START 9713505.0371 B06D25-TMA-275 000002 442
0045797

CASE NARRATIVE

NOV 1992 RECEIVED EDMS

LABORATORY : TMA/ARLI

CASE : 09-001

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : August 28, 1992

1.0 DESCRIPTION OF CASE :

Seven soil samples were analyzed for TCL Organics-Volatiles, Semivolatiles and Pesticide/PCBs according to the USEPA Contract Laboratory Program (CLP) Statement of Work for Organic Analysis, Revision OLM01.8.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX
B06D25	A2-09-001-01A	V	SOIL
B06D25 MS	A2-09-001-01B	V	SOIL
B06D25 MSD	A2-09-001-01C	V	SOIL
B06D25	A2-09-001-01D	SV & P	SOIL
B06D26	A2-09-001-02A	V	SOIL
B06D26	A2-09-001-02B	SV & P	SOIL
B06D26 MS	A2-09-001-02C	SV	SOIL
B06D26 MSD	A2-09-001-02D	SV	SOIL
B06D27	A2-09-001-03A	V	SOIL
B06D27	A2-09-001-03B	SV & P	SOIL
B06D27 MS	A2-09-001-03C	P	SOIL
B06D27 MSD	A2-09-001-03D	P	SOIL
B06D28	A2-09-001-04A	V	SOIL
B06D28	A2-09-001-04B	SV & P	SOIL
B06D30	A2-09-001-05A	V	SOIL
B06D30	A2-09-001-05B	SV & P	SOIL
B06D50	A2-09-001-06A	V	SOIL
B06D50	A2-09-001-06B	SV & P	SOIL
B06D54	A2-09-001-07A	V	SOIL

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

The samples were received unbroken and properly documented.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL SOIL :

The samples were analyzed by heated purge within the CLP SOW holding times.

All of the QC results were within the limits specified by the EPA CLP SOW.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL SOIL :

The samples were extracted and analyzed within the CLP SOW holding times.

All of the QC results were within the limits specified by the EPA CLP SOW.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The sequence was started on 9/29/2 and was analyzed in accordance with the EPA CLP SOW. The sequence was analyzed by single injection into a dual column system. The sequence met all of the QC requirements specified in the CLP SOW.

At 14:07 on 9/30/92 INDAM02 was injected. However, the Nelson interface box was interrupted at the time the data was being collected. This prevented the complete data of INDAM02 to be collected. Therefore, another instrument blank analyzed, followed by INDAM03 and INDBM02. The sequence was maintained.

After the injection at 04:22 on 10/1/92 the autosampler malfunctioned. Maintenance was performed and the sequence was resumed with the next injection at 09:10 on 10/1/92 of an instrument blank and PEM04. The samples that were originally injected between 04:22 and 09:10 were re-injected and met all of the QC requirements.

The Chromatograms are presented in the manner consistent with the capabilities of the Nelson 2600 Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL SOIL :

The samples were extracted and analyzed within the CLP SOW holding times. On the DB-1701 column the following samples had TCX surrogate recoveries slightly below the advisory QC limit: B06D27, B06D27MS, B06D27MSD and B06D28. Sample B06D28 also had a low TCX recovery on the DB-608 column. Each of the above samples also had a percent difference (%D) for TCX on both columns that exceeded 25%. The low recoveries for these samples are due to matrix interferences raising the baseline between the retention times 4 - 7.5 minutes on the DB-1701 column. The TCX peaks were re-integrated and reported so as not to include the background.

Sample B06D27MSD had a higher spike recovery for gamma-BHC on the DB-608 column than the DB-1701 column. The DB-608 column recovery also exceeded the QC advisory limit. The percent difference (%D) for gamma-BHC exceeded the 25% limit and therefore, has been "P" qualified.

Aroclor-1254 was detected in sample B06D26 at a concentration that was below the GCMS detection limit. 4,4'-DDE was detected in sample B06D30 at a concentration below the GCMS detection limit. Therefore, both the Aroclor-1254 and 4,4'-DDE could not be confirmed by GCMS.

All of the other QC results were within the limits specified by the EPA CLP SOW.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
Nicole Roth
CLP Program Manager

Widayati
Wida Ang
Organics Supervisor

9713505.0374

Westinghouse Hanford Company

NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 051932

QA Log No.

3. P. O., W. O., or Job Control No.	4. System/End Use	5. Item/Material	6. Dwg./Spec./Other No.	7. Rev.
N/A	RI/FS	SAMPLES	SEE DESCRIPTION	N/A

8. Program/Project/Other	9. Safety Class	10. ASME Code Items
(100-DR-1) 100-D-PONDS / 92-185	N/A	☐ Yes ☒ No (If yes, notify authorized inspector)

11. Supplier Name/Address	12. Notification of Potential Occurence Required
ENVIRONMENTAL FIELD SAMPLING SERVICES	☐ Yes ☒ No

13. Code: Lot/Heat/Serial	14. Lot Size	15. Sample	16. Qty. Acc.	17. Inspection Criteria
N/A	18	18	Ø	☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other WHC-CM-7-7, EII 5 REV 0, SEC 6.1

18. Item	19. Description of Nonconformance (list serial no. where applicable)	22. Disposition, Justification, and Instructions
	AS STATED IN WHC-CM-7-7, EII 5.10, REV. 0, SEC. 6.1, THERE WILL BE ONLY ONE UNIQUE HEIS NUMBER PER SAMPLE TO ASSURE NO MUTIPLE USE OF A SAMPLE NUMBER(S). CONTRARY TO THE ABOVE, HEIS SAMPLE NUMBERS - B06D31, B06D32, B06D34, B06D38, B06D39, B06D40, B06D41, B06D42, B06D43, B06D44, B06D45, B06D46, B06D47, B06D48, B06D49, B06D51, B06D52, B06D57 - WERE ASSIGNED TO TWO DISTINCT SAMPLES. EACH SAMPLE MUST BE ASSIGNED A UNIQUE HEIS NUMBER.	SDLA WILL ISSUE A NEW HEIS NUMBER TO ANY SAMPLE WHICH HAS BEEN GIVEN A PREVIOUSLY USED HEIS IDENTIFIER. THESE SAMPLE NUMBER CHANGE WILL BE ENTERED INTO THE SDLA DATA BASE. A MEMO WILL BE TRANSMITTED TO HEIS AND THE ANALYTICAL LABORATORY DATA PACKAGE, OUTLINING CORRECTIONS. SAMPLE NUMBERS WILL BE USED "AS IS" AND ~~REQUESTED~~ REFERENCED IN THE SDLA DATABASE TO MAINTAIN TRACEABILITY.

CANCELLED BMC 1/25/94

20. Originator's Signature	Date	23. Design Document Change Required?
R Lloyd Smith	1/12/94	☐ Yes, Doc. No. _____ ☐ No
21. Cognizant QA Manager's Signature	**Date**	**24. Corrective Action Required?**
		☐ Yes, No. _____ ☐ No

Disp. App.	25. Cognizant Engineer	Date	26. Technical Rep.	Date	Signature/Org.	Date
	N. M. Neikirk					
	QA Engineer	Date	Signature/Org.	Date	Signature/Org.	Date
	J. S. Corrigan					

Close

27. Accept _____ Reject _____ Follow on NCR _____

QA/C Personnel _____ Date

5-7310-104 (10/9

DUPLICATE HEIS NUMBERS

for Project 100-D-PONDS

HEIS Samp Number	Client Sample Number	Master DP File Number	DP Sequence Number	Laboratory	Y N VOA	Y N SEMI VOA	Y N PEST/PCB	Y N WETCHEM	Y N METALS	COMMENTS	Y N RADCHEM	Date OSM Rcvd DP
B06D31		9209L714	834	WESTON	N	N	N	N	Y 11/11/92	09/02/92	N	11/11/92
B06D31A		B06D25	275	TMA/NORCAL	Y 11/17/92	Y 11/17/92	Y 11/17/92	N	Y 11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N	11/17/92
B06D32		9209L714	834	WESTON	N	N	N	N	Y 11/11/92	09/02/92	N	11/11/92
B06D32A		B06D25	275	TMA/NORCAL	Y 11/17/92	Y 11/17/92	Y 11/17/92	N	Y 11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N	11/17/92
B06D34		9209L714	834	WESTON	N	N	N	N	Y 11/11/92	09/02/92	N	11/11/92
B06D34A		B06D25	275	TMA/NORCAL	Y 11/17/92	Y 11/17/92	Y 11/17/92	N	Y 11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N	11/17/92
B06D38		9209L714	834	WESTON	N	N	N	N	Y 11/11/92	09/02/92	N	11/11/92
B06D38A		B06D25	275	TMA/NORCAL	Y 11/17/92	Y 11/17/92	Y 11/17/92	N	Y 11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N	11/17/92
B06D39		9209L714	834	WESTON	N	N	N	N	Y 11/11/92	09/02/92	N	11/11/92

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1/10/94

DUPLICATE HEIS NUMBERS

for Project 100-D-PONDS

HEIS Samp Number	Client Sample Number	Master DP File Number	DP Sequence Number	Laboratory	Y N	VOA	Y N	SEMI VOA	Y N	PEST/PCB	Y N	WETCHEM	Y N	METALS	COMMENTS	Y N	RADCHEM	Date OSM Rcvd DP
B06D48A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D49		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D49A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D51		9208L673	825	WESTON	N		N		N		N		Y	11/04/92	08/29/92	N		11/04/92
B06D51A		B06D51	267	TMA/NORCAL	Y	11/02/92	Y	11/02/92	Y	11/02/92	N		Y	11/02/92	08/28/92	N		11/02/92
B06D52		9208L673	825	WESTON	N		N		N		N		Y	11/04/92	08/29/92	N		11/04/92
B06D52A		B06D51	267	TMA/NORCAL	Y	11/02/92	Y	11/02/92	Y	11/02/92	N		Y	11/02/92	08/28/92	N		11/02/92
B06D57		9208L673	825	WESTON	N		N		N		N		Y	11/04/92	08/29/92	N		11/04/92
B06D57A		B06D51	267	TMA/NORCAL	Y	11/02/92	Y	11/02/92	Y	11/02/92	N		Y	11/02/92	08/28/92	N		11/02/92

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1/10/94

DUPLICATE HEIS NUMBERS

for Project 100-D-PONDS

HEIS Samp Number	Client Sample Number	Master DP File Number	DP Sequence Number	Laboratory	Y N	VOA	Y N	SEMI VOA	Y N	PEST/PCB	Y N	WETCHEM	Y N	METALS	COMMENTS	Y N	RADCHEM	Date OSM Rcvd DP
B06D44		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D44A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D45		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D45A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D46		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D46A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D47		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D47A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D48		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92

9713505.0427

1/10/94

DUPLICATE HEIS NUMBERS

for Project 100-D-PONDS

HEIS Samp Number	Client Sample Number	Master DP File Number	DP Sequence Number	Laboratory	Y N	VOA	Y N	SEMI VOA	Y N	PEST/PCB	Y N	WETCHEM	Y N	METALS	COMMENTS	Y N	RADCHEM	Date OSM Rcvd DP
B06D39A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D40		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D40A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D41		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D41A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D42		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D42A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92
B06D43		9209L714	834	WESTON	N		N		N		N		Y	11/11/92	09/02/92	N		11/11/92
B06D43A		B06D25	275	TMA/NORCAL	Y	11/17/92	Y	11/17/92	Y	11/17/92	N		Y	11/17/92	08/28/92 - REVISED HG RCVD 8/30/93	N		11/17/92

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9213505.0379

OFFICE OF SAMPLE MANAGEMENT

RECORD OF DISPOSITION

ROD-92-00191
Record of Disposition No.

DATE: 12-01-92	LABORATORY: TMA
PROJECT TITLE/NO.: 100-D PONDS/92-185	NCR NO.: N/A

SAMPLE IDENTIFICATION NUMBERS:

B06D44

DESCRIPTION OF EVENT:

DUE TO A GEL PERMEATION CHROMATOGRAPHY (GPC) MALFUNCTION, THE PESTICIDE EXTRACT FOR SAMPLE B06D44 WAS LOST FOR PCB (8080) ANALYSIS.

THE SAMPLE WAS RE-EXTRACTED OUT OF HOLDING TIME (2 DAYS PASSED HT).

DISPOSITION OF SAMPLES:

WITH CONCURRENCE FROM THE ERE PROJECT COORDINATOR (N. M. NAIKNIMBALKER); THE RE-EXTRACT, FOR PCB/PEST ON SAMPLE B06D44 OUT OF HOLD TIME, SHOULD PROCEDE AND THE RESULTS REPORTED. TMA LABORATORY HAS BEEN NOTIFIED.

APPROVAL SIGNATURES:

KARL N. POOL/ Karl N. Pool — 12/1/92
OSM Project Coordinator (Print/Sign Name) — Date
THIS IS A COPY 4/12/93 NCS

MICHAEL T. STANKOVICH/ Michael T. Stankovich — 4/14/93
Technical Representative (Print/Sign Name) — Date

Quality Assurance (Print/Sign Name) — Date

9713505.0380

MEMORANDUM

To: Karl Pool

From: Dolores Sanchez D Sanchez

Subject: Sample B06D44 (100-D Ponds)

Date: September 11, 1992

Due to a Gel Permeation Chromatography (GPC) malfunction, the pesticide extract for sa B06D44 was lost for PCB (8080) analysis.

The sample is being re-extracted out of holding time today (2 days passed HT). Please l know whether WHC wants us to proceed with the analysis?

David Blumenkranz 2-1021
Naik Naikrimbalker 6-8739 (Cog. Engineer)

Go ahead and report.

With concurrence from the ERE ~~Operable Unit~~ Project coordinc (N.M. Naikrimbalker); The Re-extract, for PCB/RESTON Samp out of hold should procede and the results reported.

9713505.0381

TMA
Thermo Analytical Inc.

TMA/Norcal
2030 Wright Avenue
P. O. Box 4040
Richmond, CA 94804-0040
(510) 235-2633 Fax No. (510) 235-0438

OCT 1993
RECEIVED
SDLA

September 1, 1993

Briana Colley
Westinghouse Hanford Company
2355 Stevens Drive, MSIN H4-23
345 Hills Street/3000 Area
Richland, WA 99352

Subject: ***Revised Mercury Case N2-08-188***

Dear Briana:

The corrected package for Mercury Case No. N2-08-188 was sent to Joan Kessner's attention on August 26, 1993. Please dispose the original report dated November 2, 1992, and replace it with the corrected report. Thank you.

Sincerely,

Dolores Sanchez
Program Administrator

/dss

9713505.0382

TMA
Thermo Analytical Inc.

TMA/Norcal
2030 Wright Avenue
P. O. Box 4040
Richmond, CA 94804-0040
(510) 235-2633 Fax No. (510) 235-0438

AUG 1993
RECEIVED
SOLA

August 26, 1993

Ms. Joan Kessner
Westinghouse Hanford Company
Hanford Analytical Services Management (HASM)
2355 Stevens Drive, MSIN H4-23
Richland, WA 99352

Re: WHC Contract # MBH-SVV-069262, Revised Report for Mercury, Case N2-08-188

Dear Ms. Kessner:

As promised, enclosed is the revised data package for Mercury Case N2-08-188. Also included is a copy of the completed Corrective Action Request Form for your information.

Please do not hesitate to call us if you require additional information.

Sincerely,

Dolores Sanchez

Dolores Sanchez
Program Administrator

Enclosures: Data Package & CAR 93-15

cc: Dan Stuermer, TMA

P.S. -- The diskette will be mailed separately tomorrow.

9/15989.0383

TMA/Skinner & Sherman Laboratories, Inc.
Quality Assurance Program

Corrective Action Request Form

1. Department: Inorganics Report No.: 93-15

Agenda / Checklist Item Case No. S209044 / Incorrect submission

2. Attention: David Peterson Reply By: 8/26/93

3. Auditor: Westinghouse Hanford Date: 8/25/93

4. Observation:

Review of S209044 during data validation revealed incorrect preparation data submitted for mercury analysis.

5. Recommendation:

Document reason for incorrect data submission.
Implement system to ensure that the correct preparation log information is entered into metals program.
Forward corrected data package to client.

6. Corrective Action Reply:

The analyst have been told to indicate in the prep log when samples are prepped but not analyzed. This will alleviate the possibility of the wrong prep being entered into a case file. The corrected data package has been sent to the client.

7. Date Action Will Be Completed: 8/26/93

8. Signature of Department Representative: [signature] Date: 8/26/93

9. Evaluation of Corrective Action Response:

Acceptable ✓ Not Acceptable _____ Other _____

10. Quality Assurance Auditor: [signature] Date: 8/26/93

11. Corrective Action Complete:

Verified By: _____ Date: _____

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ARL000005

Westinghouse Hanford Company	2 SARE	CHAIN OF CUSTODY	002696

Custody Form Initiator KB Hulse

Company Contact Richard Roos / Nancy Seguin (OSM) Telephone 376-9218/373-3467

Project Designation/Sampling Locations SAF#92-185 100-D Ponds Collection Date 8-25-92

Ice Chest No. SML 17 Field Logbook No. WHC-N-205 #15 pg 52

Bill of Lading/Airbill No. 250 987 0209 Offsite Property No.

Method of Shipment Emery Air Express Overnight Delivery

Shipped to TMA/NORCAL 2030 Write Av Richmond, CA 94804

Possible Sample Hazards/Remarks None Known

Sample Identification

B06D25 ~~Four (4)~~ Bottles x 2

B06D26 ~~Four (4)~~ Bottles x 2

B06D27 ~~four (4)~~ Bottles x 2

B06D28 ~~four (4)~~ Bottles x 2

B06D30 ~~Four (4)~~ Bottles x 2

B06D50 ~~Four (4)~~ Bottles x 2

B06D54 one (1) Bottle

Total 25 Bottles

KBH 8-26-92

KBH 8-26-92

☐ Field Transfer of Custody

CHAIN OF POSSESSION (Sign and Print Names)		
Relinquished by: KB Hulse KB Hulse	Received by: Kermit Blum	Date/Time: 8-28-92 1130
Relinquished by: 8-31-92 Kermit Blum	Received by: Trudy Gold TRUDY GOLD	Date/Time: 9.1.92 9:30a
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90)

9713505.0385

000006

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Ex 2696

Collector KB Hulse Date 8-26-92

Company Contact Nancy Seguin Telephone (509) 373-3467

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Requested
B06D25	S	8-25-92	0954	1-120ml aG VOA (CLP)
				1-500ml aG SEMI-VOA PCB,s/Pests (CLP)
				~~1-250ml aG ICP/AA Metals, Hg (CLP)~~
				~~1-125ml G Cyanide (CLP)~~
B06D26	S	8-25-92	1010	1-120ml aG VOA (CLP)
				1-500ml aG SEMI-VOA PCB,s/Pests (CLP)
				~~1-250ml aG ICP/AA Metals, Hg (CLP)~~
				~~1-125ml G Cyanide (CLP)~~
B06D27	SL	8-26-92	0947	1-120ml aG VOA (CLP)
				1-500ml aG SEMI-VOA PCB,s/Pests (CLP)
				~~1-250ml aG ICP/AA Metals, Hg (CLP)~~
				~~1-125ml G Cyanide (CLP)~~
B06D28	SL	8-26-92	0947	1-120ml aG VOA (CLP)
				1-500ml aG SEMI-VOA PCB,s/Pests (CLP)
				~~1-250ml aG ICP/AA Metals, Hg (CLP)~~
				~~1-125ml G Cyanide (CLP)~~
B06D30	SL	8-26-92	1306	1-120ml aG VOA (CLP)
				1-500ml aG SEMI-VOA PCB,s/Pests (CLP)
				~~1-250ml aG ICP/AA Metals Hg (CLP)~~
				~~1-125ml G Cyanide (CLP)~~
B06D50	S	8-25-92	1248	1-120ml aG VOA (CLP)
				1-500ml aG SEMI-VOA PCB,s/Pests (CLP)
				~~1-250ml aG ICP/AA Metals Hg (CLP)~~
				~~1-125ml G Cyanide (CLP)~~

*Type of Sample

A = Air Total 24 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 Field pH with paper 6 to 7 on the sludge

Special Handling and/or Storage Stored at 4° C and shipped on WET ICE

Possible Sample Hazards None Known

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST COC 2686

Collector KB Hulse Date 8-26-92

Company Contact Nancy Seguin Telephone (509) 373-3467

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Requested
B06D54	S	8-25-92	0740	1-120ml aG VOA (CLP)

KB Hulse 8-26-92

*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

Special Handling and/or Storage Stored at 4° C and shipped on WET ICE

Possible Sample Hazards None Known

9713505.0387

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FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 2521032474

2521032474

Date 8-3-92

RECIPIENT'S COPY

From (Your Name) Please Print: SAMPLE CONTROL

Your Phone Number (Very Important): (619) 235-2633

Company: [illegible] MEDICAL

Department/Floor No:

Street Address: [illegible] HEIGHT AVE

City: RICHMOND State: CA ZIP Required: 94804

To (Recipient's Name) Please Print: SAMPLE CONTROL

Recipient's Phone Number (Very Imp

Company: TMA/ARL

Department/Floor

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): 160 Taylor Street

City: MONROVIA State: CA ZIP Required: 91016

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 2320 6406

IF HOLD FOR PICK-UP, Print FEDEX Address Here

Street Address

City State ZIP Required

PAYMENT 1 [x] Bill Sender 2 [ ] Bill Recipient's FedEx Acct No 3 [ ] Bill 3rd Party FedEx Acct No 4 [ ] Bill Credit Card 5 [ ] Cash Check

SERVICES (Check only one box)

Priority Overnight
- 11 [x] YOUR PACKAGING
- 16 [ ] FEDEX LETTER *
- 12 [ ] FEDEX PAK *
- 13 [ ] FEDEX BOX
- 14 [ ] FEDEX TUBE

Standard Overnight
- 51 [ ] YOUR PACKAGING
- 56 [ ] FEDEX LETTER *
- 52 [ ] FEDEX PAK *
- 53 [ ] FEDEX BOX
- 54 [ ] FEDEX TUBE

Economy Two-Day
- 30 [ ] ECONOMY

Government Overnight
- 46 [ ] GOVT LETTER
- 41 [ ] GOVT PACKAGE

Freight Service
- 70 [ ] OVERNIGHT FREIGHT **
- 80 [ ] TWO-DAY FREIGHT **

DELIVERY AND SPECIAL HANDLING (Check services required)

1 [ ] HOLD FOR PICK-UP (Fill in Box H)
2 [x] DELIVER WEEKDAY
3 [ ] DELIVER SATURDAY (Extra charge) (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ]
6 [ ] DRY ICE Lbs
7 [ ] OTHER SPECIAL SERVICE
8 [ ]
9 [ ] SATURDAY PICK-UP (Extra charge)
10 [ ]
11 [ ]
12 [ ] HOLIDAY DELIVERY (Extra charge)

PACKAGES | WEIGHT in Pounds Only | YOUR DECLARED VALUE

Total 2 Total 152 Total

DIM SHIPMENT (Chargeable Weight) [ ] _____ lbs

L x W x H = _____

Received At: [x] Regular Stop 2 [ ] On Call Stop 3 [ ] Drop Box 4 [ ] BSC 5 [ ] Station

Emp No Date

[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg To Dist. [ ] Chg To Hold

Street Address

City State Zip

Received By: X

Date/Time Received FedEx Employee Number

Release Signature

FedEx Emp No Date/Time

Federal Express U

Base Charges

Declared Value Cha

Other 1

Other 2

Total Charges

REVISION DATE 6/91. PART #137204 FXEM 4 FORMAT #099

099

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TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 9/01/92 COMPANY NORCAL (WMC) OTHER ORD # 2521C32474

Surveyor's Name MARK S. McCray

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 8/01/92

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.188

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, uCi/mL or uCi/g
Background		36.0			1.0				
Consistency		7,230	0.2791		5,140	0.1889			
Smears: Doodle		38.0			0				
Porky		59.0			6.0				
Reported (now)		34	samples [illegible]			< 50	pCi/gram		-

Comments:

All OK ✓ Approved

Not OK Date 9/01/92

CASE NO. 09-001

DATA SUMMARY REPORT
ORGANICS

PREPARED BY:

TMA ARLI
160 TAYLOR ST.
MONROVIA CA 91016

9713505.0390

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EPA SAMPLE NO.

B06D25

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-01A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	J
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	9	J
591-78-6	2-Hexanone	9	J
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	3	J
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

EPA SAMPLE NO.

B06D25

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-01A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	2.97	9	J
2.	UNKNOWN HYDROCARBON	14.87	12	BJ
3.	UNKNOWN HYDROCARBON	19.28	10	J

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000013

EPA SAMPLE NO.

B06D26

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-02A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 13 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	12	
71-55-6	1,1,1-Trichloroethane	6	J
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D26

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-02A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 13 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	2.97	31	J
2.	UNKNOWN HYDROCARBON	5.72	25	J
3.	UNKNOWN HYDROCARBON	7.00	8	J
4.	UNKNOWN HYDROCARBON	8.32	6	J

9713505.0394

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000015
EPA SAMPLE NO.

B06D27

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 76 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	42	U
74-83-9	Bromomethane	42	U
75-01-4	Vinyl Chloride	42	U
75-00-3	Chloroethane	42	U
75-09-2	Methylene Chloride	42	U
67-64-1	Acetone	780	
75-15-0	Carbon Disulfide	31	J
75-35-4	1,1-Dichloroethene	42	U
75-34-3	1,1-Dichloroethane	42	U
540-59-0	1,2-Dichloroethene (total)	42	U
67-66-3	Chloroform	42	U
107-06-2	1,2-Dichloroethane	42	U
78-93-3	2-Butanone	140	
71-55-6	1,1,1-Trichloroethane	42	U
56-23-5	Carbon Tetrachloride	42	U
75-27-4	Bromodichloromethane	42	U
78-87-5	1,2-Dichloropropane	42	U
10061-01-5	cis-1,3-Dichloropropene	42	U
79-01-6	Trichloroethene	42	U
124-48-1	Dibromochloromethane	42	U
79-00-5	1,1,2-Trichloroethane	42	U
71-43-2	Benzene	42	U
10061-02-6	trans-1,3-Dichloropropene	42	U
75-25-2	Bromoform	42	U
108-10-1	4-Methyl-2-Pentanone	42	U
591-78-6	2-Hexanone	42	U
127-18-4	Tetrachloroethene	42	U
79-34-5	1,1,2,2-Tetrachloroethane	42	U
108-88-3	Toluene	13	J
108-90-7	Chlorobenzene	42	U
100-41-4	Ethylbenzene	42	U
100-42-5	Styrene	42	U
1330-20-7	Xylene (total)	42	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000016

B06D27

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 76 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.75	50	J

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000017
EPA SAMPLE NO.

B06D28

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-04A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	53	U
74-83-9	Bromomethane	53	U
75-01-4	Vinyl Chloride	53	U
75-00-3	Chloroethane	53	U
75-09-2	Methylene Chloride	53	U
67-64-1	Acetone	970	
75-15-0	Carbon Disulfide	71	
75-35-4	1,1-Dichloroethene	53	U
75-34-3	1,1-Dichloroethane	53	U
540-59-0	1,2-Dichloroethene (total)	53	U
67-66-3	Chloroform	53	U
107-06-2	1,2-Dichloroethane	53	U
78-93-3	2-Butanone	240	
71-55-6	1,1,1-Trichloroethane	53	U
56-23-5	Carbon Tetrachloride	53	U
75-27-4	Bromodichloromethane	53	U
78-87-5	1,2-Dichloropropane	53	U
10061-01-5	cis-1,3-Dichloropropene	53	U
79-01-6	Trichloroethene	53	U
124-48-1	Dibromochloromethane	53	U
79-00-5	1,1,2-Trichloroethane	53	U
71-43-2	Benzene	53	U
10061-02-6	trans-1,3-Dichloropropene	53	U
75-25-2	Bromoform	53	U
108-10-1	4-Methyl-2-Pentanone	7	J
591-78-6	2-Hexanone	53	U
127-18-4	Tetrachloroethene	53	U
79-34-5	1,1,2,2-Tetrachloroethane	53	U
108-88-3	Toluene	11	J
108-90-7	Chlorobenzene	53	U
100-41-4	Ethylbenzene	53	U
100-42-5	Styrene	53	U
1330-20-7	Xylene (total)	53	U

9713505.0397

000018

EPA SAMPLE NO.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D28

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-04A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.78	32	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D30

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 86 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	71	U
74-83-9	Bromomethane	71	U
75-01-4	Vinyl Chloride	71	U
75-00-3	Chloroethane	71	U
75-09-2	Methylene Chloride	71	U
67-64-1	Acetone	610	
75-15-0	Carbon Disulfide	38	J
75-35-4	1,1-Dichloroethene	71	U
75-34-3	1,1-Dichloroethane	71	U
540-59-0	1,2-Dichloroethene (total)	71	U
67-66-3	Chloroform	71	U
107-06-2	1,2-Dichloroethane	71	U
78-93-3	2-Butanone	150	
71-55-6	1,1,1-Trichloroethane	71	U
56-23-5	Carbon Tetrachloride	71	U
75-27-4	Bromodichloromethane	71	U
78-87-5	1,2-Dichloropropane	71	U
10061-01-5	cis-1,3-Dichloropropene	71	U
79-01-6	Trichloroethene	71	U
124-48-1	Dibromochloromethane	71	U
79-00-5	1,1,2-Trichloroethane	71	U
71-43-2	Benzene	71	U
10061-02-6	trans-1,3-Dichloropropene	71	U
75-25-2	Bromoform	71	U
108-10-1	4-Methyl-2-Pentanone	71	U
591-78-6	2-Hexanone	71	U
127-18-4	Tetrachloroethene	71	U
79-34-5	1,1,2,2-Tetrachloroethane	71	U
108-88-3	Toluene	71	U
108-90-7	Chlorobenzene	71	U
100-41-4	Ethylbenzene	71	U
100-42-5	Styrene	71	U
1330-20-7	Xylene (total)	71	U

9713505.0399

000020

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D30

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 86 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.73	57	J

9713505.0400

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000021
EPA SAMPLE NO.

B06D50

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B20

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9713505.0401

000022

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D50

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B20

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	2.98	9	J
2.	UNKNOWN HYDROCARBON	3.05	3	J
3.	UNKNOWN HYDROCARBON	18.95	4	J
4.	UNKNOWN HYDROCARBON	19.28	18	J

9713505.0402

000023

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D54

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B21

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	10	U
67-64-1	Acetone	14	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

9713505.0403

000024
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D54

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903B21

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/03/92

GC Column: WIDE ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	3.02	7	J
2.	UNKNOWN HYDROCARBON	18.93	5	J
3.	UNKNOWN HYDROCARBON	19.28	10	J
4.	UNKNOWN HYDROCARBON	21.33	11	BJ

9713505.0404

000025

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D25

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-01D

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20908S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	810	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	810	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	810	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	810	U

9713505.0405

000026

EPA SAMPLE NO.

B06D25

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-01D

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20908S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	810	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	810	U
534-52-1	4,6-Dinitro-2-methylphenol	810	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	810	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)Anthracene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
218-01-9	Chrysene	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

9713505.0406

000027
EPA SAMPLE NO.

B06D25

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-01D

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20908S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 2 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.27	1700	BJ
2.	UNKNOWN HYDROCARBON	5.67	59000	BJ
3.	UNKNOWN HYDROCARBON	5.75	400	BJ
4.	UNKNOWN HYDROCARBON	6.63	200	BJ
5.	UNKNOWN KETONE	6.90	130	BJ
6.	UNKNOWN KETONE	7.05	170	BJ
7.	UNKNOWN HYDROCARBON	7.25	200	BJ
8.	UNKNOWN HYDROCARBON	8.67	100	J
9.	UNKNOWN HYDROCARBON	18.35	470	BJ
10.	UNKNOWN HYDROCARBON	18.48	200	J
11.	HEXANEDIOIC ACID ISOMER	24.85	25000	BJ
12.	UNKNOWN ALKANE	25.60	100	J
13.	UNKNOWN ALKANE	26.32	67	J
14.	UNKNOWN ALKANE	27.02	100	J
15.	UNKNOWN HYDROCARBON	27.67	100	BJ
16.	UNKNOWN ALKANE	27.77	100	J
17.	UNKNOWN HYDROCARBON	27.90	67	J
18.	UNKNOWN ALKANE	28.58	130	J
19.	UNKNOWN ALKANE	30.60	100	J
20.	UNKNOWN HYDROCARBON	32.40	1900	J

9713505.0407

000028
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06D26

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-02B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20908S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-Di-n-Propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)Methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	370	U
51-28-5	2,4-Dinitrophenol	910	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D26

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-02B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20908S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-Butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)Anthracene	370	U
117-81-7	bis(2-Ethylhexyl)Phthalate	370	U
218-01-9	Chrysene	370	U
117-84-0	Di-n-Octyl Phthalate	370	U
205-99-2	Benzo(b)Fluoranthene	370	U
207-08-9	Benzo(k)Fluoranthene	370	U
50-32-8	Benzo(a)Pyrene	370	U
193-39-5	Indeno(1,2,3-cd)Pyrene	370	U
53-70-3	Dibenz(a,h)Anthracene	370	U
191-24-2	Benzo(g,h,i)Perylene	370	U

(1) - Cannot be separated from Diphenylamine

9713505.0409

000030

EPA SAMPLE NO.

B06D26

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-02B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20908S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 13 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.18	1200	BJ
2.	UNKNOWN HYDROCARBON	5.60	57000	BJ
3.	UNKNOWN HYDROCARBON	5.72	380	BJ
4.	UNKNOWN HYDROCARBON	6.63	190	BJ
5.	UNKNOWN KETONE	7.03	190	BJ
6.	UNKNOWN COMPOUND	7.35	300	J
7.	UNKNOWN HYDROCARBON	18.10	1300	J
8.	UNKNOWN ALKANE	18.35	760	J
9.	UNKNOWN ALKANE	18.45	870	J
10.	UNKNOWN ALKANE	24.10	230	J
11.	HEXANEDIOIC ACID ISOMER	24.83	20000	BJ
12.	UNKNOWN ALKANE	25.60	380	J
13.	UNKNOWN ALKANE	26.32	260	J
14.	UNKNOWN ALKANE	27.02	610	J
15.	UNKNOWN HYDROCARBON	27.67	230	BJ
16.	UNKNOWN ALKANE	27.77	490	J
17.	UNKNOWN HYDROCARBON	28.23	190	J
18.	UNKNOWN ALKANE	28.58	1200	J
19.	UNKNOWN ALKANE	29.50	260	J
20.	UNKNOWN ALKANE	30.58	720	J

9713505.0410

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000031
EPA SAMPLE NO.

B06D27

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-03B

Sample wt/vol: 30.2 (g/mL) G Lab File ID: 20909S02

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 76 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/09/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1400	U
111-44-4	bis(2-Chloroethyl)Ether	1400	U
95-57-8	2-Chlorophenol	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
95-48-7	2-Methylphenol	1400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1400	U
106-44-5	4-Methylphenol	1400	U
621-64-7	N-Nitroso-Di-n-Propylamine	1400	U
67-72-1	Hexachloroethane	1400	U
98-95-3	Nitrobenzene	1400	U
78-59-1	Isophorone	1400	U
88-75-5	2-Nitrophenol	1400	U
105-67-9	2,4-Dimethylphenol	1400	U
111-91-1	bis(2-Chloroethoxy)Methane	1400	U
120-83-2	2,4-Dichlorophenol	1400	U
120-82-1	1,2,4-Trichlorobenzene	1400	U
91-20-3	Naphthalene	1400	U
106-47-8	4-Chloroaniline	1400	U
87-68-3	Hexachlorobutadiene	1400	U
59-50-7	4-Chloro-3-Methylphenol	1400	U
91-57-6	2-Methylnaphthalene	1400	U
77-47-4	Hexachlorocyclopentadiene	1400	U
88-06-2	2,4,6-Trichlorophenol	1400	U
95-95-4	2,4,5-Trichlorophenol	3300	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	3300	U
131-11-3	Dimethylphthalate	1400	U
208-96-8	Acenaphthylene	1400	U
99-09-2	3-Nitroaniline	3300	U
83-32-9	Acenaphthene	1400	U
51-28-5	2,4-Dinitrophenol	3300	U

9713505.0411

000032

EPA SAMPLE NO.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06D27

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-03B

Sample wt/vol: 30.2 (g/mL) G Lab File ID: 20909S02

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 76 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/09/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	3300	U
132-64-9	Dibenzofuran	1400	U
121-14-2	2,4-Dinitrotoluene	1400	U
606-20-2	2,6-Dinitrotoluene	1400	U
84-66-2	Diethylphthalate	170	J
7005-72-3	4-Chlorophenyl-phenylether	1400	U
86-73-7	Fluorene	1400	U
100-01-6	4-Nitroaniline	3300	U
534-52-1	4,6-Dinitro-2-methylphenol	3300	U
86-30-6	N-Nitrosodiphenylamine (1)	1400	U
101-55-3	4-Bromophenyl-phenylether	1400	U
118-74-1	Hexachlorobenzene	1400	U
87-86-5	Pentachlorophenol	3300	U
85-01-8	Phenanthrene	1400	U
120-12-7	Anthracene	1400	U
86-74-8	Carbazole	1400	U
84-74-2	Di-n-Butylphthalate	1400	U
206-44-0	Fluoranthene	1400	U
129-00-0	Pyrene	1400	U
85-68-7	Butylbenzylphthalate	1400	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)Anthracene	1400	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1400	U
218-01-9	Chrysene	1400	U
117-84-0	Di-n-Octyl Phthalate	1400	U
205-99-2	Benzo(b)Fluoranthene	1400	U
207-08-9	Benzo(k)Fluoranthene	1400	U
50-32-8	Benzo(a)Pyrene	1400	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1400	U
53-70-3	Dibenz(a,h)Anthracene	1400	U
191-24-2	Benzo(g,h,i)Perylene	1400	U

(1) - Cannot be separated from Diphenylamine

9713505.0412

000033
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D27

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-03B

Sample wt/vol: 30.2 (g/mL) G Lab File ID: 20909S02

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 76 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/09/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.13	4100	BJ
2.	UNKNOWN HYDROCARBON	5.55	230000	BJ
3.	UNKNOWN COMPOUND	7.22	1100	J
4.	UNKNOWN ALCOHOL	8.40	2300	J
5.	UNKNOWN HYDROCARBON	18.08	6500	J
6.	UNKNOWN ALKANE	18.33	2600	J
7.	UNKNOWN ALKANE	18.42	2900	J
8.	UNKNOWN ALKANE	18.92	1900	J
9.	UNKNOWN CARBOXYLIC ACID ESTE	21.15	830	J
10.	HEXANEDIOIC ACID ISOMER	24.80	91000	BJ
11.	UNKNOWN ALKANE	25.58	970	J
12.	UNKNOWN ALKANE	27.22	970	J
13.	UNKNOWN HYDROCARBON	27.65	1100	BJ
14.	UNKNOWN HYDROCARBON	27.88	1100	J
15.	UNKNOWN HYDROCARBON	28.17	1400	J
16.	UNKNOWN ALKANE	28.55	1900	J
17.	UNKNOWN ALKANE	30.58	1100	J
18.	UNKNOWN HYDROCARBON	31.20	1500	J
19.	UNKNOWN HYDROCARBON	31.77	1400	J
20.	UNKNOWN KETONE	32.85	550	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000034
EPA SAMPLE NO.

B06D28

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-04B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20908S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 81 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1700	U
111-44-4	bis(2-Chloroethyl)Ether	1700	U
95-57-8	2-Chlorophenol	1700	U
541-73-1	1,3-Dichlorobenzene	1700	U
106-46-7	1,4-Dichlorobenzene	1700	U
95-50-1	1,2-Dichlorobenzene	1700	U
95-48-7	2-Methylphenol	1700	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1700	U
106-44-5	4-Methylphenol	1700	U
621-64-7	N-Nitroso-Di-n-Propylamine	1700	U
67-72-1	Hexachloroethane	1700	U
98-95-3	Nitrobenzene	1700	U
78-59-1	Isophorone	1700	U
88-75-5	2-Nitrophenol	1700	U
105-67-9	2,4-Dimethylphenol	1700	U
111-91-1	bis(2-Chloroethoxy)Methane	1700	U
120-83-2	2,4-Dichlorophenol	1700	U
120-82-1	1,2,4-Trichlorobenzene	1700	U
91-20-3	Naphthalene	1700	U
106-47-8	4-Chloroaniline	1700	U
87-68-3	Hexachlorobutadiene	1700	U
59-50-7	4-Chloro-3-Methylphenol	1700	U
91-57-6	2-Methylnaphthalene	1700	U
77-47-4	Hexachlorocyclopentadiene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	4100	U
91-58-7	2-Chloronaphthalene	1700	U
88-74-4	2-Nitroaniline	4100	U
131-11-3	Dimethylphthalate	1700	U
208-96-8	Acenaphthylene	1700	U
99-09-2	3-Nitroaniline	4100	U
83-32-9	Acenaphthene	1700	U
51-28-5	2,4-Dinitrophenol	4100	U

9713505.0414

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000035
EPA SAMPLE NO.

B06D28

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-04B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20908S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 81 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	4100	U
132-64-9	Dibenzofuran	1700	U
121-14-2	2,4-Dinitrotoluene	1700	U
606-20-2	2,6-Dinitrotoluene	1700	U
84-66-2	Diethylphthalate	1700	U
7005-72-3	4-Chlorophenyl-phenylether	1700	U
86-73-7	Fluorene	1700	U
100-01-6	4-Nitroaniline	4100	U
534-52-1	4,6-Dinitro-2-methylphenol	4100	U
86-30-6	N-Nitrosodiphenylamine (1)	1700	U
101-55-3	4-Bromophenyl-phenylether	1700	U
118-74-1	Hexachlorobenzene	1700	U
87-86-5	Pentachlorophenol	4100	U
85-01-8	Phenanthrene	1700	U
120-12-7	Anthracene	1700	U
86-74-8	Carbazole	1700	U
84-74-2	Di-n-Butylphthalate	270	J
206-44-0	Fluoranthene	1700	U
129-00-0	Pyrene	1700	U
85-68-7	Butylbenzylphthalate	1700	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	1700	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1700	U
218-01-9	Chrysene	1700	U
117-84-0	Di-n-Octyl Phthalate	1700	U
205-99-2	Benzo(b)Fluoranthene	1700	U
207-08-9	Benzo(k)Fluoranthene	1700	U
50-32-8	Benzo(a)Pyrene	1700	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1700	U
53-70-3	Dibenz(a,h)Anthracene	1700	U
191-24-2	Benzo(g,h,i)Perylene	1700	U

(1) - Cannot be separated from Diphenylamine

9713505.0415

1F

000036
EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D28

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-04B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20908S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 81 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.20	5800	BJ
2.	UNKNOWN HYDROCARBON	5.62	290000	BJ
3.	UNKNOWN HYDROCARBON	5.70	1900	BJ
4.	UNKNOWN HYDROCARBON	6.60	1000	BJ
5.	UNKNOWN KETONE	7.00	860	BJ
6.	UNKNOWN KETONE	7.22	1000	J
7.	UNKNOWN ALCOHOL	8.40	2400	J
8.	UNKNOWN HYDROCARBON	18.07	4600	J
9.	UNKNOWN ALKANE	18.32	1900	J
10.	UNKNOWN ALKANE	18.40	2100	J
11.	UNKNOWN ALKANE	18.90	1400	J
12.	UNKNOWN CARBOXYLIC ACID ESTE	20.18	2400	BJ
13.	HEXANEDIOIC ACID ISOMER	22.20	1000	J
14.	HEXANEDIOIC ACID ISOMER	24.77	27000	BJ
15.	UNKNOWN HYDROCARBON	27.62	1200	BJ
16.	UNKNOWN HYDROCARBON	27.87	690	BJ
17.	UNKNOWN ALKANE	28.53	690	J
18.	UNKNOWN HYDROCARBON	30.57	510	J
19.	UNKNOWN HYDROCARBON	31.73	1200	J
20.	UNKNOWN HYDROCARBON	32.42	8800	BJ

9713505.0416

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000037
EPA SAMPLE NO.

B06D30

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-05B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20909S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 86 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/09/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2300	U
111-44-4	bis(2-Chloroethyl)Ether	2300	U
95-57-8	2-Chlorophenol	2300	U
541-73-1	1,3-Dichlorobenzene	2300	U
106-46-7	1,4-Dichlorobenzene	2300	U
95-50-1	1,2-Dichlorobenzene	2300	U
95-48-7	2-Methylphenol	2300	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2300	U
106-44-5	4-Methylphenol	2300	U
621-64-7	N-Nitroso-Di-n-Propylamine	2300	U
67-72-1	Hexachloroethane	2300	U
98-95-3	Nitrobenzene	2300	U
78-59-1	Isophorone	2300	U
88-75-5	2-Nitrophenol	2300	U
105-67-9	2,4-Dimethylphenol	2300	U
111-91-1	bis(2-Chloroethoxy)Methane	2300	U
120-83-2	2,4-Dichlorophenol	2300	U
120-82-1	1,2,4-Trichlorobenzene	2300	U
91-20-3	Naphthalene	2300	U
106-47-8	4-Chloroaniline	2300	U
87-68-3	Hexachlorobutadiene	2300	U
59-50-7	4-Chloro-3-Methylphenol	2300	U
91-57-6	2-Methylnaphthalene	2300	U
77-47-4	Hexachlorocyclopentadiene	2300	U
88-06-2	2,4,6-Trichlorophenol	2300	U
95-95-4	2,4,5-Trichlorophenol	5600	U
91-58-7	2-Chloronaphthalene	2300	U
88-74-4	2-Nitroaniline	5600	U
131-11-3	Dimethylphthalate	2300	U
208-96-8	Acenaphthylene	2300	U
99-09-2	3-Nitroaniline	5600	U
83-32-9	Acenaphthene	2300	U
51-28-5	2,4-Dinitrophenol	5600	U

9713505.0417

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000C38
EPA SAMPLE NO.

B06D30

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-05B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20909S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 86 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/09/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	5600	U
132-64-9	Dibenzofuran	2300	U
121-14-2	2,4-Dinitrotoluene	2300	U
606-20-2	2,6-Dinitrotoluene	2300	U
84-66-2	Diethylphthalate	2300	U
7005-72-3	4-Chlorophenyl-phenylether	2300	U
86-73-7	Fluorene	2300	U
100-01-6	4-Nitroaniline	5600	U
534-52-1	4,6-Dinitro-2-methylphenol	5600	U
86-30-6	N-Nitrosodiphenylamine (1)	2300	U
101-55-3	4-Bromophenyl-phenylether	2300	U
118-74-1	Hexachlorobenzene	2300	U
87-86-5	Pentachlorophenol	5600	U
85-01-8	Phenanthrene	2300	U
120-12-7	Anthracene	2300	U
86-74-8	Carbazole	2300	U
84-74-2	Di-n-Butylphthalate	2300	U
206-44-0	Fluoranthene	2300	U
129-00-0	Pyrene	2300	U
85-68-7	Butylbenzylphthalate	2300	U
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)Anthracene	2300	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2300	U
218-01-9	Chrysene	2300	U
117-84-0	Di-n-Octyl Phthalate	2300	U
205-99-2	Benzo(b)Fluoranthene	2300	U
207-08-9	Benzo(k)Fluoranthene	2300	U
50-32-8	Benzo(a)Pyrene	2300	U
193-39-5	Indeno(1,2,3-cd)Pyrene	2300	U
53-70-3	Dibenz(a,h)Anthracene	2300	U
191-24-2	Benzo(g,h,i)Perylene	2300	U

(1) - Cannot be separated from Diphenylamine

9713505.0418

000039
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D30

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-05B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20909S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 86 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/09/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.6

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	5.20	6300	BJ
2.	UNKNOWN HYDROCARBON	5.60	380000	BJ
3.	UNKNOWN HYDROCARBON	5.70	2600	BJ
4.	UNKNOWN COMPOUND	7.22	2800	J
5.	UNKNOWN ALCOHOL	8.40	9400	J
6.	UNKNOWN HYDROCARBON	18.08	48000	J
7.	UNKNOWN ALKANE	18.33	13000	J
8.	UNKNOWN ALKANE	18.40	4200	J
9.	UNKNOWN ALKANE	18.90	4000	J
10.	UNKNOWN CARBOXYLIC ACID ESTE	21.13	3500	J
11.	HEXANEDIOIC ACID ISOMER	24.80	120000	BJ
12.	UNKNOWN HYDROCARBON	25.53	2600	J
13.	UNKNOWN HYDROCARBON	27.88	3500	J
14.	UNKNOWN HYDROCARBON	28.17	5900	J
15.	UNKNOWN ALKANE	28.55	3000	J
16.	UNKNOWN ALKANE	29.15	2100	J
17.	UNKNOWN ALKANE	30.57	2100	J
18.	UNKNOWN HYDROCARBON	31.18	2100	J
19.	UNKNOWN HYDROCARBON	31.75	3300	J
20.	UNKNOWN KETONE	32.85	2300	J

9713505.0419

000040

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D50

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-06B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20908S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	2,2'-oxybis(1-Chloropropane)	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-Di-n-Propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
111-91-1	bis(2-Chloroethoxy)Methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	320	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-Methylphenol	320	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	790	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	790	U
131-11-3	Dimethylphthalate	320	U
208-96-8	Acenaphthylene	320	U
99-09-2	3-Nitroaniline	790	U
83-32-9	Acenaphthene	320	U
51-28-5	2,4-Dinitrophenol	790	U

9713505.0420

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000041
EPA SAMPLE NO.

B06D50

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-06B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20908S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	790	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	790	U
534-52-1	4,6-Dinitro-2-methylphenol	790	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	790	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
86-74-8	Carbazole	320	U
84-74-2	Di-n-Butylphthalate	320	U
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	320	U
56-55-3	Benzo(a)Anthracene	320	U
117-81-7	bis(2-Ethylhexyl)Phthalate	34	J
218-01-9	Chrysene	320	U
117-84-0	Di-n-Octyl Phthalate	320	U
205-99-2	Benzo(b)Fluoranthene	320	U
207-08-9	Benzo(k)Fluoranthene	320	U
50-32-8	Benzo(a)Pyrene	320	U
193-39-5	Indeno(1,2,3-cd)Pyrene	320	U
53-70-3	Dibenz(a,h)Anthracene	320	U
191-24-2	Benzo(g,h,i)Perylene	320	U

(1) - Cannot be separated from Diphenylamine

9713505.0421

000042

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D50

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-06B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20908S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/02/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 09/08/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

Number TICs found: 17

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ACID	5.13	260	J
2.	UNKNOWN HYDROCARBON	5.30	1200	BJ
3.	UNKNOWN HYDROCARBON	5.70	58000	BJ
4.	UNKNOWN HYDROCARBON	5.75	300	J
5.	UNKNOWN HYDROCARBON	6.65	230	BJ
6.	HALOGENATED HYDROCARBON	6.85	66	BJ
7.	UNKNOWN KETONE	6.92	200	BJ
8.	UNKNOWN KETONE	7.07	200	J
9.	UNKNOWN HYDROCARBON	7.27	360	BJ
10.	UNKNOWN HYDROCARBON	18.35	390	BJ
11.	UNKNOWN CARBOXYLIC ACID ESTE	20.23	98	BJ
12.	UNKNOWN HYDROCARBON	22.83	130	J
13.	HEXANEDIOIC ACID ISOMER	24.75	4200	J
14.	HEXANEDIOIC ACID ISOMER	24.87	19000	BJ
15.	UNKNOWN HYDROCARBON	27.67	66	BJ
16.	UNKNOWN HYDROCARBON	27.75	66	J
17.	UNKNOWN HYDROCARBON	32.37	1300	BJ

9713505.0422

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000043
EPA SAMPLE NO.

B06D25

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

atrix: (soil/water) SOIL Lab Sample ID: A209001-01D

ample wt/vol: 30.5 (g/mL) G Lab File ID: _____

Moisture: 2 decanted: (Y/N) N Date Received: 08/28/92

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/02/92

oncentrated Extract Volume: 5000 (uL) Date Analyzed: 09/30/92

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-36-3	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

9713505.0423

000044

EPA SAMPLE NO.

B06D26

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-02B

Sample wt/vol: 30.4 (g/mL) G Lab File ID:

% Moisture: 13 decanted: (Y/N) N Date Received: 08/28/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/02/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/30/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-36-3	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	100	
11096-82-5	Aroclor-1260	37	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D27

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-03B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

% Moisture: 76 decanted: (Y/N) N Date Received: 08/28/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/02/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/30/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	6.9	U
319-85-7	beta-BHC	6.9	U
319-86-8	delta-BHC	6.9	U
58-89-9	gamma-BHC (Lindane)	6.9	U
76-44-8	Heptachlor	6.9	U
309-00-2	Aldrin	6.9	U
1024-57-3	Heptachlor epoxide	6.9	U
959-98-8	Endosulfan I	6.9	U
60-57-1	Dieldrin	13	U
72-55-9	4,4'-DDE	13	U
72-20-8	Endrin	13	U
33213-65-9	Endosulfan II	13	U
72-54-8	4,4'-DDD	13	U
1031-07-8	Endosulfan sulfate	13	U
50-29-3	4,4'-DDT	13	U
72-43-5	Methoxychlor	69	U
53494-70-5	Endrin ketone	13	U
7421-36-3	Endrin aldehyde	13	U
5103-71-9	alpha-Chlordane	6.9	U
5103-74-2	gamma-Chlordane	6.9	U
8001-35-2	Toxaphene	690	U
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	270	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	130	U
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	130	U
11096-82-5	Aroclor-1260	130	U

9713505.0425

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000046
EPA SAMPLE NO.

B06D28

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID:

% Moisture: 81 decanted: (Y/N) N Date Received: 08/28/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/02/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/30/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.8	U
319-85-7	beta-BHC	8.8	U
319-86-8	delta-BHC	8.8	U
58-89-9	gamma-BHC (Lindane)	8.8	U
76-44-8	Heptachlor	8.8	U
309-00-2	Aldrin	8.8	U
1024-57-3	Heptachlor epoxide	8.8	U
959-98-8	Endosulfan I	8.8	U
60-57-1	Dieldrin	17	U
72-55-9	4,4'-DDE	17	U
72-20-8	Endrin	17	U
33213-65-9	Endosulfan II	17	U
72-54-8	4,4'-DDD	17	U
1031-07-8	Endosulfan sulfate	17	U
50-29-3	4,4'-DDT	17	U
72-43-5	Methoxychlor	88	U
53494-70-5	Endrin ketone	17	U
7421-36-3	Endrin aldehyde	17	U
5103-71-9	alpha-Chlordane	8.8	U
5103-74-2	gamma-Chlordane	8.8	U
8001-35-2	Toxaphene	880	U
12674-11-2	Aroclor-1016	170	U
11104-28-2	Aroclor-1221	350	U
11141-16-5	Aroclor-1232	170	U
53469-21-9	Aroclor-1242	170	U
12672-29-6	Aroclor-1248	170	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

9713505.0426

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

000047
EPA SAMPLE NO.

B06D30

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-05B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: _____

% Moisture: 86 decanted: (Y/N) N Date Received: 08/28/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/02/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/30/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	12	U
319-85-7	beta-BHC	12	U
319-86-8	delta-BHC	12	U
58-89-9	gamma-BHC (Lindane)	12	U
76-44-8	Heptachlor	12	U
309-00-2	Aldrin	12	U
1024-57-3	Heptachlor epoxide	12	U
959-98-8	Endosulfan I	12	U
60-57-1	Dieldrin	23	U
72-55-9	4,4'-DDE	170	
72-20-8	Endrin	23	U
33213-65-9	Endosulfan II	23	U
72-54-8	4,4'-DDD	23	U
1031-07-8	Endosulfan sulfate	23	U
50-29-3	4,4'-DDT	23	U
72-43-5	Methoxychlor	120	U
53494-70-5	Endrin ketone	23	U
7421-36-3	Endrin aldehyde	23	U
5103-71-9	alpha-Chlordane	12	U
5103-74-2	gamma-Chlordane	12	U
8001-35-2	Toxaphene	1200	U
12674-11-2	Aroclor-1016	230	U
11104-28-2	Aroclor-1221	470	U
11141-16-5	Aroclor-1232	230	U
53469-21-9	Aroclor-1242	230	U
12672-29-6	Aroclor-1248	230	U
11097-69-1	Aroclor-1254	230	U
11096-82-5	Aroclor-1260	230	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D50

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09001 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209001-06B

Sample wt/vol: 30.6 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 08/28/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/02/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 09/30/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.2	U
72-55-9	4,4'-DDE	3.2	U
72-20-8	Endrin	3.2	U
33213-65-9	Endosulfan II	3.2	U
72-54-8	4,4'-DDD	3.2	U
1031-07-8	Endosulfan sulfate	3.2	U
50-29-3	4,4'-DDT	3.2	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.2	U
7421-36-3	Endrin aldehyde	3.2	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	32	U
11104-28-2	Aroclor-1221	66	U
11141-16-5	Aroclor-1232	32	U
53469-21-9	Aroclor-1242	32	U
12672-29-6	Aroclor-1248	32	U
11097-69-1	Aroclor-1254	32	U
11096-82-5	Aroclor-1260	32	U

9213505.0428

AR 000002

Westinghouse Hanford Company	CHAIN OF CUSTODY 0024

Custody Form Initiator: KB Hulse

Company Contact: Richard Roos / Nancy Seguin (OSM) Telephone: 376-9218/373-3467

Project Designation/Sampling Locations: SAF#92-185 100-D Ponds Collection Date: 8-25-92

Ice Chest No.: 207 Field Logbook No.: WHC-N-205 #15 pg 52

Bill of Lading/Airbill No.: 250987 0209 Offsite Property No.:

Method of Shipment: Emery Air Express Overnight Delivery

Shipped to: TMA/NORCAL 2030 Write Av Richmond, CA 94804

Possible Sample Hazards/Remarks: None Known

Sample Identification

B06D31	~~Four (4)~~	Bottles	x 2
B06D32	~~Four (4)~~	Bottles	x 2
B06D34	~~Four (4)~~	Bottles	x 2
B06D38	~~Four (4)~~	Bottles	x 2
B06D39	~~Four (4)~~	Bottles	x 2
B06D40	~~Four (4)~~	Bottles	x 2
B06D41	~~Four (4)~~	Bottles	x 2
B06D42	~~Four (4)~~	Bottles	x 2
B06D55	~~Four (4)~~ KBH 8-26-92	Bottles	x 1

KBH 8-26-92 ~~Total 33 Bottles~~

KBH 8-26-92

☐ Field Transfer of Custody

CHAIN OF POSSESSION (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
KB Hulse (KB Hulse)	Kermit Blum	8-28-92 1130
Kermit Blum 8-31-92	Judy Gold (Terry Gould)	9-1-92 9:30a

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90)

9713505.0429

000003

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

COC 2495

Collector KB Hulse Date 8-26-92

Company Contact Nancy Seguin Telephone (509) 373-3467

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Requested
B06D31	S	8-25-92	0954	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D32	S		0954	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D34			1010	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D38			1023	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D39			1033	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D40			1040	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~

*Type of Sample A = Air Total 24 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

Special Handling and/or Storage Stored at 4° C and shipped on WET ICE

Possible Sample Hazards None Known

A-6000-406 (06/91)

9713505.0430

000004

Westinghouse Hanford Company

TWO SAES

SAMPLE ANALYSIS REQUEST COC 2495

Collector KB Hulse Date 8-26-92

Company Contact Nancy Seguin Telephone (509) 373-3467

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Requested
B06D41	S	8-25-92	1053	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D42			1101	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D55	S	8-25-92	0740	1-120ml aG VOA (8240)
				Total nine (9) Bottles

JB Hulse 8-26-92

*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

Special Handling and/or Storage Stored at 4° C and shipped on WET ICE

Possible Sample Hazards None Known

A-6200-406 (06/91)

9213505.0431

ARL 000003

Westinghouse Hanford Company	Two SARs	CHAIN OF CUSTODY	002496

Custody Form Initiator KB Hulse

Company Contact Richard Roos / Nancy Seguin (OSM) Telephone 376-9218/373-3467

Project Designation/Sampling Locations SAF#92-185 100-D Ponds Collection Date 8-26-92

Ice Chest No. SML 44 Field Logbook No. WHC-N-205 #15

Bill of Lading/Airbill No. 205 987 0209 Offsite Property No. pg 52

Method of Shipment Emery Air Express Overnight Delivery

Shipped to TMA/NORCAL 2030 Write Av Richmond, CA 94804

Possible Sample Hazards/Remarks None Known

Sample Identification

B06D43	~~four (4)~~	Bottles	x 2
B06D44	~~four (4)~~	Bottles	x 2
B06D45	~~four (4)~~	Bottles	x 2
B06D46	~~four (4)~~	Bottles	x 2
B06D47	~~four (4)~~	Bottles	x 2
B06D48	~~four (4)~~	Bottles	x 2
B06D49	~~four (4)~~	Bottles	x 2
B06D56	~~four (1)~~	Bottle	x 1
	~~Total 29 Bottles~~		
	total		15

KB Hulse 8-26-92

☐ Field Transfer of Custody

CHAIN OF POSSESSION (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
KB Hulse KB Hulse	Kermit Blum	8-28-92 1130
Relinquished by: 8-31-92 Kermit Blum	Received by: Trent Gaws	Date/Time: 9/1/92 9:30
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90)

9713505.0432

000006

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST COC 2496

Collector KB Hulse Date 8-26-92

Company Contact Nancy Seguin Telephone (509) 373-3467

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Requested
B06D43	SL	8-26-92	1455	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB's (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D44		8-26-92	0947	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB's (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D45			1100	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB's (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D46			1125	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB's (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D47			1200	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB's (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D48			1230	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB's (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~

*Type of Sample A = Air Total 24 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

Special Handling and/or Storage Stored at 4° C and shipped on WET ICE.

Possible Sample Hazards None known

9713505.0433

000007

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST COC 2496

Collector KB Hulse Date 8-26-92

Company Contact Nancy Seguin Telephone (509)373-3467

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Containers/Analysis Requested
B06D49	SL	8-26-92	1306	1-120ml aG VOA (8240)
				1-500ml aG SEMI-VOA (8270) PCB,s (8080)
				~~1-125ml G TCLP Metals (1311)~~
				~~1-125ml G Hg (7471)~~
B06D56	S	8-25-92	0740	1-120ml aG VOA (8240)
				Total 5 Bottles

*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

Special Handling and/or Storage Stored at 4° C and shipped on WET ICE

Possible Sample Hazards

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 1 OF 7

RECEIVED BY (PRINT NAME): CAROLE HARRIS

LOG-IN-DATE : 9-1-92

RECEIVED BY (SIGNATURE): Carole Harris

CASE NUMBER:
SAMPLE DELIVERY GROUP NO.:
SAS NUMBER:

REMARKS:

1. Custody Seal(s) — Present/Absent* Intact/Broken
2. Custody Seal Nos: _____
3. Chain of Custody Records — Present/Absent*
4. Traffic Reports or Packing List — Present/Absent*
5. Airbill — Airbill/Sticker Present/Absent*
6. Airbill No.: 2521032474
7. Sample Tags — Present/Absent*
8. Sample Tags Numbers — Listed/Not Listed on Chain of Custody
9. Sample Condition: — Intact/Broken*/Leaking
10. Does information on custody records, traffic reports, and sample tags agree — Yes/No*
11. Date Recieved at Lab: 9-1-92
12. Temp of ice chest 4.0 °C
13. Time Recieved: 9:30 AM

SAMPLE TRANSFER

Fraction: _____
Area #: _____
By: _____
On: _____

EPA SAMPLE #	CORRESPONDING SAMPLE TAG #	CORRESPONDING ASSIGNED LAB #	REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC
	B06D31	A2-09-002-01	
	B06D32	A2-09-002-02	
	B06D34	A2-09-002-03	
	B06D38	A2-09-002-04	
	B06D39	A2-09-002-05	
	B06D40	A2-09-002-06	
	B06D41	A2-09-002-07	
	B06D42	A2-09-002-08	
	B06D55	A2-09-002-09	
	B06D43	A2-09-002-10	
	B06D44	A2-09-002-11	
	B06D45	A2-09-002-12	
	B06D46	A2-09-002-13	
	B06D47	A2-09-002-14	
	B06D48	A2-09-002-15	
	B06D49	A2-09-002-16	
	B06D56	A2-09-002-17	

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM DC-1

9713505.0435

000009

TMA/ARLI
Thermo Analytical Inc.

RADIATION DOSE RATE SURVEY FORM

Date 9/01/92 COMPANY NORCAL (WHC) OTHER ORD # 2521032474

Surveyor's Name MARK S. McCray

Model No. HP-210 / ESP-1 Model No. AC-3-7 / ESP-1

Serial Nos. 710289 / 02619 Serial Nos. 407726 / 02628

Calibration Date 3/25/92 Calibration Date 8/01/92

Instrument Calibration Factor 0.280 Instrument Calibration Factor 0.188

Sample	Location	HP-210 CPM	HP-210 Factor	HP-210 DPM	AC-3-7 CPM	AC-3-7 Factor	AC-3-7 DPM	Spillage or Breakage?	Activity, uCi/mL or uCi/g
Background		36.0			1.0				
Consistency		7,230	0.2791		5,140	0.1889			
Smears: Doodle		38.0			0				
Pokey		59.0			6.0				
Reported (WHC)		34	samples	each		<50	pCi/gram		

Comments:

All OK ✓ Approved

Not OK Date 9/01/92

Form: ARLI RA-01
Rev: 06

01/15/92

9713505.0436

000010

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 2521032474

2521032474

RECIPIENT'S COPY

1 Date 8-3-92

From (Your Name) Please Print: SAMPLE CONTACT

Your Phone Number (Very important): (209)235-2633

Company: T M A INDUSTRIAL

Department/Floor No

Street Address: 2[illegible] WRIGHT AVE

City: RICHMOND State: CA ZIP Required: 9 4 8 0 4

2 To (Recipient's Name) Please Print: SAMPLE CONTACT

Recipient's Phone Number (Very important)

Company: TMA/ARL

Department/Floor

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 160 Taylor street

City: MONROVIA State: CA ZIP Required: 91016

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 2320 6406

H IF HOLD FOR PICK-UP, Print FEDEX Address Here

Street Address

City State ZIP Required

3 PAYMENT 1 ☑ Bill Sender 2 ☐ Bill Recipient's FedEx Acct No 3 ☐ Bill 3rd Party FedEx Acct No 4 ☐ Bill Credit Card 5 ☐ Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning)†

11 ☑ YOUR PACKAGING
16 ☐ FEDEX LETTER *
12 ☐ FEDEX PAK *
13 ☐ FEDEX BOX
14 ☐ FEDEX TUBE

Standard Overnight (Delivery by next business afternoon)†

51 ☐ YOUR PACKAGING
56 ☐ FEDEX LETTER *
52 ☐ FEDEX PAK *
53 ☐ FEDEX BOX
54 ☐ FEDEX TUBE

Economy Two-Day (Delivery by second business day)†

30 ☐ ECONOMY

Government Overnight (Available to authorized users only)

46 ☐ GOV'T LETTER
41 ☐ GOV'T PACKAGE

Freight Service (for Extra Large or any package over 150 lbs.) (Estimated transition required)

70 ☐ OVERNIGHT FREIGHT **
80 ☐ TWO-DAY FREIGHT **

† Delivery commitment may be later in some areas
* Declared Value Limit $500
** Call for delivery schedule

5 DELIVERY AND SPECIAL HANDLING (Check services required)

1 ☐ HOLD FOR PICK-UP (Fee in Base Int.)
2 ☑ DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) (Not available in all locations) ☐
4 ☐ DANGEROUS GOODS (Extra charge)
5 ☐
6 ☐ DRY ICE
7 ☐ OTHER SPECIAL SERVICE
8 ☐
9 ☐ SATURDAY PICK-UP (Extra charge)
10 ☐
11 ☐
12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)

6 PACKAGES WEIGHT in Pounds Only DECLARED VALUE

Total 2 Total 152 Total

DIM SHIPMENT (Chargeable Weight)

☐ _____ lbs.

L x W x H = _____

Received At: ☑ 1 Regular Stop ☐ 3 Drop Box ☐ 4 BSC ☐ 2 On-Call Stop ☐ 5 Station

Emp. No Date

☐ Cash Received
☐ Return Shipment
☐ Third Party ☐ Chg To Dst. ☐ Chg To Hold

Street Address

City State Zip

Received By: X

Date/Time Received FedEx Employee Number

7 Release Signature

FedEx Emp. No Date/Time

Federal Express L

Base Charges

Declared Value Cha

Other 1

Other 2

Total Charges

REVISED DATE 6/91 PART 0132284 FXE4 4/ FORMAT 6889

099

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CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 09-002

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : August 28, 1992

1.0 DESCRIPTION OF CASE :

Seventeen soil and sludge samples were analyzed for TCL Organics-Volatiles, Semivolatiles and Pesticide/PCBs according to the USEPA SW-846, Methods 8240, 8270 and 8080.

2.0 SAMPLE LIST :

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX
B06D31	A2-09-002-01A	V	SOIL
B06D31	A2-09-002-01D	SV & P	SOIL
B06D32	A2-09-002-02A	V	SOIL
B06D32	A2-09-002-02B	SV & P	SOIL
B06D32 MS	A2-09-002-02C	SV	SOIL
B06D32 MSD	A2-09-002-02D	SV	SOIL
B06D34	A2-09-002-03A	V	SOIL
B06D34 RE	A2-09-002-03A	V	SOIL
B06D34	A2-09-002-03B	SV & P	SOIL
B06D34 MS	A2-09-002-03C	P	SOIL
B06D34 MSD	A2-09-002-03D	P	SOIL
B06D38	A2-09-002-04A	V	SOIL
B06D38	A2-09-002-04B	SV & P	SOIL
B06D38 MS	A2-09-002-04C	V	SOIL
B06D38 MSD	A2-09-002-04D	V	SOIL
B06D39	A2-09-002-05A	V	SOIL
B06D39 RE	A2-09-002-05A	V	SOIL
B06D39	A2-09-002-05B	SV & P	SOIL
B06D39 LCS	A2-09-002-05C	SV	SOIL
B06D40	A2-09-002-06A	V	SOIL
B06D40 RE	A2-09-002-06A	V	SOIL
B06D40	A2-09-002-06B	SV & P	SOIL
B06D41	A2-09-002-07A	V	SOIL
B06D41 RE	A2-09-002-07A	V	SOIL
B06D41	A2-09-002-07B	SV & P	SOIL
B06D42	A2-09-002-08A	V	SOIL
B06D42 RE	A2-09-002-08A	V	SOIL
B06D42	A2-09-002-08B	SV & P	SOIL
B06D55	A2-09-002-09A	V	SOIL
B06D43	A2-09-002-10A	V	SLUDGE
B06D43	A2-09-002-10B	SV & P	SLUDGE
B06D44	A2-09-002-11A	V	SLUDGE
B06D44	A2-09-002-11B	SV & P	SLUDGE
B06D45	A2-09-002-12A	V	SLUDGE
B06D45	A2-09-002-12B	SV & P	SLUDGE
B06D46	A2-09-002-13A	V	SLUDGE
B06D46	A2-09-002-13B	SV & P	SLUDGE
B06D47	A2-09-002-14A	V	SLUDGE
B06D47	A2-09-002-14B	SV & P	SLUDGE
B06D48	A2-09-002-15A	V	SLUDGE

WESTINGHOUSE ID	LAB ID	ANALYSIS REQUESTED	MATRIX
B06D48	A2-09-002-15B	SV & P	SLUDGE
B06D49	A2-09-002-16A	V	SLUDGE
B06D49	A2-09-002-16B	SV & P	SLUDGE
B06D49 DL	A2-09-002-16B	P	SLUDGE
B06D56	A2-09-002-17A	V	SOIL
B06D56 LCS	A2-09-002-17B	V	SOIL

3.0 COMMENTS :

3.1 SHIPPING AND DOCUMENTATION :

The samples were received unbroken and properly documented.

3.2 ANALYSIS

3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL SOIL :

The samples were analyzed by heated purge within the SW-846 (Method 8240) holding times. The standards used for initial and continuing calibrations contained both isomers of 1,2-Dichloroethene. These compounds co-elute on the packed column and were reported as total 1,2-Dichloroethene.

Due to the nature of samples B06D43, B06D44, B06D45, B06D46, B06D47, B06D48 and B06D49, only 2 grams of sample could be properly purged and analyzed. The reported CRQL for the above mentioned samples were high due to the percentage of moisture in the samples.

Samples B06D34, B06D39, B06D40, B06D41 and B06D42 had internal standard area counts below the QC limit for 1,4-Difluorobenzene and Chlorobenzene-d5. The samples were re-analyzed and reported with the suffix "RE". The re-analyzed samples also yielded low internal standard area counts and confirmed the effects of the sample matrix. Because of the inconsistency of the internal standard area some of the surrogate recoveries were outside the QC limits for these samples, as shown on Form II.

Sample B06D56 was spiked with 20 ppb analytes, except 1,2-Dichloroethene (40 ppb) and labeled as B06D56LCS. The recoveries were between 70% -105%

All of the QC results were within the limits specified by SW-846, Method 8240.

TUNES :

All of the BFB tunes are injected directly into the GC/MS instrument.

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL SOIL :

The samples were extracted and analyzed within the SW-846, Method 8270 holding times. GPC cleanup was performed on all of the samples and concentrated to a 0.5 mL final volume. Sample B06D39 was spiked with approximately 1667 ppb analytes. The recoveries for the Acid compounds were in the range between 22% to 80%. The recoveries for the Base Neutral compounds were between 24% to 108%.

All of the QC results were within the limits specified by SW-846, Method 8270.

3.2.3 PESTICIDE/PCB ANALYSIS COMMENTS :

SEQUENCE NOTES :

The ICAL sequence was started on 9/8/92 and was analyzed in accordance with the SW-846, Method 8080. The samples were analyzed on the 9/30/92 sequence. Both sequences were analyzed on the same instrument and by single injection into a dual column system. The sequences met all of the QC requirements.

The Chromatograms are presented in the manner consistent with the capabilities of the Nelson 2600 Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL SOIL :

The samples were extracted and analyzed within the SW-846 holding times with the exception of sample B06D44. The sample extract for B06D44 was lost during the Gel Permeation Chromatography (GPC) cleanup. The sample was re-extracted 3 days beyond the holding time with the approval from Westinghouse Hanford Company. The re-extracted sample was then analyzed within the required holding time.

The samples had TCX surrogate recoveries within the advisory QC limits. However, with the exception of samples B06D39, B06D44, B06D49 and Method Blanks PBLK0905S2 and PBLK0911S, all of the samples had low DBC recoveries. The low DBC recoveries appear to be due to the sample matrix.

Methoxychlor was detected and confirmed by second column confirmation in samples B06D43, B06D34, B06D34MS and B06D34MSD. Aroclor-1260 was detected in samples B06D34, B06D34MS, B06D34MSD and B06D49. The Methoxychlor and Aroclor-1260 hits could not be confirmed by GCMS since their concentrations were below the GCMS instrument's detection limit.

Aroclor-1260 was detected in sample B06D49 at a concentration exceeding the ICAL. A 1 to 5 dilution was performed on the sample to properly quantitate the Aroclor-1260 result. Both B06D49 and B06D49DL have DBC surrogate recoveries above 500%. The high recoveries appear to be caused by the high background due to the sample matrix. The sample interference could not be reduced by Florisil nor Sulfuric Acid clean up. Both B06D49 and B06D49DL have been submitted in this package.

Endrin Ketone was not present in the standards analyzed in the sequences. Therefore, "NA" for "not analyzed for" was reported on the sample report sheets.

All of the other QC results were within the limits specified by SW-846, Method 8080.

We certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data in this hardcopy data package and in the computer-readable data submitted on diskette is authorized by the Laboratory Manager or his designee, as verified by the following signatures.

Nicole Roth
CLP Program Manager

Widayat
Wida Ang
Organics Supervisor

9713505.0441

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA 000016.

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	51	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	9	
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	51	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	4	J
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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	110	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	56	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethyl vinyl ether	11	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	56	U
591-78-6	2-Hexanone	56	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (Total)	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	15.37	5.6	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R08

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	110	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	110	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	56	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethyl vinyl ether	11	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	56	U
591-78-6	2-Hexanone	56	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (Total)	6	U

9713505.0448

000023
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D34RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R08

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	8	
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

1E

EPA SAMPLE NO.

B06D38

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	14	
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

1E

EPA SAMPLE NO.

B06D39

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	11	
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D39RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0455

000030

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	51	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	22	
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

1E

EPA SAMPLE NO.

B06D40

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	51	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	33	
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

9713505.0458

000039

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D40RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	14	
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

9213505.0460

000C35
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0461

00003E

EPA SAMPLE NO.

B06D41RE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	21	
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

9713505.0462

000C37

EPA SAMPLE NO.

B06D41RE

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0463

000038

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	100	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	12	
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

9713505.0464

000039

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0465

00004C

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	7	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	52	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	52	U
591-78-6	2-Hexanone	52	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	9	
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D42RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R20

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	66	U
67-64-1	Acetone	850	BJ
75-15-0	Carbon Disulfide	66	U
75-35-4	1,1-Dichloroethene	66	U
75-34-3	1,1-Dichloroethane	66	U
540-59-0	1,2-Dichloroethene (total)	66	U
67-66-3	Chloroform	66	U
107-06-2	1,2-Dichloroethane	66	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	66	U
56-23-5	Carbon Tetrachloride	66	U
108-05-4	Vinyl Acetate	660	U
75-27-4	Bromodichloromethane	66	U
78-87-5	1,2-Dichloropropane	66	U
10061-01-5	cis-1,3-Dichloropropene	66	U
79-01-6	Trichloroethene	66	U
124-48-1	Dibromochloromethane	66	U
79-00-5	1,1,2-Trichloroethane	66	U
71-43-2	Benzene	66	U
10061-02-6	trans-1,3-Dichloropropene	66	U
110-75-8	2-Chloroethyl vinyl ether	130	U
75-25-2	Bromoform	66	U
108-10-1	4-Methyl-2-Pentanone	660	U
591-78-6	2-Hexanone	660	U
127-18-4	Tetrachloroethene	66	U
79-34-5	1,1,2,2-Tetrachloroethane	66	U
108-88-3	Toluene	66	U
108-90-7	Chlorobenzene	66	U
100-41-4	Ethylbenzene	66	U
100-42-5	Styrene	66	U
1330-20-7	Xylene (Total)	66	U

9713505.0468

000043

1E

EPA SAMPLE NO.

B06D43

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R20

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.03	92	J

9713505.0469

000044

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 Date Analyzed: 09/08/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	120	U
74-83-9	Bromomethane	120	U
75-01-4	Vinyl Chloride	120	U
75-00-3	Chloroethane	120	U
75-09-2	Methylene Chloride	62	U
67-64-1	Acetone	500	BJ
75-15-0	Carbon Disulfide	62	U
75-35-4	1,1-Dichloroethene	62	U
75-34-3	1,1-Dichloroethane	62	U
540-59-0	1,2-Dichloroethene (total)	62	U
67-66-3	Chloroform	62	U
107-06-2	1,2-Dichloroethane	62	U
78-93-3	2-Butanone	1200	U
71-55-6	1,1,1-Trichloroethane	62	U
56-23-5	Carbon Tetrachloride	62	U
108-05-4	Vinyl Acetate	620	U
75-27-4	Bromodichloromethane	62	U
78-87-5	1,2-Dichloropropane	62	U
10061-01-5	cis-1,3-Dichloropropene	62	U
79-01-6	Trichloroethene	62	U
124-48-1	Dibromochloromethane	62	U
79-00-5	1,1,2-Trichloroethane	62	U
71-43-2	Benzene	62	U
10061-02-6	trans-1,3-Dichloropropene	62	U
110-75-8	2-Chloroethyl vinyl ether	120	U
75-25-2	Bromoform	62	U
108-10-1	4-Methyl-2-Pentanone	620	U
591-78-6	2-Hexanone	620	U
127-18-4	Tetrachloroethene	62	U
79-34-5	1,1,2,2-Tetrachloroethane	62	U
108-88-3	Toluene	62	U
108-90-7	Chlorobenzene	62	U
100-41-4	Ethylbenzene	62	U
100-42-5	Styrene	62	U
1330-20-7	Xylene (Total)	62	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 Date Analyzed: 09/08/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.08	240	J

9713505.0471

000C4E

EPA SAMPLE NO.

B06D45

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	69	U
74-83-9	Bromomethane	69	U
75-01-4	Vinyl Chloride	69	U
75-00-3	Chloroethane	69	U
75-09-2	Methylene Chloride	35	U
67-64-1	Acetone	570	BJ
75-15-0	Carbon Disulfide	29	J
75-35-4	1,1-Dichloroethene	35	U
75-34-3	1,1-Dichloroethane	35	U
540-59-0	1,2-Dichloroethene (total)	35	U
67-66-3	Chloroform	35	U
107-06-2	1,2-Dichloroethane	35	U
78-93-3	2-Butanone	690	U
71-55-6	1,1,1-Trichloroethane	35	U
56-23-5	Carbon Tetrachloride	35	U
108-05-4	Vinyl Acetate	350	U
75-27-4	Bromodichloromethane	35	U
78-87-5	1,2-Dichloropropane	35	U
10061-01-5	cis-1,3-Dichloropropene	35	U
79-01-6	Trichloroethene	35	U
124-48-1	Dibromochloromethane	35	U
79-00-5	1,1,2-Trichloroethane	35	U
71-43-2	Benzene	35	U
10061-02-6	trans-1,3-Dichloropropene	35	U
110-75-8	2-Chloroethyl vinyl ether	69	U
75-25-2	Bromoform	35	U
108-10-1	4-Methyl-2-Pentanone	350	U
591-78-6	2-Hexanone	350	U
127-18-4	Tetrachloroethene	35	U
79-34-5	1,1,2,2-Tetrachloroethane	35	U
108-88-3	Toluene	35	U
108-90-7	Chlorobenzene	35	U
100-41-4	Ethylbenzene	35	U
100-42-5	Styrene	35	U
1330-20-7	Xylene (Total)	35	U

9713505.0472

000047

EPA SAMPLE NO.

B06D45

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKENE	29.51	230	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	93	U
74-83-9	Bromomethane	93	U
75-01-4	Vinyl Chloride	93	U
75-00-3	Chloroethane	93	U
75-09-2	Methylene Chloride	46	U
67-64-1	Acetone	380	BJ
75-15-0	Carbon Disulfide	40	J
75-35-4	1,1-Dichloroethene	46	U
75-34-3	1,1-Dichloroethane	46	U
540-59-0	1,2-Dichloroethene (total)	46	U
67-66-3	Chloroform	46	U
107-06-2	1,2-Dichloroethane	46	U
78-93-3	2-Butanone	930	U
71-55-6	1,1,1-Trichloroethane	46	U
56-23-5	Carbon Tetrachloride	46	U
108-05-4	Vinyl Acetate	460	U
75-27-4	Bromodichloromethane	46	U
78-87-5	1,2-Dichloropropane	46	U
10061-01-5	cis-1,3-Dichloropropene	46	U
79-01-6	Trichloroethene	46	U
124-48-1	Dibromochloromethane	46	U
79-00-5	1,1,2-Trichloroethane	46	U
71-43-2	Benzene	46	U
10061-02-6	trans-1,3-Dichloropropene	46	U
110-75-8	2-Chloroethyl vinyl ether	93	U
75-25-2	Bromoform	46	U
108-10-1	4-Methyl-2-Pentanone	460	U
591-78-6	2-Hexanone	460	U
127-18-4	Tetrachloroethene	46	U
79-34-5	1,1,2,2-Tetrachloroethane	46	U
108-88-3	Toluene	46	U
108-90-7	Chlorobenzene	46	U
100-41-4	Ethylbenzene	46	U
100-42-5	Styrene	46	U
1330-20-7	Xylene (Total)	46	U

9713505.0474

000049

EPA SAMPLE NO.

B06D46

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0475

000050

EPA SAMPLE NO.

B06D47

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R24

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	66	U
67-64-1	Acetone	580	BJ
75-15-0	Carbon Disulfide	66	U
75-35-4	1,1-Dichloroethene	66	U
75-34-3	1,1-Dichloroethane	66	U
540-59-0	1,2-Dichloroethene (total)	66	U
67-66-3	Chloroform	66	U
107-06-2	1,2-Dichloroethane	66	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	66	U
56-23-5	Carbon Tetrachloride	66	U
108-05-4	Vinyl Acetate	660	U
75-27-4	Bromodichloromethane	66	U
78-87-5	1,2-Dichloropropane	66	U
10061-01-5	cis-1,3-Dichloropropene	66	U
79-01-6	Trichloroethene	66	U
124-48-1	Dibromochloromethane	66	U
79-00-5	1,1,2-Trichloroethane	66	U
71-43-2	Benzene	66	U
10061-02-6	trans-1,3-Dichloropropene	66	U
110-75-8	2-Chloroethyl vinyl ether	130	U
75-25-2	Bromoform	66	U
108-10-1	4-Methyl-2-Pentanone	660	U
591-78-6	2-Hexanone	660	U
127-18-4	Tetrachloroethene	66	U
79-34-5	1,1,2,2-Tetrachloroethane	66	U
108-88-3	Toluene	66	U
108-90-7	Chlorobenzene	66	U
100-41-4	Ethylbenzene	66	U
100-42-5	Styrene	66	U
1330-20-7	Xylene (Total)	66	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R24

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0477

000052
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R07

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 Date Analyzed: 09/08/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	170	U
74-83-9	Bromomethane	170	U
75-01-4	Vinyl Chloride	170	U
75-00-3	Chloroethane	170	U
75-09-2	Methylene Chloride	83	U
67-64-1	Acetone	2200	B
75-15-0	Carbon Disulfide	83	U
75-35-4	1,1-Dichloroethene	83	U
75-34-3	1,1-Dichloroethane	83	U
540-59-0	1,2-Dichloroethene (total)	83	U
67-66-3	Chloroform	83	U
107-06-2	1,2-Dichloroethane	83	U
78-93-3	2-Butanone	390	J
71-55-6	1,1,1-Trichloroethane	83	U
56-23-5	Carbon Tetrachloride	83	U
108-05-4	Vinyl Acetate	830	U
75-27-4	Bromodichloromethane	83	U
78-87-5	1,2-Dichloropropane	83	U
10061-01-5	cis-1,3-Dichloropropene	83	U
79-01-6	Trichloroethene	83	U
124-48-1	Dibromochloromethane	83	U
79-00-5	1,1,2-Trichloroethane	83	U
71-43-2	Benzene	83	U
10061-02-6	trans-1,3-Dichloropropene	83	U
110-75-8	2-Chloroethyl vinyl ether	170	U
75-25-2	Bromoform	83	U
108-10-1	4-Methyl-2-Pentanone	830	U
591-78-6	2-Hexanone	830	U
127-18-4	Tetrachloroethene	83	U
79-34-5	1,1,2,2-Tetrachloroethane	83	U
108-88-3	Toluene	83	U
108-90-7	Chlorobenzene	83	U
100-41-4	Ethylbenzene	83	U
100-42-5	Styrene	83	U
1330-20-7	Xylene (Total)	83	U

1E

EPA SAMPLE NO.

B06D48

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R07

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 Date Analyzed: 09/08/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.13	370	J

9713505.0479

000054

EPA SAMPLE NO.

B06D49

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R22

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	66	U
67-64-1	Acetone	430	BJ
75-15-0	Carbon Disulfide	66	U
75-35-4	1,1-Dichloroethene	66	U
75-34-3	1,1-Dichloroethane	66	U
540-59-0	1,2-Dichloroethene (total)	66	U
67-66-3	Chloroform	66	U
107-06-2	1,2-Dichloroethane	66	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	66	U
56-23-5	Carbon Tetrachloride	66	U
108-05-4	Vinyl Acetate	660	U
75-27-4	Bromodichloromethane	66	U
78-87-5	1,2-Dichloropropane	66	U
10061-01-5	cis-1,3-Dichloropropene	66	U
79-01-6	Trichloroethene	66	U
124-48-1	Dibromochloromethane	66	U
79-00-5	1,1,2-Trichloroethane	66	U
71-43-2	Benzene	66	U
10061-02-6	trans-1,3-Dichloropropene	66	U
110-75-8	2-Chloroethyl vinyl ether	130	U
75-25-2	Bromoform	66	U
108-10-1	4-Methyl-2-Pentanone	660	U
591-78-6	2-Hexanone	660	U
127-18-4	Tetrachloroethene	66	U
79-34-5	1,1,2,2-Tetrachloroethane	66	U
108-88-3	Toluene	66	U
108-90-7	Chlorobenzene	66	U
100-41-4	Ethylbenzene	66	U
100-42-5	Styrene	66	U
1330-20-7	Xylene (Total)	66	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R22

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.00	160	J

9713505.0481

00005C

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D55

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-09A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	8	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	51	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	51	U
591-78-6	2-Hexanone	51	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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D55

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-09A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

9713505.0483

000058

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D56

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-17A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	21	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	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

9713505.0484

000059

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D56

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-17A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALCOHOL	29.51	19	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01D

Sample wt/vol: 31.4 (g/mL) G Lab File ID: 20915S05

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
100-51-6	Benzyl Alcohol	640	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	bis(2-Chloroisopropyl)Ether	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-Di-n-Propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	640	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-methylphenol	640	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	320	U
208-96-8	Acenaphthylene	320	U

9713505.0486

000061

EPA SAMPLE NO.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01D

Sample wt/vol: 31.4 (g/mL) G Lab File ID: 20915S05

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	320	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
84-74-2	Di-n-Butylphthalate	320	U
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	640	U
56-55-3	Benzo(a)anthracene	320	U
117-81-7	bis(2-Ethylhexyl)Phthalate	320	U
218-01-9	Chrysene	320	U
117-84-0	Di-n-octyl Phthalate	320	U
205-99-2	Benzo(b)fluoranthene	320	U
207-08-9	Benzo(k)fluoranthene	320	U
50-32-8	Benzo(a)pyrene	320	U
193-39-5	Indeno(1,2,3-cd)Pyrene	320	U
53-70-3	Dibenz(a,h)Anthracene	320	U
191-24-2	Benzo(g,h,i)perylene	320	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B06D31

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01D

Sample wt/vol: 31.4 (g/mL) G Lab File ID: 20915S05

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	59000	BJ
2.	UNKNOWN HYDROCARBON	8.62	190	BJ
3.	UNKNOWN HYDROCARBON	8.75	620	BJ
4.	UNKNOWN HYDROCARBON	9.29	550	BJ
5.	UNKNOWN ALCOHOL	10.99	1100	BJ
6.	UNKNOWN CARBOXYLIC ACID ESTE	26.64	390	BJ
7.	HEXANEDIOIC ACID ISOMER	32.64	130	BJ

9713505.0488

000063

EPA SAMPLE NO.

B06D32

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02B

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 20915S06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	680	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	680	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	680	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02B

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 20915S06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	680	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

9713505.0490

000065

EPA SAMPLE NO.

B06D32

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02B

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 20915S06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	55000	BJ
2.	UNKNOWN HYDROCARBON	7.38	310	BJ
3.	UNKNOWN HYDROCARBON	8.64	210	BJ
4.	UNKNOWN HYDROCARBON	8.77	550	BJ
5.	UNKNOWN HYDROCARBON	9.29	550	BJ
6.	UNKNOWN ALCOHOL	110.16	1000	BJ
7.	HEXANEDIOIC ACID ISOMER	26.66	380	BJ

9713505.0491

000066

EPA SAMPLE NO.

B06D34

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20915S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
100-51-6	Benzyl Alcohol	730	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)Ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
65-85-0	Benzoic Acid	1800	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	730	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U

9713505.0492

000067

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20915S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
84-74-2	Di-n-Butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	730	U
56-55-3	Benzo(a)anthracene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	360	U
218-01-9	Chrysene	360	U
117-84-0	Di-n-octyl Phthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

9713505.0493

000039

EPA SAMPLE NO.

B06D34

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20915S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.13	64000	BJ
2.	UNKNOWN HYDROCARBON	7.33	330	BJ
3.	UNKNOWN HYDROCARBON	8.60	260	BJ
4.	UNKNOWN HYDROCARBON	8.72	630	BJ
5.	UNKNOWN HYDROCARBON	9.24	660	BJ
6.	UNKNOWN ALCOHOL	10.95	1400	BJ
7.	UNKNOWN ALKENE	23.77	770	J
8.	UNKNOWN ALKANE	24.12	480	J
9.	UNKNOWN ALKANE	24.24	630	J
10.	UNKNOWN CARBOXYLIC ACID ESTE	26.61	480	BJ
11.	UNKNOWN ALKANE	32.74	260	J
12.	UNKNOWN ALKANE	33.71	480	J
13.	UNKNOWN ALKANE	34.66	520	J
14.	UNKNOWN ALKANE	35.59	590	J
15.	UNKNOWN ALKANE	36.57	660	J
16.	UNKNOWN ALKANE	37.64	960	J
17.	UNKNOWN ALKANE	38.86	410	J
18.	UNKNOWN ALKANE	40.29	590	J
19.	UNKNOWN KETONE	42.08	220	J
20.	UNKNOWN COMPOUND	42.41	330	J

9713505.0494

000069

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S09

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	670	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	670	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S09

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B06D38

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S09

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.9 Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.22	62000	BJ
2.	UNKNOWN HYDROCARBON	8.65	270	BJ
3.	UNKNOWN HYDROCARBON	8.77	650	BJ
4.	UNKNOWN HYDROCARBON	9.30	610	BJ
5.	UNKNOWN ALCOHOL	11.00	1300	BJ
6.	UNKNOWN CARBOXYLIC ACID ESTE	26.66	480	BJ

9713505.0497

000072

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20915S10

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	670	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	670	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

9713505.0498

000073

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20915S10

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

9713505.0499

000C74

EPA SAMPLE NO.

B06D39

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20915S10

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.3 Dilution Factor: 1.0

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.22	65000	BJ
2.	UNKNOWN HYDROCARBON	7.42	340	BJ
3.	UNKNOWN HYDROCARBON	8.67	240	BJ
4.	UNKNOWN HYDROCARBON	8.79	610	BJ
5.	UNKNOWN HYDROCARBON	9.32	610	BJ
6.	UNKNOWN ALCOHOL	11.02	1200	BJ
7.	UNKNOWN CARBOXYLIC ACID ESTE	26.66	440	BJ
8.	HEXANEDIOIC ACID ISOMER	32.67	170	BJ
9.	UNKNOWN HYDROCARBON	36.01	170	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06B

Sample wt/vol: 31.8 (g/mL) G Lab File ID: 20915S11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
100-51-6	Benzyl Alcohol	640	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	bis(2-Chloroisopropyl)Ether	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-Di-n-Propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
65-85-0	Benzoic Acid	1500	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	640	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-methylphenol	640	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethyl Phthalate	320	U
208-96-8	Acenaphthylene	320	U

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000067

EPA SAMPLE NO.

B06D40

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06B

Sample wt/vol: 31.8 (g/mL) G Lab File ID: 20915S11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	320	U
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
84-74-2	Di-n-Butylphthalate	320	U
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	640	U
56-55-3	Benzo(a)anthracene	320	U
117-81-7	bis(2-Ethylhexyl)Phthalate	320	U
218-01-9	Chrysene	320	U
117-84-0	Di-n-octyl Phthalate	320	U
205-99-2	Benzo(b)fluoranthene	320	U
207-08-9	Benzo(k)fluoranthene	320	U
50-32-8	Benzo(a)pyrene	320	U
193-39-5	Indeno(1,2,3-cd)Pyrene	320	U
53-70-3	Dibenz(a,h)Anthracene	320	U
191-24-2	Benzo(g,h,i)perylene	320	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06B

Sample wt/vol: 31.8 (g/mL) G Lab File ID: 20915S11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.23	58000	BJ
2.	UNKNOWN HYDROCARBON	8.67	220	BJ
3.	UNKNOWN HYDROCARBON	8.79	580	BJ
4.	UNKNOWN HYDROCARBON	9.32	580	BJ
5.	UNKNOWN ALCOHOL	11.02	1100	BJ
6.	UNKNOWN CARBOXYLIC ACID ESTE	26.67	380	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20917S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 dec. Date Extracted: 09/08/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/17/92

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	670	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	670	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20917S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 dec. Date Extracted: 09/08/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/17/92

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B06D41

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20917S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 dec. Date Extracted: 09/08/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/17/92

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.07	18000	BJ
2.	UNKNOWN HYDROCARBON	8.59	100	J
3.	UNKNOWN HYDROCARBON	8.70	100	BJ
4.	UNKNOWN HYDROCARBON	9.22	270	BJ
5.	UNKNOWN ALCOHOL	10.92	540	BJ
6.	HEXANEDIOIC ACID ISOMER	32.56	140	BJ
7.	UNKNOWN HYDROCARBON	40.91	310	J
8.	UNKNOWN HYDROCARBON	41.42	710	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 20915S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	680	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	680	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	680	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 20915S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	680	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 20915S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.15	61000	BJ
2.	UNKNOWN HYDROCARBON	7.35	310	BJ
3.	UNKNOWN HYDROCARBON	8.60	210	BJ
4.	UNKNOWN HYDROCARBON	8.72	580	BJ
5.	UNKNOWN HYDROCARBON	9.24	550	BJ
6.	UNKNOWN ALCOHOL	10.95	1200	BJ
7.	UNKNOWN CARBOXYLIC ACID ESTE	26.61	410	BJ

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 20915S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1700	U
111-44-4	bis(2-Chloroethyl)Ether	1700	U
95-57-8	2-Chlorophenol	1700	U
541-73-1	1,3-Dichlorobenzene	1700	U
106-46-7	1,4-Dichlorobenzene	1700	U
100-51-6	Benzyl Alcohol	3500	U
95-50-1	1,2-Dichlorobenzene	1700	U
95-48-7	2-Methylphenol	1700	U
108-60-1	bis(2-Chloroisopropyl)Ether	1700	U
106-44-5	4-Methylphenol	1700	U
621-64-7	N-Nitroso-Di-n-Propylamine	1700	U
67-72-1	Hexachloroethane	1700	U
98-95-3	Nitrobenzene	1700	U
78-59-1	Isophorone	1700	U
88-75-5	2-Nitrophenol	1700	U
105-67-9	2,4-Dimethylphenol	1700	U
65-85-0	Benzoic Acid	8400	U
111-91-1	bis(2-Chloroethoxy)methane	1700	U
120-83-2	2,4-Dichlorophenol	1700	U
120-82-1	1,2,4-Trichlorobenzene	1700	U
91-20-3	Naphthalene	1700	U
106-47-8	4-Chloroaniline	3500	U
87-68-3	Hexachlorobutadiene	1700	U
59-50-7	4-Chloro-3-methylphenol	3500	U
91-57-6	2-Methylnaphthalene	1700	U
77-47-4	Hexachlorocyclopentadiene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	8400	U
91-58-7	2-Chloronaphthalene	1700	U
88-74-4	2-Nitroaniline	8400	U
131-11-3	Dimethyl Phthalate	1700	U
208-96-8	Acenaphthylene	1700	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 20915S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	8400	U
83-32-9	Acenaphthene	1700	U
51-28-5	2,4-Dinitrophenol	8400	U
100-02-7	4-Nitrophenol	8400	U
132-64-9	Dibenzofuran	1700	U
121-14-2	2,4-Dinitrotoluene	1700	U
606-20-2	2,6-Dinitrotoluene	1700	U
84-66-2	Diethylphthalate	1000	J
7005-72-3	4-Chlorophenyl-phenylether	1700	U
86-73-7	Fluorene	1700	U
100-01-6	4-Nitroaniline	8400	U
534-52-1	4,6-Dinitro-2-methylphenol	8400	U
86-30-6	N-Nitrosodiphenylamine (1)	1700	U
101-55-3	4-Bromophenyl-phenylether	1700	U
118-74-1	Hexachlorobenzene	1700	U
87-86-5	Pentachlorophenol	8400	U
85-01-8	Phenanthrene	1700	U
120-12-7	Anthracene	1700	U
84-74-2	Di-n-Butylphthalate	1700	U
206-44-0	Fluoranthene	1700	U
129-00-0	Pyrene	1700	U
85-68-7	Butylbenzylphthalate	1700	U
91-94-1	3,3'-Dichlorobenzidine	3500	U
56-55-3	Benzo(a)anthracene	1700	U
117-81-7	bis(2-Ethylhexyl)Phthalate	410	J
218-01-9	Chrysene	1700	U
117-84-0	Di-n-octyl Phthalate	1700	U
205-99-2	Benzo(b)fluoranthene	1700	U
207-08-9	Benzo(k)fluoranthene	1700	U
50-32-8	Benzo(a)pyrene	1700	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1700	U
53-70-3	Dibenz(a,h)Anthracene	1700	U
191-24-2	Benzo(g,h,i)perylene	1700	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 20915S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

Number TICs found: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.22	320000	BJ
2.	UNKNOWN HYDROCARBON	8.67	1100	BJ
3.	UNKNOWN HYDROCARBON	8.79	3200	BJ
4.	UNKNOWN HYDROCARBON	9.30	3300	BJ
5.	UNKNOWN ALCOHOL	11.02	7500	BJ
6.	UNKNOWN HYDROCARBON	23.85	7700	J
7.	UNKNOWN ALKANE	24.19	2500	J
8.	UNKNOWN ALKANE	24.30	2800	J
9.	UNKNOWN ALKANE	24.95	2300	J
10.	UNKNOWN CARBOXYLIC ACID ESTE	26.67	2600	BJ
11.	UNKNOWN CARBOXYLIC ACID ESTE	27.91	700	J
12.	HEXANEDIOIC ACID ISOMER	32.69	880	J
13.	UNKNOWN HYDROCARBON	36.51	3200	J
14.	UNKNOWN HYDROCARBON	36.81	1800	J
15.	UNKNOWN ALKANE	37.69	1200	J
16.	UNKNOWN HYDROCARBON	41.12	1100	J
17.	UNKNOWN HYDROCARBON	41.89	3300	J
18.	UNKNOWN HYDROCARBON	42.23	700	J
19.	UNKNOWN HYDROCARBON	43.29	880	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1600	U
111-44-4	bis(2-Chloroethyl)Ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
100-51-6	Benzyl Alcohol	3200	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	bis(2-Chloroisopropyl)Ether	1600	U
106-44-5	4-Methylphenol	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
65-85-0	Benzoic Acid	7800	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	1600	U
106-47-8	4-Chloroaniline	3200	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-methylphenol	3200	U
91-57-6	2-Methylnaphthalene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	7800	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	7800	U
131-11-3	Dimethyl Phthalate	1600	U
208-96-8	Acenaphthylene	1600	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7800	U
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	7800	U
100-02-7	4-Nitrophenol	7800	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	7800	U
534-52-1	4,6-Dinitro-2-methylphenol	7800	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	7800	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
84-74-2	Di-n-Butylphthalate	1600	U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	1600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	400	J
218-01-9	Chrysene	1600	U
117-84-0	Di-n-octyl Phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	1600	U
207-08-9	Benzo(k)fluoranthene	1600	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	1600	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	290000	BJ
2.	UNKNOWN HYDROCARBON	7.40	1600	BJ
3.	UNKNOWN HYDROCARBON	8.65	980	BJ
4.	UNKNOWN HYDROCARBON	8.77	2800	BJ
5.	UNKNOWN HYDROCARBON	9.29	2600	BJ
6.	UNKNOWN ALCOHOL	11.00	5900	BJ
7.	UNKNOWN HYDROCARBON	23.85	8300	J
8.	UNKNOWN ALKANE	24.17	3300	J
9.	UNKNOWN ALKANE	24.30	3300	J
10.	UNKNOWN ALKANE	24.95	2300	J
11.	UNKNOWN CARBOXYLIC ACID ESTE	26.66	2300	BJ
12.	UNKNOWN ALKANE	33.77	820	J
13.	UNKNOWN ALKANE	35.64	650	J
14.	UNKNOWN HYDROCARBON	36.51	980	J
15.	UNKNOWN HYDROCARBON	36.82	1100	J
16.	UNKNOWN ALKANE	37.71	1300	J
17.	UNKNOWN HYDROCARBON	41.16	980	J
18.	UNKNOWN HYDROCARBON	41.93	5100	J
19.	UNKNOWN HYDROCARBON	42.24	820	J
20.	UNKNOWN HYDROCARBON	44.13	980	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D45

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12B

Sample wt/vol: 32.1 (g/mL) G Lab File ID: 20915S16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	860	U
111-44-4	bis(2-Chloroethyl)Ether	860	U
95-57-8	2-Chlorophenol	860	U
541-73-1	1,3-Dichlorobenzene	860	U
106-46-7	1,4-Dichlorobenzene	860	U
100-51-6	Benzyl Alcohol	1700	U
95-50-1	1,2-Dichlorobenzene	860	U
95-48-7	2-Methylphenol	860	U
108-60-1	bis(2-Chloroisopropyl)Ether	860	U
106-44-5	4-Methylphenol	860	U
621-64-7	N-Nitroso-Di-n-Propylamine	860	U
67-72-1	Hexachloroethane	860	U
98-95-3	Nitrobenzene	860	U
78-59-1	Isophorone	860	U
88-75-5	2-Nitrophenol	860	U
105-67-9	2,4-Dimethylphenol	860	U
65-85-0	Benzoic Acid	4200	U
111-91-1	bis(2-Chloroethoxy)methane	860	U
120-83-2	2,4-Dichlorophenol	860	U
120-82-1	1,2,4-Trichlorobenzene	860	U
91-20-3	Naphthalene	860	U
106-47-8	4-Chloroaniline	1700	U
87-68-3	Hexachlorobutadiene	860	U
59-50-7	4-Chloro-3-methylphenol	1700	U
91-57-6	2-Methylnaphthalene	860	U
77-47-4	Hexachlorocyclopentadiene	860	U
88-06-2	2,4,6-Trichlorophenol	860	U
95-95-4	2,4,5-Trichlorophenol	4200	U
91-58-7	2-Chloronaphthalene	860	U
88-74-4	2-Nitroaniline	4200	U
131-11-3	Dimethyl Phthalate	860	U
208-96-8	Acenaphthylene	860	U

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EPA SAMPLE NO.

B06D45

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12B

Sample wt/vol: 32.1 (g/mL) G Lab File ID: 20915S16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4200	U
83-32-9	Acenaphthene	860	U
51-28-5	2,4-Dinitrophenol	4200	U
100-02-7	4-Nitrophenol	4200	U
132-64-9	Dibenzofuran	860	U
121-14-2	2,4-Dinitrotoluene	860	U
606-20-2	2,6-Dinitrotoluene	860	U
84-66-2	Diethylphthalate	860	U
7005-72-3	4-Chlorophenyl-phenylether	860	U
86-73-7	Fluorene	860	U
100-01-6	4-Nitroaniline	4200	U
534-52-1	4,6-Dinitro-2-methylphenol	4200	U
86-30-6	N-Nitrosodiphenylamine (1)	860	U
101-55-3	4-Bromophenyl-phenylether	860	U
118-74-1	Hexachlorobenzene	860	U
87-86-5	Pentachlorophenol	4200	U
85-01-8	Phenanthrene	860	U
120-12-7	Anthracene	860	U
84-74-2	Di-n-Butylphthalate	860	U
206-44-0	Fluoranthene	860	U
129-00-0	Pyrene	860	U
85-68-7	Butylbenzylphthalate	860	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)anthracene	860	U
117-81-7	bis(2-Ethylhexyl)Phthalate	860	U
218-01-9	Chrysene	860	U
117-84-0	Di-n-octyl Phthalate	860	U
205-99-2	Benzo(b)fluoranthene	860	U
207-08-9	Benzo(k)fluoranthene	860	U
50-32-8	Benzo(a)pyrene	860	U
193-39-5	Indeno(1,2,3-cd)Pyrene	860	U
53-70-3	Dibenz(a,h)Anthracene	860	U
191-24-2	Benzo(g,h,i)perylene	860	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B06D45

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12B

Sample wt/vol: 32.1 (g/mL) G Lab File ID: 20915S16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	160000	BJ
2.	UNKNOWN HYDROCARBON	7.37	780	BJ
3.	UNKNOWN HYDROCARBON	8.62	610	BJ
4.	UNKNOWN HYDROCARBON	8.75	1600	BJ
5.	UNKNOWN HYDROCARBON	9.29	1600	BJ
6.	UNKNOWN ALCOHOL	10.99	3600	BJ
7.	UNKNOWN HYDROCARBON	23.82	2800	J
8.	UNKNOWN ALKANE	24.15	610	J
9.	UNKNOWN ALKANE	24.27	1100	J
10.	UNKNOWN ALKANE	24.92	1100	J
11.	UNKNOWN CARBOXYLIC ACID ESTE	26.64	1000	BJ
12.	UNKNOWN HYDROCARBON	36.47	520	J
13.	UNKNOWN HYDROCARBON	37.66	350	J
14.	UNKNOWN HYDROCARBON	41.11	520	J
15.	UNKNOWN HYDROCARBON	41.84	690	J
16.	UNKNOWN HYDROCARBON	43.26	520	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20915S17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1100	U
111-44-4	bis(2-Chloroethyl)Ether	1100	U
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
100-51-6	Benzyl Alcohol	2300	U
95-50-1	1,2-Dichlorobenzene	1100	U
95-48-7	2-Methylphenol	1100	U
108-60-1	bis(2-Chloroisopropyl)Ether	1100	U
106-44-5	4-Methylphenol	1100	U
621-64-7	N-Nitroso-Di-n-Propylamine	1100	U
67-72-1	Hexachloroethane	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-Nitrophenol	1100	U
105-67-9	2,4-Dimethylphenol	1100	U
65-85-0	Benzoic Acid	5600	U
111-91-1	bis(2-Chloroethoxy)methane	1100	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	1100	U
106-47-8	4-Chloroaniline	2300	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-Chloro-3-methylphenol	2300	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-95-4	2,4,5-Trichlorophenol	5600	U
91-58-7	2-Chloronaphthalene	1100	U
88-74-4	2-Nitroaniline	5600	U
131-11-3	Dimethyl Phthalate	1100	U
208-96-8	Acenaphthylene	1100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20915S17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	5600	U
83-32-9	Acenaphthene	1100	U
51-28-5	2,4-Dinitrophenol	5600	U
100-02-7	4-Nitrophenol	5600	U
132-64-9	Dibenzofuran	1100	U
121-14-2	2,4-Dinitrotoluene	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U
84-66-2	Diethylphthalate	1100	U
7005-72-3	4-Chlorophenyl-phenylether	1100	U
86-73-7	Fluorene	1100	U
100-01-6	4-Nitroaniline	5600	U
534-52-1	4,6-Dinitro-2-methylphenol	5600	U
86-30-6	N-Nitrosodiphenylamine (1)	1100	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	Pentachlorophenol	5600	U
85-01-8	Phenanthrene	1100	U
120-12-7	Anthracene	1100	U
84-74-2	Di-n-Butylphthalate	1100	U
206-44-0	Fluoranthene	1100	U
129-00-0	Pyrene	1100	U
85-68-7	Butylbenzylphthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)anthracene	1100	U
117-81-7	bis(2-Ethylhexyl)Phthalate	240	J
218-01-9	Chrysene	1100	U
117-84-0	Di-n-octyl Phthalate	1100	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	1100	U
50-32-8	Benzo(a)pyrene	1100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1100	U
53-70-3	Dibenz(a,h)Anthracene	1100	U
191-24-2	Benzo(g,h,i)perylene	1100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20915S17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.22	240000	BJ
2.	UNKNOWN HYDROCARBON	7.38	1000	BJ
3.	UNKNOWN HYDROCARBON	8.62	810	BJ
4.	UNKNOWN HYDROCARBON	8.75	2700	BJ
5.	UNKNOWN HYDROCARBON	9.27	2000	BJ
6.	UNKNOWN ALCOHOL	10.97	4800	BJ
7.	UNKNOWN ALKENE	23.79	2800	J
8.	UNKNOWN ALKANE	24.12	700	J
9.	UNKNOWN ALKANE	24.25	1000	J
10.	UNKNOWN ALKANE	24.90	810	J
11.	UNKNOWN CARBOXYLIC ACID ESTE	26.61	1600	J
12.	HEXANEDIOIC ACID ISOMER	32.64	580	BJ
13.	UNKNOWN HYDROCARBON	41.83	580	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14B

Sample wt/vol: 32.3 (g/mL) G Lab File ID: 20915S18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1600	U
111-44-4	bis(2-Chloroethyl)Ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
100-51-6	Benzyl Alcohol	3200	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	bis(2-Chloroisopropyl)Ether	1600	U
106-44-5	4-Methylphenol	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
65-85-0	Benzoic Acid	7800	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	1600	U
106-47-8	4-Chloroaniline	3200	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-methylphenol	3200	U
91-57-6	2-Methylnaphthalene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	7800	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	7800	U
131-11-3	Dimethyl Phthalate	1600	U
208-96-8	Acenaphthylene	1600	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14B

Sample wt/vol: 32.3 (g/mL) G Lab File ID: 20915S18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7800	U
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	7800	U
100-02-7	4-Nitrophenol	7800	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	7800	U
534-52-1	4,6-Dinitro-2-methylphenol	7800	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	7800	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
84-74-2	Di-n-Butylphthalate	1600	U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	1600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1600	U
218-01-9	Chrysene	1600	U
117-84-0	Di-n-octyl Phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	1600	U
207-08-9	Benzo(k)fluoranthene	1600	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	1600	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14B

Sample wt/vol: 32.3 (g/mL) G Lab File ID: 20915S18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	340000	BJ
2.	UNKNOWN HYDROCARBON	7.35	1300	BJ
3.	UNKNOWN HYDROCARBON	8.60	980	BJ
4.	UNKNOWN HYDROCARBON	8.74	3800	BJ
5.	UNKNOWN HYDROCARBON	9.25	2800	BJ
6.	UNKNOWN ALCOHOL	10.97	6700	BJ
7.	UNKNOWN HYDROCARBON	23.79	5900	J
8.	UNKNOWN ALKANE	24.12	2400	J
9.	UNKNOWN ALKANE	25.92	4200	J
10.	UNKNOWN ALKANE	24.90	3100	J
11.	UNKNOWN ACID	25.11	820	J
12.	UNKNOWN ALKANE	25.44	820	J
13.	UNKNOWN CARBOXYLIC ACID ESTE	26.61	2400	J
14.	UNKNOWN ACID	27.62	1300	J
15.	UNKNOWN ACID	27.86	2000	J
16.	UNKNOWN HYDROCARBON	30.01	1600	BJ
17.	HEXANEDIOIC ACID ISOMER	32.64	980	J
18.	UNKNOWN HYDROCARBON	36.76	820	J
19.	UNKNOWN ALKANE	37.64	980	J
20.	UNKNOWN HYDROCARBON	41.83	820	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15B

Sample wt/vol: 31.7 (g/mL) G Lab File ID: 20916S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2100	U
111-44-4	bis(2-Chloroethyl)Ether	2100	U
95-57-8	2-Chlorophenol	2100	U
541-73-1	1,3-Dichlorobenzene	2100	U
106-46-7	1,4-Dichlorobenzene	2100	U
100-51-6	Benzyl Alcohol	4200	U
95-50-1	1,2-Dichlorobenzene	2100	U
95-48-7	2-Methylphenol	2100	U
108-60-1	bis(2-Chloroisopropyl)Ether	2100	U
106-44-5	4-Methylphenol	2100	U
621-64-7	N-Nitroso-Di-n-Propylamine	2100	U
67-72-1	Hexachloroethane	2100	U
98-95-3	Nitrobenzene	2100	U
78-59-1	Isophorone	2100	U
88-75-5	2-Nitrophenol	2100	U
105-67-9	2,4-Dimethylphenol	2100	U
65-85-0	Benzoic Acid	10000	U
111-91-1	bis(2-Chloroethoxy)methane	2100	U
120-83-2	2,4-Dichlorophenol	2100	U
120-82-1	1,2,4-Trichlorobenzene	2100	U
91-20-3	Naphthalene	2100	U
106-47-8	4-Chloroaniline	4200	U
87-68-3	Hexachlorobutadiene	2100	U
59-50-7	4-Chloro-3-methylphenol	4200	U
91-57-6	2-Methylnaphthalene	2100	U
77-47-4	Hexachlorocyclopentadiene	2100	U
88-06-2	2,4,6-Trichlorophenol	2100	U
95-95-4	2,4,5-Trichlorophenol	10000	U
91-58-7	2-Chloronaphthalene	2100	U
88-74-4	2-Nitroaniline	10000	U
131-11-3	Dimethyl Phthalate	2100	U
208-96-8	Acenaphthylene	2100	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15B

Sample wt/vol: 31.7 (g/mL) G Lab File ID: 20916S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	10000	U
83-32-9	Acenaphthene	2100	U
51-28-5	2,4-Dinitrophenol	10000	U
100-02-7	4-Nitrophenol	10000	U
132-64-9	Dibenzofuran	2100	U
121-14-2	2,4-Dinitrotoluene	2100	U
606-20-2	2,6-Dinitrotoluene	2100	U
84-66-2	Diethylphthalate	2100	U
7005-72-3	4-Chlorophenyl-phenylether	2100	U
86-73-7	Fluorene	2100	U
100-01-6	4-Nitroaniline	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	10000	U
86-30-6	N-Nitrosodiphenylamine (1)	2100	U
101-55-3	4-Bromophenyl-phenylether	2100	U
118-74-1	Hexachlorobenzene	2100	U
87-86-5	Pentachlorophenol	10000	U
85-01-8	Phenanthrene	2100	U
120-12-7	Anthracene	2100	U
84-74-2	Di-n-Butylphthalate	2100	U
206-44-0	Fluoranthene	2100	U
129-00-0	Pyrene	2100	U
85-68-7	Butylbenzylphthalate	2100	U
91-94-1	3,3'-Dichlorobenzidine	4200	U
56-55-3	Benzo(a)anthracene	2100	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2100	U
218-01-9	Chrysene	2100	U
117-84-0	Di-n-octyl Phthalate	2100	U
205-99-2	Benzo(b)fluoranthene	2100	U
207-08-9	Benzo(k)fluoranthene	2100	U
50-32-8	Benzo(a)pyrene	2100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	2100	U
53-70-3	Dibenz(a,h)Anthracene	2100	U
191-24-2	Benzo(g,h,i)perylene	2100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15B

Sample wt/vol: 31.7 (g/mL) G Lab File ID: 20916S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.6 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.10	360000	BJ
2.	UNKNOWN HYDROCARBON	7.33	1900	BJ
3.	UNKNOWN HYDROCARBON	8.70	4200	BJ
4.	UNKNOWN HYDROCARBON	9.22	3800	BJ
5.	UNKNOWN ALCOHOL	10.92	9200	J
6.	UNKNOWN HYDROCARBON	23.74	27000	BJ
7.	UNKNOWN ALKANE	24.05	9400	J
8.	UNKNOWN ALKANE	24.19	6700	J
9.	UNKNOWN ALKANE	24.82	4600	J
10.	HEXANEDIOIC ACID ISOMER	32.54	1300	BJ
11.	UNKNOWN HYDROCARBON	36.64	1300	J
12.	UNKNOWN HYDROCARBON	40.91	5500	J
13.	UNKNOWN HYDROCARBON	40.79	9000	J
14.	UNKNOWN HYDROCARBON	41.46	4000	J
15.	UNKNOWN HYDROCARBON	41.62	6700	J
16.	UNKNOWN HYDROCARBON	41.99	4000	J
17.	UNKNOWN HYDROCARBON	42.31	4000	J
18.	UNKNOWN KETONE	43.04	2100	J
19.	UNKNOWN HYDROCARBON	43.23	2700	J
20.	UNKNOWN HYDROCARBON	43.83	4400	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20916S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1600	U
111-44-4	bis(2-Chloroethyl)Ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
100-51-6	Benzyl Alcohol	3300	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	bis(2-Chloroisopropyl)Ether	1600	U
106-44-5	4-Methylphenol	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
65-85-0	Benzoic Acid	7900	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	1600	U
106-47-8	4-Chloroaniline	3300	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-methylphenol	3300	U
91-57-6	2-Methylnaphthalene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	7900	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	7900	U
131-11-3	Dimethyl Phthalate	1600	U
208-96-8	Acenaphthylene	1600	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20916S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7900	U
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	7900	U
100-02-7	4-Nitrophenol	7900	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	7900	U
534-52-1	4,6-Dinitro-2-methylphenol	7900	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	7900	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
84-74-2	Di-n-Butylphthalate	1600	U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3300	U
56-55-3	Benzo(a)anthracene	1600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1600	U
218-01-9	Chrysene	1600	U
117-84-0	Di-n-octyl Phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	1600	U
207-08-9	Benzo(k)fluoranthene	1600	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	1600	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20916S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.0

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.13	330000	BJ
2.	UNKNOWN HYDROCARBON	7.33	1500	BJ
3.	UNKNOWN HYDROCARBON	8.59	990	BJ
4.	UNKNOWN HYDROCARBON	8.72	4000	BJ
5.	UNKNOWN HYDROCARBON	9.24	3000	BJ
6.	UNKNOWN ALCOHOL	10.94	7400	BJ
7.	UNKNOWN HYDROCARBON	23.74	20000	J
8.	UNKNOWN ALKANE	24.05	5600	J
9.	UNKNOWN ALKANE	24.19	2100	J
10.	UNKNOWN ALKANE	24.84	1600	J
11.	UNKNOWN HYDROCARBON	36.66	1300	J
12.	UNKNOWN ALKANE	37.52	1200	J
13.	UNKNOWN HYDROCARBON	40.92	2600	J
14.	UNKNOWN POLYNUCLEAR AROMATIC	41.49	2000	J
15.	UNKNOWN HYDROCARBON	41.62	3100	J
16.	UNKNOWN HYDROCARBON	43.84	2000	J

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TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06031 FRACTION 01D TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 30.1 G

Moisture: 2

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 uL

Injection Volume: 1 uL

GPC Cleanup (Y/N): Y pH 7.5

Lab File Id: A93016

Decanted (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 09/30/92

Dilution Factor 1.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	ND	17
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	ND	34

Percent Surrogate Recovery

TCX 83 DBC 27

FORM I

9713505.0531

000104 B

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D32 FRACTION 02B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.4 G
Moisture: 2
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 7.5

Lab File Id: A93017
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.3
72-55-9	4,4'-DDE	ND	3.3
72-20-8	Endrin	ND	3.3
33213-65-9	Endosulfan II	ND	3.3
72-54-8	4,4'-DDD	ND	3.3
1031-07-8	Endosulfan sulfate	ND	3.3
50-29-3	4,4'-DDT	ND	3.3
72-43-5	Methoxychlor	ND	17
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.3
57-74-9	Chlordane	ND	33
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	33
11104-28-2	Aroclor-1221	ND	33
11141-16-5	Aroclor-1232	ND	33
53469-21-9	Aroclor-1242	ND	33
12672-29-6	Aroclor-1248	ND	33
11097-69-1	Aroclor-1254	ND	33
11096-82-5	Aroclor-1260	ND	33

Percent Surrogate Recovery

TCX 99 DBC 22

FORM I

9713505.0532

000104C

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D34 FRACTION 03B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 30.9 G

Moisture: 11

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 uL

Injection Volume: 1 uL

GPC Cleanup (Y/N): Y pH 7.1

Lab File Id: A93018

Decanted (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 09/30/92

Dilution Factor 1.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.9
319-85-7	beta-BHC	ND	1.9
319-86-8	delta-BHC	ND	1.9
58-89-9	gamma-BHC (Lindane)	ND	1.9
76-44-8	Heptachlor	ND	1.9
309-00-2	Aldrin	ND	1.9
1024-57-3	Heptachlor epoxide	ND	1.9
959-98-8	Endosulfan I	ND	1.9
60-57-1	Dieldrin	ND	3.6
72-55-9	4,4'-DDE	ND	3.6
72-20-8	Endrin	ND	3.6
33213-65-9	Endosulfan II	ND	3.6
72-54-8	4,4'-DDD	ND	3.6
1031-07-8	Endosulfan sulfate	ND	3.6
50-29-3	4,4'-DDT	ND	3.6
72-43-5	Methoxychlor	15	19
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.6
57-74-9	Chlordane	ND	36
8001-35-2	Toxaphene	ND	190
12674-11-2	Aroclor-1016	ND	36
11104-28-2	Aroclor-1221	ND	36
11141-16-5	Aroclor-1232	ND	36
53469-21-9	Aroclor-1242	ND	36
12672-29-6	Aroclor-1248	ND	36
11097-69-1	Aroclor-1254	ND	36
11096-82-5	Aroclor-1260	34	36

Percent Surrogate Recovery

TCX 45 DBC 30

FORM I

9713505.0533

000104D

TMA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92 Results by Sample

SAMPLE ID B06D38 FRACTION 04B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.6 G
Moisture: 4
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 7.9

Lab File Id: A93021
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	ND	17
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	ND	34

Percent Surrogate Recovery

TCX 92 DBC 33

FORM I

000104 E

9713505.0534

TRA INC. REPORT

Received: 08/28/92 Results by Sample Work Order # A2-09-002

SAMPLE ID B06D39 FRACTION 05B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.3 G
Moisture: 4
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.3

Lab File Id: A93022
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.8
319-85-7	beta-BHC	ND	1.8
319-86-8	delta-BHC	ND	1.8
58-89-9	gamma-BHC (Lindane)	ND	1.8
76-44-8	Heptachlor	ND	1.8
309-00-2	Aldrin	ND	1.8
1024-57-3	Heptachlor epoxide	ND	1.8
959-98-8	Endosulfan I	ND	1.8
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	ND	18
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	180
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	ND	34

Percent Surrogate Recovery

TCX 88 DBC 75

FORM I

TMA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92 Results by Sample

SAMPLE ID 806D40 FRACTION 06B TEST CODE 8080SP NAME Pest/PCB Soil Package
Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.4 G
Moisture: 2
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.2

Lab File Id: A93023
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.3
72-55-9	4,4'-DDE	ND	3.3
72-20-8	Endrin	ND	3.3
33213-65-9	Endosulfan II	ND	3.3
72-54-8	4,4'-DDD	ND	3.3
1031-07-8	Endosulfan sulfate	ND	3.3
50-29-3	4,4'-DDT	ND	3.3
72-43-5	Methoxychlor	ND	17
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.3
57-74-9	Chlordane	ND	33
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	33
11104-28-2	Aroclor-1221	ND	33
11141-16-5	Aroclor-1232	ND	33
53469-21-9	Aroclor-1242	ND	33
12672-29-6	Aroclor-1248	ND	33
11097-69-1	Aroclor-1254	ND	33
11096-82-5	Aroclor-1260	ND	33

Percent Surrogate Recovery
TCX 89 DBC 70

FORM I

9713505.0536

000104G

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06041 FRACTION 07B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.4 G
Moisture: 3
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.1

Lab File Id: A93026
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	ND	17
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	ND	34

Percent Surrogate Recovery

TCX 74 DBC 47

FORM I

9713505.0537

0001041

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D42 FRACTION 08B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.6 G
Moisture: 4
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.0

Lab File Id: A93027
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	ND	17
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	ND	34

Percent Surrogate Recovery

TCX 105 DBC 31

FORM I

9713505.0538

000104

TRA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92 Results by Sample

SAMPLE ID B06D43 FRACTION 10B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 31.7 G
Moisture: 81
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.6

Lab File Id: A93028
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	8.5
319-85-7	beta-BHC	ND	8.5
319-86-8	delta-BHC	ND	8.5
58-89-9	gamma-BHC (Lindane)	ND	8.5
76-44-8	Heptachlor	ND	8.5
309-00-2	Aldrin	ND	8.5
1024-57-3	Heptachlor epoxide	ND	8.5
959-98-8	Endosulfan I	ND	8.5
60-57-1	Dieldrin	ND	16
72-55-9	4,4'-DDE	ND	16
72-20-8	Endrin	ND	16
33213-65-9	Endosulfan II	ND	16
72-54-8	4,4'-DDD	ND	16
1031-07-8	Endosulfan sulfate	ND	16
50-29-3	4,4'-DDT	ND	16
72-43-5	Methoxychlor	83	85
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	16
57-74-9	Chlordane	ND	160
8001-35-2	Toxaphene	ND	850
12674-11-2	Aroclor-1016	ND	160
11104-28-2	Aroclor-1221	ND	160
11141-16-5	Aroclor-1232	ND	160
53469-21-9	Aroclor-1242	ND	160
12672-29-6	Aroclor-1248	ND	160
11097-69-1	Aroclor-1254	ND	160
11096-82-5	Aroclor-1260	ND	160

Percent Surrogate Recovery

TCX 41 DBC 11

FORM I

9713505.0539

000104 J

TNA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92

Results by Sample

SAMPLE ID B06D44 FRACTION 11B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.6 G
Moisture: 80
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.3

Lab File Id: A93029
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	8.3
319-85-7	beta-BHC	ND	8.3
319-86-8	delta-BHC	ND	8.3
58-89-9	gamma-BHC (Lindane)	ND	8.3
76-44-8	Heptachlor	ND	8.3
309-00-2	Aldrin	ND	8.3
1024-57-3	Heptachlor epoxide	ND	8.3
959-98-8	Endosulfan I	ND	8.3
60-57-1	Dieldrin	ND	16
72-55-9	4,4'-DDE	ND	16
72-20-8	Endrin	ND	16
33213-65-9	Endosulfan II	ND	16
72-54-8	4,4'-DDD	ND	16
1031-07-8	Endosulfan sulfate	ND	16
50-29-3	4,4'-DDT	ND	16
72-43-5	Methoxychlor	ND	83
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	16
57-74-9	Chlordane	ND	160
8001-35-2	Toxaphene	ND	830
12674-11-2	Aroclor-1016	ND	160
11104-28-2	Aroclor-1221	ND	160
11141-16-5	Aroclor-1232	ND	160
53469-21-9	Aroclor-1242	ND	160
12672-29-6	Aroclor-1248	ND	160
11097-69-1	Aroclor-1254	ND	160
11096-82-5	Aroclor-1260	ND	160

Percent Surrogate Recovery

TCX 102 DBC 39

FORM I

9713505.0540

000104 K

TRA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92 Results by Sample

SAMPLE ID 806D45 FRACTION 12B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.7 G
Moisture: 64
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 ul
Injection Volume: 1 ul
GPC Cleanup (Y/N): Y pH 6.5

Lab File Id: A93030
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	4.6
319-85-7	beta-BHC	ND	4.6
319-86-8	delta-BHC	ND	4.6
58-89-9	gamma-BHC (Lindane)	ND	4.6
76-44-8	Heptachlor	ND	4.6
309-00-2	Aldrin	ND	4.6
1024-57-3	Heptachlor epoxide	ND	4.6
959-98-8	Endosulfan I	ND	4.6
60-57-1	Dieldrin	ND	9.0
72-55-9	4,4'-DDE	ND	9.0
72-20-8	Endrin	ND	9.0
33213-65-9	Endosulfan II	ND	9.0
72-54-8	4,4'-DDD	ND	9.0
1031-07-8	Endosulfan sulfate	ND	9.0
50-29-3	4,4'-DDT	ND	9.0
72-43-5	Methoxychlor	ND	46
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	9.0
57-74-9	Chlordane	ND	90
8001-35-2	Toxaphene	ND	460
12674-11-2	Aroclor-1016	ND	90
11104-28-2	Aroclor-1221	ND	90
11141-16-5	Aroclor-1232	ND	90
53469-21-9	Aroclor-1242	ND	90
12672-29-6	Aroclor-1248	ND	90
11097-69-1	Aroclor-1254	ND	90
11096-82-5	Aroclor-1260	ND	90

Percent Surrogate Recovery

TCX 100 DBC 44

FORM I

9713505.0541

000104 L

TMA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92

Results by Sample

SAMPLE ID B06D46 FRACTION 13B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.8 G
Moisture: 73
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.6

Lab File Id: A93031
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	6.1
319-85-7	beta-BHC	ND	6.1
319-86-8	delta-BHC	ND	6.1
58-89-9	gamma-BHC (Lindane)	ND	6.1
76-44-8	Heptachlor	ND	6.1
309-00-2	Aldrin	ND	6.1
1024-57-3	Heptachlor epoxide	ND	6.1
959-98-8	Endosulfan I	ND	6.1
60-57-1	Dieldrin	ND	12
72-55-9	4,4'-DDE	ND	12
72-20-8	Endrin	ND	12
33213-65-9	Endosulfan II	ND	12
72-54-8	4,4'-DDD	ND	12
1031-07-8	Endosulfan sulfate	ND	12
50-29-3	4,4'-DDT	ND	12
72-43-5	Methoxychlor	ND	61
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	12
57-74-9	Chlordane	ND	120
8001-35-2	Toxaphene	ND	610
12674-11-2	Aroclor-1016	ND	120
11104-28-2	Aroclor-1221	ND	120
11141-16-5	Aroclor-1232	ND	120
53469-21-9	Aroclor-1242	ND	120
12672-29-6	Aroclor-1248	ND	120
11097-69-1	Aroclor-1254	ND	120
11096-82-5	Aroclor-1260	ND	120

Percent Surrogate Recovery

TCX 86 DBC 33

FORM I

9713505.0542

0001041

TRA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92

Results by Sample

SAMPLE ID B06047 FRACTION 14B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 31.8 G

Moisture: 81

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 uL

Injection Volume: 1 uL

GPC Cleanup (Y/N): Y pH 6.4

Lab File Id: A93032

Decented (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 10/01/92

Dilution Factor 1.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	8.4
319-85-7	beta-BHC	ND	8.4
319-86-8	delta-BHC	ND	8.4
58-89-9	gamma-BHC (Lindane)	ND	8.4
76-44-8	Heptachlor	ND	8.4
309-00-2	Aldrin	ND	8.4
1024-57-3	Heptachlor epoxide	ND	8.4
959-98-8	Endosulfan I	ND	8.4
60-57-1	Dieldrin	ND	16
72-55-9	4,4'-DDE	ND	16
72-20-8	Endrin	ND	16
33213-65-9	Endosulfan II	ND	16
72-54-8	4,4'-DDD	ND	16
1031-07-8	Endosulfan sulfate	ND	16
50-29-3	4,4'-DDT	ND	16
72-43-5	Methoxychlor	ND	84
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	16
57-74-9	Chlordane	ND	160
8001-35-2	Toxaphene	ND	840
12674-11-2	Aroclor-1016	ND	160
11104-28-2	Aroclor-1221	ND	160
11141-16-5	Aroclor-1232	ND	160
53469-21-9	Aroclor-1242	ND	160
12672-29-6	Aroclor-1248	ND	160
11097-69-1	Aroclor-1254	ND	160
11096-82-5	Aroclor-1260	ND	160

Percent Surrogate Recovery

TCX 91 DBC 37

FORM I

9713505.0543

0001041

TRA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92 Results by Sample

SAMPLE ID B06D48 FRACTION 15B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.7 G
Moisture: 85
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 5.6

Lab File Id: A93033
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	11
319-85-7	beta-BHC	ND	11
319-86-8	delta-BHC	ND	11
58-89-9	gamma-BHC (Lindane)	ND	11
76-44-8	Heptachlor	ND	11
309-00-2	Aldrin	ND	11
1024-57-3	Heptachlor epoxide	ND	11
959-98-8	Endosulfan I	ND	11
60-57-1	Dieldrin	ND	21
72-55-9	4,4'-DDE	ND	21
72-20-8	Endrin	ND	21
33213-65-9	Endosulfan II	ND	21
72-54-8	4,4'-DDD	ND	21
1031-07-8	Endosulfan sulfate	ND	21
50-29-3	4,4'-DDT	ND	21
72-43-5	Methoxychlor	ND	110
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	21
57-74-9	Chlordane	ND	210
8001-35-2	Toxaphene	ND	1100
12674-11-2	Aroclor-1016	ND	210
11104-28-2	Aroclor-1221	ND	210
11141-16-5	Aroclor-1232	ND	210
53469-21-9	Aroclor-1242	ND	210
12672-29-6	Aroclor-1248	ND	210
11097-69-1	Aroclor-1254	ND	210
11096-82-5	Aroclor-1260	ND	210

Percent Surrogate Recovery

TCX 73 DBC 70

FORM I

9213505.0544

000 1040

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID 806D49 FRACTION 16B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 31.7 G

Moisture: 81

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 uL

Injection Volume: 1 uL

GPC Cleanup (Y/N): Y pH 5.2

Lab File Id: A93034

Decanted (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 10/01/92

Dilution Factor 1.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	8.5
319-85-7	beta-BHC	ND	8.5
319-86-8	delta-BHC	ND	8.5
58-89-9	gamma-BHC (Lindane)	ND	8.5
76-44-8	Heptachlor	ND	8.5
309-00-2	Aldrin	ND	8.5
1024-57-3	Heptachlor epoxide	ND	8.5
959-98-8	Endosulfan I	ND	8.5
60-57-1	Dieldrin	ND	16
72-55-9	4,4'-DDE	ND	16
72-20-8	Endrin	ND	16
33213-65-9	Endosulfan II	ND	16
72-54-8	4,4'-DDD	ND	16
1031-07-8	Endosulfan sulfate	ND	16
50-29-3	4,4'-DDT	ND	16
72-43-5	Methoxychlor	ND	85
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	16
57-74-9	Chlordane	ND	160
8001-35-2	Toxaphene	ND	850
12674-11-2	Aroclor-1016	ND	160
11104-28-2	Aroclor-1221	ND	160
11141-16-5	Aroclor-1232	ND	160
53469-21-9	Aroclor-1242	ND	160
12672-29-6	Aroclor-1248	ND	160
11097-69-1	Aroclor-1254	ND	160
11096-82-5	Aroclor-1260	2300	160

Percent Surrogate Recovery

TCX 90 DBC 555

FORM I

9713505.0545

000104P

TMA Inc. REPORT Work Order # A2-09-002

Received: 08/28/92

Results by Sample

SAMPLE ID B06D49DL FRACTION 16C TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 31.7 G

Moisture: 81

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 uL

Injection Volume: 1 uL

GPC Cleanup (Y/N): Y pH 5.2

Lab File Id: A93041

Decented (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 10/02/92

Dilution Factor 5.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	42
319-85-7	beta-BHC	ND	42
319-86-8	delta-BHC	ND	42
58-89-9	gamma-BHC (Lindane)	ND	42
76-44-8	Heptachlor	ND	42
309-00-2	Aldrin	ND	42
1024-57-3	Heptachlor epoxide	ND	42
959-98-8	Endosulfan I	ND	42
60-57-1	Dieldrin	ND	82
72-55-9	4,4'-DDE	ND	82
72-20-8	Endrin	ND	82
33213-65-9	Endosulfan II	ND	82
72-54-8	4,4'-DDD	ND	82
1031-07-8	Endosulfan sulfate	ND	82
50-29-3	4,4'-DDT	ND	82
72-43-5	Methoxychlor	ND	420
53494-70-5	Endrin ketone	NA	NA
7421-93-4	Endrin aldehyde	ND	82
57-74-9	Chlordane	ND	820
8001-35-2	Toxaphene	ND	4200
12674-11-2	Aroclor-1016	ND	820
11104-28-2	Aroclor-1221	ND	820
11141-16-5	Aroclor-1232	ND	820
53469-21-9	Aroclor-1242	ND	820
12672-29-6	Aroclor-1248	ND	820
11097-69-1	Aroclor-1254	ND	820
11096-82-5	Aroclor-1260	3500	820

Percent Surrogate Recovery

TCX 95 DBC 644

FORM I

9713505.0546

TMA
Thermo Analytical Inc.

Skinner & Sherman Laboratories Inc.
300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200

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November 9, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Six (6) soil samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on September 2, 1992 from TMA/Norcal. The samples were analyzed for the USEPA CLP Target Analyte List metals and cyanide. The analysis were performed under TMA/Skinner and Sherman work order S209043.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work ILM02.

Discussion
All quality control requirements were met for the samples with the following exceptions;

The selenium digestion spike recovery exceeded the control limit requirements.

The iron laboratory duplicates exceeded the control limit requirements.

Please feel free to call if there are any questions concerning this package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

7/16/96 U.H.

WESTINGHOUSE/HANFORD
1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D25

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-01S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6350			P
7440-36-0	Antimony	3.2	U		P
7440-38-2	Arsenic	2.0		S	F
7440-39-3	Barium	133			P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	0.19	U		P
7440-70-2	Calcium	5780			P
7440-47-3	Chromium	6.8			P
7440-48-4	Cobalt	13.6			P
7440-50-8	Copper	19.8			P
7439-89-6	Iron	26900		*	P
7439-92-1	Lead	3.6			F
7439-95-4	Magnesium	4900			P
7439-96-5	Manganese	332			P
7439-97-6	Mercury	0.15			CV
7440-02-0	Nickel	8.9			P
7440-09-7	Potassium	440	B		P
7782-49-2	Selenium	0.71	U	WN	F
7440-22-4	Silver	0.86	B		P
7440-23-5	Sodium	272	B		P
7440-28-0	Thallium	0.26	U		F
7440-62-2	Vanadium	77.3			P
7440-66-6	Zinc	59.0			P
	Cyanide	0.51	U		CA

Color Before: GREY Clarity Before: Texture: FINE

Color After: GREY Clarity After: Artifacts: YES

Comments:
STONES

002

9713505.0548

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D26

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-02S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 90.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32800			P
7440-36-0	Antimony	3.5	U		P
7440-38-2	Arsenic	10.8		+	F
7440-39-3	Barium	149			P
7440-41-7	Beryllium	0.63	B		P
7440-43-9	Cadmium	0.92	B		P
7440-70-2	Calcium	5560			P
7440-47-3	Chromium	36.1			P
7440-48-4	Cobalt	9.5	B		P
7440-50-8	Copper	55.4			P
7439-89-6	Iron	20700		*	P
7439-92-1	Lead	23.9			F
7439-95-4	Magnesium	4790			P
7439-96-5	Manganese	377			P
7439-97-6	Mercury	0.54			CV
7440-02-0	Nickel	13.5			P
7440-09-7	Potassium	970	B		P
7782-49-2	Selenium	0.73	U	WN	F
7440-22-4	Silver	0.82	B		P
7440-23-5	Sodium	259	B		P
7440-28-0	Thallium	0.26	U		F
7440-62-2	Vanadium	53.4			P
7440-66-6	Zinc	213			P
	Cyanide	0.55	U		CA

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

003

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D27

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-03S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 21.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	78400			P
7440-36-0	Antimony	14.3	U		P
7440-38-2	Arsenic	62.2		S	F
7440-39-3	Barium	188			P
7440-41-7	Beryllium	0.34	U		P
7440-43-9	Cadmium	3.6	B		P
7440-70-2	Calcium	5220			P
7440-47-3	Chromium	77.1			P
7440-48-4	Cobalt	11.7	B		P
7440-50-8	Copper	56.9			P
7439-89-6	Iron	23300		*	P
7439-92-1	Lead	92.5			F
7439-95-4	Magnesium	4660			P
7439-96-5	Manganese	462			P
7439-97-6	Mercury	2.9			CV
7440-02-0	Nickel	13.2	B		P
7440-09-7	Potassium	1090	B		P
7782-49-2	Selenium	3.1	U	N	F
7440-22-4	Silver	2.1	U		P
7440-23-5	Sodium	351	B		P
7440-28-0	Thallium	1.1	U		F
7440-62-2	Vanadium	66.2			P
7440-66-6	Zinc	641			P
	Cyanide	2.3	U		CA

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

004

9713505.0550

WESTINGHOUSE/HANFORD
1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D28

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-04S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 20.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69400			P
7440-36-0	Antimony	16.7	U		P
7440-38-2	Arsenic	45.7		S	F
7440-39-3	Barium	162	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	3.9	B		P
7440-70-2	Calcium	4900	B		P
7440-47-3	Chromium	70.1			P
7440-48-4	Cobalt	12.3	B		P
7440-50-8	Copper	52.0			P
7439-89-6	Iron	22000		*	P
7439-92-1	Lead	71.3			F
7439-95-4	Magnesium	4880	B		P
7439-96-5	Manganese	666			P
7439-97-6	Mercury	2.2			CV
7440-02-0	Nickel	17.1	B		P
7440-09-7	Potassium	929	B		P
7782-49-2	Selenium	3.3	U	N	F
7440-22-4	Silver	2.6	B		P
7440-23-5	Sodium	309	B		P
7440-28-0	Thallium	1.2	U		F
7440-62-2	Vanadium	64.4			P
7440-66-6	Zinc	569			P
	Cyanide	2.5	U		CA

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

005

9713505.0551

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

B06D30

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-05S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 17.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65300			P
7440-36-0	Antimony	18.5	U		P
7440-38-2	Arsenic	36.9			F
7440-39-3	Barium	61.6	B		P
7440-41-7	Beryllium	0.44	U		P
7440-43-9	Cadmium	3.8	B		P
7440-70-2	Calcium	1820	B		P
7440-47-3	Chromium	68.8			P
7440-48-4	Cobalt	6.2	B		P
7440-50-8	Copper	54.1			P
7439-89-6	Iron	14100		*	P
7439-92-1	Lead	59.8			F
7439-95-4	Magnesium	2360	B		P
7439-96-5	Manganese	101			P
7439-97-6	Mercury	1.2			CV
7440-02-0	Nickel	13.7	B		P
7440-09-7	Potassium	539	B		P
7782-49-2	Selenium	11.1		+N	F
7440-22-4	Silver	2.8	B		P
7440-23-5	Sodium	288	B		P
7440-28-0	Thallium	1.5	U		F
7440-62-2	Vanadium	42.1	B		P
7440-66-6	Zinc	564			P
	Cyanide	2.8	U		CA

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

006

9713505.0552

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D50

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-06S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 99.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	45.2			P
7440-36-0	Antimony	3.1	U		P
7440-38-2	Arsenic	0.93	B		F
7440-39-3	Barium	0.54	U		P
7440-41-7	Beryllium	0.07	U		P
7440-43-9	Cadmium	0.19	U		P
7440-70-2	Calcium	36.3	B		P
7440-47-3	Chromium	0.83	U		P
7440-48-4	Cobalt	0.50	U		P
7440-50-8	Copper	0.65	U		P
7439-89-6	Iron	199		*	P
7439-92-1	Lead	0.36	U		F
7439-95-4	Magnesium	7.6	U		P
7439-96-5	Manganese	1.1	B		P
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	44.8	U		P
7782-49-2	Selenium	0.66	U	SN	F
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	30.3	B		P
7440-28-0	Thallium	0.24	U		F
7440-62-2	Vanadium	0.52	U		P
7440-66-6	Zinc	2.0	B		P
	Cyanide	0.46	U		CA

Color Before: WHITE Clarity Before: Texture: FINE

Color After: WHITE Clarity After: Artifacts:

Comments:

007

97 13505.0553

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Department/Floor No.

Street Address: 2030 WRIGHT AVE

City: RICHMOND State: CA ZIP Required: 94804

2 To (Recipient's Name) Please Print: SAMPLE CONTROL ( )

Recipient's Phone Number (Very Important)

Company: SKINNER + SHERMAN

Department/Floor No

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 300 SECOND AVE

City: WALTHAM State: MA ZIP Required: 02254

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 2320 6406

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address
City State ZIP Required

3 PAYMENT 1 [/] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)
11 [/] YOUR PACKAGING
16 [ ] FEDEX LETTER*
12 [ ] FEDEX PAK*
13 [ ] FEDEX BOX
14 [ ] FEDEX TUBE

Standard Overnight (Delivery by next business afternoon. No Saturday delivery†)
51 [ ] YOUR PACKAGING
56 [ ] FEDEX LETTER*
52 [ ] FEDEX PAK*
53 [ ] FEDEX BOX
54 [ ] FEDEX TUBE

Economy Two-Day (Delivery by second business day †)
30 [ ] ECONOMY

Government Overnight (Restricted for authorized users only)
46 [ ] GOVT LETTER
41 [ ] GOVT PACKAGE

Freight Service (for packages over 150 lbs.)
70 [ ] OVERNIGHT FREIGHT** (Confirmed reservation required)
80 [ ] TWO-DAY FREIGHT**

†Delivery commitment may be later in some areas.

5 DELIVERY AND SPECIAL HANDLING (Check services required)
1 [ ] HOLD FOR PICK-UP (Fill in Box H)
2 [/] DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) (Not available to all locations) [ ]
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ]
6 [ ] DRY ICE _____ Lbs.
7 [ ] OTHER SPECIAL SERVICE _____
8 [ ]
9 [ ] SATURDAY PICK-UP (Extra charge)
10 [ ]
[ ]
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

*Declared Value Limit $500.
**Call for delivery schedule.

6

PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE
Total	Total 1	58 Total

DIM SHIPMENT (Chargeable Weight) [ ] _____ lbs.
L x W x H

Received At
1 [/] Regular Stop 3 [ ] Drop Box
2 [ ] On-Call Stop 4 [ ] B.S.C. 5 [ ] Station

Emp. No. Date
[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold
Street Address
City State Zip
Received By: X
Date/Time Received 9/2/92 FedEx Employee Number 10:00

7 Release Signature:

For Federal Express Use
Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 2/92
PART #137204 FXEM 8/92
FORMAT #126
126

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207

9713505.0554

TMA/Skinner & Sherman Labs SAMPLE LOG-IN

WORKORDER S209043 CLIENT HANFORD NOC No. SAMPLES:

PROTCL CLP TURNARND 33 Days 6 (Soil) (Water) (Specify Other

COOLER TEMP: 5 oC, or NA

CUSTODIAN B. Prowel SDG/BATCH

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT CLIENT CASE N208158

SHIPER & # Fed Ex 5188043125 PO/CONTRACT# ↓

TAGS: PRESENT/ABSENT/NA/SEE COC CONTACT D. SANCHEZ

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A COMMENTS: none

SAMPLE CONTAINERS-INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES/NO (COMMENT)

SHIPMENT DATES 9-2-92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

9/3/92 BP

N/A

	CLIENT ID	MATRIX	RECEIVED 9/3/92 BP	PH*	TEST(S) & QC	HOLD TIME UP
1	B06D25	Soil	9-2-92	N/A	TM/CN	
2	B06D26	↓	↓	↓	↓	
3	B06D27					
4	B06D28					
5	B06D30					
6	B06D50				D.S	
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Samples are from site known to have Rad-Contamination: YES X NO N/A

Samples have detectable amounts of Radioactive Material: YES ___ NO X N/A

SUBCONTRACT: YES/NO, TO: DATE:

REVIEWED

Complete 9/3/92 BP

* EPA/CLP required Rev 1.6 PAGE: 208

9713505.0555

TMA
Thermo Analytical Inc.

Skinner & Sherman Labs., Inc.
300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
FAX (617) 890-3883

AUG 1993
RECEIVED
SDLA

August 25, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Dear Mr. Stuermer,

Enclosed is the corrected data package for TMA/Skinner and Sherman Laboratories workorder number S209044. The laboratory originally submitted the data package with the wrong preparation log. The preparation log originally submitted was for a re-preparation of the case which was not neccesary and therefore not run. The data package has been corrected to include the correct preparation log and the forms have been corrected based on the correct preparation.

Please feel free to call if there are any questions concerning the enclosed package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

7/16/96 M.H.

TMA
Thermo Analytical Inc.

Skinner & Sherman Laboratories Inc.
300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200

9713505.0556

November 2, 1992

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

Quality Control Narrative

Scope
Fifteen (15) soil samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on September 02, 1992 from TMA/Norcal. The samples were analyzed for the mercury only. The analysis were performed under TMA/Skinner and Sherman work order S209044.

Methodology
The samples were prepared, analyzed and reported in accordance with the USEPA Contract Laboratory Program Statement of Work ILM02.

Discussion
All quality control requirements were met for the samples with no exceptions.

Please feel free to call if there are any questions concerning this package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

ii 7/16/96 M.H.

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D31

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-01S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.21 ~~0.20~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D32

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-02S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.16			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

SAMPLE NUMBER:

B06D34

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-03S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 86.7

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.4			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

004

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D38

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-04S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 96.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07 ~~0.06~~	B		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

005

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D39

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-05S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 95.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

006

SAMPLE NUMBER: B06D40

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-06S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 97.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

SAMPLE NUMBER: B06D41

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-07S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 97.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.04	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

008

SAMPLE NUMBER:

B06D42

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-08S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 96.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07 ~~0.08~~	B		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

SAMPLE NUMBER:

B06D43

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-09S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 23.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	2.1 ~~2.2~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

010

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D44

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-10S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 22.4

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.7 ~~1.5~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

011

SAMPLE NUMBER:

B06D45

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-11S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 41.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.36 ~~0.38~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

012

SAMPLE NUMBER:

B06D46

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-12S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 37.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.51 ~~0.48~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

013

SAMPLE NUMBER:

B06D47

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-13S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 19.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.75 ~~0.81~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

014

SAMPLE NUMBER: B06D48

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-14S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 15.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.84 ~~0.77~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

SAMPLE NUMBER: B06D49

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-15S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 17.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.02 ~~0.85~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

9713505.0572

TMA/Skinner & Sherman Labs SAMPLE LOG-IN

WORKORDER S209044 CLIENT HANFORD-NOR No. SAMPLES: -

PROTCL CLP TURNARND 33 days 15 (Soil) (Water) (Specify Other)

COOLER TEMP: 4 oC, or NA

CUSTODIAN Benney, A.

CUSTODY SEAL: PRESENT/ABSENT/INTACT/NOT

SHIPER & # Fedex #

TAGS: PRESENT/ABSENT/NA/SEE COC

CHAIN OF CUSTODY: PRESENT/ABSENT/NA, # N/A

SDG/BATCH N/A

CLIENT CASE N2 08188

PO/CONTRACT# ↓

CONTACT Dolores Sanchez

COMMENTS: NONE

SAMPLE CONTAINERS INTACT/BROKEN COMMENTS

CLIENT COMMENT? YES/NO

SAMPLE LABELS AGREE WITH CHAIN OF CUSTODY INFO? YES/NO (COMMENT)

CLIENT PAPERWORK AGREES WITH SAMPLES & COC? YES/NO (COMMENT)

SHIPMENT DATES 9/2/92

LIST ANY DATE WITH PAPERWORK/SHIPMENT PROBLEMS & SPECIFY THE PROBLEM:

Samples were requested on SAR as SW846. 9/4/92 per conversation w/ Dolores samples should be treated as CLP.

	CLIENT ID	MATRIX	RECEIVED	PH*	TEST(S) & QC	HOLD TIME UP
1	B06D31	soil	9/2/92	N/A	QS HG-S HGDI-S	SW390
2	32	↓	↓	↓	↓	
3	34					
4	38					
5	39					
6	40					
7	41					
8	42					
9	43					
10	44					
11	45					
12	46					
13	47					
14	48					
15	49					
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						

Samples are from site known to have Rad-Contamination: YES ___ NO X

Samples have detectable amounts of Radioactive Material: YES ___ NO X

SUBCONTRACT: YES/NO TO: _____ DATE: _____

REVIEWED _____

* EPA/CLP required Rev 1.6

9713505.0573

VALIDATION SUMMARY

9713505.0574

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA 000016.

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	UJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	UJ
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10 ~~100~~	U
75-15-0	Carbon Disulfide	5	UJ
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~51~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~51~~	U
591-78-6	2-Hexanone	10 ~~51~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	9	
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

Cont. Ca

GH

FORM I VOA 1/87 Rev. 8/25/93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

~~CH~~
8/25/93

9713505.0576

000018

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U J
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U J
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10 ~~100~~	U
75-15-0	Carbon Disulfide	5	U J
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~51~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~51~~	U
591-78-6	2-Hexanone	10 ~~51~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	4	J
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

Cont. Cal.

CH 8/25/93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

~~CH~~
8/25/93

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	UJ
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	UJ
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	11 ~~110~~	U
75-15-0	Carbon Disulfide	6	UJ
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11 ~~110~~	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11 ~~56~~	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethyl vinyl ether	11	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11 ~~56~~	U J
591-78-6	2-Hexanone	11 ~~56~~	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (Total)	6	UJ

Cont. Cal

IS

8/25/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	15.37	5.6	J

8/20/93

USE THIS DATA

9713505.0580

000022

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R08

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U J
74-83-9	Bromomethane	11	U J
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U J
75-09-2	Methylene Chloride	6	U
67-64-1	Acetone	11 ~~110~~	U
75-15-0	Carbon Disulfide	6	U J
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11 ~~110~~	U J
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11 ~~56~~	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethyl vinyl ether	11	U
75-25-2	Bromoform	6	U J
108-10-1	4-Methyl-2-Pentanone	11 ~~56~~	U J
591-78-6	2-Hexanone	11 ~~56~~	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (Total)	6	U J

Cont. Calib

IS

IS

FORM I VOA 1/87 Rev.

8/25/93

Do Not Use

9713505.0581

000023
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D34RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R08

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

8/25/93

FORM I VOA-TIC 1/87 Rev.

DO NOT USE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U J
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U J
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10 ~~100~~	U
75-15-0	Carbon Disulfide	5	U J
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	8	
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

Cont. Co.

EH 8/25/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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8/25/93

9713505.0584

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U J
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 ~~100~~	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	14	
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 J

Cont. C

Surrogat. Rec.

FORM I VOA 1/87 Rev. 8/25/93

USE THIS DATA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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8/25/93

USE THIS DATA

9713505.0586

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U J
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 ~~100~~	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	11	
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 J

Cont.

Surrog. Rec.

GM

FORM I VOA 1/87 Rev. 8/25/93

Do NOT USE

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D39RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

8/25/92

9713505.0588

000030

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	UJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	UJ
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10 ~~100~~	U
75-15-0	Carbon Disulfide	5	UJ
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	UJ
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~51~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~51~~	U
591-78-6	2-Hexanone	10 ~~51~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	22	
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (Total)	5	UJ

Cont. Cal.

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FORM I VOA 1/87 Rev. 8/25/93

USE THIS DATA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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8/25/93

USE THIS DATA

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/04/92

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

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

CAS NO.	COMPOUND			Q
74-87-3	Chloromethane		10	U J
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	~~100~~	U
75-15-0	Carbon Disulfide		5	U
75-35-4	1,1-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
540-59-0	1,2-Dichloroethene (total)		5	U
67-66-3	Chloroform		5	U
107-06-2	1,2-Dichloroethane		5	U
78-93-3	2-Butanone	10	~~100~~	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
108-05-4	Vinyl Acetate	10	~~51~~	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
110-75-8	2-Chloroethyl vinyl ether		10	U
75-25-2	Bromoform		5	U
108-10-1	4-Methyl-2-Pentanone	10	~~51~~	U
591-78-6	2-Hexanone	10	~~51~~	U
127-18-4	Tetrachloroethene		5	U
79-34-5	1,1,2,2-Tetrachloroethane		5	U
108-88-3	Toluene		33	
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 J

Cont. C

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FORM I VOA 1/87 Rev. 8/25/93

Do NOT USE

9713505.0591

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D40RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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8/25/93

DO NOT USE

FORM I VOA-TIC 1/87 Rev.

9713505.0592

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U J
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 ~~100~~	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	14	
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 J

Cont. Calib.

Surrogate Rec.

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FORM I VOA 1/87 Rev. 8/25/93

USE THIS DATA

9713505.0593

000C35
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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8/25/93

USE THIS DATA

9713505.0594

00003E

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U J
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 ~~100~~	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	21	
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 J

Cont. Calib.

Surrogate Rec.

EH

FORM I VOA 1/87 Rev. 8/25/93

DO NOT USE

9713505.0595

000C37

EPA SAMPLE NO.

B06D41RE

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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8/25/93

DO NOT USE

FORM I VOA-TIC 1/87 Rev.

9713505.0596

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U J
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 ~~100~~	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	12	
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 J

Cont. Calib.

Surrogate Rec.

EH 8/25/93

FORM I VOA 1/87 Rev.

use this data

9713505.0597

000039

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

~~GA~~
8/25/93

USE THIS DATA

FORM I VOA-TIC 1/87 Rev.

9713505.0598

00004C

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U J
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 J
67-64-1	Acetone	10 ~~7~~	~~BJ~~ UJ
75-15-0	Carbon Disulfide	5	U J
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~52~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~52~~	U
591-78-6	2-Hexanone	10 ~~52~~	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	9	
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 J

Cont. Calib

Method Blk Cont

Surrogate Rec.

FORM I VOA 1/87 Rev. 8/25/93

no Alert 1/15

9713505.0599

000C41

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D42RE

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

~~GA~~
8/25/93

DO NOT USE

FORM I VOA-TIC 1/87 Rev.

9713505.0600

000042

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R20

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/04/92

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	130	U J
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	66	U J
67-64-1	Acetone	850	~~BJ~~ UJ - blank
75-15-0	Carbon Disulfide	66	U J
75-35-4	1,1-Dichloroethene	66	U
75-34-3	1,1-Dichloroethane	66	U
540-59-0	1,2-Dichloroethene (total)	66	U
67-66-3	Chloroform	66	U
107-06-2	1,2-Dichloroethane	66	U
78-93-3	2-Butanone	130 ~~1300~~	U
71-55-6	1,1,1-Trichloroethane	66	U
56-23-5	Carbon Tetrachloride	66	U
108-05-4	Vinyl Acetate	130 ~~660~~	U
75-27-4	Bromodichloromethane	66	U
78-87-5	[illegible]ropropane	66	U
[illegible]	[illegible]chloropropene	66	U
[illegible]	[illegible]ethene	66	U
[illegible]	[illegible]oromethane	66	U
[illegible]	[illegible]hloroethane	66	U
[illegible]		66	U
[illegible]	[illegible]Dichloropropene	66	U
[illegible]	[illegible]yl vinyl ether	130	U
[illegible]		66	U
[illegible]	[illegible]Pentanone	130 ~~660~~	U
[illegible]		130 ~~660~~	U
[illegible]	[illegible]ethene	66	U
[illegible]	[illegible]rachloroethane	66	U
[illegible]		66	U
[illegible]	[illegible]e	66	U
[illegible]	[illegible]	66	U
[illegible]	[illegible]yrene	66	U
[illegible]	Xy[illegible]l)	66	U J

43, 44, 45, 46, 47, 49, 55, 56

52.63 / 19 × 2.5 = 12 / 19 = 43 × 2.5 = 157.50 × 10

BJ

CH 8/25/93

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R20

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.03	92	J

8/25/93

9713505.0602

000044

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 Date Analyzed: 09/08/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	120	U J
74-83-9	Bromomethane	120	U
75-01-4	Vinyl Chloride	120	U
75-00-3	Chloroethane	120	U
75-09-2	Methylene Chloride	62	U J
67-64-1	Acetone	500	~~BJ~~ UJ-MB
75-15-0	Carbon Disulfide	62	U J
75-35-4	1,1-Dichloroethene	62	U
75-34-3	1,1-Dichloroethane	62	U
540-59-0	1,2-Dichloroethene (total)	62	U
67-66-3	Chloroform	62	U
107-06-2	1,2-Dichloroethane	62	U
78-93-3	2-Butanone	120 ~~1200~~	U
71-55-6	1,1,1-Trichloroethane	62	U
56-23-5	Carbon Tetrachloride	62	U
108-05-4	Vinyl Acetate	120 ~~620~~	U
75-27-4	Bromodichloromethane	62	U
78-87-5	1,2-Dichloropropane	62	U
10061-01-5	cis-1,3-Dichloropropene	62	U
79-01-6	Trichloroethene	62	U
124-48-1	Dibromochloromethane	62	U
79-00-5	1,1,2-Trichloroethane	62	U
71-43-2	Benzene	62	U
10061-02-6	trans-1,3-Dichloropropene	62	U
110-75-8	2-Chloroethyl vinyl ether	120	U
75-25-2	Bromoform	62	U
108-10-1	4-Methyl-2-Pentanone	120 ~~620~~	U
591-78-6	2-Hexanone	120 ~~620~~	U
127-18-4	Tetrachloroethene	62	U
79-34-5	1,1,2,2-Tetrachloroethane	62	U
108-88-3	Toluene	62	U
108-90-7	Chlorobenzene	62	U
100-41-4	Ethylbenzene	62	U
100-42-5	Styrene	62	U
1330-20-7	Xylene (Total)	62	U J

% Moisture

9713505.0603

000045

EPA SAMPLE NO.

B06D44

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 Date Analyzed: 09/08/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.08	240	J

G4
8/25/93

9713505.0604

000C4E

EPA SAMPLE NO.

B06D45

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	69	U J
74-83-9	Bromomethane	69	U
75-01-4	Vinyl Chloride	69	U
75-00-3	Chloroethane	69	U
75-09-2	Methylene Chloride	35	U J
67-64-1	Acetone	570	~~BJ~~ UJ - MB
75-15-0	Carbon Disulfide	29	J
75-35-4	1,1-Dichloroethene	35	U J
75-34-3	1,1-Dichloroethane	35	U
540-59-0	1,2-Dichloroethene (total)	35	U
67-66-3	Chloroform	35	U
107-06-2	1,2-Dichloroethane	35	U
78-93-3	2-Butanone	69 ~~690~~	U
71-55-6	1,1,1-Trichloroethane	35	U
56-23-5	Carbon Tetrachloride	35	U
108-05-4	Vinyl Acetate	69 ~~350~~	U
75-27-4	Bromodichloromethane	35	U
78-87-5	1,2-Dichloropropane	35	U
10061-01-5	cis-1,3-Dichloropropene	35	U
79-01-6	Trichloroethene	35	U
124-48-1	Dibromochloromethane	35	U
79-00-5	1,1,2-Trichloroethane	35	U
71-43-2	Benzene	35	U
10061-02-6	trans-1,3-Dichloropropene	35	U
110-75-8	2-Chloroethyl vinyl ether	69	U
75-25-2	Bromoform	35	U
108-10-1	4-Methyl-2-Pentanone	69 ~~350~~	U
591-78-6	2-Hexanone	69 ~~350~~	U
127-18-4	Tetrachloroethene	35	U
79-34-5	1,1,2,2-Tetrachloroethane	35	U
108-88-3	Toluene	35	U
108-90-7	Chlorobenzene	35	U
100-41-4	Ethylbenzene	35	U
100-42-5	Styrene	35	U
1330-20-7	Xylene (Total)	35	U J

% Moisture

GH 8/25/93

FORM I VOA 1/87 Rev.

9713505.0605

000047

EPA SAMPLE NO.

B06D45

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKENE	29.51	230	J

CH
8/25/93

9713505.0606

000048

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	93	UJ
74-83-9	Bromomethane	93	U
75-01-4	Vinyl Chloride	93	U
75-00-3	Chloroethane	93	U
75-09-2	Methylene Chloride	46	UJ
67-64-1	Acetone	380	BJ
75-15-0	Carbon Disulfide	40	J
75-35-4	1,1-Dichloroethene	46	UJ
75-34-3	1,1-Dichloroethane	46	U
540-59-0	1,2-Dichloroethene (total)	46	U
67-66-3	Chloroform	46	U
107-06-2	1,2-Dichloroethane	46	U
78-93-3	2-Butanone	93 ~~930~~	U
71-55-6	1,1,1-Trichloroethane	46	U
56-23-5	Carbon Tetrachloride	46	U
108-05-4	Vinyl Acetate	93 ~~460~~	U
75-27-4	Bromodichloromethane	46	U
78-87-5	1,2-Dichloropropane	46	U
10061-01-5	cis-1,3-Dichloropropene	46	U
79-01-6	Trichloroethene	46	U
124-48-1	Dibromochloromethane	46	U
79-00-5	1,1,2-Trichloroethane	46	U
71-43-2	Benzene	46	U
10061-02-6	trans-1,3-Dichloropropene	46	U
110-75-8	2-Chloroethyl vinyl ether	93	U
75-25-2	Bromoform	46	U
108-10-1	4-Methyl-2-Pentanone	93 ~~460~~	U
591-78-6	2-Hexanone	93 ~~460~~	U
127-18-4	Tetrachloroethene	46	U
79-34-5	1,1,2,2-Tetrachloroethane	46	U
108-88-3	Toluene	46	U
108-90-7	Chlorobenzene	46	U
100-41-4	Ethylbenzene	46	U
100-42-5	Styrene	46	U
1330-20-7	Xylene (Total)	46	UJ

% Moisture

GH 8/25/93

9713505.0607

000049

EPA SAMPLE NO.

B06D46

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

CH
8/25/93

9713505.0608

000050

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R24

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U J
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	66	U
67-64-1	Acetone	580	~~BJ~~ UJ - MB
75-15-0	Carbon Disulfide	66	U J
75-35-4	1,1-Dichloroethene	66	U
75-34-3	1,1-Dichloroethane	66	U
540-59-0	1,2-Dichloroethene (total)	66	U
67-66-3	Chloroform	66	U
107-06-2	1,2-Dichloroethane	66	U
78-93-3	2-Butanone	130 ~~1300~~	U
71-55-6	1,1,1-Trichloroethane	~~66~~	U
56-23-5	Carbon Tetrachloride	66	U
108-05-4	Vinyl Acetate	130 ~~660~~	U
75-27-4	Bromodichloromethane	66	U
78-87-5	1,2-Dichloropropane	66	U
10061-01-5	cis-1,3-Dichloropropene	66	U
79-01-6	Trichloroethene	66	U
124-48-1	Dibromochloromethane	66	U
79-00-5	1,1,2-Trichloroethane	66	U
71-43-2	Benzene	66	U
10061-02-6	trans-1,3-Dichloropropene	66	U
110-75-8	2-Chloroethyl vinyl ether	130	U
75-25-2	Bromoform	66	U
108-10-1	4-Methyl-2-Pentanone	130 ~~660~~	U
591-78-6	2-Hexanone	130 ~~660~~	U
127-18-4	Tetrachloroethene	66	U
79-34-5	1,1,2,2-Tetrachloroethane	66	U
108-88-3	Toluene	66	U
108-90-7	Chlorobenzene	66	U
100-41-4	Ethylbenzene	66	U
100-42-5	Styrene	66	U
1330-20-7	Xylene (Total)	66	U J

% Moisture

FORM I VOA 1/87 Rev. 8/25/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R24

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

CH
8/25/93

9713505.0610

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000052
EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R07

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 Date Analyzed: 09/08/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	170	U J
74-83-9	Bromomethane	170	U
75-01-4	Vinyl Chloride	170	U
75-00-3	Chloroethane	170	U
75-09-2	Methylene Chloride	83	U
67-64-1	Acetone	2200	B
75-15-0	Carbon Disulfide	83	U
75-35-4	1,1-Dichloroethene	83	U
75-34-3	1,1-Dichloroethane	83	U
540-59-0	1,2-Dichloroethene (total)	83	U
67-66-3	Chloroform	83	U
107-06-2	1,2-Dichloroethane	83	U J
78-93-3	2-Butanone	390	J
71-55-6	1,1,1-Trichloroethane	83	U J
56-23-5	Carbon Tetrachloride	83	U
108-05-4	Vinyl Acetate	170 ~~830~~	U
75-27-4	Bromodichloromethane	83	U
78-87-5	1,2-Dichloropropane	83	U
10061-01-5	cis-1,3-Dichloropropene	83	U
79-01-6	Trichloroethene	83	U
124-48-1	Dibromochloromethane	83	U
79-00-5	1,1,2-Trichloroethane	83	U
71-43-2	Benzene	83	U
10061-02-6	trans-1,3-Dichloropropene	83	U
110-75-8	2-Chloroethyl vinyl ether	170	U
75-25-2	Bromoform	83	U
108-10-1	4-Methyl-2-Pentanone	170 ~~830~~	U
591-78-6	2-Hexanone	170 ~~830~~	U
127-18-4	Tetrachloroethene	83	U
79-34-5	1,1,2,2-Tetrachloroethane	83	U
108-88-3	Toluene	83	U
108-90-7	Chlorobenzene	83	U
100-41-4	Ethylbenzene	83	U
100-42-5	Styrene	83	U
1330-20-7	Xylene (Total)	83	U J

% Moisture

EH 8/25/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20908R07

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 Date Analyzed: 09/08/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.13	370	J

GM
8/25/93

9713505.0612

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000054

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R22

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U J
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	66	U J
67-64-1	Acetone	430	~~BJ~~ UJ (MB)
75-15-0	Carbon Disulfide	66	U J
75-35-4	1,1-Dichloroethene	66	U
75-34-3	1,1-Dichloroethane	66	U
540-59-0	1,2-Dichloroethene (total)	66	U
67-66-3	Chloroform	66	U
107-06-2	1,2-Dichloroethane	66	U
78-93-3	2-Butanone	130 ~~1300~~	U
71-55-6	1,1,1-Trichloroethane	66	U
56-23-5	Carbon Tetrachloride	66	U
108-05-4	Vinyl Acetate	130 ~~660~~	U
75-27-4	Bromodichloromethane	66	U
78-87-5	1,2-Dichloropropane	66	U
10061-01-5	cis-1,3-Dichloropropene	66	U
79-01-6	Trichloroethene	66	U
124-48-1	Dibromochloromethane	66	U
79-00-5	1,1,2-Trichloroethane	66	U
71-43-2	Benzene	66	U
10061-02-6	trans-1,3-Dichloropropene	66	U
110-75-8	2-Chloroethyl vinyl ether	130	U
75-25-2	Bromoform	66	U
108-10-1	4-Methyl-2-Pentanone	130 ~~660~~	U
591-78-6	2-Hexanone	130 ~~660~~	U
127-18-4	Tetrachloroethene	66	U
79-34-5	1,1,2,2-Tetrachloroethane	66	U
108-88-3	Toluene	66	U
108-90-7	Chlorobenzene	66	U
100-41-4	Ethylbenzene	66	U
100-42-5	Styrene	66	U
1330-20-7	Xylene (Total)	66	U J

% Moisture

EH 8/25/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16A

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 20904R22

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 Date Analyzed: 09/05/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	8.00	160	J

8/25/93

9713505.0614

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

00005E

EPA SAMPLE NO.

B06D55

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-09A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	UJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	UJ
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10 ~~8~~	~~BJ~~ U
75-15-0	Carbon Disulfide	5	UJ
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~51~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~51~~	U
591-78-6	2-Hexanone	10 ~~51~~	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

Cont. Calib

MB

CM 8/26/93

9713505.0615

000057

EPA SAMPLE NO.

B06D55

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-09A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20903R19

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 Date Analyzed: 09/03/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

8/25/93

9713505.0616

000058

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D56

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-17A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/04/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	UJ
74-83-9	Bromomethane	10	UJ
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	UJ
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	21	~~BJ~~ U ~~BJ~~
75-15-0	Carbon Disulfide	5	UJ
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10 ~~100~~	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10 ~~50~~	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
110-75-8	2-Chloroethyl vinyl ether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10 ~~50~~	U
591-78-6	2-Hexanone	10 ~~50~~	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

Cont. Calib

MB

EH 8/25/93

9713505.0617

000059

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D56

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-17A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 20904R18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 0 Date Analyzed: 09/04/92

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALCOHOL	29.51	19	J

CH
8/25/93

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01D

Sample wt/vol: 31.4 (g/mL) G Lab File ID: 20915S05

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
100-51-6	Benzyl Alcohol	320 ~~640~~	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	bis(2-Chloroisopropyl)Ether	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-Di-n-Propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	320 ~~640~~	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-methylphenol	320 ~~640~~	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	320	U
208-96-8	Acenaphthylene	320	U

CA 8/25/93

9713505.0619

000061

EPA SAMPLE NO.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06D31

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01D

Sample wt/vol: 31.4 (g/mL) G Lab File ID: 20915S05

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	320	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
84-74-2	Di-n-Butylphthalate	320	U
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	640	U
56-55-3	Benzo(a)anthracene	320	U
117-81-7	bis(2-Ethylhexyl)Phthalate	320	U
218-01-9	Chrysene	320	U
117-84-0	Di-n-octyl Phthalate	320	U
205-99-2	Benzo(b)fluoranthene	320	U
207-08-9	Benzo(k)fluoranthene	320	U
50-32-8	Benzo(a)pyrene	320	U
193-39-5	Indeno(1,2,3-cd)Pyrene	320	U
53-70-3	Dibenz(a,h)Anthracene	320	U
191-24-2	Benzo(g,h,i)perylene	320	U

(1) - Cannot be separated from Diphenylamine

BH 8/25/93

9713505.0620

000062

EPA SAMPLE NO.

B06D31

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-01D

Sample wt/vol: 31.4 (g/mL) G Lab File ID: 20915S05

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.18~~ 5.43	59000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~8.62~~ 6.53	190	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.75~~ 6.63	620	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~9.29~~ 7.03	550	~~BJ~~
5.	UNKNOWN ALCOHOL	~~10.89~~ 8.32	1100	~~BJ~~
6.	UNKNOWN CARBOXYLIC ACID ESTE	~~26.64~~ 20.17	390	~~BJ~~
7.	HEXANEDIOIC ACID ISOMER	~~32.64~~ 24.72	130	~~BJ~~ U

Method Blk Cont

~~CA~~
8/25/93

9713505.0621

000063
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02B

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 20915S06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340 ~~680~~	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340 ~~680~~	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340 ~~680~~	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

8/25/93

9713505.0622

000064

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D32

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02B

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 20915S06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	680	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

8/25/93

9713505.0623

000065

EPA SAMPLE NO.

B06D32

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-02B

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 20915S06

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.18~~ 5.43	55000	~~BJ~~ u
2.	UNKNOWN HYDROCARBON	~~7.38~~ 5.60	310	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.64~~ 6.53	210	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~8.77~~ 6.63	550	~~BJ~~
5.	UNKNOWN HYDROCARBON	~~9.29~~ 7.03	550	~~BJ~~
6.	UNKNOWN ALCOHOL	~~110.16~~ 8.33	1000	~~BJ~~
7.	HEXANEDIOIC ACID ISOMER	~~26.66~~ 20.18	380	~~BJ~~ u

Method PLK. Cont.

~~CH~~
8/25/93

9713505.0624

000066

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20915S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
100-51-6	Benzyl Alcohol	360 ~~730~~	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)Ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
65-85-0	Benzoic Acid	1800	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360 ~~730~~	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360 ~~730~~	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U

EH 8/25/93

9713505.0625

000067

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D34

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20915S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
84-74-2	Di-n-Butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	730	U
56-55-3	Benzo(a)anthracene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	360	U
218-01-9	Chrysene	360	U
117-84-0	Di-n-octyl Phthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

BH 8/25/93

9713505.0626

000C6E

EPA SAMPLE NO.

B06D34

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-03B

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 20915S13

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 11 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.13~~ 5.40	64000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~7.33~~ 5.55	330	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.60~~ 6.52	260	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~8.72~~ 6.60	630	~~BJ~~
5.	UNKNOWN HYDROCARBON	~~9.24~~ 7.00	660	~~BJ~~
6.	UNKNOWN ALCOHOL	~~10.95~~ 8.30	1400	~~BJ~~ U
7.	UNKNOWN ALKENE	~~23.77~~ 18.00	770	J
8.	UNKNOWN ALKANE	~~24.12~~ 18.27	480	J
9.	UNKNOWN ALKANE	~~24.24~~ 18.35	630	J
10.	UNKNOWN CARBOXYLIC ACID ESTE	~~26.61~~ 20.15	480	~~BJ~~ U
11.	UNKNOWN ALKANE	~~32.74~~ 24.80	260	J
12.	UNKNOWN ALKANE	~~33.71~~ 25.53	480	J
13.	UNKNOWN ALKANE	~~34.66~~ 26.25	520	J
14.	UNKNOWN ALKANE	~~35.59~~ 26.95	590	J
15.	UNKNOWN ALKANE	~~36.57~~ 27.70	660	J
16.	UNKNOWN ALKANE	~~37.64~~ 28.50	960	J
17.	UNKNOWN ALKANE	~~38.86~~ 29.43	410	J
18.	UNKNOWN ALKANE	~~40.29~~ 30.52	590	J
19.	UNKNOWN KETONE	~~42.08~~ 31.87	220	J
20.	UNKNOWN COMPOUND	~~42.41~~ 32.12	330	J

Method blk cont.

BA 8/25/93

9713505.0627

000069

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S09

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340 ~~670~~	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340 ~~670~~	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340 ~~670~~	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

8/25/93

9713505.0628

000070

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S09

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

8/25/93

9713505.0629

000071

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D38

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-04B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S09

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 7.9 Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.22~~ 6.47	62000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~8.65~~ 6.55	270	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.77~~ 6.63	650	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~9.30~~ 7.05	610	~~BJ~~
5.	UNKNOWN ALCOHOL	~~11.00~~ 8.33	1300	~~BJ~~
6.	UNKNOWN CARBOXYLIC ACID ESTE	~~26.66~~ 20.18	480	~~BJ~~ U

Method blk cont.

8/25/93

9713505.0630

000072

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20915S10

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340 ~~670~~	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340 ~~670~~	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340 ~~670~~	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

CH 8/23/93

9713505.0631

000073

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D39

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20915S10

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

CH 8/25/93

9713505.0632

000C74

EPA SAMPLE NO.

B06D39

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-05B

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 20915S10

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.3 Dilution Factor: 1.0

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.22~~ 5.46	65000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~7.42~~ 5.62	340	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.67~~ 6.57	240	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~8.79~~ 6.65	610	~~BJ~~
5.	UNKNOWN HYDROCARBON	~~9.32~~ 7.05	610	~~BJ~~
6.	UNKNOWN ALCOHOL	~~11.02~~ 8.34	1200	~~BJ~~
7.	UNKNOWN CARBOXYLIC ACID ESTE	~~26.66~~ 20.18	440	~~BJ~~
8.	HEXANEDIOIC ACID ISOMER	~~32.67~~ 24.75	170	~~BJ~~ U
9.	UNKNOWN HYDROCARBON	~~36.01~~ 27.27	170	J

Mother Blk Contd

GH 8/25/93

9713505.0633

000075

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06B

Sample wt/vol: 31.8 (g/mL) G Lab File ID: 20915S11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
100-51-6	Benzyl Alcohol	320 ~~640~~	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	bis(2-Chloroisopropyl)Ether	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-Di-n-Propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
65-85-0	Benzoic Acid	1500	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	320 ~~640~~	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-methylphenol	320 ~~640~~	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	1500	U
131-11-3	Dimethyl Phthalate	320	U
208-96-8	Acenaphthylene	320	U

CH 8/25/93

9713505.0634

000C7E

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06B

Sample wt/vol: 31.8 (g/mL) G Lab File ID: 20915S11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	320	U
51-28-5	2,4-Dinitrophenol	1500	U
100-02-7	4-Nitrophenol	1500	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
84-74-2	Di-n-Butylphthalate	320	U
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	640	U
56-55-3	Benzo(a)anthracene	320	U
117-81-7	bis(2-Ethylhexyl)Phthalate	320	U
218-01-9	Chrysene	320	U
117-84-0	Di-n-octyl Phthalate	320	U
205-99-2	Benzo(b)fluoranthene	320	U
207-08-9	Benzo(k)fluoranthene	320	U
50-32-8	Benzo(a)pyrene	320	U
193-39-5	Indeno(1,2,3-cd)Pyrene	320	U
53-70-3	Dibenz(a,h)Anthracene	320	U
191-24-2	Benzo(g,h,i)perylene	320	U

(1) - Cannot be separated from Diphenylamine

8/25/93

9713505.0635

000077

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D40

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-06B

Sample wt/vol: 31.8 (g/mL) G Lab File ID: 20915S11

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 2 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.23~~ 5.48	58000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~8.67~~ 6.57	220	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.79~~ 6.65	580	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~9.32~~ 7.05	580	~~BJ~~
5.	UNKNOWN ALCOHOL	~~11.02~~ 8.35	1100	~~BJ~~
6.	UNKNOWN CARBOXYLIC ACID ESTE	~~26.67~~ 20.20	380	~~BJ~~ U

Method Blk cont.

CH
8/25/93

9713505.0636

000078

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20917S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 dec. ____ Date Extracted: 09/08/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/17/92

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340 ~~670~~	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340 ~~670~~	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340 ~~670~~	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

GH 8/25/93

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20917S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 dec. ____ Date Extracted: 09/08/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/17/92

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

CH 8/25/93

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D41

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-07B

Sample wt/vol: 30.4 (g/mL) G Lab File ID: 20917S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 3 dec. ____ Date Extracted: 09/08/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/17/92

GPC Cleanup: (Y/N) Y pH: 8.1 Dilution Factor: 1.0

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.07~~ 5.35	18000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~8.59~~ 6.50	100	J
3.	UNKNOWN HYDROCARBON	~~8.70~~ 6.58	100	~~BJ~~ U
4.	UNKNOWN HYDROCARBON	~~9.22~~ 6.98	270	~~BJ~~ U
5.	UNKNOWN ALCOHOL	~~10.92~~ 8.27	540	~~BJ~~ U
6.	HEXANEDIOIC ACID ISOMER	~~32.56~~ 24.65	140	~~BJ~~
7.	UNKNOWN HYDROCARBON	~~40.91~~ 30.98	310	J
8.	UNKNOWN HYDROCARBON	~~41.42~~ 31.37	710	J

Method Blk Cont.

eH 8/25/93

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 20915S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340 ~~680~~	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340 ~~680~~	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340 ~~680~~	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U

CH 8/26/93

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 20915S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	680	U
56-55-3	Benzo(a)anthracene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
218-01-9	Chrysene	340	U
117-84-0	Di-n-octyl Phthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

EH 8/25/93

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D42

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-08B

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 20915S12

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 4 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 8.0 Dilution Factor: 1.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	~~7.15~~ 5.42	61000	~~BJ~~ U
2.	UNKNOWN HYDROCARBON	~~7.35~~ 5.57	310	~~BJ~~
3.	UNKNOWN HYDROCARBON	~~8.60~~ 6.52	210	~~BJ~~
4.	UNKNOWN HYDROCARBON	~~8.72~~ 6.60	580	~~BJ~~
5.	UNKNOWN HYDROCARBON	~~9.24~~ 7.00	550	~~BJ~~
6.	UNKNOWN ALCOHOL	~~10.95~~ 8.30	1200	~~BJ~~
7.	UNKNOWN CARBOXYLIC ACID ESTE	~~26.61~~ 20.15	410	~~BJ~~ U

Method Blk Cont

CM 8/25/93

9713505.0642

000084

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 20915S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1700	U J
111-44-4	bis(2-Chloroethyl)Ether	1700	U
95-57-8	2-Chlorophenol	1700	U
541-73-1	1,3-Dichlorobenzene	1700	U
106-46-7	1,4-Dichlorobenzene	1700	U
100-51-6	Benzyl Alcohol	1700 ~~3500~~	U
95-50-1	1,2-Dichlorobenzene	1700	U
95-48-7	2-Methylphenol	1700	U
108-60-1	bis(2-Chloroisopropyl)Ether	1700	U
106-44-5	4-Methylphenol	1700	U
621-64-7	N-Nitroso-Di-n-Propylamine	1700	U
67-72-1	Hexachloroethane	1700	U
98-95-3	Nitrobenzene	1700	U
78-59-1	Isophorone	1700	U
88-75-5	2-Nitrophenol	1700	U
105-67-9	2,4-Dimethylphenol	1700	U
65-85-0	Benzoic Acid	8400	U
111-91-1	bis(2-Chloroethoxy)methane	1700	U
120-83-2	2,4-Dichlorophenol	1700	U
120-82-1	1,2,4-Trichlorobenzene	1700	U
91-20-3	Naphthalene	1700	U
106-47-8	4-Chloroaniline	1700 ~~3500~~	U
87-68-3	Hexachlorobutadiene	1700	U
59-50-7	4-Chloro-3-methylphenol	1700 ~~3500~~	U
91-57-6	2-Methylnaphthalene	1700	U
77-47-4	Hexachlorocyclopentadiene	1700	U
88-06-2	2,4,6-Trichlorophenol	1700	U
95-95-4	2,4,5-Trichlorophenol	8400	U
91-58-7	2-Chloronaphthalene	1700	U
88-74-4	2-Nitroaniline	8400	U
131-11-3	Dimethyl Phthalate	1700	U
208-96-8	Acenaphthylene	1700	U J

% Moisture

EH 8/25/93

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 20915S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	8400	U J
83-32-9	Acenaphthene	1700	U
51-28-5	2,4-Dinitrophenol	8400	U
100-02-7	4-Nitrophenol	8400	U
132-64-9	Dibenzofuran	1700	U
121-14-2	2,4-Dinitrotoluene	1700	U
606-20-2	2,6-Dinitrotoluene	1700	U J
84-66-2	Diethylphthalate	1000	J
7005-72-3	4-Chlorophenyl-phenylether	1700	U J
86-73-7	Fluorene	1700	U
100-01-6	4-Nitroaniline	8400	U
534-52-1	4,6-Dinitro-2-methylphenol	8400	U
86-30-6	N-Nitrosodiphenylamine (1)	1700	U
101-55-3	4-Bromophenyl-phenylether	1700	U
118-74-1	Hexachlorobenzene	1700	U
87-86-5	Pentachlorophenol	8400	U
85-01-8	Phenanthrene	1700	U
120-12-7	Anthracene	1700	U
84-74-2	Di-n-Butylphthalate	1700	U
206-44-0	Fluoranthene	1700	U
129-00-0	Pyrene	1700	U
85-68-7	Butylbenzylphthalate	1700	U
91-94-1	3,3'-Dichlorobenzidine	3500	U
56-55-3	Benzo(a)anthracene	1700	U J
117-81-7	bis(2-Ethylhexyl)Phthalate	410	J
218-01-9	Chrysene	1700	U J
117-84-0	Di-n-octyl Phthalate	1700	U
205-99-2	Benzo(b)fluoranthene	1700	U
207-08-9	Benzo(k)fluoranthene	1700	U
50-32-8	Benzo(a)pyrene	1700	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1700	U
53-70-3	Dibenz(a,h)Anthracene	1700	U
191-24-2	Benzo(g,h,i)perylene	1700	U J

% Moisture

(1) - Cannot be separated from Diphenylamine

8/25/93

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D43

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-10B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 20915S14

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

Number TICs found: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.22	5.47 320000	~~BJ~~ UJ
2.	UNKNOWN HYDROCARBON	8.67	6.57 1100	BJ
3.	UNKNOWN HYDROCARBON	8.79	6.65 3200	BJ
4.	UNKNOWN HYDROCARBON	9.30	7.05 3300	BJ
5.	UNKNOWN ALCOHOL	11.02	8.34 7500	BJ
6.	UNKNOWN HYDROCARBON	23.85	18.07 7700	J
7.	UNKNOWN ALKANE	24.19	18.31 2500	J
8.	UNKNOWN ALKANE	24.30	18.40 2800	J
9.	UNKNOWN ALKANE	24.95	18.90 2300	J
10.	UNKNOWN CARBOXYLIC ACID ESTE	26.67	20.20 2600	BJ
11.	UNKNOWN CARBOXYLIC ACID ESTE	27.91	21.13 700	J
12.	HEXANEDIOIC ACID ISOMER	32.69	24.75 880	J
13.	UNKNOWN HYDROCARBON	36.51	27.65 3200	J
14.	UNKNOWN HYDROCARBON	36.81	27.88 1800	J
15.	UNKNOWN ALKANE	37.69	28.55 1200	J
16.	UNKNOWN HYDROCARBON	41.12	31.15 1100	J
17.	UNKNOWN HYDROCARBON	41.89	31.73 3300	J
18.	UNKNOWN HYDROCARBON	42.23	31.98 700	J
19.	UNKNOWN HYDROCARBON	43.29	32.78 880	J

Method Blk Cont.

GH 8/25/93

9713505.0645

000087

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1600	U J
111-44-4	bis(2-Chloroethyl)Ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
100-51-6	Benzyl Alcohol	1600 ~~3200~~	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	bis(2-Chloroisopropyl)Ether	1600	U
106-44-5	4-Methylphenol	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
65-85-0	Benzoic Acid	7800	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	1600	U
106-47-8	4-Chloroaniline	1600 ~~3200~~	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-methylphenol	1600 ~~3200~~	U
91-57-6	2-Methylnaphthalene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	7800	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	7800	U
131-11-3	Dimethyl Phthalate	1600	U
208-96-8	Acenaphthylene	1600	U

% Moisture

FORM I SV-1 1/87 Rev. 8/25/93

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7800	U J
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	7800	U
100-02-7	4-Nitrophenol	7800	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	7800	U
534-52-1	4,6-Dinitro-2-methylphenol	7800	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	7800	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
84-74-2	Di-n-Butylphthalate	1600	U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	1600	U J
117-81-7	bis(2-Ethylhexyl)Phthalate	400	J
218-01-9	Chrysene	1600	U J
117-84-0	Di-n-octyl Phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	1600	U
207-08-9	Benzo(k)fluoranthene	1600	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	1600	U J

% Moisture

(1) - Cannot be separated from Diphenylamine

CH 8/25/93

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D44

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-11B

Sample wt/vol: 30.6 (g/mL) G Lab File ID: 20915S15

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 80 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	5.43 290000	~~BJ~~ UJ
2.	UNKNOWN HYDROCARBON	7.40	5.60 1600	~~BJ~~
3.	UNKNOWN HYDROCARBON	8.65	6.55 980	~~BJ~~
4.	UNKNOWN HYDROCARBON	8.77	6.63 2800	~~BJ~~
5.	UNKNOWN HYDROCARBON	9.29	7.03 2600	~~BJ~~
6.	UNKNOWN ALCOHOL	11.00	8.33 5900	~~BJ~~ UJ
7.	UNKNOWN HYDROCARBON	23.85	18.07 8300	J
8.	UNKNOWN ALKANE	24.17	18.30 3300	J
9.	UNKNOWN ALKANE	24.30	18.40 3300	J
10.	UNKNOWN ALKANE	24.95	18.90 2300	J
11.	UNKNOWN CARBOXYLIC ACID ESTE	26.66	20.18 2300	BJ
12.	UNKNOWN ALKANE	33.77	25.58 820	J
13.	UNKNOWN ALKANE	35.64	26.98 650	J
14.	UNKNOWN HYDROCARBON	36.51	27.65 980	J
15.	UNKNOWN HYDROCARBON	36.82	27.88 1100	J
16.	UNKNOWN ALKANE	37.71	28.55 1300	J
17.	UNKNOWN HYDROCARBON	41.16	31.17 980	J
18.	UNKNOWN HYDROCARBON	41.93	31.75 5100	J
19.	UNKNOWN HYDROCARBON	42.24	31.98 820	J
20.	UNKNOWN HYDROCARBON	44.13	33.42 980	J

Method Blk Cont.

CH
8/25/93

9713505.0648

000090

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D45

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12B

Sample wt/vol: 32.1 (g/mL) G Lab File ID: 20915S16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	860	U J
111-44-4	bis(2-Chloroethyl)Ether	860	U
95-57-8	2-Chlorophenol	860	U
541-73-1	1,3-Dichlorobenzene	860	U
106-46-7	1,4-Dichlorobenzene	860	U
100-51-6	Benzyl Alcohol	860 ~~1700~~	U
95-50-1	1,2-Dichlorobenzene	860	U
95-48-7	2-Methylphenol	860	U
108-60-1	bis(2-Chloroisopropyl)Ether	860	U
106-44-5	4-Methylphenol	860	U
621-64-7	N-Nitroso-Di-n-Propylamine	860	U
67-72-1	Hexachloroethane	860	U
98-95-3	Nitrobenzene	860	U
78-59-1	Isophorone	860	U
88-75-5	2-Nitrophenol	860	U
105-67-9	2,4-Dimethylphenol	860	U
65-85-0	Benzoic Acid	4200	U
111-91-1	bis(2-Chloroethoxy)methane	860	U
120-83-2	2,4-Dichlorophenol	860	U
120-82-1	1,2,4-Trichlorobenzene	860	U
91-20-3	Naphthalene	860	U
106-47-8	4-Chloroaniline	860 ~~1700~~	U
87-68-3	Hexachlorobutadiene	860	U
59-50-7	4-Chloro-3-methylphenol	860 ~~1700~~	U
91-57-6	2-Methylnaphthalene	860	U
77-47-4	Hexachlorocyclopentadiene	860	U
88-06-2	2,4,6-Trichlorophenol	860	U
95-95-4	2,4,5-Trichlorophenol	4200	U
91-58-7	2-Chloronaphthalene	860	U
88-74-4	2-Nitroaniline	4200	U
131-11-3	Dimethyl Phthalate	860	U
208-96-8	Acenaphthylene	860	U J

% Moisture

EH 8/25/93

9713505.0649

000091

EPA SAMPLE NO.

B06D45

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12B

Sample wt/vol: 32.1 (g/mL) G Lab File ID: 20915S16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4200	U J
83-32-9	Acenaphthene	860	U
51-28-5	2,4-Dinitrophenol	4200	U
100-02-7	4-Nitrophenol	4200	U
132-64-9	Dibenzofuran	860	U
121-14-2	2,4-Dinitrotoluene	860	U
606-20-2	2,6-Dinitrotoluene	860	U
84-66-2	Diethylphthalate	860	U
7005-72-3	4-Chlorophenyl-phenylether	860	U
86-73-7	Fluorene	860	U
100-01-6	4-Nitroaniline	4200	U
534-52-1	4,6-Dinitro-2-methylphenol	4200	U
86-30-6	N-Nitrosodiphenylamine (1)	860	U
101-55-3	4-Bromophenyl-phenylether	860	U
118-74-1	Hexachlorobenzene	860	U
87-86-5	Pentachlorophenol	4200	U
85-01-8	Phenanthrene	860	U
120-12-7	Anthracene	860	U
84-74-2	Di-n-Butylphthalate	860	U
206-44-0	Fluoranthene	860	U
129-00-0	Pyrene	860	U
85-68-7	Butylbenzylphthalate	860	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)anthracene	860	U
117-81-7	bis(2-Ethylhexyl)Phthalate	860	U
218-01-9	Chrysene	860	U
117-84-0	Di-n-octyl Phthalate	860	U
205-99-2	Benzo(b)fluoranthene	860	U
207-08-9	Benzo(k)fluoranthene	860	U
50-32-8	Benzo(a)pyrene	860	U
193-39-5	Indeno(1,2,3-cd)Pyrene	860	U
53-70-3	Dibenz(a,h)Anthracene	860	U
191-24-2	Benzo(g,h,i)perylene	860	U J

% Moisture

(1) - Cannot be separated from Diphenylamine

GM 8/25/93

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D45

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-12B

Sample wt/vol: 32.1 (g/mL) G Lab File ID: 20915S16

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 64 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	5.43 160000	~~BJ~~ UJ
2.	UNKNOWN HYDROCARBON	7.37	5.58 780	~~BJ~~
3.	UNKNOWN HYDROCARBON	8.62	6.53 610	~~BJ~~
4.	UNKNOWN HYDROCARBON	8.75	6.63 1600	~~BJ~~
5.	UNKNOWN HYDROCARBON	9.29	7.03 1600	~~BJ~~
6.	UNKNOWN ALCOHOL	10.99	8.32 3600	~~BJ~~ UJ
7.	UNKNOWN HYDROCARBON	23.82	18.03 2800	J
8.	UNKNOWN ALKANE	24.15	18.38 610	J
9.	UNKNOWN ALKANE	24.27	18.87 1100	J
10.	~~UNKNOWN ALKANE~~	24.92	20.17 1100	~~J~~ UJ
11.	UNKNOWN CARBOXYLIC ACID ESTE	26.64	27.62 1000	~~BJ~~
12.	UNKNOWN HYDROCARBON	36.47	28.52 520	J
13.	UNKNOWN HYDROCARBON	37.65	31.83 350	J
14.	UNKNOWN HYDROCARBON	41.11	31.68 520	J
15.	UNKNOWN HYDROCARBON	41.84	31.95 690	J
16.	UNKNOWN HYDROCARBON	43.26	32.47 520	J

unknown hydrocarbon

Method Blk Cont.

CH
8/25/93

9713505.0651

000093

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20915S17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1100	U J
111-44-4	bis(2-Chloroethyl)Ether	1100	U
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
100-51-6	Benzyl Alcohol	1100 ~~2300~~	U
95-50-1	1,2-Dichlorobenzene	1100	U
95-48-7	2-Methylphenol	1100	U
108-60-1	bis(2-Chloroisopropyl)Ether	1100	U
106-44-5	4-Methylphenol	1100	U
621-64-7	N-Nitroso-Di-n-Propylamine	1100	U
67-72-1	Hexachloroethane	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-Nitrophenol	1100	U
105-67-9	2,4-Dimethylphenol	1100	U
65-85-0	Benzoic Acid	5600	U
111-91-1	bis(2-Chloroethoxy)methane	1100	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	1100	U
106-47-8	4-Chloroaniline	1100 ~~2300~~	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-Chloro-3-methylphenol	1100 ~~2300~~	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-95-4	2,4,5-Trichlorophenol	5600	U
91-58-7	2-Chloronaphthalene	1100	U
88-74-4	2-Nitroaniline	5600	U
131-11-3	Dimethyl Phthalate	1100	U
208-96-8	Acenaphthylene	1100	U J

% Moisture

EH 8/25/93

9713505.0652

000094

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20915S17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	5600	U J
83-32-9	Acenaphthene	1100	U
51-28-5	2,4-Dinitrophenol	5600	U
100-02-7	4-Nitrophenol	5600	U
132-64-9	Dibenzofuran	1100	U
121-14-2	2,4-Dinitrotoluene	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U
84-66-2	Diethylphthalate	1100	U
7005-72-3	4-Chlorophenyl-phenylether	1100	U
86-73-7	Fluorene	1100	U
100-01-6	4-Nitroaniline	5600	U
534-52-1	4,6-Dinitro-2-methylphenol	5600	U
86-30-6	N-Nitrosodiphenylamine (1)	1100	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	Pentachlorophenol	5600	U
85-01-8	Phenanthrene	1100	U
120-12-7	Anthracene	1100	U
84-74-2	Di-n-Butylphthalate	1100	U
206-44-0	Fluoranthene	1100	U
129-00-0	Pyrene	1100	U
85-68-7	Butylbenzylphthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)anthracene	1100	U J
117-81-7	bis(2-Ethylhexyl)Phthalate	240	J
218-01-9	Chrysene	1100	U J
117-84-0	Di-n-octyl Phthalate	1100	U
205-99-2	Benzo(b)fluoranthene	1100	U
207-08-9	Benzo(k)fluoranthene	1100	U
50-32-8	Benzo(a)pyrene	1100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1100	U
53-70-3	Dibenz(a,h)Anthracene	1100	U
191-24-2	Benzo(g,h,i)perylene	1100	U J

% Moisture

(1) - Cannot be separated from Diphenylamine

AA 8/25/93

9713505.0653

000095

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B06D46

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-13B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20915S17

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 73 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.22	5.47 240000	~~BJ~~ UJ
2.	UNKNOWN HYDROCARBON	7.38	5.60 1000	~~BJ~~
3.	UNKNOWN HYDROCARBON	8.62	6.53 810	~~BJ~~
4.	UNKNOWN HYDROCARBON	8.75	6.68 2700	~~BJ~~
5.	UNKNOWN HYDROCARBON	9.27	7.02 2000	~~BJ~~
6.	UNKNOWN ALCOHOL	10.97	8.30 4800	~~BJ~~ UJ
7.	UNKNOWN ALKENE	23.79	18.02 2800	J
8.	UNKNOWN ALKANE	24.12	18.27 700	J
9.	UNKNOWN ALKANE	24.25	18.37 1000	J
10.	UNKNOWN ALKANE	24.90	18.87 810	J
11.	UNKNOWN CARBOXYLIC ACID ESTE	26.61	20.15 1600	~~JB~~ UJ
12.	HEXANEDIOIC ACID ISOMER	32.64	24.72 580	~~BJ~~ UJ
13.	UNKNOWN HYDROCARBON	41.83	31.68 580	J

Method Blk Cont

~~CK~~
8/25/93

9713505.0654

000096

EPA SAMPLE NO.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14B

Sample wt/vol: 32.3 (g/mL) G Lab File ID: 20915S18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1600	U J
111-44-4	bis(2-Chloroethyl)Ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
100-51-6	Benzyl Alcohol	1600 ~~3200~~	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	bis(2-Chloroisopropyl)Ether	1600	U
106-44-5	4-Methylphenol	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
65-85-0	Benzoic Acid	7800	U
111-91-1	bis(2-Chloroethoxy)methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	1600	U
106-47-8	4-Chloroaniline	1600 ~~3200~~	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-methylphenol	1600 ~~3200~~	U
91-57-6	2-Methylnaphthalene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	7800	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	7800	U
131-11-3	Dimethyl Phthalate	1600	U
208-96-8	Acenaphthylene	1600	U J

% Moisture

GH 8/25/93

9713505.0655

000097

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14B

Sample wt/vol: 32.3 (g/mL) G Lab File ID: 20915S18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7800	UJ
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	7800	U
100-02-7	4-Nitrophenol	7800	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	7800	U
534-52-1	4,6-Dinitro-2-methylphenol	7800	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	7800	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
84-74-2	Di-n-Butylphthalate	1600	U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3200	U
56-55-3	Benzo(a)anthracene	1600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1600	U
218-01-9	Chrysene	1600	U
117-84-0	Di-n-octyl Phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	1600	U
207-08-9	Benzo(k)fluoranthene	1600	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	1600	UJ

% Moisture

(1) - Cannot be separated from Diphenylamine

EH 8/25/93

9713505.0656

000098

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D47

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-14B

Sample wt/vol: 32.3 (g/mL) G Lab File ID: 20915S18

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/15/92

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.18	5.43 340000	~~BJ~~ UJ
2.	UNKNOWN HYDROCARBON	7.35	5.57 1300	~~BJ~~ UJ
3.	UNKNOWN HYDROCARBON	8.60	6.52 980	~~BJ~~ UJ
4.	UNKNOWN HYDROCARBON	8.74	6.62 3800	BJ
5.	UNKNOWN HYDROCARBON	9.25	7.00 2800	BJ
6.	UNKNOWN ALCOHOL	10.97	8.30 6700	BJ
7.	UNKNOWN HYDROCARBON	23.79	18.02 5900	J
8.	UNKNOWN ALKANE	24.12	18.27 2400	J
9.	UNKNOWN ALKANE	25.92	18.37 4200	J
10.	UNKNOWN ALKANE	24.90	18.87 3100	J
11.	UNKNOWN ACID	25.11	19.02 820	J
12.	UNKNOWN ALKANE	25.44	19.27 820	J
13.	UNKNOWN CARBOXYLIC ACID ESTE	26.61	20.15 2400	J B
14.	UNKNOWN ACID	27.62	20.92 1300	J
15.	UNKNOWN ACID	27.86	21.10 2000	J
16.	UNKNOWN HYDROCARBON	30.01	22.72 1600	~~BJ~~
17.	HEXANEDIOIC ACID ISOMER	32.61	24.72 980	J
18.	UNKNOWN HYDROCARBON	36.76	27.83 820	J
19.	UNKNOWN ALKANE	37.64	28.53 980	J
20.	UNKNOWN HYDROCARBON	41.83	31.68 820	J

Method Blk Cont.

GM 8/25/93

9713505.0657

000099

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15B

Sample wt/vol: 31.7 (g/mL) G Lab File ID: 20916S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2100	UJ
111-44-4	bis(2-Chloroethyl)Ether	2100	U
95-57-8	2-Chlorophenol	2100	U
541-73-1	1,3-Dichlorobenzene	2100	U
106-46-7	1,4-Dichlorobenzene	2100	U
100-51-6	Benzyl Alcohol	2100 ~~4200~~	U
95-50-1	1,2-Dichlorobenzene	2100	U
95-48-7	2-Methylphenol	2100	U
108-60-1	bis(2-Chloroisopropyl)Ether	2100	U
106-44-5	4-Methylphenol	2100	U
621-64-7	N-Nitroso-Di-n-Propylamine	2100	U
67-72-1	Hexachloroethane	2100	U
98-95-3	Nitrobenzene	2100	U
78-59-1	Isophorone	2100	U
88-75-5	2-Nitrophenol	2100	U
105-67-9	2,4-Dimethylphenol	2100	U
65-85-0	Benzoic Acid	10000	U
111-91-1	bis(2-Chloroethoxy)methane	2100	U
120-83-2	2,4-Dichlorophenol	2100	U
120-82-1	1,2,4-Trichlorobenzene	2100	U
91-20-3	Naphthalene	2100	U
106-47-8	4-Chloroaniline	2100 ~~4200~~	U
87-68-3	Hexachlorobutadiene	2100	U
59-50-7	4-Chloro-3-methylphenol	2100 ~~4200~~	U
91-57-6	2-Methylnaphthalene	2100	U
77-47-4	Hexachlorocyclopentadiene	2100	U
88-06-2	2,4,6-Trichlorophenol	2100	U
95-95-4	2,4,5-Trichlorophenol	10000	U
91-58-7	2-Chloronaphthalene	2100	U
88-74-4	2-Nitroaniline	10000	U
131-11-3	Dimethyl Phthalate	2100	U
208-96-8	Acenaphthylene	2100	UJ

% Moisture

8/25/93

9713505.0658

000100

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15B

Sample wt/vol: 31.7 (g/mL) G Lab File ID: 20916S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	10000	U J
83-32-9	Acenaphthene	2100	U
51-28-5	2,4-Dinitrophenol	10000	U
100-02-7	4-Nitrophenol	10000	U
132-64-9	Dibenzofuran	2100	U
121-14-2	2,4-Dinitrotoluene	2100	U
606-20-2	2,6-Dinitrotoluene	2100	U
84-66-2	Diethylphthalate	2100	U
7005-72-3	4-Chlorophenyl-phenylether	2100	U
86-73-7	Fluorene	2100	U
100-01-6	4-Nitroaniline	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	10000	U
86-30-6	N-Nitrosodiphenylamine (1)	2100	U
101-55-3	4-Bromophenyl-phenylether	2100	U
118-74-1	Hexachlorobenzene	2100	U
87-86-5	Pentachlorophenol	10000	U
85-01-8	Phenanthrene	2100	U
120-12-7	Anthracene	2100	U
84-74-2	Di-n-Butylphthalate	2100	U
206-44-0	Fluoranthene	2100	U
129-00-0	Pyrene	2100	U
85-68-7	Butylbenzylphthalate	2100	U
91-94-1	3,3'-Dichlorobenzidine	4200	U
56-55-3	Benzo(a)anthracene	2100	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2100	U
218-01-9	Chrysene	2100	U
117-84-0	Di-n-octyl Phthalate	2100	U
205-99-2	Benzo(b)fluoranthene	2100	U
207-08-9	Benzo(k)fluoranthene	2100	U
50-32-8	Benzo(a)pyrene	2100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	2100	U
53-70-3	Dibenz(a,h)Anthracene	2100	U
191-24-2	Benzo(g,h,i)perylene	2100	U J

% Moisture

(1) - Cannot be separated from Diphenylamine

8/25/93

9713505.0659

000101

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D48

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-15B

Sample wt/vol: 31.7 (g/mL) G Lab File ID: 20916S03

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 85 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.6 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.10	538 360000	BJ UJ
2.	UNKNOWN HYDROCARBON	7.33	555 1900	BJ
3.	UNKNOWN HYDROCARBON	8.70	658 4200	BJ
4.	UNKNOWN HYDROCARBON	9.22	698 3800	BJ
5.	UNKNOWN ALCOHOL	10.92	827 9200	JB
6.	UNKNOWN HYDROCARBON	23.74	1798 27000	BJ
7.	UNKNOWN ALKANE	24.05	1822 9400	J
8.	UNKNOWN ALKANE	24.19	1832 6700	J
9.	UNKNOWN ALKANE	24.82	1880 4600	J
10.	HEXANEDIOIC ACID ISOMER	32.54	2465 1300	BJ
11.	UNKNOWN HYDROCARBON	36.64	2775 1300	J
12.	UNKNOWN HYDROCARBON	40.91	3098 5500	J
13.	UNKNOWN HYDROCARBON	40.79	3127 9000	J
14.	UNKNOWN HYDROCARBON	41.46	3140 4000	J
15.	UNKNOWN HYDROCARBON	41.62	3152 6700	J
16.	UNKNOWN HYDROCARBON	41.99	3180 4000	J
17.	UNKNOWN HYDROCARBON	42.31	3203 4000	J
18.	UNKNOWN KETONE	43.04	3260 2100	J
19.	UNKNOWN HYDROCARBON	43.23	3273 2700	J
20.	UNKNOWN HYDROCARBON	43.83	3318 4400	J

Method Blk Contam.

8/25/93

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20916S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
108-95-2	Phenol		1600	U J
111-44-4	bis(2-Chloroethyl)Ether		1600	U
95-57-8	2-Chlorophenol		1600	U
541-73-1	1,3-Dichlorobenzene		1600	U
106-46-7	1,4-Dichlorobenzene		1600	U
100-51-6	Benzyl Alcohol	1600	~~3300~~	U
95-50-1	1,2-Dichlorobenzene		1600	U
95-48-7	2-Methylphenol		1600	U
108-60-1	bis(2-Chloroisopropyl)Ether		1600	U
106-44-5	4-Methylphenol		1600	U
621-64-7	N-Nitroso-Di-n-Propylamine		1600	U
67-72-1	Hexachloroethane		1600	U
98-95-3	Nitrobenzene		1600	U
78-59-1	Isophorone		1600	U
88-75-5	2-Nitrophenol		1600	U
105-67-9	2,4-Dimethylphenol		1600	U
65-85-0	Benzoic Acid		7900	U
111-91-1	bis(2-Chloroethoxy)methane		1600	U
120-83-2	2,4-Dichlorophenol		1600	U
120-82-1	1,2,4-Trichlorobenzene		1600	U
91-20-3	Naphthalene		1600	U
106-47-8	4-Chloroaniline	1600	~~3300~~	U
87-68-3	Hexachlorobutadiene		1600	U
59-50-7	4-Chloro-3-methylphenol	1600	~~3300~~	U
91-57-6	2-Methylnaphthalene		1600	U
77-47-4	Hexachlorocyclopentadiene		1600	U
88-06-2	2,4,6-Trichlorophenol		1600	U
95-95-4	2,4,5-Trichlorophenol		7900	U
91-58-7	2-Chloronaphthalene		1600	U
88-74-4	2-Nitroaniline		7900	U
131-11-3	Dimethyl Phthalate		1600	U
208-96-8	Acenaphthylene		1600	U J

% Moisture

GH 8/25/93

9713505.0661

000103

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20916S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7900	U J
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	7900	U
100-02-7	4-Nitrophenol	7900	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600	U
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-01-6	4-Nitroaniline	7900	U
534-52-1	4,6-Dinitro-2-methylphenol	7900	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	7900	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
84-74-2	Di-n-Butylphthalate	1600	U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	3300	U
56-55-3	Benzo(a)anthracene	1600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1600	U
218-01-9	Chrysene	1600	U
117-84-0	Di-n-octyl Phthalate	1600	U
205-99-2	Benzo(b)fluoranthene	1600	U
207-08-9	Benzo(k)fluoranthene	1600	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	1600	U J

% Moisture

(1) - Cannot be separated from Diphenylamine

8/25/93

9713505.0662

000104

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06D49

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 09002 SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: A209002-16B

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 20916S04

Level: (low/med) LOW Date Received: 08/28/92

% Moisture: not dec. 81 dec. ____ Date Extracted: 09/04/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/16/92

GPC Cleanup: (Y/N) Y pH: 5.2 Dilution Factor: 1.0

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	7.13	5.40 330000	~~BJ~~ UJ
2.	UNKNOWN HYDROCARBON	7.33	5.55 1500	~~BJ~~ UJ
3.	UNKNOWN HYDROCARBON	8.59	6.50 990	~~BJ~~ UJ
4.	UNKNOWN HYDROCARBON	8.72	6.60 4000	BJ
5.	UNKNOWN HYDROCARBON	9.24	7.00 3000	BJ
6.	UNKNOWN ALCOHOL	10.94	8.28 7400	BJ
7.	UNKNOWN HYDROCARBON	23.74	17.98 20000	J
8.	UNKNOWN ALKANE	24.05	18.22 5600	J
9.	UNKNOWN ALKANE	24.19	18.32 2100	J
10.	UNKNOWN ALKANE	24.84	18.82 1600	J
11.	UNKNOWN HYDROCARBON	36.56	27.77 1300	J
12.	UNKNOWN ALKANE	37.52	28.42 1200	J
13.	UNKNOWN HYDROCARBON	40.92	31.00 2600	J
14.	UNKNOWN POLYNUCLEAR AROMATIC	41.49	31.42 2000	J
15.	UNKNOWN HYDROCARBON	41.62	31.52 3100	J
16.	UNKNOWN HYDROCARBON	43.84	33.20 2000	J

Method Blk Cont.

GA 8/25/93

000104 A

9713505.0663

Received: 08/28/92

TMA Inc. REPORT
Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D31 FRACTION 01D TEST CODE 8080SP NAME Pest/PCB Soil Package
Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.1 G
Moisture: 2
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 7.5

Lab File Id: A93016
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	U	ND	1.7
319-85-7	beta-BHC		ND	1.7
319-86-8	delta-BHC		ND	1.7
58-89-9	gamma-BHC (Lindane)		ND	1.7
76-44-8	Heptachlor		ND	1.7
309-00-2	Aldrin		ND	1.7
1024-57-3	Heptachlor epoxide		ND	1.7
959-98-8	Endosulfan I		ND	1.7
60-57-1	Dieldrin		ND	3.4
72-55-9	4,4'-DDE		ND	3.4
72-20-8	Endrin		ND	3.4
33213-65-9	Endosulfan II		ND	3.4
72-54-8	4,4'-DDD		ND	3.4
1031-07-8	Endosulfan sulfate		ND	3.4
50-29-3	4,4'-DDT		ND	3.4
72-43-5	Methoxychlor	U	ND	17
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U	ND	3.4
57-74-9	Chlordane		ND	34
8001-35-2	Toxaphene		ND	170
12674-11-2	Aroclor-1016		ND	34
11104-28-2	Aroclor-1221		ND	34
11141-16-5	Aroclor-1232		ND	34
53469-21-9	Aroclor-1242		ND	34
12672-29-6	Aroclor-1248		ND	34
11097-69-1	Aroclor-1254		ND	34
11096-82-5	Aroclor-1260	U	ND	34

Percent Surrogate Recovery
TCX 83 DBC 27

FORM I

8/25/93

9213505.0664

000104 B

TMA Inc. REPORT

Work Order # A2-09-002

Received: 08/28/92

Results by Sample

SAMPLE ID 806032 FRACTION 02B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 30.4 G

Moisture: 2

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 ul

Injection Volume: 1 ul

GPC Cleanup (Y/N): Y pH 7.5

Lab File Id: A93017

Decanted (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 09/30/92

Dilution Factor 1.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	U	ND	1.7
319-85-7	beta-BHC		ND	1.7
319-86-8	delta-BHC		ND	1.7
58-89-9	gamma-BHC (Lindane)		ND	1.7
76-44-8	Heptachlor		ND	1.7
309-00-2	Aldrin		ND	1.7
1024-57-3	Heptachlor epoxide		ND	1.7
959-98-8	Endosulfan I		ND	1.7
60-57-1	Dieldrin		ND	3.3
72-55-9	4,4'-DDE		ND	3.3
72-20-8	Endrin		ND	3.3
33213-65-9	Endosulfan II		ND	3.3
72-54-8	4,4'-DDD		ND	3.3
1031-07-8	Endosulfan sulfate		ND	3.3
50-29-3	4,4'-DDT		ND	3.3
72-43-5	Methoxychlor	U	ND	17
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U	ND	3.3
57-74-9	Chlordane		ND	33
8001-35-2	Toxaphene		ND	170
12674-11-2	Aroclor-1016		ND	33
11104-28-2	Aroclor-1221		ND	33
11141-16-5	Aroclor-1232		ND	33
53469-21-9	Aroclor-1242		ND	33
12672-29-6	Aroclor-1248		ND	33
11097-69-1	Aroclor-1254		ND	33
11096-82-5	Aroclor-1260	U	ND	33

Percent Surrogate Recovery

TCX 99 DBC 22

FORM I

8/25/93

9713505.0665

000104C

Received: 08/28/92

TMA Inc. REPORT

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D36 FRACTION 03B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.9 G
Moisture: 11
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 7.1

Lab File Id: A93018
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	U	ND	1.9
319-85-7	beta-BHC		ND	1.9
319-86-8	delta-BHC		ND	1.9
58-89-9	gamma-BHC (Lindane)		ND	1.9
76-44-8	Heptachlor		ND	1.9
309-00-2	Aldrin		ND	1.9
1024-57-3	Heptachlor epoxide		ND	1.9
959-98-8	Endosulfan I		ND	1.9
60-57-1	Dieldrin		ND	3.6
72-55-9	4,4'-DDE		ND	3.6
72-20-8	Endrin		ND	3.6
33213-65-9	Endosulfan II		ND	3.6
72-54-8	4,4'-DDD		ND	3.6
1031-07-8	Endosulfan sulfate		ND	3.6
50-29-3	4,4'-DDT	U	ND	3.6
72-43-5	Methoxychlor	J	15	19
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U	ND	3.6
57-74-9	Chlordane		ND	36
8001-35-2	Toxaphene		ND	190
12674-11-2	Aroclor-1016		ND	36
11104-28-2	Aroclor-1221		ND	36
11141-16-5	Aroclor-1232		ND	36
53469-21-9	Aroclor-1242		ND	36
12672-29-6	Aroclor-1248		ND	36
11097-69-1	Aroclor-1254	U	ND	36
11096-82-5	Aroclor-1260	J	34	36

positive but below CRQL

Percent Surrogate Recovery

TCX 45 DBC 30

FORM I

8/25/93

000194D

9713505.0666

TRA Inc. REPORT

Received: 08/28/92 Results by Sample Work Order # A2-09-002

SAMPLE ID B06D38 FRACTION 04B TEST CODE 8080SP NAME Pest/PCB Soil Package
Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.6 G
Moisture: 4
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 7.9

Lab File Id: A93021
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	U	ND	1.7
319-85-7	beta-BHC		ND	1.7
319-86-8	delta-BHC		ND	1.7
58-89-9	gamma-BHC (Lindane)		ND	1.7
76-44-8	Heptachlor		ND	1.7
309-00-2	Aldrin		ND	1.7
1024-57-3	Heptachlor epoxide		ND	1.7
959-98-8	Endosulfan I		ND	1.7
60-57-1	Dieldrin		ND	3.4
72-55-9	4,4'-DDE		ND	3.4
72-20-8	Endrin		ND	3.4
33213-65-9	Endosulfan II		ND	3.4
72-54-8	4,4'-DDD		ND	3.4
1031-07-8	Endosulfan sulfate		ND	3.4
50-29-3	4,4'-DDT		ND	3.4
72-43-5	Methoxychlor	U	ND	17
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U	ND	3.4
57-74-9	Chlordane		ND	34
8001-35-2	Toxaphene		ND	170
12674-11-2	Aroclor-1016		ND	34
11104-28-2	Aroclor-1221		ND	34
11141-16-5	Aroclor-1232		ND	34
53469-21-9	Aroclor-1242		ND	34
12672-29-6	Aroclor-1248		ND	34
11097-69-1	Aroclor-1254		ND	34
11096-82-5	Aroclor-1260	U	ND	34

Percent Surrogate Recovery
TCX 92 DBC 33

FORM I

8/25/93

000104 E

9713505.0667

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D39 FRACTION 05B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.3 G
Moisture: 4
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.3

Lab File Id: A93022
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 09/30/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	U	ND	1.8
319-85-7	beta-BHC		ND	1.8
319-86-8	delta-BHC		ND	1.8
58-89-9	gamma-BHC (Lindane)		ND	1.8
76-44-8	Heptachlor		ND	1.8
309-00-2	Aldrin		ND	1.8
1024-57-3	Heptachlor epoxide		ND	1.8
959-98-8	Endosulfan I		ND	1.8
60-57-1	Dieldrin		ND	3.4
72-55-9	4,4'-DDE		ND	3.4
72-20-8	Endrin		ND	3.4
33213-65-9	Endosulfan II		ND	3.4
72-54-8	4,4'-DDD		ND	3.4
1031-07-8	Endosulfan sulfate		ND	3.4
50-29-3	4,4'-DDT		ND	3.4
72-43-5	Methoxychlor	U	ND	18
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U	ND	3.4
57-74-9	Chlordane		ND	34
8001-35-2	Toxaphene		ND	180
12674-11-2	Aroclor-1016		ND	34
11104-28-2	Aroclor-1221		ND	34
11141-16-5	Aroclor-1232		ND	34
53469-21-9	Aroclor-1242		ND	34
12672-29-6	Aroclor-1248		ND	34
11097-69-1	Aroclor-1254		ND	34
11096-82-5	Aroclor-1260	U	ND	34

Percent Surrogate Recovery

TCX 88 DBC 75

FORM I

CH 8/25/93

9713505.0668

000104F

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06040 FRACTION 06B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.4 G
Moisture: 2
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.2

Lab File Id: A93023
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	U	ND	1.7
319-85-7	beta-BHC		ND	1.7
319-86-8	delta-BHC		ND	1.7
58-89-9	gamma-BHC (Lindane)		ND	1.7
76-44-8	Heptachlor		ND	1.7
309-00-2	Aldrin		ND	1.7
1024-57-3	Heptachlor epoxide		ND	1.7
959-98-8	Endosulfan I		ND	1.7
60-57-1	Dieldrin		ND	3.3
72-55-9	4,4'-DDE		ND	3.3
72-20-8	Endrin		ND	3.3
33213-65-9	Endosulfan II		ND	3.3
72-54-8	4,4'-DDD		ND	3.3
1031-07-8	Endosulfan sulfate		ND	3.3
50-29-3	4,4'-DDT		ND	3.3
72-43-5	Methoxychlor	U	ND	17
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U	ND	3.3
57-74-9	Chlordane		ND	33
8001-35-2	Toxaphene		ND	170
12674-11-2	Aroclor-1016		ND	33
11104-28-2	Aroclor-1221		ND	33
11141-16-5	Aroclor-1232		ND	33
53469-21-9	Aroclor-1242		ND	33
12672-29-6	Aroclor-1248		ND	33
11097-69-1	Aroclor-1254		ND	33
11096-82-5	Aroclor-1260	U	ND	33

Percent Surrogate Recovery

TCX 89 DBC 70

FORM I

8/25/93

000104G

9213505.0669

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06041 FRACTION 07B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.4 G
Moisture: 3
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.1

Lab File Id: A93026
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	U ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	U ND	17
~~53494-70-5~~	~~Endrin ketone~~	~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	U ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	U ND	34

Percent Surrogate Recovery

TCX 74 DBC 47

FORM I

8/25/93

9213505.0670

0001071

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06042 FRACTION OBE TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.6 G
Moisture: 4
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 8.0

Lab File Id: A93027
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	ND	1.7
319-85-7	beta-BHC	ND	1.7
319-86-8	delta-BHC	ND	1.7
58-89-9	gamma-BHC (Lindane)	ND	1.7
76-44-8	Heptachlor	ND	1.7
309-00-2	Aldrin	ND	1.7
1024-57-3	Heptachlor epoxide	ND	1.7
959-98-8	Endosulfan I	ND	1.7
60-57-1	Dieldrin	ND	3.4
72-55-9	4,4'-DDE	ND	3.4
72-20-8	Endrin	ND	3.4
33213-65-9	Endosulfan II	ND	3.4
72-54-8	4,4'-DDD	ND	3.4
1031-07-8	Endosulfan sulfate	ND	3.4
50-29-3	4,4'-DDT	ND	3.4
72-43-5	Methoxychlor	ND	17
~~53494-70-5~~	~~Endrin ketone~~	~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	ND	3.4
57-74-9	Chlordane	ND	34
8001-35-2	Toxaphene	ND	170
12674-11-2	Aroclor-1016	ND	34
11104-28-2	Aroclor-1221	ND	34
11141-16-5	Aroclor-1232	ND	34
53469-21-9	Aroclor-1242	ND	34
12672-29-6	Aroclor-1248	ND	34
11097-69-1	Aroclor-1254	ND	34
11096-82-5	Aroclor-1260	ND	34

Percent Surrogate Recovery

TCX 105 DBC 31

FORM I

8/25/93

9713505.0671

000104 I

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D43 FRACTION 10B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/25/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 31.7 G
Moisture: 81
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.6

Lab File Id: A93028
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	8.5
319-85-7	beta-BHC		ND	8.5
319-86-8	delta-BHC		ND	8.5
58-89-9	gamma-BHC (Lindane)		ND	8.5
76-44-8	Heptachlor		ND	8.5
309-00-2	Aldrin		ND	8.5
1024-57-3	Heptachlor epoxide		ND	8.5
959-98-8	Endosulfan I		ND	8.5
60-57-1	Dieldrin		ND	16
72-55-9	4,4'-DDE		ND	16
72-20-8	Endrin		ND	16
33213-65-9	Endosulfan II		ND	16
72-54-8	4,4'-DDD		ND	16
1031-07-8	Endosulfan sulfate		ND	16
50-29-3	4,4'-DDT	UJ	ND	16
72-43-5	Methoxychlor	J	83	85
53494-70-5	Endrin ketone		NA	NA
7421-93-4	Endrin aldehyde	UJ	ND	16
57-74-9	Chlordane		ND	160
8001-35-2	Toxaphene		ND	850
12674-11-2	Aroclor-1016		ND	160
11104-28-2	Aroclor-1221		ND	160
11141-16-5	Aroclor-1232		ND	160
53469-21-9	Aroclor-1242		ND	160
12672-29-6	Aroclor-1248		ND	160
11097-69-1	Aroclor-1254		ND	160
11096-82-5	Aroclor-1260	UJ	ND	160

% Moisture

Percent Surrogate Recovery

TCX 41 DBC 11

FORM I

8/25/93

9713505.0672

000104 J

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D44 FRACTION 11B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.6 G
Moisture: 80
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.3

Lab File Id: A93029
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg	DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ ND	8.3
319-85-7	beta-BHC	ND	8.3
319-86-8	delta-BHC	ND	8.3
58-89-9	gamma-BHC (Lindane)	ND	8.3
76-44-8	Heptachlor	ND	8.3
309-00-2	Aldrin	ND	8.3
1024-57-3	Heptachlor epoxide	ND	8.3
959-98-8	Endosulfan I	ND	8.3
60-57-1	Dieldrin	ND	16
72-55-9	4,4'-DDE	ND	16
72-20-8	Endrin	ND	16
33213-65-9	Endosulfan II	ND	16
72-54-8	4,4'-DDD	ND	16
1031-07-8	Endosulfan sulfate	ND	16
50-29-3	4,4'-DDT	ND	16
72-43-5	Methoxychlor	UJ ND	83
~~53494-70-5~~	~~Endrin ketone~~	~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ ND	16
57-74-9	Chlordane	ND	160
8001-35-2	Toxaphene	ND	830
12674-11-2	Aroclor-1016	ND	160
11104-28-2	Aroclor-1221	ND	160
11141-16-5	Aroclor-1232	ND	160
53469-21-9	Aroclor-1242	ND	160
12672-29-6	Aroclor-1248	ND	160
11097-69-1	Aroclor-1254	ND	160
11096-82-5	Aroclor-1260	UJ ND	160

Holding Time exceed

Percent Surrogate Recovery

TCX 102 DBC 39

CH 8/25/93

FORM I

9713505.0673

000104 K

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D45 FRACTION 12B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.7 G
Moisture: 64
Extraction (Sepf/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 ul
Injection Volume: 1 ul
GPC Cleanup (Y/N): Y pH 6.5

Lab File Id: A93030
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	4.6
319-85-7	beta-BHC		ND	4.6
319-86-8	delta-BHC		ND	4.6
58-89-9	gamma-BHC (Lindane)		ND	4.6
76-44-8	Heptachlor		ND	4.6
309-00-2	Aldrin		ND	4.6
1024-57-3	Heptachlor epoxide		ND	4.6
959-98-8	Endosulfan I		ND	4.6
60-57-1	Dieldrin		ND	9.0
72-55-9	4,4'-DDE		ND	9.0
72-20-8	Endrin		ND	9.0
33213-65-9	Endosulfan II		ND	9.0
72-54-8	4,4'-DDD		ND	9.0
1031-07-8	Endosulfan sulfate		ND	9.0
50-29-3	4,4'-DDT		ND	9.0
72-43-5	Methoxychlor	UJ	ND	46
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ	ND	9.0
57-74-9	Chlordane		ND	90
8001-35-2	Toxaphene		ND	460
12674-11-2	Aroclor-1016		ND	90
11104-28-2	Aroclor-1221		ND	90
11141-16-5	Aroclor-1232		ND	90
53469-21-9	Aroclor-1242		ND	90
12672-29-6	Aroclor-1248		ND	90
11097-69-1	Aroclor-1254		ND	90
11096-82-5	Aroclor-1260	UJ	ND	90

% Moisture

Percent Surrogate Recovery

TCX 100 DBC 44

FORM I

CH 8/25/93

9213505.0674

000104 L

Received: 08/28/92

TMA Inc. REPORT

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D46 FRACTION 13B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.8 G
Moisture: 73
Extraction (Sepf/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.6

Lab File Id: A93031
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	6.1
319-85-7	beta-BHC		ND	6.1
319-86-8	delta-BHC		ND	6.1
58-89-9	gamma-BHC (Lindane)		ND	6.1
76-44-8	Heptachlor		ND	6.1
309-00-2	Aldrin		ND	6.1
1024-57-3	Heptachlor epoxide		ND	6.1
959-98-8	Endosulfan I		ND	6.1
60-57-1	Dieldrin		ND	12
72-55-9	4,4'-DDE		ND	12
72-20-8	Endrin		ND	12
33213-65-9	Endosulfan II		ND	12
72-54-8	4,4'-DDD		ND	12
1031-07-8	Endosulfan sulfate		ND	12
50-29-3	4,4'-DDT		ND	12
72-43-5	Methoxychlor	UJ	ND	61
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ	ND	12
57-74-9	Chlordane		ND	120
8001-35-2	Toxaphene		ND	610
12674-11-2	Aroclor-1016		ND	120
11104-28-2	Aroclor-1221		ND	120
11141-16-5	Aroclor-1232		ND	120
53469-21-9	Aroclor-1242		ND	120
12672-29-6	Aroclor-1248		ND	120
11097-69-1	Aroclor-1254		ND	120
11096-82-5	Aroclor-1260	UJ	ND	120

% Moisture

Percent Surrogate Recovery

TCX 86 DBC 33

8/25/93

FORM I

9713505.0675

000104M

TMA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID 806047 FRACTION 14B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 31.8 G
Moisture: 81
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 6.4

Lab File Id: A93032
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	8.4
319-85-7	beta-BHC		ND	8.4
319-86-8	delta-BHC		ND	8.4
58-89-9	gamma-BHC (Lindane)		ND	8.4
76-44-8	Heptachlor		ND	8.4
309-00-2	Aldrin		ND	8.4
1024-57-3	Heptachlor epoxide		ND	8.4
959-98-8	Endosulfan I		ND	8.4
60-57-1	Dieldrin		ND	16
72-55-9	4,4'-DDE		ND	16
72-20-8	Endrin		ND	16
33213-65-9	Endosulfan II		ND	16
72-54-8	4,4'-DDD		ND	16
1031-07-8	Endosulfan sulfate		ND	16
50-29-3	4,4'-DDT		ND	16
72-43-5	Methoxychlor	UJ	ND	84
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ	ND	16
57-74-9	Chlordane		ND	160
8001-35-2	Toxaphene		ND	840
12674-11-2	Aroclor-1016		ND	160
11104-28-2	Aroclor-1221		ND	160
11141-16-5	Aroclor-1232		ND	160
53469-21-9	Aroclor-1242		ND	160
12672-29-6	Aroclor-1248		ND	160
11097-69-1	Aroclor-1254		ND	160
11096-82-5	Aroclor-1260	UJ	ND	160

% Moisture

Percent Surrogate Recovery

TCX 91 DBC 37

FORM I

EH 8/25/93

000104N

9713505.0676

TMA Inc. REPORT

Results by Sample

Received: 08/28/92

Work Order # A2-09-002

SAMPLE ID B06048 FRACTION 15B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 30.7 G
Moisture: 85
Extraction (SepF/Cont/Sonc): SONC
Concentrated Extract Volume: 5000 ul
Injection Volume: 1 ul
GPC Cleanup (Y/N): Y pH 5.6

Lab File Id: A93033
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	11
319-85-7	beta-BHC		ND	11
319-86-8	delta-BHC		ND	11
58-89-9	gamma-BHC (Lindane)		ND	11
76-44-8	Heptachlor		ND	11
309-00-2	Aldrin		ND	11
1024-57-3	Heptachlor epoxide		ND	11
959-98-8	Endosulfan I		ND	11
60-57-1	Dieldrin		ND	21
72-55-9	4,4'-DDE		ND	21
72-20-8	Endrin		ND	21
33213-65-9	Endosulfan II		ND	21
72-54-8	4,4'-DDD		ND	21
1031-07-8	Endosulfan sulfate		ND	21
50-29-3	4,4'-DDT		ND	21
72-43-5	Methoxychlor	UJ	ND	110
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ	ND	21
57-74-9	Chlordane		ND	210
8001-35-2	Toxaphene		ND	1100
12674-11-2	Aroclor-1016		ND	210
11104-28-2	Aroclor-1221		ND	210
11141-16-5	Aroclor-1232		ND	210
53469-21-9	Aroclor-1242		ND	210
12672-29-6	Aroclor-1248		ND	210
11097-69-1	Aroclor-1254		ND	210
11096-82-5	Aroclor-1260	UJ	ND	210

% Moisture

Percent Surrogate Recovery

TCX 73 DBC 70

FORM I

CH 8/25/93

ØØØ 104U

TMA Inc. REPORT

Work Order # A2-09-002

Received: 08/28/92

Results by Sample

SAMPLE ID B06D49 FRACTION 16B TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL
Sample wt/vol: 31.7 G
Moisture: 81
Extraction (Sepf/Cont/Sonc): SONC
Concentrated Extract Volume: 5000. uL
Injection Volume: 1 uL
GPC Cleanup (Y/N): Y pH 5.2

Lab File Id: A93036
Decanted (Y/N): N
Date Extracted: 09/05/92
Date Analyzed: 10/01/92
Dilution Factor 1.0
Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	8.5
319-85-7	beta-BHC		ND	8.5
319-86-8	delta-BHC		ND	8.5
58-89-9	gamma-BHC (Lindane)		ND	8.5
76-44-8	Heptachlor		ND	8.5
309-00-2	Aldrin		ND	8.5
1024-57-3	Heptachlor epoxide		ND	8.5
959-98-8	Endosulfan I		ND	8.5
60-57-1	Dieldrin		ND	16
72-55-9	4,4'-DDE		ND	16
72-20-8	Endrin		ND	16
33213-65-9	Endosulfan II		ND	16
72-54-8	4,4'-DDD		ND	16
1031-07-8	Endosulfan sulfate		ND	16
50-29-3	4,4'-DDT		ND	16
72-43-5	Methoxychlor	UJ	ND	85
~~53494-70-5~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ	ND	16
57-74-9	Chlordane		ND	160
8001-35-2	Toxaphene		ND	850
12674-11-2	Aroclor-1016		ND	160
11104-28-2	Aroclor-1221		ND	160
11141-16-5	Aroclor-1232		ND	160
53469-21-9	Aroclor-1242		ND	160
12672-29-6	Aroclor-1248		ND	160
11097-69-1	Aroclor-1254	UJ	ND	160
11096-82-5	Aroclor-1260	*J 3500 ~~2500~~		~~160~~ 820

% Moisture

Percent Surrogate Recovery

TCX 90 DBC 555

FORM I

8/25/93

USE THIS DATA

* Transferred from 49DL

000104P

9213505.0678

TRA Inc. REPORT

Received: 08/28/92

Results by Sample

Work Order # A2-09-002

SAMPLE ID B06D49DL FRACTION 16C TEST CODE 8080SP NAME Pest/PCB Soil Package

Date & Time Collected 08/26/92 Category

8080 PESTICIDE/PCB ORGANICS

Matrix: SOIL

Sample wt/vol: 31.7 G

Moisture: 81

Extraction (SepF/Cont/Sonc): SONC

Concentrated Extract Volume: 5000 ul

Injection Volume: 1 ul

GPC Cleanup (Y/N): Y pH 5.2

Lab File Id: A93041

Decanted (Y/N): N

Date Extracted: 09/05/92

Date Analyzed: 10/02/92

Dilution Factor 5.0

Sulfur Cleanup (Y/N): N

CAS NO.	COMPOUND	RESULT ug/Kg		DET. LIM ug/Kg
319-84-6	alpha-BHC	UJ	ND	42
319-85-7	beta-BHC		ND	42
319-86-8	delta-BHC		ND	42
58-89-9	gamma-BHC (Lindane)		ND	42
76-44-8	Heptachlor		ND	42
309-00-2	Aldrin		ND	42
1024-57-3	Heptachlor epoxide		ND	42
959-98-8	Endosulfan I		ND	42
60-57-1	Dieldrin		ND	82
72-55-9	4,4'-DDE		ND	82
72-20-8	Endrin		ND	82
33213-65-9	Endosulfan II		ND	82
72-54-8	4,4'-DDD		ND	82
1031-07-8	Endosulfan sulfate		ND	82
50-29-3	4,4'-DDT		ND	82
72-43-5	Methoxychlor	UJ	ND	420
~~53494-70-6~~	~~Endrin ketone~~		~~NA~~	~~NA~~
7421-93-4	Endrin aldehyde	UJ	ND	82
57-74-9	Chlordane		ND	820
8001-35-2	Toxaphene		ND	4200
12674-11-2	Aroclor-1016		ND	820
11104-28-2	Aroclor-1221		ND	820
11141-16-5	Aroclor-1232		ND	820
53469-21-9	Aroclor-1242		ND	820
12672-29-6	Aroclor-1248		ND	820
11097-69-1	Aroclor-1254	UJ	ND	820
11096-82-5	Aroclor-1260	* J	3500	820

% Moisture

Percent Surrogate Recovery

TCX 95 DBC 644

FORM I

CH 8/25/93

DO NOT USE

* Transferred to 49

9713505.0679

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

B06D25

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-01S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

PMD 8/23/93

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6350			P	
7440-36-0	Antimony	3.2	U		P	
7440-38-2	Arsenic	2.0		S	F	
7440-39-3	Barium	133			P	
7440-41-7	Beryllium	0.42	B		P	
7440-43-9	Cadmium	0.19	U		P	
7440-70-2	Calcium	5780			P	
7440-47-3	Chromium	6.8			P	
7440-48-4	Cobalt	13.6			P	
7440-50-8	Copper	19.8			P	
7439-89-6	Iron	26900		*	P	
7439-92-1	Lead	3.6			F	
7439-95-4	Magnesium	4900			P	
7439-96-5	Manganese	332			P	
7439-97-6	Mercury	0.15			CV	
7440-02-0	Nickel	8.9			P	
7440-09-7	Potassium	440	B		P	
7782-49-2	Selenium	0.71	U	JWN	F	Anal. spike recov >115%
7440-22-4	Silver	0.86	~~B~~ U		P	CCB Contam
7440-23-5	Sodium	272	B		P	
7440-28-0	Thallium	0.26	U		F	
7440-62-2	Vanadium	77.3			P	
7440-66-6	Zinc	59.0			P	
	Cyanide	0.51	U		CA	

Color Before: GREY Clarity Before: Texture: FINE

Color After: GREY Clarity After: Artifacts: YES

Comments:
STONES

002

$\frac{(46.76\ \frac{ug}{L})(.2\ L)}{(1.07\ g)(.98)} = 8.9\ \frac{mg}{Kg}$

9713505.0680

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D26

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-02S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 90.2

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

8/23/93 PHL

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	32800			P	
7440-36-0	Antimony	3.5	U		P	
7440-38-2	Arsenic	10.8		J+	F	MSA cor. coef. < .995
7440-39-3	Barium	149			P	
7440-41-7	Beryllium	0.63	B		P	
7440-43-9	Cadmium	0.92	~~B~~ U		P	Blank (CCB) Contamination
7440-70-2	Calcium	5560			P	
7440-47-3	Chromium	36.1			P	
7440-48-4	Cobalt	9.5	B		P	
7440-50-8	Copper	55.4			P	
7439-89-6	Iron	20700		*	P	
7439-92-1	Lead	23.9			F	
7439-95-4	Magnesium	4790			P	
7439-96-5	Manganese	377			P	
7439-97-6	Mercury	0.54			CV	
7440-02-0	Nickel	13.5			P	
7440-09-7	Potassium	970	B		P	
7782-49-2	Selenium	0.73	U	JWN	F	Anal. Spk. rec. < 85%
7440-22-4	Silver	0.82	~~B~~ U		P	CCB Contam
7440-23-5	Sodium	259	B		P	
7440-28-0	Thallium	0.26	U		F	
7440-62-2	Vanadium	53.4			P	
7440-66-6	Zinc	213			P	
	Cyanide	0.55	U		CA	

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

003

9713505.0681

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D27

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-03S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 21.3

PMJ 8/24/93

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	78400			P	
7440-36-0	Antimony	14.3	U		P	
7440-38-2	Arsenic	62.2		J~~B~~+	F	MSA cor. coef. < .995
7440-39-3	Barium	188			P	
7440-41-7	Beryllium	0.34	U		P	
7440-43-9	Cadmium	3.6	~~B~~	U	P	Lab blank cont. 9/2/93
7440-70-2	Calcium	5220			P	
7440-47-3	Chromium	77.1			P	
7440-48-4	Cobalt	11.7	B		P	
7440-50-8	Copper	56.9			P	
7439-89-6	Iron	23300		*	P	
7439-92-1	Lead	92.5			F	
7439-95-4	Magnesium	4660			P	
7439-96-5	Manganese	462			P	
7439-97-6	Mercury	2.9			CV	
7440-02-0	Nickel	13.2	~~B~~	U	P	Lab blank 9/2/93
7440-09-7	Potassium	1090	B		P	
7782-49-2	Selenium	3.1	U	N	F	
7440-22-4	Silver	2.1	U		P	
7440-23-5	Sodium	351	B		P	
7440-28-0	Thallium	1.1	U		F	
7440-62-2	Vanadium	66.2			P	
7440-66-6	Zinc	641			P	
	Cyanide	2.3	U		CA	

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

004

$$\frac{(106.38\ \frac{ug}{L} \times .2L)}{(1.08 \times 21.3/100)} = 92.5\ \frac{mg}{Kg}$$

9713505.0682

WESTINGHOUSE/HANFORD
1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D28

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-04S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 20.0

PMS 8/23/93

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	69400			P	
7440-36-0	Antimony	16.7	U		P	
7440-38-2	Arsenic	45.7		S	F	
7440-39-3	Barium	162	B		P	
7440-41-7	Beryllium	0.40	U		P	
7440-43-9	Cadmium	3.9	~~B~~	U	P	-Lab blank 9/2/93
7440-70-2	Calcium	4900	B		P	
7440-47-3	Chromium	70.1			P	
7440-48-4	Cobalt	12.3	B		P	
7440-50-8	Copper	52.0			P	
7439-89-6	Iron	22000		*	P	
7439-92-1	Lead	71.3			F	
7439-95-4	Magnesium	4880	B		P	
7439-96-5	Manganese	666			P	
7439-97-6	Mercury	2.2			CV	
7440-02-0	Nickel	17.1	~~B~~	U	P	-Lab Blank 9/2/93
7440-09-7	Potassium	929	B		P	
7782-49-2	Selenium	3.3	U	N	F	
7440-22-4	Silver	2.6	~~B~~	U	P	CCB Contam
7440-23-5	Sodium	309	~~B~~	U	P	-Lab Blank 9/2/93
7440-28-0	Thallium	1.2	U		F	
7440-62-2	Vanadium	64.4			P	
7440-66-6	Zinc	569			P	
	Cyanide	2.5	U		CA	

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

005

9713505.0683

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

B06D30

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-05S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 17.6

PMB 8/23/93

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	65300			P	
7440-36-0	Antimony	18.5	U		P	
7440-38-2	Arsenic	36.9			F	
7440-39-3	Barium	61.6	B		P	
7440-41-7	Beryllium	0.44	U		P	
7440-43-9	Cadmium	3.8	~~B~~ U		P-	Lab blank 9/2/93
7440-70-2	Calcium	1820	B		P	
7440-47-3	Chromium	68.8			P	
7440-48-4	Cobalt	6.2	B		P	
7440-50-8	Copper	54.1			P	
7439-89-6	Iron	14100		*	P	
7439-92-1	Lead	59.8			F	
7439-95-4	Magnesium	2360	B		P	
7439-96-5	Manganese	101			P	
7439-97-6	Mercury	1.2			CV	
7440-02-0	Nickel	13.7	~~B~~ U		P-	Lab blank 9/2/93
7440-09-7	Potassium	539	B		P	
7782-49-2	Selenium	11.1		J*N	F	MSA corr. <0.995 - 9/2/93
7440-22-4	Silver	2.8	~~B~~ U		P	CCIS contam
7440-23-5	Sodium	288	~~B~~ U		P-	Lab blank 9/2/93
7440-28-0	Thallium	1.5	U		F	
7440-62-2	Vanadium	42.1	B		P	
7440-66-6	Zinc	564			P	
	Cyanide	2.8	U		CA	

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

006

$$\frac{(.040\ \frac{mg}{L})(.1L)}{(1.23g)(17.6/100)} = 1.2\ \frac{mg}{kg}$$

FORM I - IN ILM02.1

9713505.0684

WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D50

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D25

Matrix (soil/water): SOIL Lab Sample ID: 09043-06S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 99.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG 8/23/93

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	45.2			P	
7440-36-0	Antimony	3.1	U		P	
7440-38-2	Arsenic	0.93	B		F	
7440-39-3	Barium	0.54	U		P	
7440-41-7	Beryllium	0.07	U		P	
7440-43-9	Cadmium	0.19	U		P	
7440-70-2	Calcium	36.3	~~B~~ U		P	Blank (Prep) contamination
7440-47-3	Chromium	0.83	U		P	
7440-48-4	Cobalt	0.50	U		P	
7440-50-8	Copper	0.65	U		P	
7439-89-6	Iron	199		*	P	
7439-92-1	Lead	0.36	U		F	
7439-95-4	Magnesium	7.6	U		P	
7439-96-5	Manganese	1.1	~~B~~ U		P	CCB Contam.
7439-97-6	Mercury	0.05	U		CV	
7440-02-0	Nickel	1.0	U		P	
7440-09-7	Potassium	44.8	U		P	
7782-49-2	Selenium	0.66	U	SN	F	
7440-22-4	Silver	0.46	U		P	
7440-23-5	Sodium	30.3	~~B~~ U		P	Prep Blank Contam.
7440-28-0	Thallium	0.24	U		F	
7440-62-2	Vanadium	0.52	U		P	
7440-66-6	Zinc	2.0	~~B~~ U		P	PBS Contam
	Cyanide	0.46	U		CA	

Color Before: WHITE Clarity Before: Texture: FINE

Color After: WHITE Clarity After: Artifacts:

Comments:

007

SAMPLE NUMBER:

B06D31

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-01S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.21 ~~0.20~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMD 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

SAMPLE NUMBER:

B06D32

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-02S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.16			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMA 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

CC 003

SAMPLE NUMBER:

B06D34

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-03S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 86.7

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.4			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMA 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

004

SAMPLE NUMBER:

B06D38

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-04S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 96.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07 ~~0.06~~	B		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMS 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

005

9713505.0689 1

SAMPLE NUMBER:

B06D39

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-05S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 95.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓PMD 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

006

FORM I - IN ILM02.1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D40

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-06S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 97.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMA 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

SAMPLE NUMBER:

B06D41

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-07S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 97.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.04	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMA 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

.008

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D42

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-08S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 96.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07 ~~0.08~~	B		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMD 9/3/93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

009

FORM I - IN ILM02.1

9713505.0693 1

SAMPLE NUMBER:

B06D43

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-09S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 23.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	2.1 ~~2.2~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

PMD 9/3/93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

010

SAMPLE NUMBER:

B06D44

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-10S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 22.4

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.7 ~~1.5~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMD 9/3/93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

011

9713505.0695 1

SAMPLE NUMBER:

B06D45

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-11S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 41.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.36 ~~0.38~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMP 9/3/93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

012

FORM I - IN ILM02.1

SAMPLE NUMBER:

B06D46

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-12S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 37.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.51 ~~0.48~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMA 9/3/93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

013

9713505.0697 1

SAMPLE NUMBER:

B06D47

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-13S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 19.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.75 ~~0.81~~ 0.81			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMS 9/3/93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

014

FORM I - IN ILM02.1

9713505.0698 1

SAMPLE NUMBER:

B06D48

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-14S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 15.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.84 ~~0.77~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMD 9/3/93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

FORM I - IN ILM02.1

9713505.0699 1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D49

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-15S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 17.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.02 ~~0.85~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

✓ PMS 9/3/93

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

FORM I - IN ILM02.1

SAMPLE NUMBER:

B06D31

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-01S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.21 ~~0.20~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

9-22-93

SAMPLE NUMBER:

B06D32

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-02S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 98.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.16			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

9/28/93

WESTINGHOUSE/HANFORD

9713505.0702 1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D34

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-03S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 86.7

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.4			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

FORM I - IN ILM02.1

SAMPLE NUMBER:

B06D38

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-04S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 96.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07 ~~0.06~~	B		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

005

SAMPLE NUMBER:

B06D39

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-05S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 95.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

SAMPLE NUMBER:

B06D40

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-06S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 97.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.05	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

007

WESTINGHOUSE/HANFORD

9713505.0706 1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B06D41

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-07S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 97.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.04	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

HWB 9-22-93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

.008

FORM I - IN ILM02.1

SAMPLE NUMBER:

B06D42

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-08S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 96.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.07 ~~0.08~~	B		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

9-22-93

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts: YES

Comments:
STONES

009

SAMPLE NUMBER:

B06D43

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-09S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 23.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	2.1 ~~2.2~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

9-22-93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

SAMPLE NUMBER:

B06D44

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-10S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 22.4

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.7 ~~1.5~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

9-22-93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

011

SAMPLE NUMBER:

B06D45

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-11S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 41.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.36 ~~0.38~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

JMS 9-29

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

012

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B06D46

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-12S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 37.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.51 ~~0.48~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

013

SAMPLE NUMBER: B06D47

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-13S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 19.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.75 ~~0.81~~ 0.81/93			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

HMS 9-22-93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

014

SAMPLE NUMBER: B06D48

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-14S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 15.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.84 ~~0.77~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

9-22-93

Color Before: BLACK Clarity Before: Texture: FINE

Color After: BLACK Clarity After: Artifacts:

Comments:

FORM I - IN ILM02.1

SAMPLE NUMBER:

B06D49

INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N2-08-188SAS No.: SDG No.: B06D31

Matrix (soil/water): SOIL Lab Sample ID: 09044-15S

Level (low/med): LOW Date Received: 09/02/92

% Solids: 17.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.02 ~~0.85~~			CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

HMS 9-22

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

FORM I - IN ILM02.1

9713505.0715

Validation Reports 100-D PONDS

DATA VALIDATION REPORT FOR THE 100-D PONDS OPERABLE UNIT 100-D PONDS SAMPLING

Submitted To:

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P.O. Box 1970
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Richland, WA 99352

SEP 1993
RECEIVED
TQO

Submitted By:

A.T. Kearney, Inc.
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In Response To:

Purchase Order 272980
Task Order K-93-21

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SDLA

Document Control Number
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September 1993

DISCLAIMER

This report is designated as Revision 0. The report covers a specific site for a specific sampling time frame. The report addresses only those samples that have been provided for data validation review.

At the request of Westinghouse Hanford Company (Westinghouse-Hanford), 100 percent of the Sample Delivery Groups received by A.T. Kearney, Inc. from the 100-D Ponds Operable Unit Sampling Remedial Investigation and their related quality assurance samples were reviewed and validated to verify that reported sample results were of sufficient quality to meet quality control objectives.

ACRONYMS

%D	Percent difference
AA	Atomic absorption
BFB	Bromofluorobenzene
BNA	Base/neutral and acid (equivalent to semivolatiles)
CCB	Continuing calibration blank
CCV	Continuing calibration verification
CLP	Contract Laboratory Program
CRA	CRDL standard for AA
CRDL	Contract required detection limit
CRI	CRDL standard for ICP
CRII	CRDL standard for ICP initial
CRIF	CRDL standard for ICP final
CRQL	Contract required quantitation limit
DBC	Dibutylchlorendate
DFTPP	Decafluorotriphenylphosphine
DQO	Data quality objectives
EPA	U.S. Environmental Protection Agency
GC/MS	Gas chromatography/mass spectrometry
GC	Gas chromatography
GFAA	Graphite furnace atomic absorption
GPC	Gel permeation chromatography
ICB	Initial Calibration Blank
ICP	Inductively coupled plasma emission spectrometry
ICS	ICP interference check sample
ICV	Initial calibration verification
IDL	Instrument detection limit
LCS	Laboratory control sample
LCSS	Laboratory control sample soil
LCSW	Laboratory control sample water
MSA	Method of standard addition
MS/MSD	Matrix spike/matrix spike duplicate
NV	Not Validated
PCB	Polychlorinated biphenyl
PEM	Performance evaluation mixture
QA	Quality assurance
QC	Quality control
RF	Response factor
RIC	Reconstructed ion chromatogram
RPD	Relative percent difference
RRF	Relative response factor
RRT	Relative retention time
RSD	Relative standard deviation
RT	Retention time
SDG	Sample delivery group
SOW	Statement of work
TAL	Target analyte list
TCL	Target compound list
TIC	Tentatively identified compounds
TCLP	Toxicity characteristic leaching procedure
TOC	Total organic carbon
TOX	Total organic halides
V	Validated
VOC	Volatile organic compounds

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1.0 INTRODUCTION

The following samples were obtained from the 100-D Ponds Operable Unit Sampling event:

B06D25	B06D31	B06D40	B06D46	B06D52
B06D26	B06D32	B06D41	B06D47	B06D53
B06D27	B06D33	B06D42	B06D48	B06D54
B06D28	B06D34	B06D43	B06D49	B06D55
B06D29	B06D38	B06D44	B06D50	B06D56
B06D30	B06D39	B06D45	B06D51	B06D57

Westinghouse-Hanford has requested that 100 percent of the Sample Delivery Groups be validated for the 100-D Ponds Operable Unit Sampling Investigation. Therefore, the data from the chemical analysis of all 30 samples from this sampling event and their related quality assurance samples were reviewed and validated to verify that reported sample results were of sufficient quality to support decisions regarding remedial actions performed at this site.

A total of 19 samples were analyzed for inorganic TCLP metals. The TCLP is designed to determine the mobility of both organic and inorganic analytes present in liquid, solid and multiphasic wastes as defined in 40 CFR 261. The samples were analyzed by Thermo-Analytic Laboratories (TMA) and Roy F. Weston Laboratories (WESTON) using U.S. Environmental Protection Agency (EPA) CLP protocols and SW846 methods.

Sample analyses included:

- Volatile organics
- Semivolatile organics
- Pesticide/PCB organics
- Inorganics.

The table below lists the Sample Delivery Groups (SDGs) that were validated for this sampling event and included in this report.

SDG No.	Matrix	No. of Samples Analyzed	Parameters
B06D25	S	7	VOC
B06D25	S	6	BNA, Pesticide/PCB, Inorganics
B06D29	S	2	VOC, BNA, Pesticide/PCB
B06D29	S	1	Inorganics
B06D29	W	1	Inorganics
B06D31	S	17	VOC
B06D31	S	15	BNA, Pesticide/PCB, Inorganics
B06D31	W	15	Inorganics
B06D51	W	4	VOC
B06D51	W	3	BNA, Pesticide/PCB, Inorganics

Data quality was reviewed and analytical results validated using Westinghouse-Hanford procedures and related EPA protocols and guidelines. Data were qualified based upon their quality and the guidance provided by these sources. In instances where the protocols differed, the Westinghouse-Hanford guidance was followed.

Two sets of split samples were submitted to TMA and Roy F. Weston Laboratories as shown below:

Set 1:

Sample No.	Split Sample No.	Location
B06D27	B06D29	SP-6

Set 2:

Sample No.	Split Sample No.	Location
B06D31	B06D33	PP-7

The split sample results for both sets were included in the validated data. The results were compared using the sample guidelines for determining the RPD between a sample and its duplicate. The sample results for sampling location PP-7 were within spcified QC limits. The sample results for sampling location SP-6 were determined to have moisture contents of well over 50% leading to increased detection limits and standard method error. Therefore, a direct comparison of the results from this location has not been made. All results for both well locations appear in the summary tables within this report.

Two sets of field duplicate samples were submitted to TMA as shown below.

Set 1:

Sample No.	Duplicate Sample No.	Location
B06D27	B06D28	SP-6

Set 2:

Sample No.	Duplicate Sample No.	Location
B06D31	B06D32	PP-7

The duplicate sample results for both sets were included in the validated data. The results were compared using the sample guidelines for determining the RPD between a sample and its duplicate. The sample results for sampling location PP-7 were within the specified QC limits. The sample results for sampling location SP-6 were determined to have moisture contents of well over 50% leading to increased detection limits and standard method error. Therefore, a direct comparison of the results from this location has not been made. All results for both locations appear in the summary tables within this report.

Two sets of equipment blanks were submitted to TMA as shown in the table below. The first set was collected on 8/25/92. The second set was collected on 8/26/92.

Set 1: Sample Number	Set 2: Sample Number
B06D50	B06D52 B06D57

Under EPA protocol, equipment blanks are water samples used to indicate whether or not decontamination procedures were adequate or that contamination was not inherent in the equipment used. The equipment blank information provided was inadequate to determine what contamination, if any, was a result of the

equipment used. Equipment blanks require associated sample numbers in order to make such a determination.

The report is broken down into sections for each chemical analysis type. Each section addresses the data package completeness, holding time adherence, instrument calibration and tuning acceptability, blank results, accuracy, precision, system performance, as well as the compound identification and quantitation. In addition, each section has an overall assessment and summary for the data packages reviewed for the particular chemical analyses. Detailed backup information is provided to the reader by SDG No. and sample number. For each data package, a matrix of chemical analyses per sample number is presented, as well as data qualification summaries.

Laboratory and data validation personnel added qualifiers to the reported data based on specified data quality objectives. The data reporting qualifiers are summarized as follows:

U - Indicates the analyte was analyzed for and not detected. The value reported is the sample quantitation limit corrected for dilutions and moisture content. It should be noted that the sample quantitation limit may be higher or lower than the contract or method required detection limit, depending on instrumentation, matrix and concentration factors.

J - Indicates the analyte was analyzed for and detected. However, the associated value is considered to be an estimate due to identified QC deficiencies. Data flagged with a "J" may be usable for decision making purposes, depending upon the DQOs of the project. Laboratories qualify all reported organic detects below CRQL with a "J" per the CLP procedures.

UJ - Indicates the analyte was analyzed for and not detected. However, the associated detection limit is considered to be an estimate due to identified QC deficiencies. Detection limits flagged with a "UJ" may be usable for decision making purposes, depending upon the DQOs of the project.

JN - Indicates the analyte was analyzed for and that there is presumptive evidence of the presence of the compound. The concentration reported is considered an estimate which should be used for informational purposes only.

E - Indicates the analyte was analyzed for and detected at a concentration outside of the calibration range of the instrument. All reported concentrations flagged with an "E" are estimates which may contain significant error.

R - Indicates the analyte was analyzed for and due to a significant QC deficiency, the data are deemed unusable. Analytic results flagged "R" are invalid and provide no information as to whether or not the analyte is present.

It should be noted that, frequently, results will bear two qualifiers—one given by the laboratory and one given during the validation process. For example, a "U" qualifier is given by the laboratory when the compound has not been detected, and a "J" qualifier may be added during validation to qualify the result due to minor quality problems. Therefore, the resulting qualification is a "UJ", where the "U" qualifier has been given by the laboratory and the "J" qualifier was given by the validator.

The results of data validation performed for the 100-D Ponds Operable Unit Sampling Investigation are contained in the tables following each of the chapters in this report.

Several general quality trends which resulted in data qualification were observed. These included:

- Eleven soil samples submitted for analysis were found to have moisture contents of over 50 percent. The organic results from these samples have been flagged "J" and should only be used as gross estimates.

- Minor blank contamination was noted in the volatile and semivolatile results for several samples. The contaminants were compounds commonly found in analytical laboratories and the corresponding sample results were qualified accordingly.

- Several samples exhibited volatile surrogate recoveries and internal standard areas outside QC limits due to apparent matrix interferences. All associated results were qualified as estimates.

- Holding times for mercury in several TCLP samples fell outside the limit. The sample results were qualified as estimates.

- The metals analysis showed minor matrix spike accuracy problems, laboratory duplicate RPD results outside of QC, ICP serial dilution percent difference outside QC, analytical spike recoveries below the QC limit and MSA correlation coefficients less than 0.995. Approximately 5 percent of the metals results were flagged "J" due to these factors.

- Some laboratory blank contamination was noted in the inorganics analysis. Associated results were flagged accordingly. Contamination, however, was not sufficiently high to affect the usability of the data.

In general, the protocol-specific QA/QC requirements were met for the samples analyzed in this investigation with the exceptions noted above and discussed in detail in the chapters to follow. All requested analyses were performed.

With the exceptions noted above, the protocol-specific data quality objectives in terms of precision, accuracy, completeness, representativeness, and comparability have been met.

WELL AND SAMPLE INFORMATION				SAMPLE LOCATION INFORMATION
SAMPLE LOCATION	SAMPLE NUMBER	MATRIX	DATE SAMPLED	VOLATILES
PP-1	B06D42	S	8/25/92	2-11
PP-2	B06D41	S	8/25/92	2-11
PP-3	B06D40	S	8/25/92	2-11
PP-4	B06D39	S	8/25/92	2-11
PP-5	B06D38	S	8/25/92	2-11
PP-6	B06D26 B06D34	S S	8/25/92 8/25/92	2-6 2-11
PP-7	B06D25 B06D31 B06D32 B06D33	S S S S	8/25/92 8/25/92 8/25/92 8/25/92	2-6 2-11 2-11 2-8
EB-PP	B06D50	S	8/25/92	2-6
SP-1	B06D43	S	8/25/92	2-11
SP-2	B06D45	S	8/26/92	2-12
SP-3	B06D46	S	8/26/92	2-12
SP-4	B06D47	S	8/26/92	2-12
SP-5	B06D48	S	8/26/92	2-12
SP-5,7	B06D51	W	8/25/92	2-17
SP-6	B06D27 B06D28 B06D29 B06D44	S S S S	8/26/92 8/26/92 8/26/92 8/26/92	2-6 2-6 2-8 2-11
SP-7	B06D30 B06D49	S S	8/26/92 8/26/92	2-6 2-12
EB-SP	B06D57	W	8/26/92	2-17
EB	B06D52	W	8/26/92	2-17
TB	B06D53 B06D54 B06D55 B06D56	W S S S	8/26/92 8/26/92 8/26/92 8/26/92	2-17 2-6 2-12 2-12

2.0 VOLATILE ORGANIC DATA VALIDATION

2.1 DATA PACKAGE COMPLETENESS

The following data packages (SDG Nos.) were submitted for validation and found to be complete:

B06D25 B06D29 B06D31 B06D51

The percent moisture content was determined, as required, for all soil samples submitted for analysis. Several samples had significant moisture content. The following samples displayed moisture contents of fifty percent or more.

- Sample numbers B06D27, B06D28 and B06D30 in SDG No. B06D25.
- Sample number B06D29 in SDG No. B06D29.
- Sample numbers B06D43, B06D44, B06D45, B06D46, B06D47, B06D48 and B06D49 in SDG No. B06D31.

All results for these samples have been qualified as estimates and flagged "J".

2.2 HOLDING TIMES

Analytical holding times were assessed to ascertain whether the Westinghouse-Hanford holding time requirements for volatile organic analyses were met by the laboratory. The Westinghouse-Hanford holding time requirements for volatile organic analyses are as follows: soil samples must be analyzed within 14 days of the date of sample collection; aqueous samples must be analyzed within seven days of the date of sample collection (if unpreserved); and all samples must be shipped on ice to the laboratory and stored at 4°C until analysis.

Holding times were met for all samples.

2.3 INSTRUMENT CALIBRATION AND TUNING

Instrument calibration is performed to establish that the GC/MS instrument is capable of producing acceptable and reliable analytical data over a range of concentrations. The initial and continuing calibrations are to be performed according to CLP protocols. An initial multipoint calibration is performed prior to sample analysis to establish the linear range of the GC/MS

instrument. Continuing calibration checks are performed to verify that instrument performance is stable and reproducible on a day-to-day basis.

The continuing calibration results for sample numbers B06D44 and B06D48 in SDG No. B06D31 exhibited % differences slightly above the QC limits for bromomethane, chloroethane and carbon disulfide. All associated results were qualified as estimates and flagged "J".

All other initial and continuing calibration results were acceptable.

2.3.1 GC/MS Tuning/Instrument Performance Check

Tuning is performed to ensure that mass resolution, identification, and, to some degree, sensitivity of the GC/MS instrument have been established. When analyzing for volatile organics, instrument tuning is performed with BFB. Instrument tuning must be performed prior to the analysis of either standards or samples and must meet the criteria for acceptable GC/MS instrument tuning using BFB as outlined in Westinghouse-Hanford (WHC 1991) and in EPA (EPA 1988a and 1988b) criteria.

The original data were checked for transcription and calculation errors to verify that tuning criteria were met. Prior to calibration and sample analysis, all tuning criteria were met.

All GC/MS tuning data were acceptable.

2.4 BLANKS

Method blank and field blank analyses are performed to determine the extent of laboratory or field contamination of samples. No contaminants should be present in the blanks. Analytical results for analytes present in any sample at less than 5 times the concentration of that analyte found in associated blanks should be qualified as non-detects; common laboratory contaminants present in the samples at less than 10 times the concentration of that analyte are qualified as non-detects.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for methylene chloride:

- Sample number B06D33 in SDG No. B06D29.
- Sample number B06D51 in SDG No. B06D51.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for acetone:

- Sample number B06D33 in SDG No. B06D29.

All other laboratory and field blank results were acceptable.

2.5 ACCURACY

Accuracy was assessed by evaluating the recoveries of stable isotopically labeled surrogate compounds added to all samples and blanks, and by the analysis of a representative sample which was spiked with a variety of volatile organic compounds.

2.5.1 Matrix Spike Recovery

Matrix spike compounds are added to a sample which is representative of the sample delivery group. Matrix spike analyses are performed in duplicate using five compounds and should be within the established quality control limits (EPA 1988b). The matrix spike analyses estimate how much the target compounds are interfered with, either positively or negatively, by the sample matrix.

All MS/MSD results were acceptable.

2.5.2 Surrogate Recovery

Matrix-specific surrogate compound recovery control windows have been established by the EPA CLP program. When a surrogate compound recovery is out of the control window, all positively identified target compounds associated with the unacceptable surrogate recoveries are qualified as estimates (J). Undetected compounds are qualified as having an estimated detection limit (UJ).

- Sample numbers B06D39, B06D41 and B06D42 in SDG No. B06D31 had a percent recovery for one surrogate compound outside of QC limits. All VOC results for these three samples were qualified as estimates and flagged "J".

All other surrogate recovery results were acceptable.

2.6 PRECISION

Precision is expressed by the relative percent difference (RPD) between the recoveries of duplicate matrix spike analyses performed on a sample. When the laboratory has not performed duplicate spike analyses, precision may also be assessed using unspiked duplicate sample analyses. Field precision is measured by analyzing duplicate samples taken in the field.

All matrix spike/matrix spike duplicate RPD results were acceptable.

2.7 INTERNAL STANDARDS PERFORMANCE

Internal standard performance was assessed to determine whether abrupt changes in instrument response and sensitivity occurred that may have affected the reliability of the analytical data. The response (area or height) of the internal standards must not vary by more than 100 percent or -50 percent from the response of the internal standard that was used to calculate the upper and lower bounds. The upper and lower bounds define the range for acceptable internal standard response (area/height) for the sample analyses.

Several samples exhibited low internal standard areas. The analyte results associated with each of the following internal standards were qualified as estimates and flagged "J".

- Chlorobenzene-d5 in sample numbers B06D34 and B06D39 in SDG No. B06D31.
- 1,4-Difluorobenzene and chlorobenzene-d5 in sample number B06D33 in SDG No. B06D29, and sample number B06D40 in SDG No. B06D31.
- Bromochloromethane, 1,4-difluorobenzene and chlorobenzene-d5 in sample number B06D42 in SDG No. B06D31.

All other internal standard recovery results were acceptable.

2.8 COMPOUND IDENTIFICATION AND QUANTITATION

The identity of detected compounds are confirmed to investigate the possibility of false positives. The confirmation of compound identification during the quality assurance review focuses on false positives because only mass spectra for positive identifications are submitted. However, target compounds that are reported as undetected are also evaluated to investigate the possibility of false negatives. Confirmation of possible false negatives is addressed by reviewing other factors relating to analytical sensitivity (e.g., relative response factors, detection limits, linearity, analytical recovery).

Compound quantitations and reported detection limits were recalculated for a minimum of 20 percent of the samples in each case to verify that they are accurate and are consistent with CLP requirements.

Below the CRQL, instrument precision becomes more variable as the instrument detection limit is approached. Therefore, the

concentration of any compound that was detected below the CRQL was qualified as an estimate (J).

2.9 OVERALL ASSESSMENT AND SUMMARY

A thorough review of ongoing data acquisition and instrument performance criteria was made to assess overall GC/MS instrument performance. No changes in instrument performance were noted that would result in the degradation of data quality. No indications of unacceptable instrument performance (i.e., shifts in baseline stability, retention time shifts, extraneous peaks, or sensitivity) were found during the quality assurance review.

In general, the volatile data presented in this report met the protocol-specified QA/QC requirements. Minor blank contamination was detected in nine samples. All results for eleven samples were qualified as estimates due to high moisture content. The quantitations reported for these samples should be considered to be gross estimates. Several samples displayed surrogate recoveries and internal standard areas outside of QC limits, apparently due to matrix interferences. The associated data were qualified as estimates and are usable for limited purposes only. All other data are considered valid and usable within the standard error associated with the method.

VOLATILE ORGANIC ANALYSIS, SOIL MATRIX, (ug/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D25																				
Sample Number		B06D25		B06D26		B06D27		B06D28		B06D30		B06D50		B06D54							
Location		PP-7		PP-6		SP-6		SP-6		SP-7											
Remarks								DUP				EB		TB							
Sample Date		08/25/92		08/25/92		08/26/92		08/26/92		08/26/92		08/25/92		08/26/92							
Analysis Date		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92							
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Bromomethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Vinyl Chloride	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Chloroethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Methylene Chloride	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Acetone	10	10	U	11	U	780	J	970	J	610	J	10	U	14							
Carbon Disulfide	10	10	U	11	U	31	J	71	J	38	J	10	U	10	U						
1,1-Dichloroethene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
1,1-Dichloroethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
1,2-Dichloroethene (total)	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Chloroform	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
1,2-Dichloroethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
2-Butanone	10	10	J	12		140	J	240	J	150	J	10	U	10	U						
1,1,1-Trichloroethane	10	10	U	6	J	42	UJ	53	UJ	71	UJ	10	U	10	U						
Carbon Tetrachloride	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Bromodichloromethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
1,2-Dichloropropane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
cis-1,3-Dichloropropene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Trichloroethene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Dibromochloromethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
1,1,2-Trichloroethane	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Benzene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
trans-1,3-Dichloropropene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Bromoform	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
4-Methyl-2-pentanone	10	9	J	11	U	42	UJ	7	J	71	UJ	10	U	10	U						
2-Hexanone	10	9	J	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Tetrachloroethene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
1,1,2,2-Tetrachloroethane	10	3	J	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Toluene	10	10	U	11	U	13	J	11	J	71	UJ	10	U	10	U						
Chlorobenzene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Ethylbenzene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Styrene	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						
Xylene (total)	10	10	U	11	U	42	UJ	53	UJ	71	UJ	10	U	10	U						

DUP = Duplicate, EB = Equipment Blank, PP = Percolation Pond, SP = Settling Pond, TB = Trip Blank

9713505.0731
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DATA QUALIFICATION SUMMARY

SDG: B06D25	REVIEWER: CH	DATE: 8/30/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All VOC compounds	J	B06D27, B06D28, B06D30	% Moisture >50%

VOLATILE ORGANIC ANALYSIS, SOIL MATRIX, (ug/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: Roy F. Weston																					
Case	SDG: B06D29																				
Sample Number		B06D29		B06D33																	
Location		SP-6		PP-7																	
Remarks		Split		Split																	
Sample Date		08/26/92		08/25/92																	
Analysis Date		09/04/92		09/01/92																	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	10	37	UJ	10	U																
Bromomethane	10	37	UJ	10	U																
Vinyl Chloride	10	37	UJ	10	U																
Chloroethane	10	37	UJ	10	U																
Methylene Chloride	10	110	J	14	U																
Acetone	10	490	J	38	U																
Carbon Disulfide	10	37	UJ	10	U																
1,1-Dichloroethene	10	37	UJ	10	U																
1,1-Dichloroethane	10	37	UJ	10	U																
1,2-Dichloroethene (total)	10	37	UJ	10	U																
Chloroform	10	37	UJ	10	U																
1,2-Dichloroethane	10	37	UJ	10	U																
2-Butanone	10	32	J	10	U																
1,1,1-Trichloroethane	10	37	UJ	10	UJ																
Carbon Tetrachloride	10	37	UJ	10	UJ																
Bromodichloromethane	10	37	UJ	10	UJ																
1,2-Dichloropropane	10	37	UJ	10	UJ																
cis-1,3-Dichloropropene	10	37	UJ	10	UJ																
Trichloroethene	10	37	UJ	10	UJ																
Dibromochloromethane	10	37	UJ	10	UJ																
1,1,2-Trichloroethane	10	37	UJ	10	UJ																
Benzene	10	37	UJ	10	UJ																
trans-1,3-Dichloropropene	10	37	UJ	10	UJ																
Bromoform	10	37	UJ	10	UJ																
4-Methyl-2-pentanone	10	37	UJ	10	UJ																
2-Hexanone	10	37	UJ	10	UJ																
Tetrachloroethene	10	37	UJ	10	UJ																
1,1,2,2-Tetrachloroethane	10	37	UJ	10	UJ																
Toluene	10	5	J	10	UJ																
Chlorobenzene	10	37	UJ	10	UJ																
Ethylbenzene	10	37	UJ	10	UJ																
Styrene	10	37	UJ	10	UJ																
Xylene (total)	10	37	UJ	10	UJ																

PP = Percolation Pond, SP = Settling Pond

9713505.0734
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BLANK AND SAMPLE DATA SUMMARY

SDG: B06D29	REVIEWER: SC			DATE: 8/23/93				PAGE 1 OF 1	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
92LVW198-MB1	Methylene chloride	5	J		ug/kg	25	50	B06D33	U
92LVW198-MB1	Acetone	8	J		ug/kg	40	80	B06D33	U

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DATA QUALIFICATION SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/23/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Methylene chloride	U	B06D33	Lab blank contamination
Acetone	U	B06D33	Lab blank contamination
All compounds associated with 1,4-Difluorobenzene and Chlorobenzene-d5	J	B06D33	Internal standard area Low counts
All VOC compounds	J	B06D29	% moisture > 50%

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D31																				
Sample Number		B06D31		B06D32		B06D34		B06D38		B06D39		B06D40		B06D41		B06D42		B06D43		B06D44	
Location		PP-7		PP-7		PP-6		PP-5		PP-4		PP-3		PP-2		PP-1		SP-1		SP-6	
Remarks				DUP																	
Sample Date		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/26/92	
Analysis Date		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92		09/03/92		09/04/92		09/08/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	10	10	U	10	U	11	U	10	U	10	UJ	10	U	10	UJ	10	UJ	130	UJ	120	UJ
Bromomethane	10	10	U	10	U	11	U	10	U	10	UJ	10	U	10	UJ	10	UJ	130	UJ	120	UJ
Vinyl Chloride	10	10	U	10	U	11	U	10	U	10	UJ	10	U	10	UJ	10	UJ	130	UJ	120	UJ
Chloroethane	10	10	U	10	U	11	U	10	U	10	UJ	10	U	10	UJ	10	UJ	130	UJ	120	UJ
Methylene Chloride	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
Acetone	10	10	U	10	U	11	U	10	U	10	UJ	10	U	10	UJ	10	UJ	850	J	500	J
Carbon Disulfide	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
1,1-Dichloroethene	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
1,1-Dichloroethane	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
1,2-Dichloroethene (total)	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
Chloroform	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
1,2-Dichloroethane	10	5	U	5	U	6	U	5	U	5	UJ	5	U	5	UJ	5	UJ	66	UJ	62	UJ
2-Butanone	10	10	U	10	U	11	U	10	U	10	UJ	10	UJ	10	UJ	10	UJ	130	UJ	120	UJ
1,1,1-Trichloroethane	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Carbon Tetrachloride	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Vinyl Acetate	10	10	U	10	U	11	U	10	U	10	UJ	10	UJ	10	UJ	10	UJ	130	UJ	120	UJ
Bromodichloromethane	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
1,2-Dichloropropane	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
cis-1,3-Dichloropropene	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Trichloroethene	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Dibromochloromethane	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
1,1,2-Trichloroethane	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Benzene	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
trans-1,3-Dichloropropene	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
2-Chloroethyl vinyl ether	10	10	U	10	U	11	U	10	U	10	UJ	10	UJ	10	UJ	10	UJ	130	UJ	120	UJ
Bromoform	10	5	U	5	U	6	U	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
4-Methyl-2-pentanone	10	10	U	10	U	11	UJ	10	U	10	UJ	10	UJ	10	UJ	10	UJ	130	UJ	120	UJ
2-Hexanone	10	10	U	10	U	11	UJ	10	U	10	UJ	10	UJ	10	UJ	10	UJ	130	UJ	120	UJ
Tetrachloroethene	10	5	U	5	U	6	UJ	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
1,1,2,2-Tetrachloroethane	10	5	U	5	U	6	UJ	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Toluene	10	9		4	J	6	UJ	8		14	J	22	J	14	J	12	J	66	UJ	62	UJ
Chlorobenzene	10	5	U	5	U	6	UJ	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Ethylbenzene	10	5	U	5	U	6	UJ	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Styrene	10	5	U	5	U	6	UJ	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ
Xylene (total)	10	5	U	5	U	6	UJ	5	U	5	UJ	5	UJ	5	UJ	5	UJ	66	UJ	62	UJ

DUP = Duplicate, PP = Percolation Pond, SP = Settling Pond, TB = Trip Blank

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Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D31																				
Sample Number		B06D45		B06D46		B06D47		B06D48		B06D49		B06D55		B06D56							
Location		SP-2		SP-3		SP-4		SP-5		SP-7											
Remarks												TB		TB							
Sample Date		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92							
Analysis Date		09/04/92		09/04/92		09/05/92		09/08/92		09/05/92		09/03/92		09/04/92							
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Bromomethane	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Vinyl Chloride	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Chloroethane	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Methylene Chloride	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Acetone	10	570	J	380	J	580	J	2200	J	430	J	8	J	21	J						
Carbon Disulfide	10	29	J	40	J	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,1-Dichloroethene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,1-Dichloroethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,2-Dichloroethene (total)	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Chloroform	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,2-Dichloroethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
2-Butanone	10	69	UJ	93	UJ	130	UJ	390	J	130	UJ	10	U	10	U						
1,1,1-Trichloroethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Carbon Tetrachloride	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Vinyl Acetate	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Bromodichloromethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,2-Dichloropropane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
cis-1,3-Dichloropropene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Trichloroethene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Dibromochloromethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,1,2-Trichloroethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Benzene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
trans-1,3-Dichloropropene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
2-Chloroethyl vinyl ether	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Bromoform	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
4-Methyl-2-pentanone	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
2-Hexanone	10	69	UJ	93	UJ	130	UJ	170	UJ	130	UJ	10	U	10	U						
Tetrachloroethene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
1,1,2,2-Tetrachloroethane	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Toluene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Chlorobenzene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Ethylbenzene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Styrene	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						
Xylene (total)	10	35	UJ	46	UJ	66	UJ	83	UJ	66	UJ	5	U	5	U						

DUP = Duplicate, PP = Percolation Pond, SP = Settling Pond, TB = Trip Blank

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CALIBRATION DATA SUMMARY

SDG: B06D31	REVIEWER: CH		DATE: 8/25/93		PAGE 1 OF 1	
COMMENTS:						
CALIB. TYPE:	INITIAL	CONTINUING	INSTRUMENT: 4500			
CALIB. DATE	COMPOUND		RF	RSD/%D/%R	SAMPLES AFFECTED	QUALIFIER
9/8/92	Bromomethane			40.0	B06D44, B06D48	J
9/8/92	Chloroethane			40.2	B06D44, B06D48	J
9/8/92	Carbon Disulfide			41.2	B06D44, B06D48	J

BLANK AND SAMPLE DATA SUMMARY

SDG: B06D31	REVIEWER: CH			DATE: 8/25/93				PAGE 1 OF 1	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
VBLK0904R1	Acetone	12	J		ug/Kg	60	120	B06D43, B06D45, B06D46, B06D47, B06D49	None
VBLK0908R	Acetone	9	J		ug/Kg	45	90	B06D44	None

ACCURACY DATA SUMMARY

SDG: B06D31	REVIEWER: CH	DATE: 8/25/93	PAGE 1 OF 1	
COMMENTS:				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D39	Toluene-d8	119	B06D39	J
B06D41	Bromofluorobenzene	73	B06D41	J
B06D42	Toluene-d8	118	B06D42	J

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DATA QUALIFICATION SUMMARY

SDG: B06D31	REVIEWER: CH	DATE: 8/25/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All VOC compounds	J	B06D43, B06D44, B06D45, B06D46, B06D47, B06D48, B06D49	% Moisture >50%
Bromomethane	J	B06D44, B06D48	Continuing calibration
Chloroethane	J	B06D44, B06D48	Continuing calibration
Carbon disulfide	J	B06D44, B06D48	Continuing calibration
All VOC compounds	J	B06D39, B06D41, B06D42	Surrogate recoveries
All compounds associated with cholorbenzene-d5	J	B06D34, B06D39	Low internal standard area count
All compounds associated with 1,4-difluorobenzene and chlorobenzene-d5	J	B06D40	Low internal standard area counts
All VOC compounds	J	B06D42	Low internal standard area counts

VOLATILE ORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D51																				
Sample Number		B06D51		B06D52		B06D53		B06D57													
Location		SP-5,7																			
Remarks				EB		TB		EB													
Sample Date		08/25/92		08/26/92		08/26/92		08/26/92													
Analysis Date		09/04/92		09/04/92		09/04/92		09/04/92													
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	10	10	U	10	U	10	U	10	U												
Bromomethane	10	10	U	10	U	10	U	10	U												
Vinyl Chloride	10	10	U	10	U	10	U	10	U												
Chloroethane	10	10	U	10	U	10	U	10	U												
Methylene Chloride	10	10	U	2	J	2	J	3	J												
Acetone	10	10	U	10	U	10	U	10	U												
Carbon Disulfide	10	5	U	5	U	5	U	5	U												
1,1-Dichloroethene	10	5	U	5	U	5	U	5	U												
1,1-Dichloroethane	10	5	U	5	U	5	U	5	U												
1,2-Dichloroethene (total)	10	5	U	5	U	5	U	5	U												
Chloroform	10	5	U	5	U	2	J	5	U												
1,2-Dichloroethane	10	5	U	5	U	5	U	5	U												
2-Butanone	10	10	U	10	U	10	U	10	U												
1,1,1-Trichloroethane	10	5	U	5	U	5	U	5	U												
Carbon Tetrachloride	10	5	U	5	U	5	U	5	U												
Vinyl Acetate	10	10	U	10	U	10	U	10	U												
Bromodichloromethane	10	5	U	5	U	5	U	5	U												
1,2-Dichloropropane	10	5	U	5	U	5	U	5	U												
cis-1,3-Dichloropropene	10	5	U	5	U	5	U	5	U												
2-Chloroethylvinylether	10	10	U	10	U	10	U	10	U												
Trichloroethene	10	5	U	5	U	5	U	5	U												
Dibromochloromethane	10	5	U	5	U	5	U	5	U												
1,1,2-Trichloroethane	10	5	U	5	U	5	U	5	U												
Benzene	10	5	U	5	U	5	U	5	U												
trans-1,3-Dichloropropene	10	5	U	5	U	5	U	5	U												
Bromoform	10	5	U	5	U	5	U	5	U												
4-Methyl-2-pentanone	10	10	U	10	U	10	U	10	U												
2-Hexanone	10	10	U	10	U	10	U	10	U												
Tetrachloroethene	10	5	U	5	U	5	U	5	U												
1,1,2,2-Tetrachloroethane	10	5	U	5	U	5	U	5	U												
Toluene	10	5	U	5	U	5	U	5	U												
Chlorobenzene	10	5	U	5	U	5	U	5	U												
Ethylbenzene	10	5	U	5	U	5	U	5	U												
Styrene	10	5	U	5	U	5	U	5	U												
Xylene (total)	10	5	U	5	U	5	U	5	U												

TB = Trip Blank, EB = Equipment Blank, SP = Settling Pond

97135056.1R
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BLANK AND SAMPLE DATA SUMMARY

SDG: B06D51	REVIEWER: CH			DATE: 8/30/93				PAGE 1 OF 1	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
VBLK0904W	Methylene chloride	4	J		ug/L	20	40	B06D51	U

DATA QUALIFICATION SUMMARY

SDG: B06D51	REVIEWER: CH	DATE: 8/30/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Methylene chloride	U	B06D51	Lab blank contamination

WELL AND SAMPLE INFORMATION				SAMPLE LOCATION INFORMATION
SAMPLE LOCATION	SAMPLE NUMBER	MATRIX	DATE SAMPLED	SEMIVOLATILES
PP-1	B06D42	S	8/25/92	3-13, 3-14
PP-2	B06D41	S	8/25/92	3-13, 3-14
PP-3	B06D40	S	8/25/92	3-13, 3-14
PP-4	B06D39	S	8/25/92	3-13, 3-14
PP-5	B06D38	S	8/25/92	3-13, 3-14
PP-6	B06D26 B06D34	S S	8/25/92 8/25/92	3-6, 3-7 3-13, 3-14
PP-7	B06D25 B06D31 B06D32 B06D33	S S S S	8/25/92 8/25/92 8/25/92 8/25/92	3-6, 3-7 3-13, 3-14 3-13, 3-14 3-9, 3-10
EB-PP	B06D50	S	8/25/92	3-6, 3-7
SP-1	B06D43	S	8/25/92	3-13, 3-14
SP-2	B06D45	S	8/26/92	3-15, 3-16
SP-3	B06D46	S	8/26/92	3-15, 3-16
SP-4	B06D47	S	8/26/92	3-15, 3-16
SP-5	B06D48	S	8/26/92	3-15, 3-16
SP-5,7	B06D51	W	8/25/92	3-18, 3-19
SP-6	B06D27 B06D28 B06D29 B06D44	S S S S	8/26/92 8/26/92 8/26/92 8/26/92	3-6, 3-7 3-6, 3-7 3-9, 3-10 3-13, 3-14
SP-7	B06D30 B06D49	S S	8/26/92 8/26/92	3-6, 3-7 3-15, 3-16
EB-SP	B06D57	W	8/26/92	3-18, 3-19
EB	B06D52	W	8/26/92	3-18, 3-19

3.0 SEMIVOLATILE DATA VALIDATION

3.1 DATA PACKAGE COMPLETENESS

The following data packages (SDG Nos.) were submitted for validation and found to be complete:

B06D25 B06D29 B06D31 B06D51

The percent moisture content was determined, as required, for all soil samples submitted for analysis. Several samples had significant moisture content. The following samples displayed moisture contents of fifty percent or more.

- Sample numbers B06D27, B06D28 and B06D30 in SDG No. B06D25.
- Sample number B06D29 in SDG No. B06D29.
- Sample numbers B06D43, B06D44, B06D45, B06D46, B06D47, B06D48 and B06D49 in SDG No. B06D31.

All results for these samples have been qualified as estimates and flagged "J".

3.2 HOLDING TIMES

Analytical holding times were assessed to ascertain whether the holding time requirements for semivolatile analyses were met by the laboratory. Westinghouse-Hanford protocols require that samples be extracted within seven days of collection and be analyzed within 40 days of extraction (WHC 1991a).

Holding time requirements were met for all samples.

3.3 INSTRUMENT CALIBRATION AND TUNING

3.3.1 GC/MS Tuning/Instrument Performance Check

Tuning is performed to ensure that mass resolution, and to some degree, sensitivity, of the GC/MS instrument has been established. When analyzing for semivolatile organic compounds, the GC/MS is tuned using DFTPP. The GC/MS must be tuned prior to the analysis of either standards or samples, and tuning must meet the criteria established by the analytical protocol. The specific criteria for acceptable GC/MS tuning using DFTPP are

outlined in Westinghouse-Hanford procedures (WHC 1991) and in CLP protocols (EPA 1988a and 1988b).

As part of data validation, the original tuning data were checked for transcription and calculation errors to verify that tuning and performance criteria were met.

All tuning and performance criteria were met.

3.3.2 Initial Calibration

The GC/MS instrument is calibrated to ensure that it is capable of producing acceptable and reliable analytical data over a range of concentrations. The initial and continuing calibrations are to be performed according to CLP protocols. An initial multipoint calibration is performed prior to sample analysis to establish the linearity range of the GC/MS instrument. Continuing calibration checks are performed to verify that instrument performance is stable and reproducible on a day-to-day basis.

Instrument response is established by the initial calibration when the RRFs for all target compounds are greater than or equal to 0.05 units. Linearity is established when the RSDs of the RRFs are less than or equal to 30 percent.

All initial calibration results were acceptable.

3.3.3 Continuing Calibration

The criteria for accepting the continuing calibration require that a standard be analyzed at least once per 12 hour period and that the RRFs of all target compounds be greater than or equal to 0.05 units. In addition, the percent difference of these RRFs must be less than or equal to 25 percent of the average RRFs calculated for the associated initial calibration.

All continuing calibration results were acceptable.

3.4 BLANKS

Method blank and field blank analyses are performed to determine the extent of laboratory or field contamination of samples. No contaminants should be present in the blanks. Analytical results for analytes present in any sample at less than 5 times the concentration of that analyte found in associated blanks should be qualified as non-detects; in the case of certain common laboratory contaminants, results less than 10 times blank concentrations should be qualified as non-detects.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for di-n-butylphthalate:

- Sample number B06D29 in SDG No. B06D29.
- Sample number B06D51 in SDG No. B06D51.

All other laboratory blank results were acceptable.

3.5 ACCURACY

Accuracy was assessed by evaluating the recoveries of stable isotopically labeled surrogate compounds added to all samples and blanks, and by the analysis of a representative sample which was spiked with a variety of organic compounds.

3.5.1 Matrix Spike Recovery

Matrix spike compounds are added to a sample which is representative of the sample delivery group. Matrix spike analyses are performed in duplicate using the 11 compounds specified by CLP protocols. All recoveries for the 11 compounds should be within the established QC limits (EPA 1988b). The matrix spike analyses estimate how much the analyses for the target compounds are interfered with, either positively or negatively, by the sample matrix. Because the matrix spike is performed using only one of the samples extracted within the SDG, these data alone cannot be used to evaluate the precision and accuracy of individual samples.

All matrix spike/matrix spike duplicate recovery results were acceptable.

3.5.2 Surrogate Recovery

Surrogate compound recoveries are calculated using analytical results from six stable, isotopically labeled surrogate compounds added to the sample prior to sample preparation and analysis. Matrix-specific surrogate compound recovery control windows have been established by the EPA CLP program. When recoveries for any two surrogate compounds are out of the control window, all positively identified target compound concentrations in samples associated with the unacceptable surrogate recoveries are qualified as estimates (J) and undetected compounds are qualified estimated below the detection limit (UJ).

All surrogate recovery results were acceptable.

3.6 PRECISION

The precision is expressed by the RPD between the recoveries of the matrix spike and the matrix spike duplicate analyses performed on a sample, and through a comparison of the results

for field duplicate samples. Acceptable RPD control windows for matrix spike/matrix spike duplicate analyses have been established by the EPA CLP program.

Field precision is measured by analyzing duplicate samples taken in the field. No standards have been established for qualifying data based on RPD for duplicate field samples by CLP protocols. Westinghouse-Hanford procedures establish the following criteria for duplicate field sample analyses for organic compounds, based on criteria established for inorganic analyses for laboratory duplicates:

1. For compounds whose concentrations are greater than 5 times CRQL, RPDs, must be ±20 percent for aqueous samples and ±35 percent for soil samples.

2. When one or both results are present at concentrations less than 5 times CRQL, the concentration difference must be ± CRQL for aqueous samples and ±2XCRQL for soil samples.

All matrix spike/matrix spike duplicate RPD results were acceptable for all samples.

3.7 SYSTEM PERFORMANCE

Internal standard performance was assessed to determine whether abrupt changes in instrument response and sensitivity occurred that may have affected the reliability of the analytical data. The response (area or height) of the internal standards must not vary by more than -50 percent or +100 percent from the response of the calibration standard that was used to calculate the upper and lower bounds. The upper and lower bounds define the range for acceptable internal standard response (area/height) for the sample analyses. In addition, retention times for the internal standard must not vary more than ±30 seconds from that of the associated calibration standard.

All internal standard results were acceptable.

3.8 COMPOUND IDENTIFICATION AND QUANTITATION

The identities of detected compounds were confirmed to investigate the possibility of false positives. The confirmation of compound identification during the QA review focuses on false positives because only mass spectra for positive identifications are submitted. However, target compounds that are reported as undetected are also evaluated to investigate the possibility of false negatives. Confirmation of possible false negatives is addressed by reviewing other factors relating to analytical sensitivity (e.g., detection limits, linearity, analytical recovery). Compound retention times and mass spectra must match

those for the standard within set to tolerance limits (EPA 1988b).

3.8.1 Reported Results and Quantitation Limits

Compound quantitations and reported detection limits were recalculated and verified to ensure that they are accurate and are consistent with the internal standards and relative retention times specified by the CLP scope of work.

At concentrations below the CRQL, instrument precision becomes more variable as the IDL is approached. Therefore, the concentrations of any compound detected below the CRQL are qualified as estimates.

All compound identifications and quantitations have been verified as correct.

3.8.2 Tentatively Identified Compounds

Several TICs were identified in the blanks and samples which were flagged "U" according to Westinghouse-Hanford protocols; if the sample result was ±0.06 RRT from that of the blank and if the sample result was less than 5 times the highest blank concentration.

3.9 OVERALL ASSESSMENT AND SUMMARY

A thorough review of ongoing data acquisition and instrument performance criteria was made to assess overall GC/MS instrument performance. No changes in instrument performance were noted that would result in the degradation of data quality. No indications of unacceptable instrument performance (i.e., shifts in baseline stability, retention time shifts, extraneous peaks, sensitivity) were found during the quality assurance review.

In general, the semivolatile data presented in this report met the protocol-specified QA/QC requirements. Minor laboratory blank contamination was detected in two samples. Due to high moisture contents all results for eleven samples were qualified as estimates. The quantitations reported for these samples should be used as gross estimates only. All other data are considered valid and usable within the standard error associated with the method.

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D25																				
Sample Number		B06D25		B06D26		B06D27		B06D28		B06D30		B06D50									
Location		PP-7		PP-6		SP-6		SP-6		SP-7											
Remarks								DUP				EB									
Sample Date		08/25/92		08/25/92		08/26/92		08/26/92		08/26/92		08/25/92									
Extraction Date		09/02/92		09/02/92		09/02/92		09/02/92		09/02/92		09/02/92									
Analysis Date		09/08/92		09/08/92		09/09/92		09/08/92		09/09/92		09/08/92									
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Phenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
bis(2-Chloroethyl)ether	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2-Chlorophenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
1,3-Dichlorobenzene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
1,4-Dichlorobenzene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
1,2-Dichlorobenzene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2-Methylphenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,2'-oxybis(1-Chloropropane)	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
4-Methylphenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
N-Nitroso-di-n-propylamine	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Hexachloroethane	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Nitrobenzene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Isophorone	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2-Nitrophenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,4-Dimethylphenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
bis(2-Chloroethoxy)methane	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,4-Dichlorophenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
1,2,4-Trichlorobenzene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Naphthalene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
4-Chloroaniline	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Hexachlorobutadiene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
4-Chloro-3-methylphenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2-Methylnaphthalene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Hexachlorocyclopentadiene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,4,6-Trichlorophenol	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,4,5-Trichlorophenol	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
2-Chloronaphthalene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2-Nitroaniline	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
Dimethylphthalate	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Acenaphthylene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
3-Nitroaniline	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
Acenaphthene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,4-Dinitrophenol	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								

DUP = Duplicate, EB = Equipment Blank, PP = Percolation Pond, SP = Settling Pond

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Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D25																				
Sample Number		B06D25		B06D26		B06D27		B06D28		B06D30		B06D50									
Location		PP-7		PP-6		SP-6		SP-6		SP-7											
Remarks								DUP				EB									
Sample Date		08/25/92		08/25/92		08/26/92		08/26/92		08/26/92		08/25/92									
Extraction Date		09/02/92		09/02/92		09/02/92		09/02/92		09/02/92		09/02/92									
Analysis Date		09/08/92		09/08/92		09/09/92		09/08/92		09/09/92		09/08/92									
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
4-Nitrophenol	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
Dibenzofuran	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,4-Dinitrotoluene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
2,6-Dinitrotoluene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Diethylphthalate	330	330	U	370	U	170	J	1700	UJ	2300	UJ	320	U								
4-Chlorophenyl-phenylether	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Fluorene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
4-Nitroaniline	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
4,6-Dinitro-2-methylphenol	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
N-Nitrosodiphenylamine	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
4-Bromophenyl-phenylether	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Hexachlorobenzene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Pentachlorophenol	1700	810	U	910	U	3300	UJ	4100	UJ	5600	UJ	790	U								
Phenanthrene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Anthracene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Carbazole	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Di-n-butylphthalate	330	330	U	370	U	1400	UJ	270	J	2300	UJ	320	U								
Fluoranthene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Pyrene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Butylbenzylphthalate	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
3,3'-Dichlorobenzidine	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Benzo(a)anthracene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
bis(2-Ethylhexyl)phthalate	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	34	J								
Chrysene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Di-n-octylphthalate	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Benzo(b)fluoranthene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Benzo(k)fluoranthene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Benzo(a)pyrene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Indeno(1,2,3-cd)pyrene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Dibenzo(a,h)anthracene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								
Benzo(g,h,i)perylene	330	330	U	370	U	1400	UJ	1700	UJ	2300	UJ	320	U								

DUP = Duplicate, EB = Equipment Blank, PP = Percolation Pond, SP = Settling Pond

9713505.0756 WHC-SD-EN-TI-197, Rev. 0

DATA QUALIFICATION SUMMARY

SDG: B06D25	REVIEWER: CH	DATE: 8/30/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All BNA compounds	J	B06D27, B06D28, B06D30	% Moisture >50%

Project: WESTINGHOUSE-HANFORD																					
Laboratory: Roy F. Weston																					
Case	SDG: B06D29																				
Sample Number		B06D29		B06D33REP																	
Location		SP-6		PP-7																	
Remarks		Split		Split																	
Sample Date		08/26/92		08/25/92																	
Extraction Date		09/03/92		09/03/92																	
Analysis Date		09/28/92		09/28/92																	
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Phenol	330	1200	UJ	130	J																
bis(2-Chloroethyl)ether	330	1200	UJ	330	U																
2-Chlorophenol	330	1200	UJ	330	U																
1,3-Dichlorobenzene	330	1200	UJ	330	U																
1,4-Dichlorobenzene	330	1200	UJ	330	U																
1,2-Dichlorobenzene	330	1200	UJ	330	U																
2-Methylphenol	330	1200	UJ	330	U																
2,2'-oxybis(1-Chloropropane)	330	1200	UJ	330	U																
4-Methylphenol	330	1200	UJ	330	U																
N-Nitroso-di-n-propylamine	330	1200	UJ	330	U																
Hexachloroethane	330	1200	UJ	330	U																
Nitrobenzene	330	1200	UJ	330	U																
Isophorone	330	1200	UJ	330	U																
2-Nitrophenol	330	1200	UJ	330	U																
2,4-Dimethylphenol	330	1200	UJ	330	U																
bis(2-Chloroethoxy)methane	330	1200	UJ	330	U																
2,4-Dichlorophenol	330	1200	UJ	330	U																
1,2,4-Trichlorobenzene	330	1200	UJ	330	U																
Naphthalene	330	1200	UJ	330	U																
4-Chloroaniline	330	1200	UJ	330	U																
Hexachlorobutadiene	330	1200	UJ	330	U																
4-Chloro-3-methylphenol	330	1200	UJ	330	U																
2-Methylnaphthalene	330	1200	UJ	330	U																
Hexachlorocyclopentadiene	330	1200	UJ	330	U																
2,4,6-Trichlorophenol	330	1200	UJ	330	U																
2,4,5-Trichlorophenol	1700	3100	UJ	840	U																
2-Chloronaphthalene	330	1200	UJ	330	U																
2-Nitroaniline	1700	3100	UJ	840	U																
Dimethylphthalate	330	1200	UJ	330	U																
Acenaphthylene	330	1200	UJ	330	U																
2,6-Dinitrotoluene	330	1200	UJ	330	U																
3-Nitroaniline	1700	3100	UJ	840	U																
Acenaphthene	330	1200	UJ	330	U																

PP = Percolation Pond, SP = Settling Pond

9713506.0875 WHC-SD-EN-TI-197, Rev. 0

Project: WESTINGHOUSE-HANFORD																					
Laboratory: Roy F. Weston																					
Case	SDG: B06D29																				
Sample Number		B06D29		B06D33REP																	
Location		SP-6		PP-7																	
Remarks		Split		Split																	
Sample Date		08/26/92		08/25/92																	
Extraction Date		09/03/92		09/03/92																	
Analysis Date		09/28/92		09/28/92																	
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
2,4-Dinitrophenol	1700	3100	UJ	840	U																
4-Nitrophenol	1700	3100	UJ	840	U																
Dibenzofuran	330	1200	UJ	330	U																
2,4-Dinitrotoluene	330	1200	UJ	330	U																
Diethylphthalate	330	1200	UJ	330	U																
4-Chlorophenyl-phenylether	330	1200	UJ	330	U																
Fluorene	330	1200	UJ	330	U																
4-Nitroaniline	1700	3100	UJ	840	U																
4,6-Dinitro-2-methylphenol	1700	3100	UJ	840	U																
N-Nitrosodiphenylamine	330	1200	UJ	330	U																
4-Bromophenyl-phenylether	330	1200	UJ	330	U																
Hexachlorobenzene	330	1200	UJ	330	U																
Pentachlorophenol	1700	3100	UJ	840	U																
Phenanthrene	330	1200	UJ	330	U																
Anthracene	330	1200	UJ	330	U																
Carbazole	330	1200	UJ	330	U																
Di-n-butylphthalate	330	1200	UJ	850																	
Fluoranthene	330	1200	UJ	330	U																
Pyrene	330	1200	UJ	330	U																
Butylbenzylphthalate	330	1200	UJ	330	U																
3,3'-Dichlorobenzidine	330	1200	UJ	330	U																
Benzo(a)anthracene	330	1200	UJ	330	U																
Chrysene	330	1200	UJ	330	U																
bis(2-Ethylhexyl)phthalate	330	370	J	39	J																
Di-n-octylphthalate	330	1200	UJ	330	U																
Benzo(b)fluoranthene	330	1200	UJ	330	U																
Benzo(k)fluoranthene	330	1200	UJ	330	U																
Benzo(a)pyrene	330	1200	UJ	330	U																
Indeno(1,2,3-cd)pyrene	330	1200	UJ	330	U																
Dibenzo(a,h)anthracene	330	1200	UJ	330	U																
Benzo(g,h,i)perylene	330	1200	UJ	330	U																

PP = Percolation Pond, SP = Settling Pond

9713506.0755
WHC-SD-EN-TI-197, Rev. 0

BLANK AND SAMPLE DATA SUMMARY

SDG: B06D29	REVIEWER: SC			DATE: 8/23/93				PAGE 1 OF 1	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
SBLK92LE1509	Di-n-butylphthalate	57	J		ug/Kg	285	570	B06D29	U

9713500.0750 WHC-SD-EN-TI-197, Rev. 0

DATA QUALIFICATION SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/23/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All BNA compounds	J	B06D29	% moisture >50%
Di-n-butylphthalate	U	B06D29	Lab blank contamination

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B0D631																				
Sample Number		B06D31		B06D32		B06D34		B06D38		B06D39		B06D40		B06D41		B06D42		B06D43		B06D44	
Location		PP-7		PP-7		PP-6		PP-5		PP-4		PP-3		PP-2		PP-1		SP-1		SP-6	
Remarks				DUP																	
Sample Date		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/26/92	
Extraction Date		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/08/92		09/04/92		09/04/92		09/04/92	
Analysis Date		09/15/92		09/15/92		09/15/92		09/15/92		09/15/92		09/15/92		09/17/92		09/15/92		09/15/92		09/15/92	
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Phenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
bis(2-Chloroethyl)ether	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2-Chlorophenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
1,3-Dichlorobenzene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
1,4-Dichlorobenzene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Benzyl Alcohol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
1,2-Dichlorobenzene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2-Methylphenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
bis(2-Chloroisopropyl)Ether	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
4-Methylphenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
N-Nitroso-di-n-propylamine	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Hexachloroethane	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Nitrobenzene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Isophorone	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2-Nitrophenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,4-Dimethylphenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Benzoic Acid	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
bis(2-Chloroethoxy)methane	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,4-Dichlorophenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
1,2,4-Trichlorobenzene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Naphthalene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
4-Chloroaniline	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Hexachlorobutadiene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
4-Chloro-3-methylphenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2-Methylnaphthalene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Hexachlorocyclopentadiene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,4,6-Trichlorophenol	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,4,5-Trichlorophenol	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
2-Chloronaphthalene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2-Nitroaniline	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
Dimethylphthalate	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Acenaphthylene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ

DUP = Duplicate, SP = Settling Pond, PP = Percolation Pond

97135056 WHC-SD-EN-TI-197, Rev. 0

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B0D631																				
Sample Number		B06D31		B06D32		B06D34		B06D38		B06D39		B06D40		B06D41		B06D42		B06D43		B06D44	
Location		PP-7		PP-7		PP-6		PP-5		PP-4		PP-3		PP-2		PP-1		SP-1		SP-6	
Remarks				DUP																	
Sample Date		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/26/92	
Extraction Date		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92	
Analysis Date		09/15/92		09/15/92		09/15/92		09/15/92		09/15/92		09/15/92		09/17/92		09/15/92		09/15/92		09/15/92	
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
3-Nitroaniline	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
Acenaphthene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,4-Dinitrophenol	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
4-Nitrophenol	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
Dibenzofuran	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,4-Dinitrotoluene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
2,6-Dinitrotoluene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Diethylphthalate	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1000	J	1600	UJ
4-Chlorophenyl-phenylether	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Fluorene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
4-Nitroaniline	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
4,6-Dinitro-2-methylphenol	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
N-Nitrosodiphenylamine	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
4-Bromophenyl-phenylether	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Hexachlorobenzene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Pentachlorophenol	1700	1600	U	1600	U	1800	U	1600	U	1600	U	1500	U	1600	U	1600	U	8400	UJ	7800	UJ
Phenanthrene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Anthracene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Di-n-butylphthalate	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Fluoranthene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Pyrene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Butylbenzylphthalate	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
3,3'-Dichlorobenzidine	330	640	U	680	U	730	U	670	U	670	U	640	U	670	U	680	U	3500	UJ	3200	UJ
Benzo(a)anthracene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
bis(2-Ethylhexyl)phthalate	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	410	J	400	J
Chrysene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Di-n-octylphthalate	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Benzo(b)fluoranthene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Benzo(k)fluoranthene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Benzo(a)pyrene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Indeno(1,2,3-cd)pyrene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Dibenzo(a,h)anthracene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ
Benzo(g,h,i)perylene	330	320	U	340	U	360	U	340	U	340	U	320	U	340	U	340	U	1700	UJ	1600	UJ

DUP = Duplicate, SP = Settling Pond, PP = Percolation Pond

9713505.0759
WHC-SD-EN-TI-197, Rev. 0

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B0D631																				
Sample Number		B06D45		B06D46		B06D47		B06D48		B06D49											
Location		SP-2		SP-3		SP-4		SP-5		SP-7											
Remarks																					
Sample Date		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92											
Extraction Date		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92											
Analysis Date		09/25/92		09/25/92		09/25/92		09/26/92		09/26/92											
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Phenol	330	860	UJ	1100	UJ	1600	UJ	2100	U	1600	UJ										
bis(2-Chloroethyl)ether	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2-Chlorophenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
1,3-Dichlorobenzene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
1,4-Dichlorobenzene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Benzyl Alcohol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
1,2-Dichlorobenzene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2-Methylphenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
bis(2-Chloroisopropyl)Ether	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
4-Methylphenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
N-Nitroso-di-n-propylamine	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Hexachloroethane	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Nitrobenzene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Isophorone	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2-Nitrophenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2,4-Dimethylphenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Benzoic Acid	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
bis(2-Chloroethoxy)methane	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2,4-Dichlorophenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
1,2,4-Trichlorobenzene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Naphthalene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
4-Chloroaniline	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Hexachlorobutadiene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
4-Chloro-3-methylphenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2-Methylnaphthalene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Hexachlorocyclopentadiene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2,4,6-Trichlorophenol	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2,4,5-Trichlorophenol	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
2-Chloronaphthalene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2-Nitroaniline	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
Dimethylphthalate	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Acenaphthylene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
3-Nitroaniline	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
Acenaphthene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										

DUP = Duplicate, SP = Settling Pond, PP = Percolation Pond

9713505.0760 WHC-SD-EN-TI-197, Rev. 0

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B0D631																				
Sample Number		B06D45		B06D46		B06D47		B06D48		B06D49											
Location		SP-2		SP-3		SP-4		SP-5		SP-7											
Remarks																					
Sample Date		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92											
Extraction Date		09/04/92		09/04/92		09/04/92		09/04/92		09/04/92											
Analysis Date		09/15/92		09/15/92		09/15/92		09/16/92		09/16/92											
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
2,4-Dinitrophenol	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
4-Nitrophenol	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
Dibenzofuran	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2,4-Dinitrotoluene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
2,6-Dinitrotoluene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Diethylphthalate	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
4-Chlorophenyl-phenylether	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Fluorene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
4-Nitroaniline	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
4,6-Dinitro-2-methylphenol	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
N-Nitrosodiphenylamine	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
4-Bromophenyl-phenylether	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Hexachlorobenzene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Pentachlorophenol	1700	4200	UJ	5600	UJ	7800	UJ	10000	UJ	7900	UJ										
Phenanthrene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Anthracene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Di-n-butylphthalate	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Fluoranthene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Pyrene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Butylbenzylphthalate	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
3,3'-Dichlorobenzidine	330	1700	UJ	2300	UJ	3200	UJ	4200	UJ	3300	UJ										
Benzo(a)anthracene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
bis(2-Ethylhexyl)phthalate	330	860	UJ	240	J	1600	UJ	2100	UJ	1600	UJ										
Chrysene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Di-n-octylphthalate	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Benzo(b)fluoranthene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Benzo(k)fluoranthene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Benzo(a)pyrene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Indeno(1,2,3-cd)pyrene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Dibenzo(a,h)anthracene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										
Benzo(g,h,i)perylene	330	860	UJ	1100	UJ	1600	UJ	2100	UJ	1600	UJ										

DUP = Duplicate, SP = Settling Pond, PP = Percolation Pond

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DATA QUALIFICATION SUMMARY

SDG: B06D31	REVIEWER: CH	DATE: 8/25/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All BNA compounds	J	B06D43, B06D44, B06D45, B06D46, B06D47, B06D48, B06D49	% Moisture >50%

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D51																				
Sample Number		B06D51		B06D52		B06D57															
Location		SP-5,7																			
Remarks				EB		EB															
Sample Date		08/25/92		08/26/92		08/26/92															
Extraction Date		09/01/92		09/01/92		09/01/92															
Analysis Date		09/21/92		09/21/92		09/21/92															
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Phenol	10	10	U	10	U	10	U														
bis(2-Chloroethyl)ether	10	10	U	10	U	10	U														
2-Chlorophenol	10	10	U	10	U	10	U														
1,3-Dichlorobenzene	10	10	U	10	U	10	U														
1,4-Dichlorobenzene	10	10	U	10	U	10	U														
Benzyl Alcohol	10	10	U	10	U	10	U														
1,2-Dichlorobenzene	10	10	U	10	U	10	U														
2-Methylphenol	10	10	U	10	U	10	U														
bis(2-Chloroisopropyl)Ether	10	10	U	10	U	10	U														
4-Methylphenol	10	10	U	10	U	10	U														
N-Nitroso-di-n-propylamine	10	10	U	10	U	10	U														
Hexachloroethane	10	10	U	10	U	10	U														
Nitrobenzene	10	10	U	10	U	10	U														
Isophorone	10	10	U	10	U	10	U														
2-Nitrophenol	10	10	U	10	U	10	U														
2,4-Dimethylphenol	10	10	U	10	U	10	U														
Benzoic Acid	50	50	U	50	U	50	U														
bis(2-Chloroethoxy)methane	10	10	U	10	U	10	U														
2,4-Dichlorophenol	10	10	U	10	U	10	U														
1,2,4-Trichlorobenzene	10	10	U	10	U	10	U														
Naphthalene	10	10	U	10	U	10	U														
4-Chloroaniline	10	10	U	10	U	10	U														
Hexachlorobutadiene	10	10	U	10	U	10	U														
4-Chloro-3-methylphenol	10	10	U	10	U	10	U														
2-Methylnaphthalene	10	10	U	10	U	10	U														
Hexachlorocyclopentadiene	10	10	U	10	U	10	U														
2,4,6-Trichlorophenol	10	10	U	10	U	10	U														
2,4,5-Trichlorophenol	50	50	U	50	U	50	U														
2-Chloronaphthalene	10	10	U	10	U	10	U														
2-Nitroaniline	50	50	U	50	U	50	U														
Dimethylphthalate	10	10	U	10	U	10	U														
Acenaphthylene	10	10	U	10	U	10	U														
2,6-Dinitrotoluene	10	10	U	10	U	10	U														

EB = Equipment Blank, SP = Settling Pond

9713505.0763
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Project: WESTINGHOUSE HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D51																				
Sample Number		B06D51		B06D52		B06D57															
Location		SP-5,7																			
Remarks				EB		EB															
Sample Date		08/25/92		08/26/92		08/26/92															
Extraction Date		09/01/92		09/01/92		09/01/92															
Analysis Date		09/21/92		09/21/92		09/21/92															
Semivolatile Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
3-Nitroaniline	50	50	U	50	U	50	U														
Acenaphthene	10	10	U	10	U	10	U														
2,4-Dinitrophenol	50	50	U	50	U	50	U														
4-Nitrophenol	50	50	U	50	U	50	U														
Dibenzofuran	10	10	U	10	U	10	U														
2,4-Dinitrotoluene	10	10	U	10	U	10	U														
Diethylphthalate	10	10	U	10	U	10	U														
4-Chlorophenyl-phenylether	10	10	U	10	U	10	U														
Fluorene	10	10	U	10	U	10	U														
4-Nitroaniline	50	50	U	50	U	50	U														
4,6-Dinitro-2-methylphenol	50	50	U	50	U	50	U														
N-Nitrosodiphenylamine	10	10	U	10	U	10	U														
4-Bromophenyl-phenylether	10	10	U	10	U	10	U														
Hexachlorobenzene	10	10	U	10	U	10	U														
Pentachlorophenol	50	50	U	50	U	50	U														
Phenanthrene	10	10	U	10	U	10	U														
Anthracene	10	10	U	10	U	10	U														
Di-n-butylphthalate	10	10	U	3	J	3	J														
Fluoranthene	10	10	U	10	U	10	U														
Pyrene	10	10	U	10	U	10	U														
Butylbenzylphthalate	10	10	U	10	U	10	U														
3,3'-Dichlorobenzidine	10	20	U	20	U	20	U														
Benzo(a)anthracene	10	10	U	10	U	10	U														
Chrysene	10	10	U	10	U	10	U														
bis(2-Ethylhexyl)phthalate	10	10	U	10	U	10	U														
Di-n-octylphthalate	10	10	U	10	U	10	U														
Benzo(b)fluoranthene	10	10	U	10	U	10	U														
Benzo(k)fluoranthene	10	10	U	10	U	10	U														
Benzo(a)pyrene	10	10	U	10	U	10	U														
Indeno(1,2,3-cd)pyrene	10	10	U	10	U	10	U														
Dibenzo(a,h)anthracene	10	10	U	10	U	10	U														
Benzo(g,h,i)perylene	10	10	U	10	U	10	U														

EB = Equipment Blank, SP = Settling Pond

9713505.0764

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BLANK AND SAMPLE DATA SUMMARY

SDG: B06D51	REVIEWER: CH			DATE: 8/30/93				PAGE_1_OF_1_	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
SBLK01SEPS1	Di-n-butylphthalate	2	J		ug/L	10	20	B06D51	U

9713506.0765
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DATA QUALIFICATION SUMMARY

SDG: B06D51	REVIEWER: CH	DATE: 8/30/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Di-n-butylphthalate	U	B06D51	Lab blank contamination

WELL AND SAMPLE INFORMATION				SAMPLE LOCATION INFORMATION
SAMPLE LOCATION	SAMPLE NUMBER	MATRIX	DATE SAMPLED	PESTICIDES/PCBs
PP-1	B06D42	S	8/25/92	4-10
PP-2	B06D41	S	8/25/92	4-10
PP-3	B06D40	S	8/25/92	4-10
PP-4	B06D39	S	8/25/92	4-10
PP-5	B06D38	S	8/25/92	4-10
PP-6	B06D26 B06D34	S S	8/25/92 8/25/92	4-5 4-10
PP-7	B06D25 B06D31 B06D32 B06D33	S S S S	8/25/92 8/25/92 8/25/92 8/25/92	4-5 4-10 4-10 4-7
EB-PP	B06D50	S	8/25/92	4-5
SP-1	B06D43	S	8/25/92	4-10
SP-2	B06D45	S	8/26/92	4-11
SP-3	B06D46	S	8/26/92	4-11
SP-4	B06D47	S	8/26/92	4-11
SP-5	B06D48	S	8/26/92	4-11
SP-5,7	B06D51	W	8/25/92	4-14
SP-6	B06D27 B06D28 B06D29 B06D44	S S S S	8/26/92 8/26/92 8/26/92 8/26/92	4-5 4-5 4-7 4-10
SP-7	B06D30 B06D49	S S	8/26/92 8/26/92	4-5 4-11
EB-SP	B06D57	W	8/26/92	4-14
EB	B06D52	W	8/26/92	4-14

4.0 PESTICIDE AND PCB DATA VALIDATION

4.1 DATA PACKAGE COMPLETENESS

The following data packages (SDG Nos.) were submitted for validation and found to be complete:

B06D25 B06D29 B06D31 B06D51

The percent moisture content was determined, as required, for all soil samples submitted for analysis. Several samples had significant moisture content. The following samples displayed moisture contents of fifty percent or more.

- Sample numbers B06D27, B06D28 and B06D30 in SDG No. B06D25.
- Sample number B06D29 in SDG No. B06D29.
- Sample numbers B06D43, B06D44, B06D45, B06D46, B06D47, B06D48 and B06D49 in SDG No. B06D31.

All results for these samples have been qualified as estimates and flagged "J".

4.2 HOLDING TIMES

Analytical holding times were assessed to ascertain whether the holding time requirements for pesticide/PCB analyses were met by the laboratory. Westinghouse-Hanford procedures require that samples be extracted within seven days of collection and analyzed within 40 days of extraction (WHC 1991a).

The sample to extraction holding time was exceeded, though not grossly exceeded, for sample number B06D44 in SDG No. B06D31. All results for this sample were qualified as estimates and flagged "J".

All other holding time requirements were met.

4.3 INSTRUMENT PERFORMANCE AND CALIBRATIONS

Instrument performance was assessed to ensure that adequate chromatographic resolution and instrument sensitivity were achieved by the gas chromatographic system.

The specific criteria for acceptable instrument performance are outlined in EPA guidelines (EPA 1988a and 1988b), including the evaluation and qualification procedures that may be performed on the analytical results.

During the quality assurance review, all indicators for acceptable instrument performance were verified. The criteria established by CLP protocols were met and the results are acceptable, except as noted.

Instrument calibration is performed to ensure that the chromatographic system is capable of producing acceptable and reliable analytical data. The initial and continuing calibrations are to be performed according to procedures established by CLP protocols. An initial calibration is performed prior to sample analysis to establish the linear range of the system, including a demonstration that all target compounds can be detected. Continuing calibration checks are performed to verify that instrument performance is stable and reproducible on a day-to-day basis.

4.3.1 Initial Calibrations

The laboratory performed an initial multipoint calibration for all target compounds at the concentrations required by CLP protocols. The linearity of the initial calibration is established when the percent RSD or the calibration factors are less than or equal to 10 percent (or 15% for certain analytes).

All initial calibration results were acceptable.

4.3.2 Calibration Verification

The criteria for acceptable continuing calibrations requires that the calibration factors for all target compounds have a percent difference of less than or equal to 15 percent of the average calibration factor calculated for the associated initial calibration standard. The 15 percent difference value is required for results calculated using the chromatographic column which is used for quantitative purposes. In addition, the percent difference of the calibration factors calculated for the chromatographic column that is used for confirmation must be less than or equal to 20 percent.

All calibration verification results were acceptable.

4.4 BLANKS

Method blank and field blank analyses are performed to determine the extent of laboratory or field contamination of samples. No contaminants should be present in the blanks. Analytical results for analytes present in any sample at less

than 5 times the concentration of that analyte found in associated blanks should be qualified as non-detects.

There were no compounds of concern detected in the method or field blanks.

4.5 ACCURACY

Accuracy was assessed by evaluating the recoveries of the surrogate compounds and the matrix spike recoveries calculated for the sample analyses.

4.5.1 Matrix Spike Recovery

Matrix spike analyses are performed in duplicate using six compounds specified by CLP protocols. The recoveries for the six compounds must be within the acceptable quality control limits established by CLP protocols.

All matrix spike/matrix spike duplicate results were acceptable.

4.5.2 Surrogate Recovery

Surrogate compound recoveries are calculated using analytical results from two stable surrogate compounds added to the sample prior to sample preparation and analysis. Matrix-specific surrogate compound recovery control windows have been established by the EPA CLP program. When recoveries for either surrogate compound are out of the control window, all positively identified target compound concentrations in samples associated with the unacceptable surrogate recoveries are qualified as estimates (J) and undetected compounds are qualified estimated below the detection limit (UJ).

Sample number B06D29 in SDG No. B06D29 exhibited slightly low recoveries for both surrogate compounds. All associated results were qualified as estimates and flagged "J".

Surrogate recovery results were acceptable for all other samples.

4.6 PRECISION

Precision is expressed by the RPD between the recoveries of the matrix spike and the matrix spike duplicate analyses performed on a sample. When the laboratory has not performed duplicate spike analyses, precision may also be assessed by using unspiked duplicate analyses.

All matrix spike/matrix spike duplicate RPDs were acceptable.

4.7 COMPOUND IDENTIFICATION AND QUANTITATION

The data were evaluated to confirm the positive concentrations and to investigate the possibility of false negatives in all other data. Confirmation of possible false negatives is addressed by reviewing other factors relating to analytical sensitivity (e.g., detection limits, instrument linearity, analytical recovery). These factors were found to be in control, and the data are acceptable.

Compound quantitations and reported detection limits were recalculated and verified for a minimum of 20 percent of the samples in each case to ensure that they were accurate and are consistent with CLP requirements (EPA 1988a). The reported detection limits must be in accordance with the CRQLs specified in the applicable CLP statement of work.

Due to an oversight on the part of the laboratory a "J" qualifier was not added to methoxychlor and aroclor-1260 results for sample number B06D34 in SDG No. B06D31. Samples have been qualified as estimates and flagged "J" due to detects quantitated below the CRQL.

All compound identifications, CRQLs, and quantitation results were acceptable.

4.8 OVERALL ASSESSMENT AND SUMMARY

A thorough review of ongoing data acquisition and instrument performance criteria was made to assess overall GC/MS instrument performance. No changes in instrument performance were noted that would result in the degradation of data quality. No indications of unacceptable instrument performance (i.e., shifts in baseline stability, retention time shifts, extraneous peaks, or sensitivity) were found during the quality assurance review.

In general, the pesticide/PCB data presented in this report met the protocol-specified QA/QC requirements. The surrogate recoveries were low on both columns for one sample. The sampling to analysis holding time was exceeded for one sample. In both cases all associated results were qualified as estimates and flagged "J". Due to high moisture content, all results for eleven samples were qualified as estimates. The quantitations reported from these samples should be used as gross estimates only. All other data are considered valid and usable within the standard error associated with the method.

PESTICIDE/PCB ORGANIC ANALYSIS, SOIL MATRIX, (ug/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D25																				
Sample Number		B06D25		B06D26		B06D27		B06D28		B06D30		B06D50									
Location		PP-7		PP-6		SP-6		SP-6		SP-7											
Remarks								DUP				EB									
Sample Date		08/25/92		08/25/92		08/26/92		08/26/92		08/26/92		08/25/92									
Extraction Date		09/02/92		09/02/92		09/02/92		09/02/92		09/02/92		09/02/92									
Analysis Date		09/30/92		09/30/92		09/30/92		09/30/92		09/30/92		09/30/92									
Pesticide/PCB	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
alpha-BHC	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
beta-BHC	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
delta-BHC	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
gamma-BHC (Lindane)	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
Heptachlor	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
Aldrin	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
Heptachlor epoxide	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
Endosulfan I	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
Dieldrin	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
4,4'-DDE	3.3	3.3	U	3.7	U	13	UJ	17	UJ	170	J	3.2	U								
Endrin	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
Endosulfan II	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
4,4'-DDD	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
Endosulfan sulfate	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
4,4'-DDT	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
Methoxychlor	17.0	17	U	19	U	69	UJ	88	UJ	120	UJ	17	U								
Endrin Ketone	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
Endrin Aldehyde	3.3	3.3	U	3.7	U	13	UJ	17	UJ	23	UJ	3.2	U								
alpha-Chlordane	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
gamma-Chlordane	1.7	1.7	U	1.9	U	6.9	UJ	8.8	UJ	12	UJ	1.7	U								
Toxaphene	170.0	170	U	190	U	690	UJ	880	UJ	1200	UJ	170	U								
Aroclor-1016	33.0	33	U	37	U	130	UJ	170	UJ	230	UJ	32	U								
Aroclor-1221	33.0	67	U	76	U	270	UJ	350	UJ	470	UJ	66	U								
Aroclor-1232	67.0	33	U	37	U	130	UJ	170	UJ	230	UJ	32	U								
Aroclor-1242	33.0	33	U	37	U	130	UJ	170	UJ	230	UJ	32	U								
Aroclor-1248	33.0	33	U	37	U	130	UJ	170	UJ	230	UJ	32	U								
Aroclor-1254	33.0	33	U	100		130	UJ	170	UJ	230	UJ	32	U								
Aroclor-1260	33.0	33	U	37	U	130	UJ	170	UJ	230	UJ	32	U								

DUP = Duplicate, EB = Equipment Blank, PP = Percolation Pond, SP = Settling Pond

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DATA QUALIFICATION SUMMARY

SDG: B06D25	REVIEWER: CH	DATE: 8/30/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All Pest/PCB analytes	J	B06D27, B06D28, B06D30	% Moisture >50%

PESTICIDE/PCB ORGANIC ANALYSIS, SOIL MATRIX, (ug/Kg)

Project: WESTINGHOUSE-HANFORD																						
Laboratory: Roy F. Weston																						
Case	SDG: B06D29																					
Sample Number		B06D29		B06D33																		
Location		SP-6		PP-7																		
Remarks		Split		Split																		
Sample Date		08/26/92		08/25/92																		
Extraction Date		09/03/92		09/03/92																		
Analysis Date		10/03/92		10/03/92																		
Pesticide/PCB	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
alpha-BHC	1.7	6.2	UJ	1.7	U																
beta-BHC	1.7	6.2	UJ	1.7	U																
delta-BHC	1.7	6.2	UJ	1.7	U																
gamma-BHC (Lindane)	1.7	6.2	UJ	1.7	U																
Heptachlor	1.7	6.2	UJ	1.7	U																
Aldrin	1.7	6.2	UJ	1.7	U																
Heptachlor epoxide	1.7	6.2	UJ	1.7	U																
Endosulfan I	1.7	6.2	UJ	1.7	U																
Dieldrin	3.3	12	UJ	3.4	U																
4,4'-DDE	3.3	12	UJ	3.4	U																
Endrin	3.3	12	UJ	3.4	U																
Endosulfan II	3.3	12	UJ	3.4	U																
4,4'-DDD	3.3	12	UJ	3.4	U																
Endosulfan sulfate	3.3	12	UJ	3.4	U																
4,4'-DDT	3.3	12	UJ	3.4	U																
Methoxychlor	17.0	62	UJ	17	U																
Endrin Ketone	3.3	12	UJ	3.4	U																
Endrin Aldehyde	3.3	12	UJ	3.4	U																
alpha-Chlordane	1.7	6.2	UJ	1.7	U																
gamma-Chlordane	1.7	6.2	UJ	1.7	U																
Toxaphene	170.0	620	UJ	170	U																
Aroclor-1016	33.0	120	UJ	34	U																
Aroclor-1221	33.0	250	UJ	69	U																
Aroclor-1232	67.0	120	UJ	34	U																
Aroclor-1242	33.0	120	UJ	34	U																
Aroclor-1248	33.0	120	UJ	34	U																
Aroclor-1254	33.0	120	UJ	34	U																
Aroclor-1260	33.0	120	UJ	34	U																

PP = Percolation Pond, SP = Settling Pond

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ACCURACY DATA SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/24/93	PAGE 1 OF 1	
COMMENTS:				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D29	Tetrachloro-m-xylene	48/50	B06D29	J
B06D29	Decachlorobiphenyl	55	B06D29	J

DATA QUALIFICATION SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/24/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All Pest/PCB compounds	J	B06D29	Low surrogate recoveries
All Pest/PCB compounds	J	B06D29	% Moisture >50%

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D31																				
Sample Number		B06D31		B06D32		B06D34		B06D38		B06D39		B06D40		B06D41		B06D42		B06D43		B06D44	
Location		PP-7		PP-7		PP-6		PP-5		PP-4		PP-3		PP-2		PP-1		SP-1		SP-6	
Remarks				DUP																	
Sample Date		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/26/92	
Extraction Date		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92	
Analysis Date		09/30/92		09/30/92		09/30/92		09/30/92		09/30/92		10/01/92		10/01/92		10/01/92		10/01/92		10/01/92	
Pesticide/PCB	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
alpha-BHC	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
beta-BHC	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
delta-BHC	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
gamma-BHC (Lindane)	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
Heptachlor	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
Aldrin	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
Heptachlor epoxide	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
Endosulfan I	1.7	1.7	U	1.7	U	1.9	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	8.5	UJ	8.3	UJ
Dieldrin	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
4,4'-DDE	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
Endrin	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
Endosulfan II	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
4,4'-DDD	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
Endosulfan sulfate	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
4,4'-DDT	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
Methoxychlor	17.0	17	U	17	U	15	J	17	U	18	U	17	U	17	U	17	U	85	J	83	UJ
Endrin Ketone	3.3	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	
Endrin Aldehyde	3.3	3.4	U	3.3	U	3.6	U	3.4	U	3.4	U	3.3	U	3.4	U	3.4	U	16	UJ	16	UJ
Chlordane	1.7	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Toxaphene	170.0	170	U	170	U	190	U	170	U	180	U	170	U	170	U	170	U	850	UJ	830	UJ
Aroclor-1016	33.0	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Aroclor-1221	33.0	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Aroclor-1232	67.0	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Aroclor-1242	33.0	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Aroclor-1248	33.0	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Aroclor-1254	33.0	34	U	33	U	36	U	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ
Aroclor-1260	33.0	34	U	33	U	34	J	34	U	34	U	33	U	34	U	34	U	160	UJ	160	UJ

DUP = Duplicate, N/A = Not Applicable, PP = Percolation Pond, SP = Settling Pond

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D31																				
Sample Number		B06D45		B06D46		B06D47		B06D48		B06D49											
Location		SP-2		SP-3		SP-4		SP-5		SP-7											
Remarks																					
Sample Date		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92											
Extraction Date		09/05/92		09/05/92		09/05/92		09/05/92		09/05/92											
Analysis Date		10/01/92		10/01/92		10/01/92		10/01/92		10/01/92											
Pesticide/PCB	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
alpha-BHC	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
beta-BHC	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
delta-BHC	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
gamma-BHC (Lindane)	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
Heptachlor	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
Aldrin	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
Heptachlor epoxide	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
Endosulfan I	1.7	4.6	UJ	6.1	UJ	8.4	UJ	11	UJ	8.5	UJ										
Dieldrin	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
4,4'-DDE	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
Endrin	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
Endosulfan II	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
4,4'-DDD	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
Endosulfan sulfate	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
4,4'-DDT	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
Methoxychlor	17.0	46	UJ	61	UJ	84	UJ	110	UJ	85	UJ										
Endrin Ketone	3.3	N/A		N/A		N/A		N/A		N/A											
Endrin Aldehyde	3.3	9.0	UJ	12	UJ	16	UJ	21	UJ	16	UJ										
Chlordane	1.7	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Toxaphene	170.0	460	UJ	610	UJ	840	UJ	1100	UJ	850	UJ										
Aroclor-1016	33.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Aroclor-1221	33.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Aroclor-1232	67.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Aroclor-1242	33.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Aroclor-1248	33.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Aroclor-1254	33.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										
Aroclor-1260	33.0	90	UJ	120	UJ	160	UJ	210	UJ	160	UJ										

DUP = Duplicate, N/A = Not Applicable, PP = Percolation Pond, SP = Settling Pond

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HOLDING TIME SUMMARY

SDG: B06D31	REVIEWER: CH			DATE: 8/25/93		PAGE 1 OF 1	
COMMENTS:							
FIELD SAMPLE ID	ANALYSIS TYPE	DATE SAMPLED	DATE PREPARED	DATE ANALYZED	PREP. HOLDING TIME, DAYS	ANALYSIS HOLDING TIME, DAYS	QUALIFIER
B06D44	Pest./PCB	8/26/92	9/11/92	10/1/92	7	40	J

DATA QUALIFICATION SUMMARY

SDG: B06D31	REVIEWER: CH	DATE: 8/25/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
All Pest./PCB analytes	J	B06D44	Holding time exceeded
All Pest./PCB analytes	J	B06D43, B06D44, B06D45, B06D46, B06D47, B06D48, B06D49	% Moisture >50%
Methoxychlor	J	B06D34	Detect quantitated below the CRQL
Aroclor-1260	J	B06D34	Detect quantitated below the CRQL

PESTICIDE/PCB ORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D51																				
Sample Number		B06D51		B06D52		B06D57															
Location		SP-5,7																			
Remarks				EB		EB															
Sample Date		08/25/92		08/26/92		08/26/92															
Extraction Date		09/01/92		09/01/92		09/01/92															
Analysis Date		10/09/92		10/09/92		10/09/92															
Pesticide/PCB	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
alpha-BHC	0.05	0.05	U	0.05	U	0.05	U														
beta-BHC	0.05	0.05	U	0.05	U	0.05	U														
delta-BHC	0.05	0.05	U	0.05	U	0.05	U														
gamma-BHC (Lindane)	0.05	0.05	U	0.05	U	0.05	U														
Heptachlor	0.05	0.05	U	0.05	U	0.05	U														
Aldrin	0.05	0.05	U	0.05	U	0.05	U														
Heptachlor epoxide	0.05	0.05	U	0.05	U	0.05	U														
Endosulfan I	0.05	0.05	U	0.05	U	0.05	U														
Dieldrin	0.10	0.10	U	0.10	U	0.10	U														
4,4'-DDE	0.10	0.10	U	0.10	U	0.10	U														
Endrin	0.10	0.10	U	0.10	U	0.10	U														
Endosulfan II	0.10	0.10	U	0.10	U	0.10	U														
4,4'-DDD	0.10	0.10	U	0.10	U	0.10	U														
Endosulfan sulfate	0.10	0.10	U	0.10	U	0.10	U														
4,4'-DDT	0.10	0.10	U	0.10	U	0.10	U														
Methoxychlor	0.50	0.50	U	0.50	U	0.50	U														
Endrin Ketone	0.10	0.10	U	0.10	U	0.10	U														
Endrin Aldehyde	0.10	0.10	U	0.10	U	0.10	U														
alpha-Chlordane	0.05	0.50	U	0.50	U	0.50	U														
gamma-Chlordane	0.05	0.50	U	0.50	U	0.50	U														
Toxaphene	5.00	1.00	U	1.00	U	1.00	U														
Aroclor-1016	1.00	0.50	U	0.50	U	0.50	U														
Aroclor-1221	1.00	0.50	U	0.50	U	0.50	U														
Aroclor-1232	2.00	0.50	U	0.50	U	0.50	U														
Aroclor-1242	1.00	0.50	U	0.50	U	0.50	U														
Aroclor-1248	1.00	0.50	U	0.50	U	0.50	U														
Aroclor-1254	1.00	1.00	U	1.00	U	1.00	U														
Aroclor-1260	1.00	1.00	U	1.00	U	1.00	U														

EB = Equipment Blank, SP = Settling Pond

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WELL AND SAMPLE INFORMATION				SAMPLE LOCATION INFORMATION
SAMPLE LOCATION	SAMPLE NUMBER	MATRIX	DATE SAMPLED	INORGANICS
PP-1	B06D42	S/TCLP	8/25/92	5-21, 5-23
PP-2	B06D41	S/TCLP	8/25/92	5-21, 5-23
PP-3	B06D40	S/TCLP	8/25/92	5-21, 5-23
PP-4	B06D39	S/TCLP	8/25/92	5-21, 5-23
PP-5	B06D38	S/TCLP	8/25/92	5-21, 5-23
PP-6	B06D26 B06D34	S S/TCLP	8/25/92 8/25/92	5-9 5-21, 5-23
PP-7	B06D25 B06D31 B06D32 B06D33	S S/TCLP S/TCLP TCLP	8/25/92 8/25/92 8/25/92 8/25/92	5-9 5-21, 5-23 5-21, 5-23 5-18
EB-PP	B06D50	S	8/25/92	5-9
SP-1	B06D43	S/TCLP	8/25/92	5-21, 5-23
SP-2	B06D45	S/TCLP	8/26/92	5-22, 5-24
SP-3	B06D46	S/TCLP	8/26/92	5-22, 5-24
SP-4	B06D47	S/TCLP	8/26/92	5-22, 5-24
SP-5	B06D48	S/TCLP	8/26/92	5-22, 5-24
SP-5,7	B06D51	W/TCLP	8/25/92	5-28, 5-29
SP-6	B06D27 B06D28 B06D29 B06D44	S S S S/TCLP	8/26/92 8/26/92 8/26/92 8/26/92	5-9 5-9 5-13 5-21, 5-24
SP-7	B06D30 B06D49	S S/TCLP	8/26/92 8/26/92	5-9 5-22, 5-24
EB-SP	B06D57	W/TCLP	8/26/92	5-28, 5-29
EB	B06D52	W/TCLP	8/26/92	5-28, 5-29

5.0 INORGANIC DATA VALIDATION

5.1 DATA PACKAGE COMPLETENESS

The following data packages (SDG Nos.) were submitted for validation and checked for completeness:

B06D25 B06D29 B06D31 B06D51

Data packages B06D29, B06D31 and B06D51 were also analyzed for TCLP metals. Westinghouse-Hanford validation guidelines do not specifically address validation of TCLP analytes, therefore validation was based on the same criteria used for total constituents.

5.2 HOLDING TIMES

Analytical holding times for ICP metals, GFAA metals and CVAA mercury analyses were assessed to ascertain whether the holding time requirements were met by the laboratory. The holding time requirements are as follows: samples must be analyzed within 28 days for mercury, 14 days for cyanide and within six months for all other metals.

The holding time was exceeded for mercury for sample numbers B06D31, B06D32, B06D34, B06D38, B06D39, B06D40, B06D41 and B06D42 in SDG No. B06D31. The associated results were qualified as estimates and flagged "J".

All other holding time requirements for all analytes in all data packages reviewed were met.

5.3 INSTRUMENT PERFORMANCE AND CALIBRATIONS

Performance of specific instrument quality assurance and quality control procedures, including deficiencies noted during the quality assurance review, are outlined below.

Three calibration standards and a blank were analyzed for arsenic, lead, selenium and thallium by GFAA. The correlation coefficient of a least squares linear regression met the requirements for calibration in all cases.

Up to five calibration standards and a blank were analyzed for mercury by CVAA. The correlation coefficient of a least squares linear regression met the requirements for calibration.

At least one standard and a blank were analyzed by ICP for all other elements.

The above calibrations were each immediately verified with an ICV standard and a calibration blank. The ICV was prepared from a source independent of the calibration standards, at a mid-calibration range concentration. The ICV percent recovery must fall within the control limits of 90 to 110 percent for metals analyzed by ICP and GFAA, and 80 to 120 percent for mercury. Calibration linearity near the detection limit was verified with a standard prepared at a concentration near the CRDL.

The ICVs met the recommended control limits in all cases.

The calibrations were subsequently verified at regular intervals using a CCV standard. The control windows for percent recovery of CCV standards are the same as the ICV windows described above.

The CCVs met the recommended control limits in all cases.

5.3.1 ICP Calibration

An ICS was analyzed at the beginning and end of each ICP sample run to verify the laboratory interelement and background correction factors. Results for the ICS solution must fall within the control limit of ±20 percent of the true value.

A five-fold serial dilution is required for all elements analyzed by ICP. The subsequent concentrations of the reanalysis are compared with the original analysis. If the analyte concentration is sufficiently high (a minimum factor of 50 above the IDL) then the serial dilution must agree within 10% of the original determination after correction for dilution.

The ICS has been analyzed at the proper frequency however, ICSAB true values were not provided with the laboratory data and therefore, percent recovery values could not be verified.

5.3.2 Atomic Absorption Calibrations

Duplicate injections are required for all GFAA analyses. The duplicate injections establish the precision of the individual analytical determinations. For sample concentrations greater than the CRDL, duplicate injections must agree within ±20 percent RSD or CV. The duplicate injection results are discussed in Section 5.7.1 of this report

5.4 BLANKS

Samples with digestate concentrations (in ug/L) of less than five times (<5x) the highest amount found in any of the associated blanks have had their associated values qualified as non-detected (U). Samples with concentrations of greater than five times (>5x) the highest amount found in any of the associated blanks do not require qualification.

Due to the presence of laboratory blank contamination, the following sample was flagged "U" for beryllium:

- Sample number B06D29 in SDG No. B06D29.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for cadmium:

- Sample numbers B06D26, B06D27, B06D28 and B06D30 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following sample was flagged "U" for calcium:

- Sample number B06D50 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for cobalt:

- Sample numbers B06D27, B06D28 and B06D30 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following sample was flagged "U" for manganese:

- Sample number B06D50 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for nickel:

- Sample numbers B06D27, B06D28 and B06D30 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for silver:

- Sample numbers B06D25, B06D26, B06D28 and B06D30 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following samples were flagged "U" for sodium:

- Sample numbers B06D28, B06D30 and B06D50 in SDG No. B06D25.

Due to the presence of laboratory blank contamination, the following sample was flagged "U" for zinc:

- Sample number B06D50 in SDG. No. B06D25.

All other laboratory blank results were acceptable.

5.5 ACCURACY

5.5.1 Matrix Spike Recovery

Matrix spike analyses are used to assess the analytical accuracy of the reported data and the effect of the matrix on the ability to accurately quantify sample concentrations. Matrix spike recoveries must generally fall within the range of 75 to 125 percent. Samples with a spike recovery of less than 30% and a sample value below the IDL were rejected and flagged "R". Samples with a spike recovery greater than 125% and a sample value below the IDL do not require qualification. All other samples with a spike recovery outside the QC limits are qualified as estimates and flagged "J".

The matrix spike recovery fell outside the QC limits and the associated results flagged "J" for lead in the following sample:

- Sample number B06D29 in SDG No. B06D29.

The matrix spike recovery fell outside the QC limits and the associated results flagged "J" for manganese in the following sample:

- Sample number B06D29 in SDG No. B06D29.

The matrix spike recovery fell outside the QC limits and the associated results flagged "J" for selenium in the following samples:

- Sample number B06D33 in SDG No. B06D29.
- All samples in SDG No. B06D31.
- Sample numbers B06D51, B06D52 and B06D57 in SDG No. B06D51.

The matrix spike recovery fell outside the QC limits and the associated results flagged "J" for silver in the following samples:

- Sample number B06D33 in SDG No. B06D29.
- Sample numbers B06D51, B06D52 and B06D57 in SDG No. B06D51.

The matrix spike recovery fell outside the QC limits and the associated results flagged "J" for thallium in the following sample:

- Sample number B06D29 in SDG No. B06D29.

All other matrix spike recovery results were acceptable.

5.5.2 Laboratory Control Sample Recovery

The LCS monitors the overall performance of the analysis, including the sample preparation. An LCS should be digested or distilled and analyzed with every batch of samples prepared and analyzed simultaneously. The performance criteria for solid LCS samples are established through interlaboratory studies coordinated by a certifying agency (e.g., EPA or an independent commercial supplier).

One solid LCS was digested and analyzed for each of the cases in this report that contain soil samples. The results were compared against the control limits provided and found to be acceptable. However, LCS solid samples for soil samples digested and analyzed by Roy F. Weston Laboratories could not be verified as actual soil samples. According to the Roy F. Weston digestion logbooks, two milliliters of ICV were used for the LCS, however, according to Exhibit E, Section V, Item 8 (pg. E-19) of the USEPA Statement of Work for Inorganics Analysis, Document Number ILM01.0, the ICV can only be used for the LCS digestion and analysis of aqueous samples. A solid LCS provided by the EPA or a certified agent is required for soil samples.

Since Westinghouse-Hanford protocols do not address this issue, samples were not flagged based on the use of an incorrect LCS. Under CLP protocol samples are required to be redigested and reanalyzed in instances where the LCS did not meet the criteria.

All other LCS results were found to be acceptable.

One liquid LCS was digested and analyzed for each of the cases in this report that contained water samples. The results were compared against the control limit of 80-120% as required by the EPA CLP SOW 3/90 protocol and found to be acceptable.

All LCSW results were found to be acceptable.

5.6 PRECISION

5.6.1 Laboratory Duplicate Samples

The laboratory duplicate results measure the precision of the method by measuring a second aliquot of the sample that is treated the same way as the original. Samples whose precision fell outside the quality control requirements were flagged as estimates "J".

With the exception of TCLP mercury, duplicate sample analyses for TCLP analytes in SDG Nos. B06D29, B06D31, B06D51 were not performed by the laboratory. Therefore, precision could not be determined for associated samples.

The laboratory duplicate RPD results were above QC limits and the associated results flagged "J" for mercury for sample number B06D29 in SDG No. B06D29.

All other laboratory duplicate recovery results were acceptable.

5.6.2 ICP Serial Dilution

The ICP serial dilution is used to determine whether significant physical or chemical interferences exist due to sample matrix. If sample concentration is $\geq$ 50 times the IDL for an analyte and the %D is outside the control limits the associated data must be qualified as estimates "J".

The ICP serial dilution results were outside the QC limits and the associated results flagged "J" for zinc for sample number B06D29 in SDG No. B06D29.

All other ICP serial dilution results were acceptable.

5.7 FURNACE AA QUALITY CONTROL

The post-digestion analytical spike is analyzed to determine the extent of interference in the digestate matrix. When the results of the analytical spike analyses exceeds the control window of 85 to 115 percent recovery and the absorbance of the sample is greater than fifty percent of the analytical spike absorbance, then the sample must be reanalyzed using the MSA. The duplicate injections and the analytical spike recoveries establish the precision and accuracy of the individual GFAA determinations.

5.7.1 Duplicate Injections

Each furnace analysis requires a minimum of two injections (burns), except for full Method of Standard Addition (MSA). For concentrations greater than CRDL, the duplicate injection readings must agree within 50% relative standard deviation (RSD) or coefficient of variation (CV). If these requirements are not met, the analytical sample must be rerun once (i.e., two additional burns). If the readings are then still outside the QC limits, the result is qualified as an estimate and flagged "J".

All RSDs between duplicate injections met QC requirements. All duplicate injection quality control requirements were met.

5.7.2 Analytical Spike Recoveries

For all samples whose analytical spike results are outside the 85 to 115 percent control limit, but whose absorbances are less than 50 percent of the analytical spike absorbance, the samples were flagged as estimates "J". In cases where the analytical spike recovery was 0.0 percent, the results were rejected and flagged "R".

The analytical spike recovery fell outside the established QC limits and the associated results flagged "J" for lead in the following sample:

- Sample number B06D29 in SDG No. B06D29.

The analytical spike recovery fell outside the established QC limits and the associated results flagged "J" for selenium in the following samples:

- Sample numbers B06D25 and B06D26 in SDG No. B06D25.
- Sample number B06D29 in SDG No. B06D29.

The analytical spike recovery fell outside the established QC limits and the associated results flagged "J" for thallium in the following sample:

- Sample number B06D29 in SDG No. B06D29.

All other analytical spike recovery results were acceptable.

5.7.3 Method of Standard Addition (MSA) Results

For all samples whose analytical spike results are outside the 85 to 115 percent control limit and whose absorbances are greater than 50 percent of the analytical spike absorbance an MSA is required. In cases where the MSA correlation coefficient was less than 0.995 the MSA analysis was repeated once. If the correlation coefficient was still less than 0.995, samples were flagged as estimates "J".

The MSA correlation coefficient was less than 0.995 and the associated results flagged "J" for arsenic in the following samples:

- Sample numbers B06D26 and B06D27 in SDG No. B06D25.

The MSA correlation coefficient was less than 0.995 and the associated results flagged "J" for selenium in the following sample:

- Sample number B06D30 in SDG No. B06D25.

5.8 ANALYTE QUANTITATION AND DETECTION LIMITS

Twenty percent of sample results and reported detection limits were recalculated to ensure that the reported results were accurate. Raw data were examined for anomalies, transcription errors, and reduction errors.

The reviewer verified that the results and detection limits fell within the linear range of the instrument.

5.9 OVERALL ASSESSMENT AND SUMMARY

All samples were analyzed and reported under the 1990 CLP protocol (EPA 1990). Several inconsistencies and deviations from the protocol were observed. They are as follows:

A CCV and CCB must be analyzed immediately after the ICV and ICB. ICAP and Mercury do not follow this protocol. For ICAP analysis a CCV and CCB were run after the initial interference checks and CRI. This is incorrect because the ICSA/AB and CRII are considered analytical samples and according to the CLP protocol a CCV and CCB must be run prior to any analytical samples. For mercury, the CCV and CCB were analyzed for after the first ten samples. Refer to Sections E-11 paragraph 5b and E-15 paragraph 4a of the EPA CLP SOW 3/90 protocol.

The LCSs for soil samples digested and analyzed by Roy F. Weston Laboratories could not be verified as actual solid samples. According to Roy F. Weston digestion logbooks, a liquid LCS was digested and analyzed, and a control limit of 80-120% was used. Under EPA CLP SOW 390 protocol an actual solid sample provided by the EPA or a certified agent is required.

The TCLP extraction logbook pages for samples in SDG Nos. B06D31 and B06D51 were not provided. Verification of correct TCLP sample extraction and preparation could not be performed.

With the exception of TCLP mercury, duplicate sample analyses for TCLP samples in SDG Nos. B06D29, B06D31 and B06D51 were not performed. Therefore, precision could not be determined.

The preparation blank results for TCLP mercury samples in SDG No. B06D51 were incorrectly calculated as soils but were marked with units for liquid. Samples were recalculated to reflect water analysis.

All raw data associated with Roy F. Weston has not been labeled with the client (EPA) ID number. Results labeled with only the laboratory sample ID number is insufficient. Refer to Section B-10 of the EPA CLP SOW 390.

Except as noted in the preceding sections, all other data are usable for all purposes.

INORGANIC ANALYSIS, SOIL MATRIX, (mg/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D25																				
Sample Number		B06D25		B06D26		B06D27		B06D28		B06D30		B06D50									
Location		PP-7		PP-6		SP-6		SP-6		SP-7											
Remarks								DUP				EB									
Sample Date		08/25/92		08/25/92		08/26/92		08/26/92		08/26/92		08/25/92									
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	200	6350		32800		78400		69400		65300		45.2									
Antimony	60	3.2	U	3.5	U	14.3	U	16.7	U	18.5	U	3.1	U								
Arsenic	10	2.0		10.8	J	62.2	J	45.7		36.9		0.93									
Barium	200	133		149		188		162		61.6		0.54	U								
Beryllium	5	0.42		0.63		0.34	U	0.40	U	0.44	U	0.07	U								
Cadmium	5	0.19	U	0.92	U	3.6	U	3.9	U	3.8	U	0.19	U								
Calcium	5000	5780		5560		5220		4900		1820		36.3	U								
Chromium	10	6.8		36.1		77.1		70.1		68.8		0.83	U								
Cobalt	50	13.6		9.5		11.7	U	12.3	U	6.2	U	0.50	U								
Copper	25	19.8		55.4		56.9		52.0		54.1		0.65	U								
Iron	100	26900		20700		23300		22000		14100		199									
Lead	3	3.6		23.9		92.5		71.3		59.8		0.36	U								
Magnesium	5000	4900		4790		4660		4880		2360		7.6	U								
Manganese	15	332		377		462		666		101		1.1	U								
Mercury	0.2	0.15		0.54		2.9		2.2		1.2		0.05	U								
Nickel	40	8.9		13.5		13.2	U	17.1	U	13.7	U	1.0	U								
Potassium	5000	440		970		1090		929		539		44.8	U								
Selenium	5	0.71	UJ	0.73	UJ	3.1	U	3.3	U	11.1	J	0.66	U								
Silver	10	0.86	U	0.82	U	2.1	U	2.6	U	2.8	U	0.46	U								
Sodium	5000	272		259		351		309	U	288	U	30.3	U								
Thallium	10	0.26	U	0.26	U	1.1	U	1.2	U	1.5	U	0.24	U								
Vanadium	50	77.3		53.4		66.2		64.4		42.1		0.52	U								
Zinc	20	59.0		213		641		569		564		2.0	U								
Cyanide	10	0.51	U	0.55	U	2.3	U	2.5	U	2.8	U	0.46	U								

DUP = Duplicate, EB = Equipment Blank, PP = Percolation Pond, SP = Settling Pond

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BLANK AND SAMPLE DATA SUMMARY

SDG: B06D25	REVIEWER: PMG			DATE: 8/24/93				PAGE 1 OF 1	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
CCB	Cadmium	2.5			ug/L	12.5	25.0	B06D26, B06D27, B06D28, B06D30	U
PBS	Calcium	240.6			ug/L	1203	2406	B06D50	U
CCB	Cobalt	2.9			ug/L	14.5	29.0	B06D27, B06D28, B06D30	U
CCB	Manganese	6.9			ug/L	34.5	69.0	B06D50	U
CCB	Nickel	7.1			ug/L	35.5	71.0	B06D27, B06D28, B06D30	U
CCB	Silver	3.0			ug/L	15.0	30.0	B06D25, B06D26, B06D28, B06D30	U
PBS	Sodium	134.2			ug/L	671.0	1342	B06D28, B06D30, B06D50	U
PBS	Zinc	10.6			ug/L	53.0	106	B06D50	U

ACCURACY DATA SUMMARY

SDG: B06D25	REVIEWER: PMG	DATE: 8/24/93	PAGE 1 OF 1	
COMMENTS:				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D25A	Selenium	130.09	B06D25	J
B06D26A	Selenium	61.53	B06D26	J

DATA QUALIFICATION SUMMARY

SDG: B06D25	REVIEWER: PMG	DATE: 8/24/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Arsenic	J	B06D26, B06D27	MSA correlation coefficients <0.995
Selenium	J	B06D30	MSA correlation coefficients <0.995
Cadmium	U	B06D26, B06D27, B06D28, B06D30	Lab blank contamination
Calcium	U	B06D50	Lab blank contamination
Cobalt	U	B06D27, B06D28, B06D30	Lab blank contamination
Manganese	U	B06D50	Lab blank contamination
Nickel	U	B06D27, B06D28, B06D30	Lab blank contamination
Silver	U	B06D25, B06D26, B06D28, B06D30	Lab blank contamination
Sodium	U	B06D28, B06D30, B06D50	Lab blank contamination
Zinc	U	B06D50	Lab blank contamination
Selenium	J	B06D25, B06D26	GFAA analytical spike

INORGANIC ANALYSIS, SOIL MATRIX, (mg/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: Roy F. Weston																					
Case	SDG: B06D29																				
Sample Number		B06D29																			
Location		SP-6																			
Remarks		Split																			
Sample Date		08/26/92																			
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	200	46200																			
Antimony	60	44.7	U																		
Arsenic	10	28.0																			
Barium	200	144																			
Beryllium	5	1.0	U																		
Cadmium	5	5.2	U																		
Calcium	5000	4340																			
Chromium	10	48.9																			
Cobalt	50	10.6																			
Copper	25	41.4																			
Iron	100	18500																			
Lead	3	46.2	J																		
Magnesium	5000	3240																			
Manganese	15	431	J																		
Mercury	0.2	2.85	J																		
Nickel	40	14.9	U																		
Potassium	5000	999	U																		
Selenium	5	1.49	UJ																		
Silver	10	7.45	U																		
Sodium	5000	244																			
Thallium	10	1.49	UJ																		
Vanadium	50	47.7																			
Zinc	20	432	J																		
Cyanide	10	3.73	U																		

SP = Settling Pond

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WHC-SD-EN-TI-197, Rev. 0

BLANK AND SAMPLE DATA SUMMARY

SDG: B06D29	REVIEWER: SC			DATE: 8/25/93				PAGE 1 OF 1	
COMMENTS:									
SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
CCB	Beryllium	1.1			ug/L	5.5	11.0	B06D29	U

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WHC-SD-EN-TI-197, Rev. 0

ACCURACY DATA SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/25/93	PAGE 1 OF 1	
COMMENTS:				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D29S	Lead	280.0	B06D29	J
B06D29S	Manganese	67.7	B06D29	J
B06D29S	Thallium	69.6	B06D29	J
B06D29A	Lead	78.0	B06D29	J
B06D29A	Selenium	78.0	B06D29	J
B06D29A	Thallium	63.5	B06D29	J

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WHC-SD-EN-TI-197, Rev. 0

PRECISION DATA SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/25/93	PAGE 1 OF 1
COMMENTS:			

COMPOUND	SAMPLE ID:	SAMPLE ID:	RPD	SAMPLES AFFECTED	QUALIFIER
Mercury	B06D29	B06D29D	46.1	B06D29	J
Zinc	B06D29	B06D29L	63.2	B06D29	J

DATA QUALIFICATION SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/25/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Beryllium	U	B06D29	Lab blank contamination
Lead	J	B06D29	Matrix spike
Manganese	J	B06D29	Matrix spike
Thallium	J	B06D29	Matrix spike
Lead	J	B06D29	GFAA analytical spike
Selenium	J	B06D29	GFAA analytical spike
Thallium	J	B06D29	GFAA analytical spike
Mercury	J	B06D29	Lab duplicate
Zinc	J	B06D29	ICP serial dilution

INORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																			
Laboratory: Roy F. Weston																			
Case	SDG: B06D29																		
Sample Number		B06D33																	
Location		PP-7																	
Remarks		Split																	
Sample Date		08/25/92																	
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Silver, TCLP Leachate	10.0	10.0	UJ																
Arsenic, TCLP Leachate	100.0	100	U																
Barium, TCLP Leachate	200.0	768																	
Cadmium, TCLP Leachate	5.0	5.0	U																
Chromium, TCLP Leachate	10.0	10.0	U																
Mercury, TCLP Leachate	0.2	0.20	U																
Lead, TCLP Leachate	90.0	90.0	U																
Selenium, TCLP Leachate	100.0	100	UJ																

PP = Percolation Pond

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WHC-SD-EN-TI-197, Rev. 0

ACCURACY DATA SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/24/93	PAGE_1_OF_1_	
COMMENTS: TCLP				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D33S	Selenium	68.6	B06D33	J
B96D33S	Silver	45.2	B06D33	J

DATA QUALIFICATION SUMMARY

SDG: B06D29	REVIEWER: SC	DATE: 8/24/93	PAGE 1 OF 1
COMMENTS: TCLP			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Selenium	J	B06D33	Matrix Spike
Silver	J	B06D33	Matrix Spike

INORGANIC ANALYSIS, SOIL MATRIX, (mg/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D31																				
Sample Number		B06D31		B06D32		B06D34		B06D38		B06D39		B06D40		B06D41		B06D42		B06D43		B06D44	
Location		PP-7		PP-7		PP-6		PP-5		PP-4		PP-3		PP-2		PP-1		SP-1		SP-6	
Remarks				DUP																	
Sample Date		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/26/92	
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Mercury	0.2	0.21		0.16		1.4		0.07		0.05	U	0.05	U	0.04	U	0.07		2.1		1.7	

DUP = Duplicate, PP = Percolation Pond, SP = Settling Pond

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WHC-SD-EN-TI-197, Rev. 0

INORGANIC ANALYSIS, SOIL MATRIX, (mg/Kg)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D31																				
Sample Number		B06D45		B06D46		B06D47		B06D48		B06D49											
Location		SP-2		SP-3		SP-4		SP-5		SP-7											
Remarks																					
Sample Date		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92											
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Mercury	0.2	0.36		0.51		0.75		0.84		1.02											

DUP = Duplicate, PP = Percolation Pond, SP = Settling Pond

9713505.0804
WHC-SD-EN-TI-197, Rev. 0

INORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																			
Laboratory: Roy F. Weston																			
Case	SDG: B06D31																		
Sample Number		B06D31		B06D32		B06D34		B06D38		B06D39		B06D40		B06D41		B06D42		B06D43	
Location		PP-7		PP-7		PP-6		PP-5		PP-4		PP-3		PP-2		PP-1		SP-1	
Remarks				DUP															
Sample Date		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92		08/25/92	
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Silver, TCLP Leachate	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Arsenic, TCLP Leachate	100	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Barium, TCLP Leachate	200	929		821		790		972		1500		755		1000		1100	.	1060	
Cadmium, TCLP Leachate	5.0	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.2	
Chromium, TCLP Leachate	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	15.3	
Mercury, TCLP Leachate	0.20	0.20	UJ	0.20	UJ	0.20	UJ	0.20	UJ	0.20	UJ	0.20	UJ	0.20	UJ	0.20	UJ	0.20	U
Lead, TCLP Leachate	90.0	90.0	U	90.0	U	90.0	U	90.0	U	90.0	U	90.0	U	90.0	U	90.0	U	90.0	U
Selenium, TCLP Leachate	100.0	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ

DUP = Duplicate, PP = Percolation Pond, SP = Settling Pond

9713505.0005
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INORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																			
Laboratory: Roy F. Weston																			
Case	SDG: B06D31																		
Sample Number		B06D44		B06D45		B06D46		B06D47		B06D48		B06D49							
Location		SP-6		SP-2		SP-3		SP-4		SP-5		SP-7							
Remarks																			
Sample Date		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92		08/26/92							
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Silver, TCLP Leachate	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U						
Arsenic, TCLP Leachate	100	100	U	100	U	100	U	100	U	100	U	100	U						
Barium, TCLP Leachate	200	789		1050		916		568		608		402							
Cadmium, TCLP Leachate	5.0	5.8		5.0	U	5.0	U	5.0	U	5.0	U	8.7							
Chromium, TCLP Leachate	10.0	10.0	U	10.0	U	10.0	U	10.0	U	13.5		14.1							
Mercury, TCLP Leachate	0.20	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U						
Lead, TCLP Leachate	90.0	90.0	U	90.0	U	90.0	U	90.0	U	90.0	U	95.0							
Selenium, TCLP Leachate	100.0	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ	100	UJ						

DUP = Duplicate, PP = Percolation Pond, SP = Settling Pond

9713505.0806
WHC-SD-EN-TI-197, Rev. 0

HOLDING TIME SUMMARY

SDG: B06D31	REVIEWER: PMG			DATE: 8/31/93		PAGE 1 OF 1	
COMMENTS: TCLP							
FIELD SAMPLE ID	ANALYSIS TYPE	DATE SAMPLED	DATE TCLP EXTRACTION	DATE ANALYZED	EXT. HOLDING TIME, DAYS	ANALYSIS HOLDING TIME, DAYS	QUALIFIER
B06D31	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D32	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D34	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D38	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D39	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D40	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D41	Mercury	8/25/92	9/23/92	10/7/92	28	28	J
B06D42	Mercury	8/25/92	9/23/92	10/7/92	28	28	J

9713505.0807
WHC-SD-EN-TI-197, Rev. 0

ACCURACY DATA SUMMARY

SDG: B06D31	REVIEWER: PMG	DATE: 8/31/93	PAGE 1 OF 1	
COMMENTS: TCLP				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D31S	Selenium	68.2	All	J

9713505.0800
WAC-SD-EN-TI-197, Rev. 0

DATA QUALIFICATION SUMMARY

SDG: B06D31	REVIEWER: PMG	DATE: 8/31/93	PAGE 1 OF 1
COMMENTS: TCLP			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Mercury	J	B06D31, B06D32, B06D34, B06D38, B06D39, B06D40, B06D41, B06D42	Holding time exceeded
Selenium	J	All	Matrix spike recovery

INORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																					
Laboratory: TMA																					
Case	SDG: B06D51																				
Sample Number		B06D51		B06D52		B06D57															
Location		SP-5,7																			
Remarks				EB		EB															
Sample Date		08/25/92		08/26/92		08/26/92															
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Mercury	0.2	0.22		0.20	U	0.20	U														

EB = Equipment Blank, SP = Settling Pond

9713505.0810
WHC-SD-EN-TI-197, Rev. 0

INORGANIC ANALYSIS, WATER MATRIX, (ug/L)

Project: WESTINGHOUSE-HANFORD																			
Laboratory: Roy F. Weston																			
Case	SDG: B06D51																		
Sample Number		B06D51		B06D52		B06D57													
Location		SP-5,7																	
Remarks				EB		EB													
Sample Date		08/25/92		08/26/92		08/26/92													
Inorganic Analytes	CRDL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Silver, TCLP Leachate	10.0	10.0	UJ	10.0	UJ	10.0	UJ												
Arsenic, TCLP Leachate	100.0	100	U	100	U	100	U												
Barium, TCLP Leachate	200.0	200	U	200	U	200	U												
Cadmium, TCLP Leachate	5.0	5.0	U	5.0	U	5.0	U												
Chromium, TCLP Leachate	10.0	10.0	U	10.0	U	10.0	U												
Mercury, TCLP Leachate	0.20	0.20	U	0.20	U	0.20	U												
Lead, TCLP Leachate	90.0	90.0	U	90.0	U	90.0	U												
Selenium, TCLP Leachate	100.0	100	UJ	100	UJ	100	UJ												

SP = Settling Pond, EB = Equipment Blank

9713505.0811
WHC-SD-EN-TI-197, Rev. 0

ACCURACY DATA SUMMARY

SDG: B06D51	REVIEWER: PMG	DATE: 8/26/93	PAGE 1 OF 1	
COMMENTS: TCLP				
SAMPLE ID	COMPOUND	% RECOVERY	SAMPLE(S) AFFECTED	QUALIFIER REQUIRED
B06D57S	Selenium	68.4	B06D51, B06D52, B06D57	J
B06D57S	Silver	52.2	B06D51, B06D52, B06D57	J

DATA QUALIFICATION SUMMARY

SDG: B06D51	REVIEWER: PMG	DATE: 8/26/93	PAGE 1 OF 1
COMMENTS: TCLP			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Selenium	J	B06D51, B06D52, B06D57	Matrix spike recovery
Silver	J	B06D51, B06D52, B06D57	Matrix spike recovery

6.0 REFERENCES

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