START

0037077

00231 114

FILE NAME: _____
RCRA _____
CERCLA _____

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

DATE: March 8, 1994

TO: Elisa Huckaby B5-18

FROM: Jon W. Ball H4-23

Telephone: 372-2653

cc:

SUBJECT: Data for 183D Liquid Effluent

I have enclosed data for the first two rounds of sampling at 183D. The data for round two (SAF 93-278) is incomplete: the validated data for the chemical analyses haven't passed review yet. I will forward you a copy when complete. I don't anticipate any lengthy delays.

9413273.1883

APR 1994
RECEIVED
EPIC

54-3000-101 (12/92) GEF014

54-8000-101 (9-59)

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

DATE March 31, 1994

TO Barbara Neff

FROM Alison D. Hutchaby

Please add the attached to the 100-D Ponds unit administrative record.

Thank Much,

Alison D. Hutchaby
509/736-3034

37077

"TO MAKE LIFE LAST, PUT SAFETY FIRST"

0037077

9413273.1884

DATA VALIDATION REPORT
for
183-D LIQUID EFFLUENT 2
9309L995-WES-1269

Westinghouse Hanford Company
P.O. Box 1970
Richland, Washington 99352

December 8, 1993

DEC 1993
RECEIVED
TQO

RECEIVED
DEC 8 1993
VALIDATION DOCUMENTATION
SDLA

APR 1994
RECEIVED
EPIC

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client : WESTINGHOUSE HANFORD
RFW# : 9309L995

W.O. #: 06168-002-001-9999-00
Date Received: 09-17-93

INORGANIC

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. All sample holding times as required by 40CFR136 were met.

2. All preparation blank results were below the required detection limits.

3. All laboratory control standards (blank spikes) were within the control limits of 70-130%. All %RPD were within the 40% guidance limit.

4. All calibration verification checks were within the required control limits of 90-110%. Calibration verification is performed using independent standards.

5. Matrix spike recoveries are summarized on the Inorganic Accuracy Report contained within this document. All recoveries were within the 70-130% guidance limits. All %RPD were within the 40% guidance limit.

6. Replicate results are summarized on the Inorganic Precision Report contained within this document. All results were within the 40% RPD guidance limit.

7. The analytical methods applied by the laboratory, unless otherwise requested, for the analysis of solid samples are derived from Test Methods for Evaluating Solid Waste (USEPA SW846).

J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

10.4.93
Date

OCT 1993
RECEIVED
SDLA

pas/i09-995

RECORD COPY

000017

0001

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 09/27/93

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9309L995

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	B093R7	Total Organic Halides	147	UG/L	20.0	4.0

DSD 12/8/93

9413273.1886

000018

0003

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client: WESTINGHOUSE HANFORD
RFW #: 9308L995

W.O. #: 06168-002-001-9999-00
Date Received: 09-17-93

DETERMINATION OF ETHYLENE GLYCOL IN WATER

One (1) water sample was collected on 09-15-93.

The sample and its associated QC samples were analyzed on 10-08-93 utilizing Gas chromatography equipped with a Flame Ionization Detector.

1. Sample preparation consisted of an eight-fold concentration, followed by direct injection into the instrument. Blank QC samples were processed through this concentration step and their recoveries are indicated as percent (%). The sample results for Ethylene Glycol are as follows:

RFW #	CLIENT ID	Result (ug/mL)
9308L995-001	B093R7	< 10
	Method Blank	< 10
	Blank Spike	81 %

2. Continuing calibration criteria (15%) was met for all standards analyzed prior to the sample extracts.

DSD 12/8/93

J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

10.28.93
Date

cs/sma/misc/09-995.gc

000019

0010

WESTON Analytics Use Only

9309L995

9413273.1888

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 1

0029

Client: WESTINGHOUSE HANFORD
Est. Final Proj. Sampling Date:
Work Order #: 01a168-002-001-9999-00
Project Contact/Phone #:
AD Project Manager: Josie Edwards
QC: SU846 Del: Special TAT: 35 Days
Date Rec'd: 9-17-93 Date Due: 11/22/93
Account #: WS-HANFORD

Refrigerator #																		
#/Type Container	Liquid							6	1									
	Solid							2	1									
Volume	Liquid							1L	250ml									
	Solid																	
Preservatives								none	HNO3									
ANALYSES REQUESTED →		ORGANIC						Strylene Glycol	Zn	INORG								
		VOA	BNA	Pest/PCB	Herb					Metal	CN							

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	WESTON Analytics Use Only													
S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids L - EP/TCLP Leachate WI - Wipe X - Other F - Fish	001	B093R7			W	9/15/93							X	X							
		RCRA Protocol																			

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:
93-278

Target Date = 14
Temp = 3.2°C
Original/Rewritten

DATE/REVISIONS:
1.
2.
3.
4.
5.
6.

WESTON Analytics Use Only

Samples were:
1) Shipped X or Hand Delivered
Airbill # 997532 724
2) Ambient or Chilled
3) Received In Good Condition Y or N
4) Labels Indicate Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was:
1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N

COC Record Present Upon Sample Rec'd Y or N

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
BURLINGTON	[illegible]	9-17-93	16:00		[illegible]	9/20/93	
[illegible]							

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES:

RFW 21-21-001/A-7/91 ____ L372 ____ L373 ____ L375 ____ L377 ____ L378 Ref# ____ Cooler# ____ 381-596a

9413273.1889

Westinghouse Hanford Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 1 of 1
		005785

Collector CE Zerby
Company Contact M.S. Hendrix / D.R. Herman
Telephone (509) 372-3916 / 373-4069
SAF No. SAF #93-278
Project Designation 183-D Liquid Effluent - 2
Sampling Location Filter Backwash
Ice Chest No.
Bill of Lading/Airbill No. 9973332921
Offsite Property No.
Method of Shipment Air Express
Field Logbook No. WHC-N-205 #32
Shipped to ROY F WESTON INC. Lionville PA 19341-1313
Possible Sample Hazards/Remarks Work done to RCRA Protocol
Special Handling and/or Storage Shipped on WET ICE. 93092995

SPECIAL INSTRUCTIONS NO_2, NO_3 (EPA method 300.0) are for information only. WHC recognizes the holding times will be missed. If "nohead space" samples have bubbles still run analysis.

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093R7	L	09-15-93	0907	(2) 40ml aGs	Ethylene Glycol 8015M	
001 B093R7	L	09-15-93	0910	(1) 250ml aGs	TOX 9020	H_2SO_4
					CZ 9/15/93	
					Temp = 5.2°C	

Chain of Possession (Sign and Print Names)			
Relinquished By	Date/Time	Received By	Date/Time
CE Zerby	9/15/93 1310	Susan Luger	9/15/93 1330
Relinquished By	Date/Time	Received By	Date/Time
Susan Luger	9/15/93 1100		
Relinquished By	Date/Time	Received By	Date/Time
BURLINGTON AIR	9/17/93 16:00		

*Matrix
A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
Final Sample Disposition	Disposal Method:	Disposed by:	Date/Time:

9413273.1890

220000

0033

001001

BURLINGTON AIR EXPRESS

CORPORATE SUPPORT GROUP
18200 VON KARMAN AVE
IRVINE, CA 92715

997 332 921
AIRBILL NUMBER

DATE	ORIGIN	DEST. SORT CODE
09-16-93	PSC	

1
SHIPPER'S REFERENCE NO.: 812911 A2DCC W93-0764
SHIPPER'S ACCOUNT NO.: 7414641 2
COMMODITY: 113
DEPT./FLOOR: C/O WESTINGHOUSE HANFORD CO
FROM (YOUR NAME): WESTINGHOUSE SHIPPING DEPT.
PHONE NO.: (509) 376-6665
STREET ADDRESS: 2355 STEVENS DR
CITY: RICHLAND
STATE: WA
ZIP (REQUIRED): 99352

2
CONSIGNEE'S REFERENCE NO.: 0 8 3
CONSIGNEE'S ACCOUNT NO.: 0 0 2
COMPANY: ROY F. WESTON INC
DEPT./FLOOR:
TO (CONSIGNEE NAME): ROY F. WESTON JOSIE KING
PHONE NO.:
ACCURATE STREET ADDRESS (BURLINGTON CANNOT DELIVER TO A P.O. BOX): 256 WELSH POOL ROAD
CITY: LIONVILLE
STATE: PA
ZIP (REQUIRED): 19341-1313

3 C.O.D.
$
CONSIGNEE'S CHECK O.K. MARK IF APPLICABLE ☐

DECLARED VALUE
$

LIMIT OF LIABILITY
LIABILITY IS AGREED AND UNDERSTOOD TO BE $9.00 OR $.50 PER POUND WHICHEVER IS GREATER, UNLESS A HIGHER VALUE IS DECLARED AND APPLICABLE CHARGES PAID. SEE REVERSE SIDE OF AIRBILL, PARAGRAPH 9, FOR DECLARED VALUE LIMITATIONS.

1-800 CALL-BAX FOR INFORMATION ON THE BAX OFFICE NEAREST YOU

4 BILLING INFORMATION
- [XX] PREPAID (SHIPPER) $ _____ CASH RECEIVED (PAID IN ADVANCE)
- [ ] COLLECT (CONSIGNEE)
- [ ] 3RD PARTY (ACCT. NO. OR BILLING ADDRESS REQ'D.)

ACCOUNT NO.
COMPANY/NAME
STREET ADDRESS
CITY | STATE | ZIP

997 332 921
AIRBILL NUMBER

5 SERVICE REQUESTED
- [XX] OVERNIGHT (NEXT BUSINESS DAY)
- [ ] SECOND DAY
- [ ] NEXT FLIGHT OUT
- [ ] _____

CHECK BELOW IF PACKAGE IS
- [ ] LETTER
- [ ] G.O.H. (MARKET ON HANGER)

6 HANDLING INFORMATION (* SPECIAL RATE MAY APPLY)
- [ ] HOLD AT BAX
- [ ] *DANGEROUS GOODS
- [ ] *SATURDAY DELIVERY
- [ ] *SPECIAL DELIVERY
- [ ] *CONVENTION
- [ ] *GOVERNMENT SHIPMENT

SPECIAL INSTRUCTIONS / ADDITIONAL REFERENCE INFORMATION:

NO. OF PCS	WEIGHT	LENGTH	WIDTH	HEIGHT	DESCRIPTION
1	5		560	360	COOLER SML-SS SAMPLES
TOTAL PCS 1	TOTAL WT 5				

_____ SKID(S) SAID TO CONTAIN _____ NO. OF PIECES

RATE QUOTE NUMBER

RECEIVED BY BAX AT [X] SHIPPER'S DOOR [ ] BAX TERMINAL

OUTSIDE CARRIER:
CHARGES ADVANCED $
PRO NUMBER
CARRIER NAME

7
SIGNATURE OF SHIPPER: X [signature] 9-16-93
TIME/DATE OF PICK UP: 9/16/93
DRIVER NO.
RELEASE SIGNATURE (SIGNING THIS BOX IS A DIRECT AUTHORIZATION TO RELEASE SHIPMENT WITHOUT SIGNATURE AS PER CONDITIONS ON REVERSE OF THIS PAGE): X
SIGNED FOR BAX: X [signature]

OP 100 (11-92)

NON NEGOTIABLE AIRBILL SUBJECT TO TERMS AND CONDITIONS OF CONTRACT ON REVERSE SIDE.

CONSIGNEE COPY

DATA VALIDATION REPORT
for
183-D LIQUID EFFLUENT 2
9309L934-WES-1254

RECEIVED
DEC 9 1993
VALIDATION DOCUMENTATION
SDLA

Westinghouse Hanford Company
P.O. Box 1970
Richland, Washington 99352

December 9, 1993

DEC 1993
RECEIVED
TQO

APR 1994
RECEIVED
EPIC

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client : WESTINGHOUSE HANFORD
RFW# : 9309L934

W.O. #: 06168-002-001-9999-00
Date Received: 09-15-93

INORGANIC

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. All sample holding times as required by 40CFR136 were met.

2. All preparation blank results were below the required detection limits.

3. All laboratory control standards (blank spikes) were within the control limits of 70-130%. All %RPD were within the 40% guidance limit.

4. All calibration verification checks were within the required control limits of 90-110%. Calibration verification is performed using independent standards.

5. Matrix spike recoveries are summarized on the Inorganic Accuracy Report contained within this document. All recoveries were within the 70-130% guidance limits.

6. Replicate results are summarized on the Inorganic Precision Report contained within this document. All results were within the 40% RPD guidance limit.

7. The analytical methods applied by the laboratory, for Total Organic Halides, is derived from the Test Methods for Evaluating Solid Waste (USEPA SW846).

RECORD COPY

OCT 1993
RECEIVED
SDLA

10.1.93
Date

J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

pas/i09-934

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 09/30/93

CLIENT: WESTINGHOUSE HANFORD WESTON BATCH #: 9309L934

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	B093R5	Total Organic Halides	216	UG/L	20.0	4.0
-002	B093R6	Total Organic Halides	17.2	UG/L	5.6	1.3
-003	B093R8	Total Organic Halides	191	UG/L	7.7	1.5

9413273.1893

DSP 12/6/93

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0003

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client: WESTINGHOUSE HANFORD
RFW #: 9309L934

W.O. #: 06168-002-001-9999-00
Date Received: 09-15-93

DETERMINATION OF ETHYLENE GLYCOL IN WATER

The set of samples consisted of three (3) water samples collected on 09-13-93.

The samples were analyzed on 10-08-93 utilizing Gas chromatography equipped with a Flame Ionization Detector.

1. Sample preparation consisted of an eight-fold concentration, followed by direct injection into the instrument. Matrix and blank QC samples were processed through this concentration step and their recoveries are indicated as percent (%). The sample results for Ethylene Glycol are as follows.

RFW #	CLIENT ID	Result (ug/mL)
9309L934-001	B093R5	< 10
9309L934-001S	B093R5 MS	92 %
9309L934-001T	B093R5 MSD	79 %
9309L934-002	B093R6	< 10
9309L934-003	B093R8	< 10
	Method Blank	< 10
	Blank Spike	81 %

2. Continuing calibration criteria (15%) was met for all standards analyzed prior to the sample extracts.

DSV 12/9/93

J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

10.28.93
Date

000020

0010

cs/sma/misc/09-934.gc

9413273.1894

9413273.1895

WESTON Analytics Use Only
9309L934

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 1

Client: Westinghouse - Hanford
Est. Final Proj. Sampling Date:
Work Order #: 06168-002-001-999-00
Project Contact/Phone #:
AD Project Manager: Jesse Edwards
QC: SW846 Del: Special TAT: 35 Days
Date Rec'd: 9-15-93 Date Due: 10/20/93
Account #: US HANFORD

Refrigerator #:

# Type Container	Liquid	6	1													
	Solid	1 Gal	1 Gal													
Volume	Liquid	1 L	1 L													
	Solid															
Preservatives		none	1650													
ANALYSES REQUESTED		Pyrene Alkyl	TOX													

	ORGANIC				INORG	
	VOA	BNA	Pest/PCB	Herb	Metal	CN

WESTON Analytics Use Only

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

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	06 C5 C	TOX
001	B093R5			W	9-13-93		X	X
002	B093R6			W	9-13-93		X	X
003	B093R8			W	9-13-93		X	X
	RCRA Protocol							

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:
SHF # 93-278
Temp. = 4.1°C

Target Date = 16
Temp = 4.1°C
Original Rewritten

DATE/REVISIONS:
1.
2.
3.
4.
5.
6.

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or Hand Delivered
Airbill # 997333061
2) Ambient or Chilled
3) Received in Good Condition Y or N
4) Labels Indicate Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was:
1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N

COC Record Present Upon Sample Rec't Y or N

Discrepancies Between Samples and COC Record? Y or N
NOTES:

Relinquished by	Received by	Date	Time
Burlington Air	B. Burnett	9-16-93	16:30
—	[illegible]	9/16/93	

Relinquished by	Received by	Date	Time
	[illegible]	9/16/93	

RFW 21-21-001/A-7/91 ____ L372 ____ L373 ____ L375 ____ L377 ____ L378 Rel# N/A Cooler# N/A 381-596a

9413273.1896

Westinghouse Hanford Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 1 of 1
		005786

000022

0039

Collector CE Zerby
Company Contact M.S. Hendrix / D.R. Herman
Telephone (509) 372-3916 / 373-4069
SAF No. SAF #93-278
Project Designation 183-D Liquid Effluent - 2
Sampling Locations Filter Backwash
Ice Chest No. [illegible]
Bill of Lading/Airbill No. 9113330[illegible]
Offsite Property No.
Method of Shipment Air Express
Field Logbook No. WHC-N-205 # 32
Shipped to ROY F WESTON INC. Lionville PA 19341-1313
Possible Sample Hazards/Remarks Work done to RCRA Protocol
Special Handling and/or Storage Shipped on WET ICE.

SPECIAL INSTRUCTIONS NO_2, NO_3 (EPA method 300.0) are for information only. WHC recognizes the holding times will be missed. If "nohead space" samples have bubbles still run analysis.

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093R5	L	09-13-93	0915	(2) 40ml aGs	Ethylene Glycol 8015M	
B093R5	L	09-13-93	0915	(1) 250ml aGs	TOX 9020	H_2SO_4
B093R6	L	09-13-93	1115	(2) 40ml aGs	Ethylene Glycol 8015M	
B093R6	L	09-13-93	1115	(1) 250ml aGs	TOX 9020	H_2SO_4
B093R8	L	09-13-93	0915	(2) 40ml aGs	Ethylene Glycol 8015M	
B093R8	L	09-13-93	0915	(1) 250ml aGs	TOX 9020	H_2SO_4
					TEMP = 4.7°C	

Chain of Possession (Sign and Print Names)		Received By	Date/Time
Relinquished By: C.E. Zerby	Date/Time: 9/14/93 0930	Received By	Date/Time
Relinquished By: BURLINGTON AIR	Date/Time: 9/15/93 16:30	Received By: [signature]	Date/Time: 9-15-93 1630
Relinquished By	Date/Time	Received By	Date/Time

*Matrix
A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
Final Sample Disposition	Disposal Method:	Disposed by:	Date/Time:

9413273.1897

DATA VALIDATION REPORT
for
183D LIQUID EFFLUENT 2
SDG B093Q6-TMA-598

APR 1994
RECEIVED
EPIC

Westinghouse Hanford Company
P.O. Box 1970
Richland, Washington 99352

December 29, 1993

RECEIVED
DEC 30 1993
VALIDATION DOCUMENTATION
SDLA

DEC 1993
RECEIVED
TQO

SDG: 7244
Contact: Dinkar Kharkar

TMA NORCAL

REPORTING GROUP 7244

Client: Westinghouse Hanford
Contract: MBH-SVV-069262

CASE NARRATIVE

1.0 GENERAL

TMA/Norcal Sample Delivery Group 7244 is comprised of the samples listed on the Chain-of-Custody documents below. This sample group was processed under the Westinghouse Hanford Company Statement of Work P.O. MBH-SVV-069262.

1.1 Chains-of-Custody

This report includes data for the four water samples from location SAF #93-278, 183-D Liquid Effluent-2 delivered under Chain-of-Custody numbers 005787 through 005790.

1.2 Sample Volume

One 1 L plastic bottle of each sample was received for the analyses.

1.3 Missing Samples

All containers listed on the Chain-of-Custody documents were received.

1.4 Holding Times

The samples were collected on September 13 and September 15, 1993 and sample processing was initiated within 180 days of collection.

2.0 QUALITY CONTROL

The internal quality control consisted of one sample each of a laboratory control sample, a blank, and a replicate. All original analyses were performed with QC samples 7244-05 through 7244-07.

The QC samples were prepared by the Quality Control Department. Copies of the QC notebook pages are included in this data package.

2.1 Laboratory Control Samples

The LCS recoveries for gross alpha and gross beta were acceptable. The MDA's of the results met the RDL's.

2.2 Reagent Blanks

The MDA's of the results for gross alpha and gross beta met the RDL's.

9413273.1898

SDG: 7244
Contact: Dinkar Kharkar

TMA NORCAL

REPORTING GROUP 7244

Client: Westinghouse Hanford
Contract: MBH-SVV-069262

9413273.1899

2.0 QUALITY CONTROL (cont'd)

2.3 Duplicates

Results were satisfactory for the duplicate analyses.

3.0 ANALYSIS NOTES

3.1 Gross Alpha Analyses

The average MDA for gross alpha was (2 ± 0) pCi/L. Gross alpha activity above the RDL was not found in any of the samples.

3.2 Gross Beta Analyses

The average MDA for gross beta was (2 ± 0) pCi/L. Gross beta activity above the RDL was found in sample B093Q6.

N309061-04

TMA NORCAL
REPORTING GROUP 7244

DATA SHEET

B093R1

SDG	7244	Client	Westinghouse Hanford
Contact	Dinkar Kharkar	Contract	MBH-SVV-069262
Lab sample id	N309061-04	Client sample id	B093R1
Dept sample id	7244-004	Location/Matrix	Basin Washdown LIQUID
Received	09/17/93	Collected	09/15/93
		Chain of custody id	005788

9413273.1900

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Gross Alpha	Alpha	0.71	1.6	2	3	U	80A
Gross Beta	Beta	1.3	1.2	2	4	U	80B

LAB SAMPLE	TEST	PLANCHET	SUFFIX	ALIQUOT	ANALYZED	REVIEWED	BY
N309061-04	80A/80	7244-004		0.300 L	10/20/93	10/27/93	DPK
N309061-04	80B/80	7244-004		0.300 L	10/20/93	10/20/93	DPK

12/29/93

Lab id	TMAN
Protocol	WHC-HASM
Version	Ver 1.0
Form	DVD-DS
Version	2.27
Report date	11/01/93

N309061-03

TMA NORCAL
REPORTING GROUP 7244

DATA SHEET

B093R4

SDG	7244	Client	Westinghouse Hanford
Contact	Dinkar Kharkar	Contract	MBH-SVV-069262
Lab sample id	N309061-03	Client sample id	B093R4
Dept sample id	7244-003	Location/Matrix	Filter Backwash LIQUID
Received	09/15/93	Collected	09/13/93
		Chain of custody id	005787

9413273.1901

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Gross Alpha	Alpha	1.0	1.2	2	3	U	80A
Gross Beta	Beta	2.0	1.2	2	4	J	80B

LAB SAMPLE	TEST	PLANCHET	SUFFIX	ALIQUOT	ANALYZED	REVIEWED	BY
N309061-03	80A/80	7244-003		0.300 L	10/19/93	10/20/93	DPK
N309061-03	80B/80	7244-003		0.300 L	10/19/93	10/20/93	DPK

12/29/93

Lab id	TMAN
Protocol	WHC-HASM
Version	Ver 1.0
Form	DVD-DS
Version	2.27
Report date	11/01/93

94/3273.1902

Westinghouse Hanford Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 1 of 2 005790

Collector CE Zerby
Company Contact M.S. Hendrix / D.R. Herman
Telephone (509) 372-3916 / 373-4069
SAF No. SAF #93-278
Project Designation 183-D Liquid Effluent - 2
Sampling Locations Filter Backwash
Ice Chest No.
Bill of Lading/Airbill No. 9973332001
Offsite Property No.
Method of Shipment Air Express
Field Logbook No. WHC-N-205 #32
Shipped to TMA/NORCAL 2030 Wright Av. Richmond CA 94804
Possible Sample Hazards/Remarks Work done to RCRA Protocol
Special Handling and/or Storage Shipped on WET ICE.

SPECIAL INSTRUCTIONS NO_2, NO_3 (EPA method 300.0) are for information only. WHC recognizes the holding times will be missed. If "nohead space" samples have bubbles still run analysis.

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093Q6	L	09-13-93	0915	(2) 40ml aGs	VOA 8240 Appendix IX	
B093Q6	L	09-13-93	0915	(1) 2.5 L aG	Semi-Voa 8270 Appendix IX	
B093Q6	L	09-13-93		(1) 1 L aG	Semi-Voa 8270 Appendix IX	
B093Q6	L	09-13-93		(1) 2.5 L aG	Herbicides 8150 Appendix IX	
B093Q6	L	09-13-93		(1) 1 L aG	Herbicides 8150 Appendix IX	
B093Q6	L	09-13-93		(1) 2.5 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093Q6	L	09-13-93		(1) 1 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093Q6	L	09-13-93		(1) 2.5 L aG	PCBs/Pesticides 8080 Appendix IX	
B093Q6	L	09-13-93		(1) 1 L aG	PCBs/Pesticides 8080 Appendix IX	
B093Q6	L	09-13-93		(1) 250ml Poly	Alkalinity EPA 310.1	
B093Q6	L	09-13-93		(2) 1 L aG	Total Phenolics 9065	H_2SO_4
B093Q6	L	09-13-93	✓	(1) 500ml Poly	Conductivity EPA 120.1	

LABORATORY COPY

Chain of Possession (Sign and Print Names)			
Relinquished By: CE Zerby	Date/Time: 9/14/93 0830	Received By: H. NARCISO TMA/NORCAL	Date/Time: 9-15-93 10:30
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

*Matrix
A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
		SAMPLE CONTROL TECHNICIAN	9-15-93 10:30
Final Sample Disposition	Disposal Method:	Disposed By:	Date/Time:

P003/015
TO WHC COC NEW
04
06-15-93 04:38PM FROM TMA NORCAL
000018

9413273.1903

Westinghouse Hanford Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	Page 2 of 2
		005790

Collector CE Zerby | Company Contact M.S. Hendrix / D.R. Herman | Telephone (509) 372-3916 / 373-4069

SAF No. SAF #93-278 | Project Designation 183-D Liquid Effluent -2 | Sampling Location Filter Backwash

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093Q6	L	09-13-93	0915	(1) 500ml Poly	NO_2, NO_3 EPA 353.2	H_2SO_4
B093Q6	L	09-13-93		(1) 1 L Poly	Anions: Cl, F, SO_4, NO_2, NO_3 EPA 300.0; pH 9040	
B093Q6	L	09-13-93		(1) 1 L Poly	Ammonia EPA 350.3, COD EPA 410.4	H_2SO_4
B093Q6	L	09-13-93		(1) 500ml Poly	Sulfide 9030	ZnAc/NaCH
B093Q6	L	09-13-93		(1) 1 L Poly	Total Cyanide 9010	NaOH
B093Q6	L	09-13-93		(1) 1 L Poly	ICP Metals 6010 App. IX, Arsenic 7060, Lead 7421, Selenium 7740, Thallium 7841, Mercury 7470	HNO_3
B093Q6	L	09-13-93		(1) 125ml aGs	TOC 9060	H_2SO_4
B093Q6	L	09-13-93		(1) 1 L Poly	Gross Alpha/Beta EP-10	HNO_3
B093Q7	L	09-13-93	0800	(2) 40ml aGs	VOA 8240 Appendix IX	
B093Q8	L	09-13-93	0915	(2) 40ml aGs	VOA 8240 Appendix IX	

LABORATORY COPY

14

Chain of Possession	(Sign and Print Names)		
Relinquished By: CE Zerby	Date/Time: 9/10/93 0930	Received By: H. NARCISO	Date/Time:
Relinquished By	Date/Time	Received By: TNA/NORCAL	Date/Time: 9-15-93 / 10:30
Relinquished By	Date/Time	Received By	Date/Time

*Matrix

A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By: H. Narciso	Title: SAMPLE CONTROL TECHNICIAN	Date/Time: 9-15-93 10:30
Final Sample Disposition	Disposal Method:	Disposed by:	Date/Time:

09-15-93 04:38PM FROM TNA NORCAL TO WHC COC NEW P004/015

Westinghouse Hanford Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 9/13/93 1904	Page 1 of 2 005789

Collector CE Zerby
Company Contact M.S. Hendrix / D.R. Herman
Telephone (509) 372-3916 / 373-4069
SAF No. SAF #93-278
Project Designation 183-D Liquid Effluent - 2
Sampling Locations Raw Water Basin
Ice Chest No.
Bill of Lading/Airbill No. 997333002
Offsite Property No.
Method of Shipment Air Express
Field Logbook No. WHC-N-205 #32
Shipped to TMA/NORCAL 2030 Wright Av. Richmond CA 94804
Possible Sample Hazards/Remarks Work done to RCRA Protocol
Special Handling and/or Storage Shipped on WET ICE.

SPECIAL INSTRUCTIONS NO_2, NO_3 (EPA method 300.0) are for information only. WHC recognizes the holding times will be missed. If "nohead space" samples have bubbles still run analysis.

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093Q9	L	09-13-93	1115	(2) 40ml aGs	VOA 8240 Appendix IX	//
B093Q9	L	09-13-93	1120	(1) 2.5 L aG	Semi-Voa 8270 Appendix IX	
B093Q9	L	09-13-93	1120	(1) 1 L aG	Semi-Voa 8270 Appendix IX	
B093Q9	L	09-13-93	1120	(1) 2.5 L aG	Herbicides 8150 Appendix IX	
B093Q9	L	09-13-93	1120	(1) 1 L aG	Herbicides 8150 Appendix IX	
B093Q9	L	09-13-93	1124	(1) 2.5 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093Q9	L	09-13-93	1124	(1) 1 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093Q9	L	09-13-93	1126	(1) 2.5 L aG	PCBs/Pesticides 8080 Appendix IX	
B093Q9	L	09-13-93	1126	(1) 1 L aG	PCBs/Pesticides 8080 Appendix IX	
B093Q9	L	09-13-93	1129	(1) 250ml Poly	Alkalinity EPA 310.1	
B093Q9	L	09-13-93	1136	(2) 1 L aG	Total Phenolics 9065	H_2SO_4
B093Q9	L	09-13-93	1129	(1) 500ml Poly	Conductivity EPA 120.1	

Chain of Possession (Sign and Print Names)			
Relinquished By CE Zerby	Date/Time 9/14/93 0930	Received By H. Narciso TMA/NORCAL	Date/Time 9-15-93 10:30
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

*Matrix
A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
Final Sample Disposition	Disposal Method:	Disposed by:	Date/Time:

42

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

9413273.1905

005787

Collector CE Zerby | Company Contact M.S. Hendrix / D.R. Herman | Telephone (509) 372-3916 / 373-4069

SAF No. SAF #93-278 | Project Designation 183-D Liquid Effluent - 2 | Sampling Locations Filter Backwash

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093R4	L	09-13-93	0915	(1) 500ml Poly	NO_2, NO_3 EPA 353.2	H_2SO_4
B093R4	L	09-13-93		(1) 1 L Poly	Anions: Cl, F, SO_4, NO_2, NO_3 EPA 300.0; pH 9040	
B093R4	L	09-13-93		(1) 1 L Poly	Ammonia EPA 350.3, COD EPA 410.1	H_2SO_4
B093R4	L	09-13-93		(1) 500ml Poly	Sulfide 9030	ZnAc/NaOH
B093R4	L	09-13-93		(1) 1 L Poly	Total Cyanide 9010	NaOH
B093R4	L	09-13-93		(1) 1 L Poly	ICP Metals 6010 App. IX, Arsenic 7060, Lead 7421, Selenium 7740, Thallium 7841, Mercury 7470	HNO_3
B093R4	L	09-13-93		(1) 125ml aGs	TOC 9060	H_2SO_4
B093R4	L	09-13-93		(1) 1 L Poly	Gross Alpha/Beta EP-10	HNO_3

Chain of Possession	(Sign and Print Names)		
Relinquished By: CE Zerby	Date/Time: 9/14/93 0930	Received By: H. Narciso TMA/HORCAL	Date/Time: 9-15-93 10:30
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

*Matrix

A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
		SAMPLE CONTROL TECHNICIAN	9-15-93 10:30
Final Sample Disposition	Disposal Method:	Disposed by:	Date/Time:

4.3

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

9413273.1906

005787

Collector CE Zerby
Company Contact M.S. Hendrix / D.R. Herman
Telephone (509) 372-3916 / 373-4069
SAF No. SAF #93-278
Project Designation 183-d Liquid Effluent - 2
Sampling Locations Filter Backwash
Ice Chest No.
Bill of Lading/Airbill No. 9973330b2
Offsite Property No.
Method of Shipment Air Express
Field Logbook No. WHC-N-205 #32
Shipped to TMA/NORCAL 2030 Wright Av. Richmond CA 94804
Possible Sample Hazards/Remarks Work done to RCRA Protocol
Special Handling and/or Storage Shipped on WET ICE.

SPECIAL INSTRUCTIONS NO_2, NO_3 (EPA method 300.0) are for information only. WHC recognizes the holding times will be missed. If "nohead space" samples have bubbles still run analysis.

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093R4	L	09-13-93	0915	(2) 40ml aGs	VOA 8240 Appendix IX	
B093R4	L	09-13-93		(1) 2.5 L aG	Semi-Voa 8270 Appendix IX	
B093R4	L	09-13-93		(1) 1 L aG	Semi-Voa 8270 Appendix IX	
B093R4	L	09-13-93		(1) 2.5 L aG	Herbicides 8150 Appendix IX	
B093R4	L	09-13-93		(1) 1 L aG	Herbicides 8150 Appendix IX	
B093R4	L	09-13-93		(1) 2.5 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093R4	L	09-13-93		(1) 1 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093R4	L	09-13-93		(1) 2.5 L aG	PCBs/Pesticides 8080 Appendix IX	
B093R4	L	09-13-93		(1) 1 L aG	PCBs/Pesticides 8080 Appendix IX	
B093R4	L	09-13-93		(1) 250ml Poly	Alkalinity EPA 310.1	
B093R4	L	09-13-93		(2) 1 L aG	Total Phenolics 9065	H_2SO_4
B093R4	L	09-13-93		(1) 500ml Poly	Conductivity EPA 120.1	

Chain of Possession (Sign and Print Names)

Relinquished By	Date/Time	Received By	Date/Time
CE Zerby	9/13/93 0930	H. Narciso TMA/NORCAL	9-15-93 10:30
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

*Matrix
A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
O = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION
Received By
Title SAMPLE CONTROL TECHNICIAN
Date/Time 9-15-93 10:30
Final Sample Disposition
Disposal Method:
Disposed by:
Date/Time:

44

9413273.1907

Westinghouse Hanford Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

005788

Collector CE Zerby
Company Contact: M.S. Hendrix / D.R. Herman
Telephone (509) 372-3916 / 373-4069
SAF No. SAF #93-278
Project Designation 183-D Liquid Effluent - 2
Sampling Locations Basin Washdown
Ice Chest No. SML - MCM
Bill of Lading/Airbill No. 9973529[illegible]
Offsite Property No.
Method of Shipment Air Express
Field Logbook No. WHC-N-205 #32
Shipped to TMA/NORCAL 2030 Wright Av. Richmond CA 94804
Possible Sample Hazards/Remarks Work done to RCRA Protocol
Special Handling and/or Storage Shipped on WET ICE.

SPECIAL INSTRUCTIONS NO_2, NO_3 (EPA method 300.0) are for information only. WHC recognizes the holding times will be missed. If "nohead space" samples have bubbles still run analysis.

Sample Number	*	Date Collected	Time	Number and Type of Containers	Analysis Required	Preservative
B093R1	L	09-15-93	0905	(2) 40ml aGs	VOA 8240 Appendix IX	
B093R1	L	09-15-93	0910	(1) 2.5 L aG	Semi-Voa 8270 Appendix IX	
B093R1	L	09-15-93		(1) 1 L aG	Semi-Voa 8270 Appendix IX	
B093R1	L	09-15-93		(1) 2.5 L aG	Herbicides 8150 Appendix IX	
B093R1	L	09-15-93		(1) 1 L aG	Herbicides 8150 Appendix IX	
B093R1	L	09-15-93		(1) 2.5 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093R1	L	09-15-93		(1) 1 L aG	Organophosphorus Pesticides 8140 Appendix IX	
B093R1	L	09-15-93		(1) 2.5 L aG	PCBs/Pesticides 8080 Appendix IX	
B093R1	L	09-15-93		(1) 1 L aG	PCBs/Pesticides 8080 Appendix IX	
B093R1	L	09-15-93		(1) 250ml Poly	Alkalinity EPA 310.1	
B093R1	L	09-15-93		(2) 1 L aG	Total Phenolics 9065	H_2SO_4
B093R1	L	09-15-93		(1) 500ml Poly	Conductivity EPA 120.1	

LABORATORY COPY

Chain of Possession (Sign and Print Names)

Relinquished By	Date/Time	Received By	Date/Time
CE Zerby	9/15/93 1310	Lulan Myers	9-15-93 1320
Lulan Myers	9/16/93 1100	H. Narouse TMA/NORCAL	9-17-93 11:30

*Matrix
A = Air
DL = Drum Liquids
DS = Drum Solids
L = Liquid
C = Oil
S = Soil
SE = Sediment
SL = Sludge
SO = Solid
T = Tissue
W = Water
WI = Wipe
X = Other

LABORATORY SECTION	Received By	Title	Date/Time
Final Sample Disposition	Disposal Method:	Disposed by:	Date/Time:

copy is in cooler SML-144

P005/012
TO WHC COC NEW
FROM TMA NORCAL
09-28-93 03:58PM

93061789

Westinghouse Hanford Company	CHAIN OF CUSTODY	4173

Custody Form Initiator CE ZERBY

Company Contact M.S. HENDRIX/D.R. HERMAN

Telephone 509-373-4069

Project Designation/Sampling Locations 183-D 100 AREA FILTER BACKWASH

Collection Date 6-3-93

Ice Chest No. SML-60

Field Logbook No. WHC-N-205 #29

Bill of Lading/Airbill No. 970892193

Offsite Property No.

Method of Shipment AIR FREIGHTED

Shipped to WESTON

Possible Sample Hazards/Remarks NONE KNOWN SEE S.A.R. FOR BOTTLE SIZE AND ANALYSIS

temp = 4.6°C

Sample Identification

B08KN7 (4) BOTTLES
B08KP1 (4) BOTTLES
B08KP4 (4) BOTTLES

9413270008

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

Relinquished By	Date	Time	Received By	Date	Time
C E Zerby	6-3-93	1400		→	
Burlington Air Express	6-5-93	11:00	B. Burnett	6-5-93	11:00

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/92) WEF061

~~0050~~

Westinghouse Hanford Company	SAMPLE ANALYSIS REQUEST 4173

Collector CE ZERBY Date

Company Contact M.S. HENDRIX/D.R. HERMAN Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Required
B08KN7	L	6-3-93	~~1031~~ ~~1032~~	1, aG 250ml TOC 9060 (H2SO4)
			1050	1, aGs 250ml TOX 9020 (H2SO4) Head Space B.B. 6-5-93
			1034	2, 40ml aGs Ethylene Glycol 8015M (NONE)
B08KP1	L		1052	1, aG 250ml TOC 9060 (H2SO4)
			1052	1, aGs 250ml TOX 9020 (H2SO4) Head Space B.B. 6-5-93
			1035	2, 40ml aGs Ethylene Glycol 8015M (NONE)
B08KP4	L		0920	1, aG 250ml TOC 9060 (H2SO4)
			0920	1, aGs 250ml TOX 9020 (H2SO4) Head Space B.B. 6-5-93
			0905	2, 40ml aGs Ethylene Glycol 8015M (NONE)

*Type of Sample A = Air; DL = Drum Liquids; DS = Drum Solids; L = Liquid; O = Oil; S = Soil; SE = Sediment; SL = Sludge; SO = Solid; T = Tissue; W = Water; WI = Wipe; X = Other

Field Information S.A.F. 93-047 IF Septa Lids CONTAINS BUBBLES, STILL RUN ANALYSIS CZ 6-7-93

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

A-6000-406 (06/91) WEF060

~~0051~~

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 06/21/93

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9306L789

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	B08KN7	Total Organic Carbon	2.1		MG/L	0.50	1.0
		Total Organic Halides	20.0	a	UG/L	20.0	4.0
-002	B08KP1	Total Organic Carbon	2.1		MG/L	0.50	1.0
		Total Organic Halides	10.0	a	UG/L	10.0	2.0
-003	B08KP4	Total Organic Carbon	20.7		MG/L	0.50	1.0
		Total Organic Halides	192		UG/L	20.0	4.0

9413273.1010

dw 9/15/93

~~0007~~

Roy F. Weston, Inc. - Lionville Laboratory

GC SCAN

Report Date: 06/28/93 15:01

RFW Batch Number: 9306L789 Client: WESTINGHOUSE HANFORD Work Order: 06168002001 Page: 1

	Cust ID:	B08KN7	B08KP1	B08KP4	BLK
Sample Information	RFW#:	001	002	003	93LLC138-MB1
	Matrix:	WATER	WATER	WATER	WATER
	D.F.:	1.00	1.00	1.00	1.00
	Units:	mg/L	mg/L	mg/L	mg/L
Ethylene Glycol		10 U UJ	10 U UJ	10 U UJ	10 U
Propylene Glycol		NA	NA	NA	NA
Diethylene Glycol		NA	NA	NA	NA

dw 9/15/93

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

9413273.1911

N3-05-017

Westinghouse Hanford Company	CHAIN OF CUSTODY	4172

Custody Form Initiator CE ZERBY

Company Contact M.S. HENDRIX/D.R. HERMAN

Telephone 509-373-4069

Project Designation/Sampling Locations 183-D 100 AREA FILTER BACKWASH

Collection Date 6-3-93

Ice Chest No.

Field Logbook No. WHC-N-205 #29

Bill of Lading/Airbill No.

Offsite Property No.

Method of Shipment AIR FREIGHTED

Shipped to TMA

Possible Sample Hazards/Remarks NONE KNOWN SEE S.A.R. FOR BOTTLE SIZE AND ANALYSIS

Original Chain of Custody in "HAMMER" (1 Ice chest)

Sample Identification

9413273.1912

B08KN6 (21) BOTTLES
B08KN8 (2) BOTTLES
B08KN9 (2) BOTTLES
B08KP0 (21) BOTTLES
B08KP2 (2) BOTTLES
B08KP3 (21) BOTTLES
B08KP5 (2) BOTTLES
B08KP6 (2) BOTTLES

CZ 6-3-93

APR 1994 RECEIVED EPIC

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

Relinquished By	Date	Time	Received By	Date	Time
C E Zerby	6-3-93	1400	Kermit Blum K. Blum	6-7-93 *	

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

* Received @ TMA/NORCAL 6-5-93 ; opened 6-7-93 -KB

A-6000-407 (12/92) WEF061

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

4172

Collector CE ZERBY

Date 6-3-93

Company Contact M.S. HENDERX/ D.R.HERMAN

Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Containers/Analysis Required
B08KN6	L	6-3-93	1125	1, 500ml P Hg 7470 (HNO3)
			1118	1, 2 LITER P AMENDABLE CN 9010 TOTAL CYANIDE 9010 (NaOH)
			1123	1, 500mL P TOTAL SULFIDE 9030 (ZnAc+ NaOH)
			1120	1, 1 LITER P AMMONIA EPA 350.1 COD EPA 410.1 (H2SO4)
			1054	1, 1 LITER P ANIONS F, CL, SO4, NO2-NO3, EPA300.0 pH 9040 (NONE)
			1114	1, 2.5 LITER aG TOTAL PHENOLS 9065 (Na2S203)
			1108	1, 2.5 LITER aG PCB/PEST 8080 (APPENDIX) (NONE) 1, 1 LITER aG PCB/PEST 8080 (APPENDIX IX) (NONE)
			1110	1, 2.5 LITER aG ORGANOPHOSPHOROUS PESTICIDES 8140 (APPENDIX IX) (NONE) 1, 1 LITER aG ORGANOPHOSPHOROUS PESTICIDES 8140 (APPENDIX IX) (NONE)

CZ 6-3-93

*Type of Sample A = Air; DL = Drum Liquids; DS = Drum Solids; L = Liquid; O = Oil; S = Soil; SE = Sediment; SL = Sludge; SO = Solid; T = Tissue; W = Water; WI = Wipe; X = Other

Field Information S.A.F 93-047 (Raw water)

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

A-6000-406 (06/91) WEF060

147

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST 4172

Collector CE ZERBY Date 6-3-93

Company Contact M.S. HENDRIX/D.R. HERMAN Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Required
B08KN6	L	6-3-93	1056	1, 2 LITER P ICP METALS 6010 (APPENDIX IX) As 7060, Pb 7421, Se 7740, TL 7841, Sn 7870 (HNO3)
			1057	1, 500mL P NO2-NO3, EPA 353.2 (H2SO4)
			1150	1, 500mL P CONDUCTIVITY, EPA 120.1 (NONE)
			1059	1, 500ml P ALKALINITY, EPA 310.1 (NONE)
			1044	1, 2.5 LITER aG HERBICIDES 8150 (APPENDIX IX) (NONE) 1, 1 LITER aG HERBICIDES, 8150 (APPENDIX IX) (NONE)
			1041	1, 2.5 LITER aG SEMI-VOA 8270 (APPENDIX IX) (NONE) 1, 1 LITER aG SEMI-VOA, 8270 (APPENDIX IX) (NONE)
			1032	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)
			1103	1, 1 LITER P GROSS ALPHA/GROSS BETA EP-10, EP-10 (HNO3)
B08KN8			0730	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)
B08KN9			1127	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)

CZ 6-3-93

*Type of Sample A = Air; DL = Drum Liquids; DS = Drum Solids; L = Liquid; O = Oil; S = Soil; SE = Sediment; SL = Sludge; SO = Solid; T = Tissue; W = Water; WI = Wipe; X = Other

Field Information S.A.F. 93-047 IF CONTAINERS WITH SEPTA LIDS HAVE BUBBLES, STILL RUN ANALYSIS. (RAW Water)

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

A-6000-406 (06/91) WEF060

~~000002D~~
ADD 9-15-93

Westinghouse Hanford Company	SAMPLE ANALYSIS REQUEST 4172

Collector CE ZERBY Date 6-3-93

Company Contact M.S. HENDERX/ D.R.HERMAN Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Required
B08KP0	L	6-3-93	1126	1, 500ml P Hg 7470 (HNO3)
			1119	1, 2 LITER P AMENDABLE CN 9010 TOTAL CYANIDE 9010 (NaOH)
			1124	1, 500mL P TOTAL SULFIDE 9030 (ZnAc+ NaOH)
			1121	1, 1 LITER P AMMONIA EPA 350.1 COD EPA 410.1 (H2SO4)
			1053	1, 1 LITER P ANIONS F, CL, SO4, NO2-NO3, EPA300.0 pH 9040 (NONE)
			1116	1, 2.5 LITER aG TOTAL PHENOLS 9065 (Na2S203)
			1105	1, 2.5 LITER aG PCB/PEST 8080 (APPENDIX) (NONE) 1, 1 LITER aG PCB/PEST 8080 (APPENDIX IX) (NONE)
			1111	1, 2.5 LITER aG ORGANOPHOSPHOROUS PESTICIDES 8140 (APPENDIX IX) (NONE) 1, 1 LITER aG ORGANOPHOSPHOROUS PESTICIDES 8140 (APPENDIX IX) (NONE)

9413273.1915

*Type of Sample A = Air L = Liquid SE = Sediment T = Tissue X = Other
DL = Drum Liquids O = Oil SL = Sludge W = Water
DS = Drum Solids S = Soil SO = Solid WI = Wipe

Field Information S.A.F 93-047 (RAW water)

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

A-6000-406 (06/91) WEF060

~~000002E~~
ADJ 9-16-93

Westinghouse Hanford Company	SAMPLE ANALYSIS REQUEST 4172

Collector CE ZERBY Date 6-3-93

Company Contact M.S. HENDRIX/D.R. HERMAN Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Required
B08KP0	L	6-3-93	1057	1, 2 LITER P ICP METALS 6010 (APPENDIX IX) As 7060, Pb 7421, Se 7740, TL 7841, Sn 7870 (HNO3)
			1058	1, 500mL P NO2-NO3, EPA 353.2 (H2SO4)
			1101	1, 500mL P CONDUCTIVITY, EPA 120.1 (NONE)
			1100	1, 500ml P ALKALINITY, EPA 310.1 (NONE)
			1047	1, 2.5 LITER aG HERBICIDES 8150 (APPENDIX IX) (NONE) 1, 1 LITER aG HERBICIDES, 8150 (APPENDIX IX) (NONE)
			1038	1, 2.5 LITER aG SEMI-VOA 8270 (APPENDIX IX) (NONE) 1, 1 LITER aG SEMI-VOA, 8270 (APPENDIX IX) (NONE)
			1032	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)
			1102	1, 1 LITER P GROSS ALPHA/GROSS BETA EP-10, EP-10 (HNO3)
B08KP2			0730	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)

CZ 6-3-93

9413273.1916

*Type of Sample A = Air L = Liquid SE = Sediment T = Tissue X = Other
DL = Drum Liquids O = Oil SL = Sludge W = Water
DS = Drum Solids S = Soil SO = Solid WI = Wipe

Field Information S.A.F. 93-047 IF CONTAINERS WITH SEPTA LIDS HAVE BUBBLES, STILL RUN ANALYSIS. (RAW Water)

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

A-6000-406 (06/91) WEF060.

150

~~000052F~~
ASD 9-15-9

Westinghouse Hanford Company	SAMPLE ANALYSIS REQUEST	4172

Collector CE ZERBY Date 6-3-93

Company Contact M.S. HENDERX/ D.R.HERMAN Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Required
B08KP3	L	6-3-93	0925	1, 500ml P Hg 7470 (HNO3)
			0926	1, 2 LITER P AMENDABLE CN 9010 TOTAL CYANIDE 9010 (NaOH)
			0927	1, 500mL P TOTAL SULFIDE 9030 (ZnAc+ NaOH)
			0928	1, 1 LITER P AMMONIA EPA 350.1 COD EPA 410.1 (H2SO4)
			0931	1, 1 LITER P ANIONS F, CL, SO4, NO2-NO3, EPA300.0 pH 9040 (NONE)
			0930	1, 2.5 LITER aG TOTAL PHENOLS 9065 (Na2S203)
			0932	1, 2.5 LITER aG PCB/PEST 8080 (APPENDIX) (NONE) 1, 1 LITER aG PCB/PEST 8080 (APPENDIX IX) (NONE)
			0933	1, 2.5 LITER aG ORGANOPHOSPHOROUS PESTICIDES 8140 (APPENDIX IX) (NONE) 1, 1 LITER aG ORGANOPHOSPHOROUS PESTICIDES 8140 (APPENDIX IX) (NONE)

CZ 6-3-93

9413273.1917

*Type of Sample A = Air; DL = Drum Liquids; DS = Drum Solids; L = Liquid; O = Oil; S = Soil; SE = Sediment; SL = Sludge; SO = Solid; T = Tissue; W = Water; WI = Wipe; X = Other

Field Information S.A.F 93-047 (Back flush

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

A-6000-406 (06/91) WEF060

~~000002G~~
abD 9-15

Westinghouse Hanford Company	SAMPLE ANALYSIS REQUEST 4172

Collector CE ZERBY Date 6-3-93

Company Contact M.S. HENDRIX/D.R. HERMAN Telephone (509) 373-4069

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Required
B08KP3	L	6-3-93	0921	1, 2 LITER P ICP METALS 6010 (APPENDIX IX) As 7060, Pb 7421, Se 7740, TL 7841, Sn 7870 (HNO3)
			0923	1, 500mL P NO2-NO3, EPA 353.2 (H2SO4)
			0923	1, 500mL P CONDUCTIVITY, EPA 120.1 (NONE)
			0924	1, 500ml P ALKALINITY, EPA 310.1 (NONE)
			0920	1, 2.5 LITER aG HERBICIDES 8150 (APPENDIX IX) (NONE) 1, 1 LITER aG HERBICIDES, 8150 (APPENDIX IX) (NONE)
			0915	1, 2.5 LITER aG SEMI-VOA 8270 (APPENDIX IX) (NONE) 1, 1 LITER aG SEMI-VOA, 8270 (APPENDIX IX) (NONE)
			0905	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)
			0924	1, 1 LITER P GROSS ALPHA/GROSS BETA EP-10, EP-10 (HNO3)
B08KP5			0730	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)
B08KP6			0941	2, 40ml aGs VOA, 8240 (APPENDIX IX) (NONE)

CZ 6-2-93

*Type of Sample A = Air L = Liquid SE = Sediment T = Tissue X = Other
DL = Drum Liquids O = Oil SL = Sludge W = Water
DS = Drum Solids S = Soil SO = Solid WI = Wipe

Field Information S.A.F. 93-047 IF CONTAINERS WITH SEPTA LIDS HAVE BUBBLES, STILL RUN ANALYSIS. (Backflush)

Special Handling and/or Storage SAMPLES TO BE KEPT AT 4 DEGREES C UNTIL ANALYSIS

Possible Sample Hazards NONE KNOWN

9413273.1918

A-6000-406 (06/91) WEF060

152

N306019-01

TMA NORCAL
REPORTING GROUP 7198

DATA SHEET

B08KN6

SDG	7198	Client	Westinghouse Hanford
Contact	Dinkar Kharkar	Contract	MBH-SVV-069262
Lab sample id	N306019-01	Client sample id	B08KN6
Dept sample id	7198-001	Matrix	LIQUID
Received	06/07/93	Collected	06/03/93
		Chain of custody id	4172

PARAMETER	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Gross Alpha	Alpha	0.31	1.6	2	3	U	80A
Gross Beta	Beta	10	1.6	2	4		80B

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9413273.1919

DATA SHEETS
Page 1
SUMMARY DATA SECTION
Page 10

Lab id	TMAN
Protocol	WHC-HASM
Version	Ver 1.0
Form	DVD-DS
Version	2.24
Report date	07/20/93

DGL 9-9-93

14

N306019-02

TMA NORCAL
REPORTING GROUP 7198

DATA SHEET

B08KP0

SDG	7198	Client	Westinghouse Hanford
Contact	Dinkar Kharkar	Contract	MBH-SVV-069262
Lab sample id	N306019-02	Client sample id	B08KP0
Dept sample id	7198-002	Matrix	LIQUID
Received	06/07/93	Collected	06/03/93
		Chain of custody id	4172

PARAMETER	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Gross Alpha	Alpha	0.87	1.4	2	3	U	80A
Gross Beta	Beta	0.86	1.2	2	4	U	80B

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9413273.1920

DATA SHEETS
Page 2
SUMMARY DATA SECTION
Page 11

Lab id	TMAN
Protocol	WHC-HASM
Version	Ver 1.0
Form	DVD-DS
Version	2.24
Report date	07/20/93

DEB 8-9-93

143

N306019-03

TMA NORCAL
REPORTING GROUP 7198

DATA SHEET

B08KP3

SDG	7198	Client	Westinghouse Hanford
Contact	Dinkar Kharkar	Contract	MBH-SVV-069262
Lab sample id	N306019-03	Client sample id	B08KP3
Dept sample id	7198-003	Matrix	LIQUID
Received	06/07/93	Collected	06/03/93
		Chain of custody id	4172

PARAMETER	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Gross Alpha	Alpha	5.5	2.4	3	3		80A
Gross Beta	Beta	5.5	1.4	2	4		80B

9413273.1921

DATA SHEETS
Page 3
SUMMARY DATA SECTION
Page 12

Lab id	TMAN
Protocol	WHC-HASM
Version	Ver 1.0
Form	DVD-DS
Version	2.24
Report date	07/20/93

Rec'd 9-9-93

1/4

~~000013~~ ASD 9-15-

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KN6 FRACTION 01A TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS				
ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	136	umho/cm	6

FORM I

9413273.1922

AEl 9-9-93

122

~~000014~~

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KN6 FRACTION 01C TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS				
ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Alkalinity	310.1	54	mg/L	2

FORM I

9413273.1923

123

Del 9-9-93

~~000015~~ ASD 9-15-

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93

Results by Sample

SAMPLE ID B08KN6 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Sulfide	9030	<1	mg/L	1

FORM I

9413273.1924

124

ASD 9-9-93

~~000016~~

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KN6 FRACTION 01G TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS				
ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Ammonia Nitrogen	350.3	0.09	mg/L	0.05
COD	410.2	7	mg/L	5

FORM I

9413273.1925

Ded 9-9-93 125

~~000017~~

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93

Results by Sample

SAMPLE ID 808KN6 FRACTION 01I TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Chloride	300.0	1.0	mg/L	0.2
Fluoride	300.0	0.1	mg/L	0.1
pH	9040	9.4	pH	0.1
Sulfate	300.0	11	mg/L	1
Nitrate Nitrogen	300.0	0.1	mg/L	0.2
Nitrite Nitrogen	300.0	<0.1	mg/L	0.1

FORM I

9413273.1926

126

DEJ 9-9-93

~~000018~~ UJD 9-15-9

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KN6 FRACTION 01K TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Phenol	9065	<0.05	mg/L	0.05

UJ

FORM I

9413273.1927

Del 9-9-93 127

~~000019~~

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP0 FRACTION 02A TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	136	umho/cm	6

FORM I

9413273.1928

Rcd 9-9-93

125

000020

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP0 FRACTION 02B TEST CODE UCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Alkalinity	310.1	55	mg/L	2

FORM I

9413273.1929

129

~~000021~~ ATD 9-15-

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP0 FRACTION 02C TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Sulfide	9030	<1	mg/L	1

FORM I

9413273.1930

12C

Dsd 9-9-93

~~000022~~ 4-15-

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP0 FRACTION 02E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Ammonia Nitrogen	350.3	<0.05	mg/L	0.05
COD	410.2	7	mg/L	5

FORM I

94/3273.1931

131

DEP 9-9-93

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP0 FRACTION 02G TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS				
ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Chloride	300.0	1.0	mg/L	0.2
Fluoride	300.0	0.2	mg/L	0.1
pH	9040	9.4	pH	0.1
Sulfate	300.0	11	mg/L	1
Nitrate Nitrogen	300.0	0.1	mg/L	0.2
Nitrite Nitrogen	300.0	<0.1	mg/L	0.1

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FORM I

9413273.1932

132

9-9-93

~~000024~~ A3D 9-15-9

TMA Inc. REPORT Work Order # A3-06-016

:eceived: 06/07/93 Results by Sample

:AMPLE ID B08KP0 FRACTION 02I TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Phenol	9065	<0.05	mg/L	0.05

UJ

FORM I

9413273.1933

DEP 9-9-93 133

~~000025~~ 9-15-93

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP3 FRACTION 03A TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Elect. Conductivity	120.1	151	umho/cm	6

FORM I

9413273.1934

Del 9-9-93 134

~~000026~~

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP3 FRACTION 03B TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Alkalinity	310.1	63	mg/L	2

FORM I

9413273.1935

135

~~000027~~ 9-19-9

TNA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP3 FRACTION 03C TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Sulfide	9030	<1	mg/L	1

FORM I

9413273.1936

DEL 9-9-93 136

~~000028~~ abd 9-15-9

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP3 FRACTION 03D TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Ammonia Nitrogen	350.3	0.06	mg/L	0.05
COD	410.2	79	mg/L	5

FORM I

94/3273.1937

137

Acl 9-9-93

~~000029~~ a5D 9-15-

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP3 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Chloride	300.0	3.2	mg/L	0.2
Fluoride	300.0	0.2	mg/L	0.1
pH	9040	7.7	pH	0.1 J
Sulfate	300.0	19	mg/L	1
Nitrate Nitrogen	300.0	0.1	mg/L	0.2
Nitrite Nitrogen	300.0	<0.1	mg/L	0.1

FORM I

9413273.1938

DEJ 9-9-93

138

~~000030~~ 2 JD 9-15-93

TMA Inc. REPORT Work Order # A3-06-016

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP3 FRACTION 03F TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 06/03/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

ANALYSIS	METHOD	RESULT	UNITS	LIMIT
Phenol	9065	<0.05	mg/L	0.05 UJ

FORM I

9413273.1939

DSL 9-9-93 139

WESTINGHOUSE/HANFORD
1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B08KN6

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N3-06-017SAS No.: SDG No.: B08KN6

Matrix (soil/water): WATER Lab Sample ID: 06059-01S

Level (low/med): LOW Date Received: 06/08/93

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	18.6	U		P	
7440-38-2	Arsenic	2.3	U		F	
7440-39-3	Barium	23.9	B		P	
7440-41-7	Beryllium	0.30	U		P	
7440-43-9	Cadmium	1.4	U		P	
7440-47-3	Chromium	3.3	U		P	
7440-48-4	Cobalt	2.9	U		P	
7440-50-8	Copper	2.7	U		P	uJ
7439-92-1	Lead	2.6	B	W	F	
7439-97-6	Mercury	0.10	U	N*	CV	uJ
7440-02-0	Nickel	4.2	U		P	
7782-49-2	Selenium	3.3	U	N	F	uJ
7440-22-4	Silver	3.3	U		P	
7440-28-0	Thallium	1.2	U	W	F	
7440-62-2	Vanadium	2.1	U		P	
7440-66-6	Zinc	5.2	B		P	J
	Cyanide	10.0	U		CA	dw 9/8/93
7440-42-8	Boron				NR	
7440-31-5	Tin	6.7	U		P	uJ

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

WESTINGHOUSE/HANFORD
1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08KP0

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N3-06-017SAS No.: SDG No.: B08KN6

Matrix (soil/water): WATER Lab Sample ID: 06059-02S

Level (low/med): LOW Date Received: 06/08/93

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	18.6	U		P	
7440-38-2	Arsenic	2.3	U		F	
7440-39-3	Barium	24.2	B		P	
7440-41-7	Beryllium	0.30	U		P	
7440-43-9	Cadmium	1.4	U		P	
7440-47-3	Chromium	3.3	U		P	
7440-48-4	Cobalt	2.9	U		P	
7440-50-8	Copper	2.7	U		P	uJ
7439-92-1	Lead	11.6		S	F	
7439-97-6	Mercury	0.10	U	N*	CV	uJ
7440-02-0	Nickel	4.2	U		P	
7782-49-2	Selenium	3.3	U	N	F	uJ
7440-22-4	Silver	3.3	U		P	
7440-28-0	Thallium	1.2	U	W	F	
7440-62-2	Vanadium	2.1	U		P	dw 9/8/93
7440-66-6	Zinc	4.8	U		P	uJ
	Cyanide	10.0	U		CA	
7440-42-8	Boron				NR	
7440-31-5	Tin	6.7	U		P	uJ

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

DJD 9-15-

~~003~~ 118

WESTINGHOUSE/HANFORD
1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08KP3

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D0-0108

Lab Code: SKINER Case No.: N3-06-017SAS No.: SDG No.: B08KN6

Matrix (soil/water): WATER Lab Sample ID: 06059-03S

Level (low/med): LOW Date Received: 06/08/93

% Solids: 0.0

9413273.1942

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7440-36-0	Antimony	18.6	U		P	
7440-38-2	Arsenic	7.3	B		F	
7440-39-3	Barium	39.7	B		P	
7440-41-7	Beryllium	0.30	U		P	
7440-43-9	Cadmium	1.4	U		P	
7440-47-3	Chromium	16.0			P	
7440-48-4	Cobalt	2.9	U		P	
7440-50-8	Copper	43.6			P	J
7439-92-1	Lead	27.2			F	
7439-97-6	Mercury	2.0		N*	CV	J
7440-02-0	Nickel	4.2	U		P	
7782-49-2	Selenium	3.3	U	WN	F	uJ
7440-22-4	Silver	3.3	U		P	
7440-28-0	Thallium	1.2	U		F	
7440-62-2	Vanadium	8.6	B		P	
7440-66-6	Zinc	65.2			P	J dw 9/8/93
	Cyanide	10.0	U		CA	
7440-42-8	Boron				NR	
7440-31-5	Tin	6.7	U		P	uJ

Color Before: YELLOW Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

DA

ASD 9-15-92 000135

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B04

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

UJ

9413273.1943

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BS 9-9-93

9-15-93 ~~000136~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B04

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9443273.1944

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

Def 9-9-93

65

9-15-93 ~~000137~~

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B04

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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DES 9-9-93

~~000147~~ 052

EPA SAMPLE NO.

B08KN8

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B05

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1946

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

UJ

57

DEJ 9-9-93

ATD 9-15-93 ~~000148~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B05

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	1	J
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

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Del 9-9-93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KN8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B05

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Del 9-9-93

ASD 9-15-93 ~~000161~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B06

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1949

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

UJ

DSL 9-9-93

ASD 9-15-93 ~~000162~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B06

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

9413273.1950

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DEP 9-9-93

ABD 8-15-93 ~~000163~~

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KN9

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B06

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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Del 9-9-93

QSD 9-17-93 ~~000173~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B09

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1952

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

CAS NO.	COMPOUND		Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

US

DCJ 9-9-93

AJD 9-15-93 ~~000174~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B09

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1953

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

Ad. 9-9-93

ATD 9-15-93

~~000175~~

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B09

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9413273.1994

Ad 9-9-93

ASD 9-15-93 ~~000185~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B10

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1955

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

UJ

Ncl 9-9-93

ASD 9-15-93 ~~000186~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B10

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1956

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

Rcd 9-9-93

ASD 9-15-93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA ~~SAMPLE~~ NO.
B08KP2

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B10

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

78

ASD 9-9-93

ASD 9-15-93 ~~000197~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
67-66-3	Chloroform	2	J
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

4J

9413273.1958

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79

ASD 9-9-93

ASD 9-15-93 ~~000198~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

9413273.1959

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ASD 9-9-93

a32 9-15-93 ~~000199~~

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9413273.1960

81

Dcl 9-9-93

aJD 9-15-93 ~~000211~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

UJ

94/3273.1961

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82

DEB 9-9-93

OJD 9-15-93 ~~000212~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1962

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

UJ

83

DCB 9-9-93

9-15-93 ~~000213~~

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KP5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

84

DJ 9-9-93

QSD 9-15-93 ~~000223~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B13

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

9413273.1964

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	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

UJ

85

Acl 9-9-93

ajp 9-15-93 ~~000224~~

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B13

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column: (pack/cap) CAP Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
75-71-8	Dichlorodifluoromethane	10	U
75-69-4	Trichlorofluoromethane	10	U
110-57-6	trans-1,4-Dichloro-2-butene	50	U
106-89-8	Epichlorohydrin	50	U
75-56-9	Propylene Oxide	50	U
76-01-7	Pentachloroethane	10	U
140-88-5	Ethylacrylate	10	U
75-05-8	Acetonitrile	100	U
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	200	U
107-12-0	Ethyl Cyanide	100	U
107-05-1	3-Chloro-1-propene	10	U
158-60-5	trans-1,2-Dichloroethene	5	U
78-83-1	Isobutanol	200	U
126-98-7	Methacrylonitrile	20	U
74-95-3	Dibromomethane	5	U
123-91-1	1,4-Dioxane	200	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
106-93-4	1,2-Dibromoethane	5	U
96-18-4	1,2,3-Trichloropropane	10	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
80-62-6	Methylmethacrylate	10	U
97-63-4	Ethylmethacrylate	10	U

uJ

9413273.1965

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86

DB 9-9-93

ASP 9-15-93 ~~000225~~

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08KP6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30611B13

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ Date Analyzed: 06/11/93

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9413273-1966

97

Dcl 9-9-93

ASD 9-15-93 ~~000318~~

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S08

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1967

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	20	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	Bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U

UJ

mf. 9-9-93 85

OJD 9-15-93 ~~000319~~

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S08

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1968

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
10595-95-6	N-Nitroso-methylethylamine	20	U
66-27-3	Methyl methanesulfonate	10	U
55-18-5	N-Nitrosodiethylamine	20	U
62-50-0	Ethyl methanesulfonate	20	U
109-06-8	2-Picoline	10	U
930-55-2	N-Nitrosopyrrolidine	40	U
98-86-2	Acetophenone	10	U
59-89-2	N-Nitroso-morpholine	1000	U
95-53-4	o-Toluidine	10	U
100-75-4	N-Nitrosopiperidine	20	U
1888-71-7	Hexachloropropene	20	U
87-65-0	2,6-Dichlorophenol	10	U
924-16-3	N-Nitrosodi-N-butylamine	10	U
94-59-7	Safrole	10	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U
120-58-1	Isosafrole	10	U
130-15-4	1,4-Naphthoquinone	20	U
528-29-0	1,3-Dinitrobenzene	50	U
92-67-1	4-Aminobiphenyl	10	U
99-35-4	1,3,5-Trinitrobenzene	50	U
134-32-7	1-Naphthylamine	10	U
608-93-5	Pentachlorobenzene	20	U
91-59-8	2-Naphthylamine	10	U
58-90-2	2,3,4,6-Tetrachlorophenol	50	U
99-55-8	5-Nitro-o-toluidine	10	U

uJ

89

Dcl 9-9-93

ABD 9-15-93 ~~000320~~

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S08

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1969

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
99-09-2	3-Nitroaniline	50	U	us
83-32-9	Acenaphthene	10	U	
51-28-5	2,4-Dinitrophenol	50	U	
100-02-7	4-Nitrophenol	50	U	
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
606-20-2	2,6-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	50	U	
534-52-1	4,6-Dinitro-2-methylphenol	50	U	
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	20	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	50	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
84-74-2	Di-n-butylphthalate	10	U	
206-44-0	Fluoranthene	10	U	
I29-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	20	U	
56-55-3	Benzo(a)anthracene	10	U	
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	
218-01-9	Chrysene	10	U	
117-84-0	Di-n-octylphthalate	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	r

(1) - Cannot be separated from Diphenylamine

DEL 9-9-93

9-15-93 ~~000321~~

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S08

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1970

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-44-2	Phenacetin	20	U
82-68-8	Pentachloronitrobenzene	50	U
122-09-8	a,a-Dimethylphenethylamine	10	U
23950-58-5	Pronamide	10	U
56-57-5	4-Nitroquinoline-1-oxide	100	U
91-80-5	Methapyrilene	10	U
140-57-8	Aramite	50	U
60-11-7	p-Dimethylaminoazobenzene	10	U
53-96-3	2-Acetylaminofluorene	20	U
119-93-7	3,3'-Dimethylbenzidine	20	U
57-97-6	7,12-Dimethylbenz(a)anthracen	20	U
56-49-5	3-Methylcholanthrene	20	U
70-30-4	Hexachlorophene	100	U
110-86-1	Pyridine	10	U
465-73-6	Isodrin	20	U
62-75-9	N-Nitroso-dimethylamine	20	U
143-50-0	Kepone	50	U
2303-16-4	Diallate	20	U
510-15-6	Chlorobenzilate	10	U
62-53-3	Aniline	10	U
86-74-8	Carbazole	20	U
92-87-5	Benzidine	50	U

UJ

(1) - Cannot be separated from Diphenylamine

9,

DJ 9-9-93

9-15-93 ~~000322~~

EPA SAMPLE NO.

B08KN6

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S08

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

92

DCD 9-9-93

ATD 9-15-93 ~~000337~~

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1972

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	20	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	Bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U

UJ

9

DEJ 9-9-93

ASD 9-5-93

~~000338~~

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9113273.1973

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
10595-95-6	N-Nitroso-methylethylamine	20	U
66-27-3	Methyl methanesulfonate	10	U
55-18-5	N-Nitrosodiethylamine	20	U
62-50-0	Ethyl methanesulfonate	20	U
109-06-8	2-Picoline	10	U
930-55-2	N-Nitrosopyrrolidine	40	U
98-86-2	Acetophenone	10	U
59-89-2	N-Nitroso-morpholine	1000	U
95-53-4	o-Toluidine	10	U
100-75-4	N-Nitrosopiperidine	20	U
1888-71-7	Hexachloropropene	20	U
87-65-0	2,6-Dichlorophenol	10	U
924-16-3	N-Nitrosodi-N-butylamine	10	U
94-59-7	Safrole	10	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U
120-58-1	Isosafrole	10	U
130-15-4	1,4-Naphthoquinone	20	U
528-29-0	1,3-Dinitrobenzene	50	U
92-67-1	4-Aminobiphenyl	10	U
99-35-4	1,3,5-Trinitrobenzene	50	U
134-32-7	1-Naphthylamine	10	U
608-93-5	Pentachlorobenzene	20	U
91-59-8	2-Naphthylamine	10	U
58-90-2	2,3,4,6-Tetrachlorophenol	50	U
99-55-8	5-Nitro-o-toluidine	10	U

45

ASD 9-9-93

ATD 6-15-93 ~~000339~~

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1974

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
99-09-2	3-Nitroaniline	50	U	UJ
83-32-9	Acenaphthene	10	U	
51-28-5	2,4-Dinitrophenol	50	U	
100-02-7	4-Nitrophenol	50	U	
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
606-20-2	2,6-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	50	U	
534-52-1	4,6-Dinitro-2-methylphenol	50	U	
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	20	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	50	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
84-74-2	Di-n-butylphthalate	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	20	U	
56-55-3	Benzo(a)anthracene	10	U	
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	
218-01-9	Chrysene	10	U	
117-84-0	Di-n-octylphthalate	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	

(1) - Cannot be separated from Diphenylamine

9.

DEJ 9-9-93

ATJ 9-15-93 ~~000340~~

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1975

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
62-44-2	Phenacetin	20	U	UJ
82-68-8	Pentachloronitrobenzene	50	U	
122-09-8	a,a-Dimethylphenethylamine	10	U	
23950-58-5	Pronamide	10	U	
56-57-5	4-Nitroquinoline-1-oxide	100	U	
91-80-5	Methapyrilene	10	U	
140-57-8	Aramite	50	U	
60-11-7	p-Dimethylaminoazobenzene	10	U	
53-96-3	2-Acetylaminofluorene	20	U	
119-93-7	3,3'-Dimethylbenzidine	20	U	
57-97-6	7,12-Dimethylbenz(a)anthracen	20	U	
56-49-5	3-Methylcholanthrene	20	U	
70-30-4	Hexachlorophene	100	U	
110-86-1	Pyridine	10	U	
465-73-6	Isodrin	20	U	
62-75-9	N-Nitroso-dimethylamine	20	U	
143-50-0	Kepone	50	U	
2303-16-4	Diallate	20	U	
510-15-6	Chlorobenzilate	10	U	
62-53-3	Aniline	10	U	
86-74-8	Carbazole	20	U	
92-87-5	Benzidine	50	U	

(1) - Cannot be separated from Diphenylamine

96

ACF 9-9-93

a92 9-15-93 ~~000341~~

EPA SAMPLE NO.

B08KP0

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S11

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

97

FORM I SV-TIC 1/87 Rev.

AES 9-9-93

~~000356~~

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1977

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	20	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	Bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U

UJ

9-9-93

ASD 9-15-93 ~~000357~~

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1978

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

CAS NO.	COMPOUND		Q
10595-95-6	N-Nitroso-methylethylamine	20	U
66-27-3	Methyl methanesulfonate	10	U
55-18-5	N-Nitrosodiethylamine	20	U
62-50-0	Ethyl methanesulfonate	20	U
109-06-8	2-Picoline	10	U
930-55-2	N-Nitrosopyrrolidine	40	U
98-86-2	Acetophenone	10	U
59-89-2	N-Nitroso-morpholine	1000	U
95-53-4	o-Toluidine	10	U
100-75-4	N-Nitrosopiperidine	20	U
1888-71-7	Hexachloropropene	20	U
87-65-0	2,6-Dichlorophenol	10	U
924-16-3	N-Nitrosodi-N-butylamine	10	U
94-59-7	Safrole	10	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U
120-58-1	Isosafrole	10	U
130-15-4	1,4-Naphthoquinone	20	U
528-29-0	1,3-Dinitrobenzene	50	U
92-67-1	4-Aminobiphenyl	10	U
99-35-4	1,3,5-Trinitrobenzene	50	U
I34-32-7	1-Naphthylamine	10	U
608-93-5	Pentachlorobenzene	20	U
91-59-8	2-Naphthylamine	10	U
58-90-2	2,3,4,6-Tetrachlorophenol	50	U
99-55-8	5-Nitro-o-toluidine	10	U

UJ

99

ASD 9-9-93

ASD 9-15-93

~~000358~~

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1979

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
99-09-2	3-Nitroaniline	50	U	UJ
83-32-9	Acenaphthene	10	U	
51-28-5	2,4-Dinitrophenol	50	U	
100-02-7	4-Nitrophenol	50	U	
132-64-9	Dibenzofuran	10	U	
121-14-2	2,4-Dinitrotoluene	10	U	
606-20-2	2,6-Dinitrotoluene	10	U	
84-66-2	Diethylphthalate	10	U	
7005-72-3	4-Chlorophenyl-phenylether	10	U	
86-73-7	Fluorene	10	U	
100-01-6	4-Nitroaniline	50	U	
534-52-1	4,6-Dinitro-2-methylphenol	50	U	
86-30-6	N-Nitrosodiphenylamine (1)	10	U	
101-55-3	4-Bromophenyl-phenylether	20	U	
118-74-1	Hexachlorobenzene	10	U	
87-86-5	Pentachlorophenol	50	U	
85-01-8	Phenanthrene	10	U	
120-12-7	Anthracene	10	U	
84-74-2	Di-n-butylphthalate	10	U	
206-44-0	Fluoranthene	10	U	
I29-00-0	Pyrene	10	U	
85-68-7	Butylbenzylphthalate	10	U	
91-94-1	3,3'-Dichlorobenzidine	20	U	
56-55-3	Benzo(a)anthracene	10	U	
117-81-7	Bis(2-ethylhexyl)phthalate	10	U	
218-01-9	Chrysene	10	U	
117-84-0	Di-n-octylphthalate	10	U	
205-99-2	Benzo(b)fluoranthene	10	U	
207-08-9	Benzo(k)fluoranthene	10	U	
50-32-8	Benzo(a)pyrene	10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	
53-70-3	Dibenz(a,h)anthracene	10	U	
191-24-2	Benzo(g,h,i)perylene	10	U	r

(1) - Cannot be separated from Diphenylamine

1C

FORM I SV-2 1/87 Rev.

Ad 9-9-93

a JD 9-15-93

~~000359~~

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

9413273.1980

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-44-2	Phenacetin	20	U
82-68-8	Pentachloronitrobenzene	50	U
122-09-8	a,a-Dimethylphenethylamine	10	U
23950-58-5	Pronamide	10	U
56-57-5	4-Nitroquinoline-1-oxide	100	U
91-80-5	Methapyrilene	10	U
140-57-8	Aramite	50	U
60-11-7	p-Dimethylaminoazobenzene	10	U
53-96-3	2-Acetylaminofluorene	20	U
119-93-7	3,3'-Dimethylbenzidine	20	U
57-97-6	7,12-Dimethylbenz(a)anthracen	20	U
56-49-5	3-Methylcholanthrene	20	U
70-30-4	Hexachlorophene	100	U
110-86-1	Pyridine	10	U
465-73-6	Isodrin	20	U
62-75-9	N-Nitroso-dimethylamine	20	U
143-50-0	Kepone	50	U
2303-16-4	Diallate	20	U
510-15-6	Chlorobenzilate	10	U
62-53-3	Aniline	10	U
86-74-8	Carbazole	20	U
92-87-5	Benzidine	50	U

UJ

(1) - Cannot be separated from Diphenylamine

101

AD 9-9-93

ASD 9-15-93 ~~000360~~

EPA SAMPLE NO.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B08KP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 06015 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A306015-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30707S12

Level: (low/med) LOW Date Received: 06/07/93

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/09/93

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 07/07/93

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

102

FORM I SV-TIC 1/87 Rev.

Del 9-9-93

ASD 9-15-93

TMA Inc. REPORT Work Order # ~~A3-06-015~~ 001104

Received: 06/07/93

Results by Sample

SAMPLE ID B08KN6 FRACTION 01I TEST CODE 8150 NAME HERBICIDES 8150 (WM204)

Date & Time Collected 06/03/93 Category

8150 CHLORINATED HERBICIDES

Matrix: (soil/water) WATER Lab. File ID: AF27033

Sample Wt/Vol: 500 Date Prepared: 06/09/93

Moisture: NA Date Analyzed: 06/27/93

Extraction: (SepF/Cont/Sonc) Sepf Dilution Factor: 1.00

Concentrated Extract Volume: 5 (mL)

CAS No.	COMPOUND	RESULT ug/L	PQL ug/L	
75-99-0	Dalapon	ND	6	UJ
93-65-2	MCPP	ND	200	UJ
1918-00-9	Dicamba	ND	0.2	
94-75-7	2,4-D	ND	2	UJ
94-74-6	MCPA	ND	200	UJ
120-36-5	Dichloroprop	ND	2	
93-72-1	2,4,5-TP	ND	0.2	UJ
93-76-5	2,4,5-T	ND	0.2	
88-85-7	Dinoseb	ND	1.2	UJ
94-82-6	2,4-DB	ND	2	UJ

% RECOVERY SURROGATE COMPOUND

DCAA 71

ASD 9-6-93

FORM I

9413273.1982

ASD 9-15-93 ~~001109~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP0 FRACTION 04G TEST CODE 8150 NAME HERBICIDES 8150 (WH204)

Date & Time Collected 06/03/93 Category

8150 CHLORINATED HERBICIDES

Matrix: (soil/water) WATER Lab. File ID: AF27036

Sample Wt/Vol: 500 Date Prepared: 06/09/93

Moisture: NA Date Analyzed: 06/27/93

Extraction: (SepF/Cont/Sonc) Sepf Dilution Factor: 1.00

Concentrated Extract Volume: 5 (mL)

94A3273.1983

CAS No.	COMPOUND	RESULT ug/L	PQL ug/L	
75-99-0	Dalapon	ND	6	UJ
93-65-2	MCPP	ND	200	UJ
1918-00-9	Dicamba	ND	0.2	
94-75-7	2,4-D	ND	2	UJ
94-74-6	MCPA	ND	200	UJ
120-36-5	Dichloroprop	ND	2	
93-72-1	2,4,5-TP	ND	0.2	UJ
93-76-5	2,4,5-T	ND	0.2	
88-85-7	Dinoseb	ND	1.2	UJ
94-82-6	2,4-DB	ND	2	UJ

% RECOVERY SURROGATE COMPOUND

DCAA 63

ASD 9-6-93

FORM I

104

9-15-93 ~~001114~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP3 FRACTION 06E TEST CODE 8150 NAME HERBICIDES 8150 (WH204)

Date & Time Collected 06/03/93 Category

8150 CHLORINATED HERBICIDES

Matrix: (soil/water) WATER Lab. File ID: AF27037

Sample Wt/Vol: 500 Date Prepared: 06/09/93

Moisture: NA Date Analyzed: 06/27/93

Extraction: (SepF/Cont/Sonc) Sepf Dilution Factor: 1.00

Concentrated Extract Volume: 5 (mL)

9413273.1984

CAS No.	COMPOUND	RESULT ug/L	PQL ug/L	
75-99-0	Dalapon	ND	6	UJ
93-65-2	MCPP	ND	200	UJ
1918-00-9	Dicamba	ND	0.2	
94-75-7	2,4-D	ND	2	UJ
94-74-6	MCPA	ND	200	UJ
120-36-5	Dichloroprop	ND	2	
93-72-1	2,4,5-TP	ND	0.2	UJ
93-76-5	2,4,5-T	ND	0.2	
88-85-7	Dinoseb	ND	1.2	UJ
94-82-6	2,4-DB	ND	2	UJ

% RECOVERY SURROGATE COMPOUND

DCAA 76

FORM I

9-6-93

105

~~000505~~ ATD 9-15-9

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93 Results by Sample

SAMPLE ID B08KN6 FRACTION 01E TEST CODE 8080A9 NAME Appendix IX Organchlo/pest

Date & Time Collected 06/03/93 Category

8080 Appendix IX ORGANOCHLORINE PESTICIDES Pg. 1 of 2

Matrix: WATER

Sample wt/vol: 1000 mL Lab File Id: AG13031

Moisture: NA Date Prepared: 06/09/93

Extraction (SepF/Cont/Sonc): Cont Date Analyzed: 07/14/93

Concentrated Extract Volume: 10 mL Dilution Factor: 1

GPC Cleanup (Y/N): N pH NA Sulfur Cleanup (Y/N): N

9413273.1985

CAS NO.	COMPOUND	RESULT ug/L	PQL ug/L
309-00-2	Aldrin	ND	0.05
319-84-6	alpha-BHC	ND	0.05
319-85-7	beta-BHC	ND	0.05
319-86-8	delta-BHC	ND	0.05
58-89-9	gamma-BHC	ND	0.05
5103-71-9	alpha-Chlordane	ND	0.05
5103-74-2	gamma-Chlordane	ND	0.05
57-74-90	Chlordane	ND	1.00
1897-45-6	Chlorthalonil	ND	0.50
72-54-8	4,4'-DDD	ND	0.10
72-55-9	4,4'-DDE	ND	0.10
50-29-3	4,4'-DDT	ND	0.10
60-57-1	Dieldrin	ND	0.10
959-98-8	Endosulfan I	ND	0.05
33213-65-9	Endosulfan II	ND	0.10
1031-07-8	Endosulfan Sulfate	ND	0.10
72-20-8	Endrin	ND	0.10

dw 9/8/93

106

ATD 9-15-93 ~~000506~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93 Results by Sample Continued From Above

SAMPLE ID B08KN6 FRACTION 01E TEST CODE 8080A9 NAME Appendix IX Organchlo/pest

Date & Time Collected 06/03/93 Category

8080 Appendix IX ORGANOCHLORINE PESTICIDES Pg. 2 of 2

Matrix: WATER

Sample wt/vol: 1000 mL Lab File Id: AG13031

Moisture: NA Date Prepared: 06/09/93

Extraction (SepF/Cont/Sonc): Cont Date Analyzed: 07/14/93

Concentrated Extract Volume: 10 mL Dilution Factor 1

GPC Cleanup (Y/N): N pH NA Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/L	PQL ug/L
7421-93-4	Endrin Aldehyde	ND	0.10
133-07-3	Folpet	ND	1.00
76-44-8	Heptachlor	ND	0.05
1024-57-3	Heptachlor Epoxide	ND	0.05
72-43-5	Methoxychlor	ND	0.50
2385-85-5	Mirex	ND	0.10
8001-35-2	Toxaphene	ND	5.00
12674-11-2	Aroclor-1016	ND	1.00
11104-28-2	Aroclor-1221	ND	2.00
11141-16-5	Aroclor-1232	ND	1.00
53469-21-9	Aroclor-1242	ND	1.00
12672-29-6	Aroclor-1248	ND	1.00
11097-69-1	Aroclor-1254	ND	1.00
11096-82-5	Aroclor-1260	ND	1.00
	PBBs	ND	1.00

UJ

9413273.1986

% RECOVERY SURROGATE COMPOUND

dw 9/8/93

TCX 74

DCB 55

FORM I

107

~~000517~~ a 15 9-15-

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93 Results by Sample

SAMPLE ID B08KP0 FRACTION 04C TEST CODE 8080A9 NAME Appendix IX Organchlo/pest

Date & Time Collected 06/03/93 Category

8080 Appendix IX ORGANOCHLORINE PESTICIDES Pg. 1 of 2

Matrix: WATER

Sample wt/vol: 1000 mL Lab File Id: AG13034

Moisture: NA Date Prepared: 06/09/93

Extraction (SepF/Cont/Sonc): Cont Date Analyzed: 07/14/93

Concentrated Extract Volume: 10 mL Dilution Factor: 1

GPC Cleanup (Y/N): N pH NA Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/L	PQL ug/L
309-00-2	Aldrin	ND	0.05
319-84-6	alpha-BHC	ND	0.05
319-85-7	beta-BHC	ND	0.05
319-86-8	delta-BHC	ND	0.05
58-89-9	gamma-BHC	ND	0.05
5103-71-9	alpha-Chlordane	ND	0.05
5103-74-2	gamma-Chlordane	ND	0.05
57-74-90	Chlordane	ND	1.00
1897-45-6	Chlorthalonil	ND	0.50
72-54-8	4,4'-DDD	ND	0.10
72-55-9	4,4'-DDE	ND	0.10
50-29-3	4,4'-DDT	ND	0.10
60-57-1	Dieldrin	ND	0.10
959-98-8	Endosulfan I	ND	0.05
33213-65-9	Endosulfan II	ND	0.10
1031-07-8	Endosulfan Sulfate	ND	0.10
72-20-8	Endrin	ND	0.10

dw 9/8/93

9413273.1987

108

TMA Inc. REPORT
Results by Sample

Received: 06/07/93

Work Order # A3-06-015
Continued From Above

SAMPLE ID B08KP0 FRACTION 04C TEST CODE 8080A9 NAME Appendix IX Organchlo/pest
Date & Time Collected 06/03/93 Category

8080 Appendix IX ORGANOCHLORINE PESTICIDES Pg. 2 of 2

Matrix: WATER
Sample wt/vol: 1000 mL
Moisture: NA
Extraction (SepF/Cont/Sonc): Cont
Concentrated Extract Volume: 10 mL
GPC Cleanup (Y/N): N pH NA

Lab File Id: AG13034
Date Prepared: 06/09/93
Date Analyzed: 07/14/93
Dilution Factor 1
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/L	PQL ug/L
7421-93-4	Endrin Aldehyde	ND	0.10
133-07-3	Folpet	ND	1.00
76-44-8	Heptachlor	ND	0.05
1024-57-3	Heptachlor Epoxide	ND	0.05
72-43-5	Methoxychlor	ND	0.50
2385-85-5	Mirex	ND	0.10
8001-35-2	Toxaphene	ND	5.00
12674-11-2	Aroclor-1016	ND	1.00
11104-28-2	Aroclor-1221	ND	2.00
11141-16-5	Aroclor-1232	ND	1.00
53469-21-9	Aroclor-1242	ND	1.00
12672-29-6	Aroclor-1248	ND	1.00
11097-69-1	Aroclor-1254	ND	1.00
11096-82-5	Aroclor-1260	ND	1.00
	PBBs	ND	1.00

UJ

% RECOVERY SURROGATE COMPOUND

TCX 77
DCB 65

dw 9/8/93

FORM I

9413273.1988

ADD 9-15-93 ~~000530~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP3 FRACTION 06C TEST CODE 8080A9 NAME Appendix IX Organchlo/pest

Date & Time Collected 06/03/93 Category

8080 Appendix IX ORGANOCHLORINE PESTICIDES Pg. 1 of 2

Matrix: WATER

Sample wt/vol: 1000 mL

Moisture: NA

Extraction (SepF/Cont/Sonc): Cont

Concentrated Extract Volume: 10 mL

GPC Cleanup (Y/N): N pH NA

Lab File Id: AG13035

Date Prepared: 06/09/93

Date Analyzed: 07/14/93

Dilution Factor: 1

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/L	PQL ug/L
309-00-2	Aldrin	ND	0.05
319-84-6	alpha-BHC	ND	0.05
319-85-7	beta-BHC	ND	0.05
319-86-8	delta-BHC	ND	0.05
58-89-9	gamma-BHC	ND	0.05
5103-71-9	alpha-Chlordane	ND	0.05
5103-74-2	gamma-Chlordane	ND	0.05
57-74-90	Chlordane	ND	1.00
1897-45-6	Chlorthalonil	ND	0.50
72-54-8	4,4'-DDD	ND	0.10
72-55-9	4,4'-DDE	ND	0.10
50-29-3	4,4'-DDT	ND	0.10
60-57-1	Dieldrin	ND	0.10
959-98-8	Endosulfan I	ND	0.05
33213-65-9	Endosulfan II	ND	0.10
1031-07-8	Endosulfan Sulfate	ND	0.10
72-20-8	Endrin	ND	0.10

dw 9/8/93

9413273.1989

110

9-15-93 ~~000531~~

TMA Inc. REPORT

Received: 06/07/93

Results by Sample

Work Order # A3-06-015

Continued From Above

SAMPLE ID B08KP3 FRACTION 06C TEST CODE 8080A9 NAME Appendix IX Organchlo/pest

Date & Time Collected 06/03/93 Category

8080 Appendix IX ORGANOCHLORINE PESTICIDES Pg. 2 of 2

Matrix: WATER

Sample wt/vol: 1000 mL

Lab File Id: AG13035

Moisture: NA

Date Prepared: 06/09/93

Extraction (SepF/Cont/Sonc): Cont

Date Analyzed: 07/14/93

Concentrated Extract Volume: 10 mL

Dilution Factor 1

GPC Cleanup (Y/N): N pH NA

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/L	PQL ug/L
7421-93-4	Endrin Aldehyde	ND	0.10
133-07-3	Folpet	ND	1.00
76-44-8	Heptachlor	ND	0.05
1024-57-3	Heptachlor Epoxide	ND	0.05
72-43-5	Methoxychlor	ND	0.50
2385-85-5	Mirex	ND	0.10
8001-35-2	Toxaphene	ND	5.00
12674-11-2	Aroclor-1016	ND	1.00
11104-28-2	Aroclor-1221	ND	2.00
11141-16-5	Aroclor-1232	ND	1.00
53469-21-9	Aroclor-1242	ND	1.00
12672-29-6	Aroclor-1248	ND	1.00
11097-69-1	Aroclor-1254	ND	1.00
11096-82-5	Aroclor-1260	ND	1.00
	PBBs	ND	1.00

UJ

dw 9/8/93

% RECOVERY SURROGATE COMPOUND

TCX 83

DCB 52

FORM I

9413273.1990

111

9-15-93 ~~001663~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93

Results by Sample

SAMPLE ID B08KN6 FRACTION 01H TEST CODE 8140A9 NAME Append.IX OrganoPhos/Pest

Date & Time Collected 06/03/93 Category

8140 Appendix IX ORGANOPHOSPHORUS PESTICIDES

Matrix: (soil/water) WATER

Sample wt/vol: 1000 (mL)

Extraction: (SepF/Cont/Sonc) Cont

Concentrated Extract Volume: 10 (mL)

GPC Cleanup: (Y/N) N

Lab File ID: L062434

Moisture: NA

Date Prepared: 06/09/93

Date Analyzed: 06/26/93

Dilution Factor: 1.00

CAS No.	COMPOUND	RESULT ug/L	PQL ug/L
62-73-7	Dichlorvos	ND	0.50
60-51-5	Dimethoate	ND	2.0
298-04-4	Disulfoton	ND	0.50
52-85-7	Famphur	ND	2.0
56-38-2	Parathion	ND	0.50
298-00-0	Parathion-methyl	ND	1.0
298-02-2	Phorate	ND	0.50
3689-24-5	Sulfotep	ND	0.50

% RECOVERY SURROGATE COMPOUND

Tributylphosphate 94

Triphenylphosphate 115

dw 9/8/93

FORM I

112

a3D
9-15-93 ~~001071~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP0 FRACTION 04D TEST CODE 8140A9 NAME Append.IX OrganoPhos/Pest

Date & Time Collected 06/03/93 Category

8140 Appendix IX ORGANOPHOSPHORUS PESTICIDES

Matrix: (soil/water) WATER

Sample wt/vol: 1000 (mL)

Extraction: (SepF/Cont/Sonc) Cont

Concentrated Extract Volume: 10 (mL)

GPC Cleanup: (Y/N) N

Lab File ID: L062435

Moisture: NA

Date Prepared: 06/09/93

Date Analyzed: 06/26/93

Dilution Factor: 1.00

CAS No.	COMPOUND	RESULT ug/L	PQL ug/L
62-73-7	Dichlorvos	ND	0.50
60-51-5	Dimethoate	ND	2.0
298-04-4	Disulfoton	ND	0.50
52-85-7	Famphur	ND	2.0
56-38-2	Parathion	ND	0.50
298-00-0	Parathion-methyl	ND	1.0
298-02-2	Phorate	ND	0.50
3689-24-5	Sulfotep	ND	0.50

% RECOVERY SURROGATE COMPOUND

Tributylphosphate 91

Triphenylphosphate 103

dw 9/8/93

FORM I

9413273.1992

9-15-93 ~~001073~~

TMA Inc. REPORT Work Order # A3-06-015

Received: 06/07/93

Results by Sample

SAMPLE ID B08KP3 FRACTION 06D TEST CODE 8140A9 NAME Append.IX OrganoPhos/Pest

Date & Time Collected 06/03/93 Category

8140 Appendix IX ORGANOPHOSPHORUS PESTICIDES

Matrix: (soil/water) WATER

Sample wt/vol: 1000 (mL)

Extraction: (SepF/Cont/Sonc) Cont

Concentrated Extract Volume: 10 (mL)

GPC Cleanup: (Y/N) N

Lab File ID: L062438

Moisture: NA

Date Prepared: 06/09/93

Date Analyzed: 06/26/93

Dilution Factor: 1.00

CAS No.	COMPOUND	RESULT ug/L	PQL ug/L
62-73-7	Dichlorvos	ND	0.50
60-51-5	Dimethoate	ND	2.0
298-04-4	Disulfoton	ND	0.50
52-85-7	Famphur	ND	2.0
56-38-2	Parathion	ND	0.50
298-00-0	Parathion-methyl	ND	1.0
298-02-2	Phorate	ND	0.50
3689-24-5	Sulfotep	ND	0.50

dw 9/8/93

% RECOVERY SURROGATE COMPOUND

Tributylphosphate 92

Triphenylphosphate 110

FORM I

94/3273 1993

114

Received: 06/08/93

Skinner&Sherman REPORT Work Order # S3-06-060

Results by Sample

SAMPLE ID B08KN6 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 06/03/93 Category WATER

NO3NO2 <0.25
mg N/L

SAMPLE ID B08KP0 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 06/03/93 Category WATER

NO3NO2 <0.25
mg N/L

SAMPLE ID B08KP3 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 06/03/93 Category WATER

NO3NO2 <0.25
mg N/L

SAMPLE ID B08KP3 DUPL SAMPLE # 03 FRACTIONS: B
Date & Time Collected 06/03/93 Category WATER

NO3NO2 <0.25
mg N/L

SAMPLE ID B08KP3 SPIKE SAMPLE # 03 FRACTIONS: C
Date & Time Collected 06/03/93 Category WATER

NO3NO2 2.17
mg N/L

SAMPLE ID LCSW SAMPLE # 04 FRACTIONS: A
Date & Time Collected not specified Category WATER

NO3NO2 1.94
mg N/L

dw 9/8/93

This report is rendered upon all of the following conditions: Skinner & Sherman Laboratories, Inc., retains ownership of this report until associated subm invoice is satisfied. Expert witness services shall be available in conjunction with this report only if prior notification of this potential requirement was m and accepted, before the analysis. Client will be responsible for Skinner & Sherman costs and consulting fees if our services are required by subpoena or other in legal proceedings. Total liability is limited to the invoice amount. The results listed refer only to tested samples and applicable parameters. Samples are analyzed in accordance with New York State protocol unless indicated. Product endorsement is neither inferred nor implied. Skinner & Sherman Laborato Inc., will exercise due diligence but will not be responsible for lost or destroyed samples or evidence unless client makes appropriate insurance coverage arra ments. Samples are held for thirty days following issuance of report. Samples will be stored at client's expense, if authorized in writing.

TMA
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1-800-4 LAB TEST FAX (617) 890-3883