START 9613500.0943

B08FF6-TMA-491 000001

0045590

JUN 1993 RECEIVED

WESTINGHOUSE HANFORD COMPANY

Results of Analyses For:

GENERAL CHEMISTRY
CASE NO. 04-061
(TMA/ARLI Work Order # A3-04-061)

ORGANICS
CASE NO. 04-061
(TMA/ARLI Work Order # A3-04-061)

General Chemistry and Organics results are presented for the following WHC WATER sample(s):

| | |
|---|---|
| B08FF6 | B08FF8 |
| B08FG1 | B08FG3 |
| B08FG6 | B08FG8 |
| B08FH1 | B08FH3 |
| B08FH6 | B08FH8 |
| B08FW0 | B08FW2 |

OCT 1996 RECEIVED EDMC

Norcal Work Order # N3-04-097

Thermo Analytical Inc.
160 Taylor Street
Monrovia, CA 91016
(818) 357-3247

Date submitted:

6/14/93

PAGE 1 TMA/Norcal CHAIN OF CUSTODY ORD # N3-04-097
RCVD: 04/20/93 DUE: 05/25/93 04/20/93 14:28:50 KEEP: 08/23/93 DISP: S 000002

| DASH | SAMPLE IDENTIFICATION | STORED | TESTS for FRACTIONS with work in DEPT: SU and CATEGORY | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 01A-W | B08FF6 | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH121 | WH122 |
| | | | WH128 | WH131 | WH132 | WH140 | | | |
| 02A-W | B08FG1 | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH121 | WH122 |
| | | | WH128 | WH131 | WH132 | WH140 | | | |
| 03A-W | B08FG6 | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH121 | WH122 |
| | | | WH128 | WH131 | WH132 | WH140 | | | |
| 04A-W | B08FH1 | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH121 | WH122 |
| | | | WH128 | WH131 | WH132 | WH140 | | | |
| 05A-W | B08FH6 | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH121 | WH122 |
| | | | WH128 | WH131 | WH132 | WH140 | | | |
| 06A-W | B08FW2 | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH121 | WH122 |
| | | | WH128 | WH131 | WH132 | WH140 | | | |
| 06C-W | B08FW2 MS | UNFILTEREDARLI | WH018 | WH019 | WH020 | WH043 | WH114 | WH140 | |
| 06D-W | B08FW2 MSD | UNFILTEREDARLI | WH018 | WH019 | WH020 | | | | |
| 06E-W | B08FW2 DUP | UNFILTEREDARLI | WH043 | WH114 | WH121 | WH122 | WH128 | WH131 | WH132 |
| | | | WH140 | | | | | | |
| 13A-W | B08FF6 | ARLI | WH018 | | | | | | |
| 14A-W | B08FG3 | ARLI | WH018 | | | | | | |
| 15A-W | B08FG8 | ARLI | WH018 | | | | | | |
| 16A-W | B08FH3 | ARLI | WH018 | | | | | | |
| 17A-W | B08FH8 | ARLI | WH018 | | | | | | |
| 18A-W | B08FW2 | ARLI | WH018 | | | | | | |

| RELEASED BY | DATE | TRANSFERRED TO | DATE | RECEIVED BY | DATE |
|---|---|---|---|---|---|
| | | | | | |
| tyamamoto | 4-20-93 | ARLI | 4-20-93 | [illegible] | 4/21/93 |
| | | | | | |
| | | | | | |
| | | | | | |

9613500.0945

# SAMPLE LOG-IN SHEET

LAB NAME : TRA/ARLI

PAGE : 1 000003

RECEIVED BY (PRINT NAME): Tracy Cooper

LOG-IN-DATE : 4/21/93

RECEIVED BY (SIGNATURE): Tracy Cooper

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

REMARKS: SADIE

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.: 2521033281
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: 4/21/93
12. Temp of Ice chest No Thermometer
13. Time Recieved: 1105

SAMPLE TRANSFER

Fraction:
Area #:
By:
On:

| EPA SAMPLE # | CORRESPONDING SAMPLE TAG # | CORRESPONDING ASSIGNED LAB # | REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC |
|---|---|---|---|
| | B08FH6 | A3-04-061-09 | |
| | B08FG1 | A3-04-061-03 | |
| | B08FG3 | A3-04-061-04 | |
| | B08FF8 | A3-04-061-02 | |

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM SC-3

9613500.0946

SAMPLE LOG-IN SHEET

000004

LAB NAME : TRA/APLI

PAGE : 2 OF 6

RECEIVED BY (PRINT NAME): Trudy Golub

LOG-IN-DATE : 4/21/93

RECEIVED BY (SIGNATURE): Trudy Golub

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

REMARKS: SML-289

| | EPA SAMPLE # | CORRESPONDING SAMPLE TAG # | CORRESPONDING ASSIGNED LAB # | REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC |
|---|---|---|---|---|
| | | B08FF6 | A3-01-001-01 | |

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.: 2521033281
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: 4/21/93
12. Temp of ice chest No Thermo. Cooler
13. Time Recieved: 1100

SAMPLE TRANSFER

Fraction:
Area #:
By:
On:

* Contact SMO and attach record of resolution

Reviewed By:
Date:
Logbook No.:
Logbook Page No.:

FORM SC-1

9613500.0947

000005

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 3 OF 6

RECEIVED BY (PRINT NAME): Trudy Galub

LOG-IN-DATE : 4/21/93

RECEIVED BY (SIGNATURE): Trudy Galub

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

REMARKS: SML 263

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.: 2521033281
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: 4/21/93
12. Temp of ice chest: No Thermometer
13. Time Recieved: 1100

SAMPLE TRANSFER

Fraction:
Area #:
By:
On:

| EPA SAMPLE # | CORRESPONDING SAMPLE TAG # | CORRESPONDING ASSIGNED LAB # | REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC |
|---|---|---|---|
| | B08FG6 | A3040461-05 | |
| | B08FG8 | A3040461-06 | |

* Contact SMO and attach record of resolution

Reviewed By: _____ Logbook No.: _____

Date: _____ Logbook Page No.: _____

FORM DC-1

9615500.0948

000006

SAMPLE LOG-IN SHEET

LAB NAME : TRA/ARLI

PAGE : 4 OF 6

RECEIVED BY (PRINT NAME): Trudy Galun

LOG-IN-DATE : 4/21/93

RECEIVED BY (SIGNATURE): Trudy Galun

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

REMARKS: SML 196

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.: 2521033285
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* SML-196
11. Date Recieved at Lab: 4/21/93
12. Temp of ice chest °F
13. Time Recieved:

SAMPLE TRANSFER

Fraction:
Area #:
By:
On:

| CORRESPONDING | | | |
|---|---|---|---|
| EPA SAMPLE # | SAMPLE TAG # | ASSIGNED LAB # | REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC |
| | B08FH1 | A304061-01 | |
| | B08FH3 | A304061-02 | |

* Contact SMO and attach record of resolution

Reviewed By:
Date:
Logbook No.:
Logbook Page No.:

FORM SC-1

9613500.0949

000007

SAMPLE LOG-IN SHEET

LAB NAME : TMA/ARLI

PAGE : 5 OF 6

RECEIVED BY (PRINT NAME): Trudy Golub

LOG-IN-DATE : 4/21/93

RECEIVED BY (SIGNATURE): Trudy Golub

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

REMARKS: 2/5/7

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.: 2521033281
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: 4/21/93
12. Temp of ice chest No Thermometer °C
13. Time Recieved: 1100

SAMPLE TRANSFER

Fraction:
Area #:
By:
On:

| EPA SAMPLE # | CORRESPONDING SAMPLE TAG # | CORRESPONDING ASSIGNED LAB # | REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC |
|---|---|---|---|
| | B08FW0 | A3-04-061-11 | |
| | B08FW2 | A3-04-061-12 | |

* Contact SMO and attach record of resolution

Reviewed By: Logbook No.:

Date: Logbook Page No.:

FORM DC-1

9613500.0950

000008

SAMPLE LOG-IN SHEET

LAB NAME : TMA/NYL

PAGE : 6 OF 6

RECEIVED BY (PRINT NAME): Trudy Galub

LOG-IN-DATE : 4/21/93

RECEIVED BY (SIGNATURE): Trudy Galub

CASE NUMBER:

SAMPLE DELIVERY GROUP NO.:

SAS NUMBER:

REMARKS: SMC-244

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.: 2521053328 1

7. Sample Tags Present/Absent*

8. Sample Tags Numbers Listed/Not Listed on Chain of Custody

9. Sample Condition: Intact/Broken*/Leaking

B08F61 Sulfide Lid broken Replaced Tag 4/21/93

10. Does information on custody records, traffic reports, and sample tags agree Yes/No*

11. Date Recieved at Lab: 4/21/93

12. Temp of ice chest No Thermometer

13. Time Recieved: 1100

SAMPLE TRANSFER

Fraction:

Area #:

By:

On:

| EPA SAMPLE # | CORRESPONDING SAMPLE TAG # | CORRESPONDING ASSIGNED LAB # | REMARKS: CONDITION OF SAMPLE SHIPMENT, ETC |
|---|---|---|---|
| | B08F61 | A3-01-0061-03 | |
| | B08FH6 | A3-01-0061-09 | |
| | B08FH8 | A3-01-0061-10 | |

* Contact SMO and attach record of resolution

Reviewed By: Logbook No.:

Date: Logbook Page No.:

FORM OC-1

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 2521033281

A30-1069

2521033281

RECIPIENT'S COPY

Date 4-20-93

From (Your Name) Please Print: SAMPLE CONTROL

Your Phone Number (Very Important): 510-235-2633

Company: T M A /NORCAL

Department/Floor No.

Street Address: 2030 WRIGHT AVE

City: RICHMOND State: CA ZIP Required: 94804

2 To (Recipient's Name) Please Print: CAROLE HARRIS

Recipient's Phone Number (Very Important): (818) 357-3247

Company: TMA / ARLI

Department/Floor No.

Exact Street Address (No Street Delivery to P.O. Boxes or P.O. Zip Codes.): 160 TAYLOR ST.

City: MONROVIA State: CA ZIP Required: 91016

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 2340-6406

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

Street Address

City State ZIP Required

3 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

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)
- 11 [X] 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 (Restricted to authorized users only)
- 46 [ ] GOVT LETTER
- 41 [ ] GOVT PACKAGE

Freight Service (for Extra Large or any pkg. weigh over 150 lbs.)
- 70 [ ] OVERNIGHT FREIGHT ** (Extreme reservation required)
- 80 [ ] TWO-DAY FREIGHT **

† Delivery commitment may be later in some areas

*Declared Value Limit $100

**Call for delivery schedule

5 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)

6

| PACKAGES | WEIGHT in Pounds Only | YOUR DECLARED VALUE |
|---|---|---|
| Total 6 | Total 341 | Total |

DIM SHIPMENT (Chargeable Weight) [ ] ____ lbs.

L x W x H = ____

Received At: 1 [ ] Regular Stop 2 [ ] On-Call Stop 3 [ ] Drop Box 4 [ ] BSC 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 FedEx Employee Number

7 Release Signature

FedEx Emp. No. Date/Time

Federal Express Use

Base Charges

Declared Value Charge

Other 1

Other 2

Total Charges

REVISION DATE 6/91
PART #137204 FXEM 4/92
FORMAT #099

099

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9425000 0051 9 0350 0054 96

9613500.0952

A304061

000010

TMA/ARI
Thermo Analytical Inc.

# RADIATION DOSE RATE SURVEY FORM

Date 4/21/93 COMPANY TMA/NORCAL (WHC) OTHER ORD # 2521033281

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. [illegible] / [illegible]

Calibration Date "OUT FOR CALIBRATION" Calibration Date 2/16/93

Instrument Calibration Factor _____ Instrument Calibration Factor 0.190

| Sample | Location | HP-210 CPM | HP-210 Factor | HP-210 DPM | AC-3-7 CPM | AC-3-7 Factor | AC-3-7 DPM | Surface or Smear? | Activity dpm/100 cm² or dpm/g |
|---|---|---|---|---|---|---|---|---|---|
| Background | | NA | | | 0 | | | | |
| Consistency | | NA | | | 5,030 | 0.1849 | | | |
| Smear SADIE | | NA | | | 30 | | | None | |
| SML289 | | NA | | | 16.0 | | | None | |
| SML244 | | NA | | | 14.0 | | | None | |
| SML263 | | NA | | | 7.0 | | | None | |
| L-10 | | NA | | | 4.0 | | | None | |
| SML 196 | | NA | | | 1.0 | | | None | |
| | | | | | | | | | |
| Reported (WHC) (30) samples each < 300 pCi/gram | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Comments

All OK ✓ Approved MSM

Not OK Date 4/21/93

# GENERAL CHEMISTRY RESULTS

## CASE NO. 04-061

Water Sample #:

| | |
|---|---|
| B08FF6 | B08FG1 |
| B08FG6 | B08FH1 |
| B08FH6 | B08FW0 |

## CASE NARRATIVE

The holding time for the pH, Sulfide, and TDS analysis was exceeded. Careful review of the QC analysis indicate that the data is reliable.

Sample B08FF6 (A3-04-061-1F) yielded a 73.0% recovery for the Phosphate analysis. The low Phosphate recovery compared to our laboratory control sample indicated the presence of a matrix interference.

No other problems were encountered during sample analysis. All QC results were acceptable.

Maureen Parrish

Maureen Parrish

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 7.3 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 41 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 370 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION 01G TEST CODE WCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 106 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 248 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FF6 FRACTION 01W TEST CODE WCCLPL NAME Anions & Wet Chem. - VR043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION 01J TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG1 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.2 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 50 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 371 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG1 FRACTION 03G TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 95 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 233 | mg/L | 5 |
| | | | | |

FORM I

9613500.0960

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FG1 FRACTION 031 TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG1 FRACTION 03K TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG6 FRACTION 05C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 1.4 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.5 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 10 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 261 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # X3-04-061



Received: 04/20/93

Results by Sample

SAMPLE ID B08FG6 FRACTION 05D TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 122 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 170 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG6 FRACTION 05E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG6 FRACTION 05F TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FN1 FRACTION 07C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 7.6 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 42 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 341 | umho/cm | 6 |
| | | | | |

FORM I

9613500.0967

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FM1 FRACTION 07D TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 100 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 237 | mg/L | 5 |
| | | | | |

FORM I

9613500.0968

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FM1 FRACTION 07E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT

Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FM1 FRACTION 07F TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FM6 FRACTION 09C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 10.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 47 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 389 | umho/cm | 6 |
| | | | | |

FORM I

9613500.0971

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FM6 FRACTION 09D TEST CODE VCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 268 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FH6 FRACTION 09E TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FM6 FRACTION 09F TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11C TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 10.1 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 47 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 392 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11D TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 269 | mg/L | 5 |
| | | | | |

FORM I

9613500.0976

000037

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11E TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11F TEST CODE WCCLPL NAME Anions & Wet Chem. - WR043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

9613500.0978



RECORD COPY

JUN 1993
RECEIVED
SDLA

# CASE NO. 04-061

## DATA SUMMARY REPORT
## ORGANICS

PREPARED BY:

TMA ARLI
160 TAYLOR ST.
MONROVIA CA 91016

# CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 04-061

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : April 20, 1993

## 1.0 DESCRIPTION OF CASE :

Twelve water samples were analyzed for TCL Organics- Volatiles, Semivolatiles, and Pesticides/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 | pH |
|---|---|---|---|---|
| B08FF6 | A3-04-061-01A | V | WATER | 7 |
| B08FF6 | A3-04-061-01B | SV & P | WATER | |
| B08FF6 MS | A3-04-061-01C | SV | WATER | |
| B08FF6 MSD | A3-04-061-01D | SV | WATER | |
| B08FF8 | A3-04-061-02A | V | WATER | 7 |
| B08FF8 MS | A3-04-061-02B | V | WATER | 7 |
| B08FF8 MSD | A3-04-061-02C | V | WATER | 7 |
| B08FG1 | A3-04-061-03A | V | WATER | 7 |
| B08FG1 | A3-04-061-03B | SV & P | WATER | |
| B08FG1 MS | A3-04-061-03C | P | WATER | |
| B08FG1 MSD | A3-04-061-03D | P | WATER | |
| B08FG3 | A3-04-061-04A | V | WATER | 7 |
| B08FG6 | A3-04-061-05A | V | WATER | 7 |
| B08FG6 | A3-04-061-05B | SV & P | WATER | |
| B08FG8 | A3-04-061-06A | V | WATER | 7 |
| B08FH1 | A3-04-061-07A | V | WATER | 7 |
| B08FH1 | A3-04-061-07B | SV & P | WATER | |
| B08FH3 | A3-04-061-08A | V | WATER | 7 |
| B08FH6 | A3-04-061-09A | V | WATER | 7 |
| B08FH6 | A3-04-061-09B | SV & P | WATER | |
| B08FH8 | A3-04-061-10A | V | WATER | 7 |
| B08FW0 | A3-04-061-11A | V | WATER | 7 |
| B08FW0 | A3-04-061-11B | SV & P | WATER | |
| B08FW2 | A3-04-061-12A | V | WATER | 7 |

## 3.0 COMMENTS :

### 3.1 SHIPPING AND DOCUMENTATION :

All of the samples were received unbroken and properly documented.

## 3.2 ANALYSIS

### 3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times.

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

TUNES :

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

### 3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Samples B08FF6, B08FG6 and B08FH1 had surrogate recoveries for 2-Fluorobiphenyl, 2-Fluorophenol and 2-Chlorophenol-d4 above the QC limits. Sample B08FG6 also had a recovery above the QC limits for the advisory surrogate 1,2-Dichlorobenzene-d4. The surrogate recoveries for Phenol-d5 and 2-Chlorophenol-d4 in sample B08FF6MS were above the QC limits. In accordance with protocol, no further action was required.

Samples B08FF6MS and B08FF6MSD had matrix spike recoveries above the QC limits for 4-Chloro-3-methylphenol, 4-Nitrophenol and Pentachlorophenol. Sample B08FF6MSD also had a spike recovery for Pyrene slightly above the QC limits. In accordance with protocol, no further action was required.

All of the other 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 05/06/93 and was analyzed according to the CLP SOW. The sequence was analyzed by single injection into a dual column system.

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

The chromatograms are presented in the manner consistent with the capabilities of the Nelson 2700 Turbochrome Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Sample B08FG6 had a TCX surrogate recovery that had a percent difference between the two columns that exceeded 25%. The high recovery was due to an interference peak that co-eluted with TCX on the DB-1701 column.

Samples B08FG1MS and B08FG1MSD had matrix spike recoveries for Dieldrin above the QC limits on the DB-1701 column. The percent difference between the two GC columns exceeded 25% for Dieldrin. The high recovery was due to an interference peak that co-eluted with Dieldrin on the DB-1701 column. Therefore, Dieldrin has been "P" qualified.

All of the other QC results were within the limits specified by 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 6/4/93
CLP Program Manager

Widayati

Wida Ang 6/4/93
Organics Manager

EPA SAMPLE NO.

B08FF6

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B17

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 9 | J |
| 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 |

9613500.0983

000006
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B17

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000007
EPA SAMPLE NO.

B08FF8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B04

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 5 | 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 | 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 |

EPA SAMPLE NO.

B08FF8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B04

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FG1

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B03

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

000010
EPA SAMPLE NO.

B08FG1

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B03

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FG3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B18

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

EPA SAMPLE NO.

B08FG3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B18

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

000013
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 10 | U |
| 67-64-1 | Acetone | 9 | J |
| 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 |

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500.0992

000015

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FG8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

EPA SAMPLE NO.

B08FG8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500.0994

1A

000017

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FH1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B10

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 5 | 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 | 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 |

9613500.0995

000018
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FH1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B10

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FH3

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B11

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 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 |

9613500 0997

IE

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000020

B08FH3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B11

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FH6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

EPA SAMPLE NO.

B08FH6

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000023

EPA SAMPLE NO.

B08FH8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 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 |

EPA SAMPLE NO.

B08FH8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

000026
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FW2

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-12A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 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 |

9613500 1005

000028

EPA SAMPLE NO.

B08FW2

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-12A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1B

000239

EPA SAMPLE NO.

B08FF6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B08FF6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.43 | 2 | BJ |

9615590.1009

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

9613500.1011

1F

000256
EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 3

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.43 | 4 | BJ |
| 2. | UNKNOWN GLYCOL ETHER | 12.30 | 34 | J |
| 3. | UNKNOWN HYDROCARBON | 22.15 | 2 | J |

1B

EPA SAMPLE NO.

B08FG6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

9615590.1015

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

9613500.1014

IF

EPA SAMPLE NO.

B08FG6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 2

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.45 | 4 | BJ |
| 2. | UNKNOWN HYDROCARBON | 20.12 | 13 | J |

EPA SAMPLE NO.

B08FH1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

9613500 1C016

EPA SAMPLE NO.

B08FH1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 12 | B |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B08FH1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 4 | BJ |

EPA SAMPLE NO.

B08FH6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

9613500.1019

EPA SAMPLE NO.

B08FH6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

9613500.1020

1F

EPA SAMPLE NO.

B08FH6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | BJ |

9613500.1021

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

1C

000045

EPA SAMPLE NO.

B08FW0

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 2 | BJ |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

000046

EPA SAMPLE NO.

B08FW0

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | BJ |

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

# 1D
# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

96135010 1026

1b

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

EPA SAMPLE NO.

B08FH1

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9613500 1D 1028

EPA SAMPLE NO.

B08FH6

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9513500.1029

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

000052
EPA SAMPLE NO.

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9613500.1030

 Skinner&Sherman REPORT Work Order # S3-04-227

Received: 04/21/93 05/24/93 15:23:45

REPORT TMA/NORCAL
TO 2030 Wright Avenue
Richmond, CA 94804

ATTEN Dan Steurmer

PREPARED TMA / Skinner & Sherman Labs.
BY 300 Second Avenue
P.O. Box 521
Waltham, MA 02254

ATTEN Client Services
PHONE (617) 890-7200

CERTIFIED BY

CONTACT DP

CLIENT HANFORD NOR SAMPLES 7
COMPANY TMA/NORCAL Hanford
FACILITY Richmond, CA

WORK ID N3-04-097
TAKEN By Client
TRANS Fed Ex
TYPE Water
P.O. # N3-04-097
INVOICE under separate cover

| SAMPLE IDENTIFICATION | TEST CODES and NAMES used on this workorder |
|---|---|
| 01 B08FF6 | NO3NO2 Nitrate Plus Nitrite |
| 02 B08FG1 | |
| 03 B08FG6 | |
| 04 B08FH1 | |
| 05 B08FH6 | |
| 06 B08FW0 | |
| 06 B08FW0 DUPL | |
| 06 B08FW0 SPIKE | |
| 07 LCSW | |

MAR 1996
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Data
Log In

TMA
Thermo Analytical Inc.
Skinner & Sherman Laboratories Inc.

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

300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200
1-800-4 LAB TEST FAX (617) 890-3883

9613500.1031



Received: 04/21/93

Results by Sample

SAMPLE ID B08FF6 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/16/93 Category WATER

N03N02 6.42
mgN/L

SAMPLE ID B08FG1 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/16/93 Category WATER

N03N02 6.05
mgN/L

SAMPLE ID B08FG6 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

N03N02 <0.25
mgN/L

SAMPLE ID B08FH1 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

N03N02 3.51
mgN/L

SAMPLE ID B08FH6 SAMPLE # 05 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

N03N02 5.30
mgN/L

SAMPLE ID B08FW0 SAMPLE # 06 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

N03N02 5.33
mgN/L

SAMPLE ID B08FW0 DUPL SAMPLE # 06 FRACTIONS: B
Date & Time Collected 04/17/93 Category WATER

N03N02 5.54
mgN/L

TMA
Thermo Analytical Inc.
Skinner & Sherman Laboratories Inc.

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

300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200
1-800-4 LAB TEST FAX (617) 890-3883

9613500.1032

 Skinner&Sherman REPORT Work Order # S3-04-227

Received: 04/21/93 Results by Sample

SAMPLE ID B08FW0 SPIKE SAMPLE # 06 FRACTIONS: C

Date & Time Collected 04/17/93 Category WATER

NO3NO2 7.68 mgN/L

SAMPLE ID LCSW SAMPLE # 07 FRACTIONS: A

Date & Time Collected not specified Category WATER

NO3NO2 2.02 mgN/L

TMA Thermo Analytical Inc.

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

Skinner & Sherman Laboratories Inc. 500 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200
1-800-4 LAB TEST FAX (617) 890-3883

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

9613500.1033

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JUN 1993
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SDLA

May 21, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Six (6) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 21, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals. The analysis was performed under TMA/Skinner and Sherman work order S304228.

**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 aluminum and selenium digestion spike recoveries exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

Steven Provencal

Steven R. Provencal
Lead Chemist

9613500.1034

# COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

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

Lab Code: SKINER Case No.: N3-04-097 SAS No.: SDG No.: B08FF7

SOW No.: ILM02.1

| SAMPLE NUMBER: | Lab Sample ID. |
|---|---|
| B08FF7 | 04228-01S |
| B08FG2 | 04228-02S |
| B08FG7 | 04228-03S |
| B08FH2 | 04228-04S |
| B08FH7 | 04228-05S |
| B08FW1 | 04228-06S |
| B08FW1D | 04228-06S2 |
| B08FW1S | 04228-06DS |

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I 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 contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Steven Provencal Name: Steven R. Provencal

Date: 5/21/93 Title: Lead Chemist

WESTINGHOUSE/HANFORD

9613500.1035

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FF7

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-01S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 29.8 | B | N | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 32.6 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 50400 | | | P |
| 7440-47-3 | Chromium | 7.6 | B | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 25.1 | B | | P |
| 7439-92-1 | Lead | 1.3 | U | | F |
| 7439-95-4 | Magnesium | 8320 | | | P |
| 7439-96-5 | Manganese | 2.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 2060 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 2.1 | U | | P |
| 7440-66-6 | Zinc | 13.0 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN ILM02.1

9613590.1036

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FG2

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-02S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | N | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 33.4 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 49800 | | | P |
| 7440-47-3 | Chromium | 17.6 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 11.4 | B | | P |
| 7439-92-1 | Lead | 3.1 | | W | F |
| 7439-95-4 | Magnesium | 7470 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 1800 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | N | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 10000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 2.1 | U | | P |
| 7440-66-6 | Zinc | 7.7 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.1057

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FG7

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-03S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 20.3 | B | N | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.9 | B | | F |
| 7440-39-3 | Barium | 63.8 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 24900 | | | P |
| 7440-47-3 | Chromium | 3.3 | U | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 12.1 | B | | P |
| 7439-92-1 | Lead | 2.0 | B | | F |
| 7439-95-4 | Magnesium | 8930 | | | P |
| 7439-96-5 | Manganese | 40.4 | | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5180 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 12900 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 30.2 | B | | P |
| 7440-66-6 | Zinc | 5.6 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

9615600.1068

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FH2

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-04S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | N | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 33.4 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 39200 | | | P |
| 7440-47-3 | Chromium | 20.8 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 14.9 | B | | P |
| 7439-92-1 | Lead | 1.4 | B | | F |
| 7439-95-4 | Magnesium | 9620 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4250 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 7.9 | B | | P |
| 7440-66-6 | Zinc | 8.1 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

9613500.1059

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FH7

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-05S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.9 | B | N | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.1 | B | W | F |
| 7440-39-3 | Barium | 30.7 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 51800 | | | P |
| 7440-47-3 | Chromium | 11.1 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 37.5 | B | | P |
| 7439-92-1 | Lead | 1.6 | B | | F |
| 7439-95-4 | Magnesium | 6930 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4100 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 3.8 | B | | P |
| 7440-66-6 | Zinc | 8.1 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN ILM02.1

**TMA** 9613500.1040
**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*

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JUN 1993
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May 21, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Six (6) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 21, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S304226.

**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 exception:

The selenium digestion spike recovery exceeded the control limit requirement.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

Steven Provencal

Steven R. Provencal
Lead Chemist

9413500.1041

# COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

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

Lab Code: SKINER Case No.: N3-04-097 SAS No.: SDG No.: B08FF6

SOW No.: ILM02.1

| SAMPLE NUMBER: | Lab Sample ID. |
|---|---|
| B08FF6 | 04226-01S |
| B08FG1 | 04226-02S |
| B08FG6 | 04226-03S |
| B08FH1 | 04226-04S |
| B08FH6 | 04226-05S |
| B08FW0 | 04226-06S |
| B08FW0D | 04226-06S2 |
| B08FW0S | 04226-06DS |

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I 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 contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Steven Provencal Name: Steven R. Provencal

Date: 5/21/93 Title: Lead Chemist

WESTINGHOUSE/HANFORD

9615900.1042

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FF6

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-01S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 25.7 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 29.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 49600 | | | P |
| 7440-47-3 | Chromium | 9.8 | B | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 175 | | | P |
| 7439-92-1 | Lead | 3.1 | | W | F |
| 7439-95-4 | Magnesium | 8160 | | | P |
| 7439-96-5 | Manganese | 10.7 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 1900 | B | | P |
| 7782-49-2 | Selenium | 7.2 | | +N | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11100 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 9.6 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN ILM02.1

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FG1

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-02S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 66.4 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 37.0 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 51700 | | | P |
| 7440-47-3 | Chromium | 20.4 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 80.8 | B | | P |
| 7439-92-1 | Lead | 3.0 | B | W | F |
| 7439-95-4 | Magnesium | 7770 | | | P |
| 7439-96-5 | Manganese | 2.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 1780 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | N | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 10200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

9613500.1044

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FG6

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-03S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 66.7 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 25400 | | | P |
| 7440-47-3 | Chromium | 5.8 | U | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 107 | | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 9110 | | | P |
| 7439-96-5 | Manganese | 47.9 | | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5040 | | | P |
| 7782-49-2 | Selenium | 2.9 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 13100 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 31.0 | B | | P |
| 7440-66-6 | Zinc | 9.9 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

9613500.1045

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FH1

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-04S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 35.8 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 38900 | | | P |
| 7440-47-3 | Chromium | 26.7 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 52.9 | B | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 9570 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4060 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 10900 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 7.9 | B | | P |
| 7440-66-6 | Zinc | 5.8 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.1046

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FH6

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-05S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | W | F |
| 7440-39-3 | Barium | 29.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 53200 | | | P |
| 7440-47-3 | Chromium | 10.5 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 18.6 | B | | P |
| 7439-92-1 | Lead | 2.7 | B | | F |
| 7439-95-4 | Magnesium | 7110 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 3940 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 4.1 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTINGHOUSE/HANFORD

9613500.1047

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FW0

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-06S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 36.4 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | W | F |
| 7440-39-3 | Barium | 29.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 52700 | | | P |
| 7440-47-3 | Chromium | 11.2 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 34.2 | B | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 7040 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4060 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9615500.1048

B08FF6-TMA-491

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

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June 18, 1993

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Ref. TMA/Norcal N3-04-100-7186

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

Dear Ms. Colley:

Enclosed in the Summary Data Section, are the gross alpha, gross beta, $^{3}H$, $^{14}C$, $^{90}Sr$, $^{99}Tc$, isotopic uranium, isotopic plutonium, $^{241}Am$, and gamma scan results for the water samples from 100-BC-5 location we received 20 April, 1993. The QA/QC results are also given in the Summary Data Section. The Summary Data Section is numbered pages 1 to 65, and the appendices are numbered pages 66 to 740.

Please call if you have any questions concerning this data.

Sincerely,

D.P. Kharkar

Dinkar P. Kharkar, Ph.D.
Manager, Nuclear Programs

DPK/jv

Enclosures: Section 1 and 2
Appendices

9613500.1049

N304100-19

# TMA NORCAL

REPORTING GROUP 7186

## REPLICATE

B08FF6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

REPLICATE
Lab sample id N304100-19
Dept sample id 7186-019

ORIGINAL
Lab sample id N304100-01
Dept sample id 7186-001
Received 04/20/93

Client sample id B08FF6
Matrix LIQUID
Collected 04/16/93
Chain of custody id EFL-1037

| PARAMETER | REPLICATE pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | ORIGINAL pCi/L | 2σ ERR (COUNT) | MDA pCi/L | QUALI-FIERS | RPD % | 3σ PROT TOT LIMIT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Alpha | 2.0 | 2.3 | 2 | 3 | J | 80A | -1.3 | 1.9 | 3 | U | 200 | 275 |
| Gross Beta | 130 | 4.5 | 2 | 4 | | 80B | 130 | 4.5 | 2 | | 0 | 34 |
| Uranium 233/234 | 0.94 | 0.10 | 0.04 | 0.2 | | U | 1.2 | 0.13 | 0.05 | | 24 | 26 |
| Uranium 235 | 0.046 | 0.022 | 0.02 | 0.2 | J | U | 0.026 | 0.026 | 0.04 | U | 56 | 142 |
| Uranium 238 | 0.86 | 0.097 | 0.03 | 0.2 | | U | 0.95 | 0.11 | 0.03 | | 10 | 27 |
| Plutonium 238 | 0.019 | 0.025 | 0.04 | 0.05 | U | PU | 0.017 | 0.012 | 0.01 | J | 11 | 231 |
| Plutonium 239/240 | -0.006 | 0.013 | 0.03 | 0.05 | U | PU | 0.015 | 0.012 | 0.01 | J | 200 | 253 |
| Americium 241 | 0.017 | 0.021 | 0.03 | 0.05 | U | AM | 0.007 | 0.013 | 0.03 | U | - | |
| Strontium 90 | 41 | 1.7 | 0.8 | 2 | | Y | 44 | 1.7 | 0.9 | | 7 | 23 |
| Technetium 99 | 91 | 3.2 | 3 | 5 | | TC | 90 | 4.9 | 4 | | 1 | 23 |
| Tritium | 3200 | 250 | 200 | 400 | | H | 3700 | 270 | 200 | | 14 | 27 |
| Carbon 14 | 32 | 21 | 30 | 50 | BJ | C | -2.7 | 19 | 30 | U | 200 | 246 |
| GAMMA SCAN ANALYTES | | | | | | | | | | | | |
| Potassium 40 | 120 | 86 | | | | GAM | U | | 100 | U | 18 | 183 |
| Iron 59 | U | | 20 | 30 | U | GAM | U | | 20 | U | - | |
| Chromium 51 | U | | 100 | | U | GAM | U | | 100 | U | - | |
| Cobalt 60 | U | | 9 | 30 | U | GAM | U | | 10 | U | - | |
| Zinc 65 | U | | 20 | | U | GAM | U | | 20 | U | - | |
| Ruthenium 106 | U | | 80 | | U | GAM | U | | 80 | U | - | |
| Cesium 134 | U | | 10 | | U | GAM | U | | 8 | U | - | |
| Cesium 137 | U | | 10 | 20 | U | GAM | U | | 9 | U | - | |
| Cerium 144 | U | | 40 | | U | GAM | U | | 40 | U | - | |
| Europium 152 | U | | 20 | 40 | U | GAM | U | | 20 | U | - | |
| Europium 154 | U | | 10 | 40 | U | GAM | U | | 10 | U | - | |
| Radium 226 | U | | 20 | | U | GAM | U | | 20 | U | - | |
| Thorium 228 | U | | 20 | | U | GAM | U | | 20 | U | - | |
| Thorium 232 | U | | 40 | | U | GAM | U | | 30 | U | - | |

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-REP
Version 2.23
Report date 06/17/93

9613580.1050

N304100-01

# TMA NORCAL
REPORTING GROUP 7186

# DATA SHEET

B08FF6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-01
Dept sample id 7186-001
Received 04/20/93

Client sample id B08FF6
Matrix LIQUID
Collected 04/16/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -1.3 | 1.9 | 3 | 3 | U | 80A |
| Gross Beta | Beta | 130 | 4.5 | 2 | 4 | | 80B |
| Uranium 233/234 | | 1.2 | 0.13 | 0.05 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.026 | 0.026 | 0.04 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.95 | 0.11 | 0.03 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0.017 | 0.012 | 0.01 | 0.05 | J | PU |
| Plutonium 239/240 | | 0.015 | 0.012 | 0.01 | 0.05 | J | PU |
| Americium 241 | 14596-10-2 | 0.007 | 0.013 | 0.03 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 44 | 1.7 | 0.9 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 90 | 4.9 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 3700 | 270 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | -2.7 | 19 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 20 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 80 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 8 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 9 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 40 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 30 | | U | GAM |

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1051

N304100-02

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

B08FG1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-02
Dept sample id 7186-002
Received 04/20/93

Client sample id B08FG1
Matrix LIQUID
Collected 04/16/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -0.58 | 1.6 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 66 | 3.3 | 2 | 4 | | 80B |
| Uranium 233/234 | | 1.0 | 0.12 | 0.04 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.038 | 0.030 | 0.03 | 0.2 | J | U |
| Uranium 238 | 7440-61-1 | 0.84 | 0.11 | 0.02 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0.005 | 0.009 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | 0 | 0.005 | 0.02 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.003 | 0.007 | 0.03 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 18 | 3.1 | 0.9 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 71 | 4.5 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 11000 | 430 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | -5.4 | 19 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 70 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 40 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1052

N304100-03

# TMA NORCAL
REPORTING GROUP 7186

# DATA SHEET

B08FG6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-03
Dept sample id 7186-003
Received 04/20/93

Client sample id B08FG6
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.74 | 1.5 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 5.0 | 1.4 | 2 | 4 | | 80B |
| Uranium 233/234 | | 1.1 | 0.13 | 0.04 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.062 | 0.030 | 0.03 | 0.2 | J | U |
| Uranium 238 | 7440-61-1 | 0.59 | 0.090 | 0.03 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0.002 | 0.008 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | 0.006 | 0.008 | 0.02 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.009 | 0.017 | 0.03 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | -0.22 | 0.24 | 0.8 | 2 | U | Y |
| Technetium 99 | 14133-76-7 | 0.95 | 0.65 | 1 | 5 | U | TC |
| Tritium | 10028-17-8 | 280 | 150 | 200 | 400 | J | H |
| Carbon 14 | 14762-75-5 | -0.66 | 18 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1053

N304100-04

TMA NORCAL
REPORTING GROUP 7186

DATA SHEET

B08FH1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-04
Dept sample id 7186-004
Received 04/20/93

Client sample id B08FH1
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 1.3 | 1.5 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 10 | 1.7 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.57 | 0.20 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.017 | 0.034 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.54 | 0.18 | 0.1 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | -0.002 | 0.004 | 0.02 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0 | 0.007 | 0.03 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 0.001 | 1.1 | 0.8 | 2 | U | Y |
| Technetium 99 | 14133-76-7 | 12 | 1.9 | 3 | 5 | | TC |
| Tritium | 10028-17-8 | 12000 | 440 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 5.6 | 22 | 40 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 70 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 30 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 70 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
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9613500.1054

N304100-05

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

B08FH6

SDG 7186
Contact Dinkar Kharkar
Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-05
Dept sample id 7186-005
Received 04/20/93
Client sample id B08FH6
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.42 | 1.8 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 71 | 3.5 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.74 | 0.11 | 0.05 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.049 | 0.030 | 0.04 | 0.2 | J | U |
| Uranium 238 | 7440-61-1 | 0.63 | 0.094 | 0.03 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | -0.002 | 0.004 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | 0.006 | 0.008 | 0.02 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.005 | 0.010 | 0.04 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 20 | 1.0 | 0.8 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 61 | 4.2 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 2700 | 240 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 4.4 | 18 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1055

N304100-07

# TMA NORCAL
REPORTING GROUP 7186

# DATA SHEET

B08FJ1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-07
Dept sample id 7186-007
Received 04/21/93

Client sample id B08FJ1
Matrix LIQUID
Collected 04/19/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 1.8 | 1.9 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 46 | 2.8 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.63 | 0.23 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.019 | 0.038 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.63 | 0.20 | 0.1 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | -0.002 | 0.007 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | -0.002 | 0.003 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0 | 0.011 | 0.02 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 1.1 | 0.37 | 0.7 | 2 | J | Y |
| Technetium 99 | 14133-76-7 | 77 | 4.8 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 2800 | 240 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 6.0 | 21 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 20 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 20 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 70 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 30 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 40 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 60 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1056

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-08

B08FJ6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-08
Dept sample id 7186-008
Received 04/21/93

Client sample id B08FJ6
Matrix LIQUID
Collected 04/19/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 4.3 | 2.7 | 3 | 3 | | 80A |
| Gross Beta | Beta | 87 | 3.8 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.62 | 0.22 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.054 | 0.072 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.53 | 0.19 | 0.1 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0 | 0.006 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | -0.002 | 0.003 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0 | 0.005 | 0.02 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 23 | 1.9 | 0.8 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 77 | 5.2 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 2700 | 240 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 5.0 | 23 | 40 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
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9613500.1057

N304100-09

TMA NORCAL
REPORTING GROUP 7186

DATA SHEET

B08FK1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-09
Dept sample id 7186-009
Received 04/21/93

Client sample id B08FK1
Matrix LIQUID
Collected 04/19/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -0.67 | 1.8 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 100 | 4.0 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.58 | 0.21 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.035 | 0.035 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.52 | 0.18 | 0.1 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | 0 | 0.004 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.003 | 0.007 | 0.03 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 30 | 1.4 | 0.8 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 62 | 4.2 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 2700 | 240 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 5.8 | 20 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 20 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 90 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
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Version 2.23
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9613500.1058

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-10

B08FK6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-10
Dept sample id 7186-010
Received 04/22/93

Client sample id B08FK6
Matrix LIQUID
Collected 04/20/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -0.052 | 1.8 | 3 | 3 | U | 80A |
| Gross Beta | Beta | 44 | 2.7 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.63 | 0.18 | 0.09 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.029 | 0.059 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.67 | 0.18 | 0.09 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0 | 0.003 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | -0.001 | 0.003 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.008 | 0.033 | 0.06 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 5.6 | 0.62 | 0.9 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 58 | 3.9 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 2400 | 230 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 34 | 22 | 40 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 300 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 40 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 20 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 20 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 70 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 30 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 30 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 60 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1059

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-16

B08FL1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-16
Dept sample id 7186-016
Received 04/26/93

Client sample id B08FL1
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1036

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.35 | 1.9 | 3 | 3 | U | 80A |
| Gross Beta | Beta | 28 | 2.4 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.56 | 0.076 | 0.04 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.024 | 0.020 | 0.03 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.43 | 0.063 | 0.02 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | 0.004 | 0.004 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.003 | 0.006 | 0.02 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 0.83 | 0.57 | 0.8 | 2 | J | Y |
| Technetium 99 | 14133-76-7 | 42 | 2.5 | 2 | 5 | | TC |
| Tritium | 10028-17-8 | 1600 | 200 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 100 | 22 | 30 | 50 | B | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |

Lab id TMAN
Protocol WHC-HASM
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Version 2.23
Report date 06/17/93

9613500.1069

N304100-11

TMA NORCAL
REPORTING GROUP 7186

DATA SHEET

B08FN6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-11
Dept sample id 7186-011
Received 04/22/93

Client sample id B08FN6
Matrix LIQUID
Collected 04/20/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.085 | 1.6 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 45 | 2.8 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.58 | 0.17 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | -0.012 | 0.024 | 0.09 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.42 | 0.13 | 0.08 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | -0.002 | 0.004 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | -0.002 | 0.008 | 0.02 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.015 | 0.025 | 0.04 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 5.6 | 0.66 | 0.8 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 66 | 3.9 | 3 | 5 | | TC |
| Tritium | 10028-17-8 | 2300 | 230 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | -0.42 | 17 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |

Lab id TMAN
Protocol WHC-HASM
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9613500.1061

N304100-12

# TMA NORCAL
REPORTING GROUP 7186

# DATA SHEET

B08FP1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-12
Dept sample id 7186-012
Received 04/23/93

Client sample id B08FP1
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1036

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 2.2 | 1.8 | 2 | 3 | J | 80A |
| Gross Beta | Beta | 29 | 2.4 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.50 | 0.17 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.016 | 0.032 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.39 | 0.14 | 0.1 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0.004 | 0.007 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | 0.002 | 0.007 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | -0.008 | 0.025 | 0.05 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 1.1 | 0.36 | 0.8 | 2 | J | Y |
| Technetium 99 | 14133-76-7 | 53 | 3.4 | 3 | 5 | | TC |
| Tritium | 10028-17-8 | 2100 | 220 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 8.4 | 21 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 80 | | U | GAM |

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
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9615F00.1062

N304100-13

**TMA NORCAL**
**REPORTING GROUP 7186**

**DATA SHEET**

B08FQ1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-13
Dept sample id 7186-013
Received 04/23/93

Client sample id B08FQ1
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 3.4 | 2.1 | 2 | 3 | | 80A |
| Gross Beta | Beta | 16 | 2.0 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.98 | 0.27 | 0.1 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.018 | 0.037 | 0.1 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.76 | 0.23 | 0.1 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | 0.002 | 0.009 | 0.02 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.008 | 0.012 | 0.02 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | -0.11 | 0.25 | 0.8 | 2 | U | Y |
| Technetium 99 | 14133-76-7 | 27 | 2.5 | 3 | 5 | | TC |
| Tritium | 10028-17-8 | 28000 | 660 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | -7.3 | 21 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 20 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
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9613500.1063

N304100-14

# TMA NORCAL
REPORTING GROUP 7186

# DATA SHEET

B08FQ6

SDG 7186
Contact Dinkar Kharkar
Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-14
Dept sample id 7186-014
Received 04/23/93
Client sample id B08FQ6
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.73 | 1.5 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 9.9 | 1.6 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.78 | 0.11 | 0.04 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.060 | 0.028 | 0.03 | 0.2 | J | U |
| Uranium 238 | 7440-61-1 | 0.45 | 0.079 | 0.04 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0.006 | 0.007 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | 0 | 0.004 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | 0.004 | 0.016 | 0.03 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | -0.024 | 0.96 | 0.8 | 2 | U | Y |
| Technetium 99 | 14133-76-7 | 10 | 1.1 | 2 | 5 | | TC |
| Tritium | 10028-17-8 | 930 | 180 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 9.9 | 26 | 40 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 20 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 90 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 9 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500_1064

N304100-06

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

B08FW0

SDG 7186
Contact Dinkar Kharkar
Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-06
Dept sample id 7186-006
Received 04/20/93
Client sample id B08FW0
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 1.6 | 2.0 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 79 | 3.6 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.66 | 0.17 | 0.07 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.022 | 0.022 | 0.08 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.59 | 0.15 | 0.07 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | -0.004 | 0.004 | 0.02 | 0.05 | U | PU |
| Plutonium 239/240 | | -0.002 | 0.004 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | -0.014 | 0.020 | 0.04 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 21 | 2.2 | 0.9 | 2 | | Y |
| Technetium 99 | 14133-76-7 | 57 | 4.1 | 4 | 5 | | TC |
| Tritium | 10028-17-8 | 2500 | 230 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | -7.4 | 19 | 30 | 50 | U | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 30 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 60 | | U | GAM |



Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1065

N304100-15

# TMA NORCAL
REPORTING GROUP 7186

# DATA SHEET

B08G60

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-15
Dept sample id 7186-015
Received 04/23/93

Client sample id B08G60
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1036

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST |
|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.51 | 1.5 | 2 | 3 | U | 80A |
| Gross Beta | Beta | 30 | 2.4 | 2 | 4 | | 80B |
| Uranium 233/234 | | 0.62 | 0.083 | 0.03 | 0.2 | | U |
| Uranium 235 | 15117-96-1 | 0.006 | 0.017 | 0.03 | 0.2 | U | U |
| Uranium 238 | 7440-61-1 | 0.40 | 0.062 | 0.02 | 0.2 | | U |
| Plutonium 238 | 13981-16-3 | 0.003 | 0.003 | 0.01 | 0.05 | U | PU |
| Plutonium 239/240 | | 0.003 | 0.007 | 0.01 | 0.05 | U | PU |
| Americium 241 | 14596-10-2 | -0.004 | 0.022 | 0.05 | 0.05 | U | AM |
| Strontium 90 | 10098-97-2 | 0.21 | 0.74 | 1 | 2 | U | Y |
| Technetium 99 | 14133-76-7 | 58 | 2.2 | 2 | 5 | | TC |
| Tritium | 10028-17-8 | 2300 | 230 | 200 | 400 | | H |
| Carbon 14 | 14762-75-5 | 120 | 24 | 40 | 50 | B | C |
| GAMMA SCAN ANALYTES | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM |
| Ruthenium 106 | 13967-48-1 | U | | 80 | | U | GAM |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM |
| Thorium 232 | 7440-29-1 | U | | 40 | | U | GAM |

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

9613500.1066

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-BC-5

Ice Chest No. SML-196

Bill of Lading/Airbill No. 2536955014

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Telephone (509) 376-5045

Collection Date 4/16/93

Field Logbook No. EFL-1037

Offsite Property No. W93-0420-14

Sample Identification

B08FF6

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FF7

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FF8

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| K. Trapp/K. Trapp | 4/16/93 | 1355 | RCCole RC Cole | 4/19/93 | 0730 |
| RCCole RC Cole | 4/19/93 | 0730 | Alfonso Gabaldy | 4/20/93 | 1100 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments: Samples set in refrig 1 on 4/16/93 at 1355

A-6000-407 (12/92) WEF061

9613500.1067

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/16/93 Time 0945 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FF6 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FF7 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FF8 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-14 |
| | | | BOL: # 2536955014 |
| | | | TASK#: 93-089 |

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Mata Title Sample control tech Date 4/20/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-B

9613500.1068

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/16/93

Ice Chest No. SML-289

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 253695504

Offsite Property No. W93-0420-13

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FG1

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FG2

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FG3

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| K. Trapp/K. Trapp | 4/16/93 | 1355 | PC Cole PC Cole | 4/19/93 | 0730 |
| PC Cole PC Cole | 4/19/93 | 0730 | [illegible] | 4/20/93 | 1100 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments: Samples set in refrig #1 on 4/16/93 at 1355

VOA received on their side

A-6000-407 (12/92) WEF061

66-C

0013500.1069

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/16/93 Time 1045 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FG1 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FG2 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FG3 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-13 |
| | | | BOL: # 2536955014 |
| | | | TASK#: 93-089 |

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

## PART II: LABORATORY SECTION

Received by Alfonso Mabe Title Sample control tech Date 4/20/93

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-D

9613500.1070

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/17/93

Ice Chest No. SML-263

Field Logbook No. EFL 1037

Bill of Lading/Airbill No. 2536955014

Offsite Property No. W93-0420-14

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FG6

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FG7

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FG8

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| GG Hamilton GG Hamilton | 4/17/93 | 1646 | RC Cole RC Cole | 4/19/93 | 0730 |
| RC Cole RC Cole | 4/19/93 | 0730 | [illegible] | 4/20/93 | 1100 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

FRIG #5

A-6000-407 (12/92) WEF061

66-E

9615500.1071

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/27/93 Time 1050 (1050) hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FG6 | 3; 40ml; Gs*; | WATER | CLP-VOA |
| | 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | 1; 1L; P; | WATER | CLP-CN (NaOH) |
| | 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FG7 | 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FG8 | 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-14 |
| | | | BOL: # 2536955014 |
| | | | TASK#: 93-089 |

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

## PART II: LABORATORY SECTION

Received by Alonzo Hatch Title sample control tech Date 4/30/93

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-F

9613500.1072

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/17/93

Ice Chest No. SML-221

Field Logbook No. EFL 1037

Bill of Lading/Airbill No. 2536955014

Offsite Property No. W93-0420-13

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FH1

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FH2

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FH3

3, 40ml, Gs, WATER; CLP-VOA

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| GG Hamilton GG Hamilton | 4/19/93 | 1646 | RCole RCole | 4/19/93 | 0730 |
| RCole RCole | 4/19/93 | 0730 | Alyson Hakely | 4/20/93 | 1100 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

FRIG #5

A-6000-407 (12/92) WEF061

66-G

9613500.1073

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/17/93 Time 1330 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| BO 8FH1 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| BO 8FH2 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| BO 8FH3 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0-420-13 |
| | | | BOL: # 2536955014 |
| | | | TASK#: 93-089 |

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

## PART II: LABORATORY SECTION

Received by Alonzo Hately Title Sample control tech Date 4/20/93

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90

66-H

9615500.1074

Westinghouse Hanford Company

# CHAIN OF CUSTODY

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/17/93

Ice Chest No. SML-244

Field Logbook No. EFL 1037

Bill of Lading/Airbill No. 2536955014

Offsite Property No. W93-D-420-12

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B0 8FH6
- 3, 40ml, Gs, WATER; CLP-VOA
- 3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
- 1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
- 1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
- 1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
- 1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
- 1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
- 1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
- 1, 1L, P, WATER; Cn(NaOH)
- 2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
- 1, 1L, G/P,WATER; Tc-99 (HCl)
- 1, 250ml, Gs, WATER; TRITIUM/C-14

B0 8FH7
- 1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B0 8FH8
- 3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| GG Hamilton | 4/17/93 | 1646 | PC Cole PC Cole | 4/19/93 | 0730 |
| PC Cole PC Cole | 4/19/93 | 0730 | Alfonso Yoke | 4/20/93 | 1100 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: unavoidable

① CALM TO ERRATIC LIGHT BREEZE OCCASIONALLY BROUGHT GENERATOR EXHAUST TO SAMPLE SITE. 4/17/93

② FRIG #4

A-6000-407 (12/92) WEF061

66-I

9615910.1075

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/17/93 Time 0715 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| BO 8FH6 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| BO 8FH7 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| BO 8FH8 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0-420-12 |
| | | | BOL: #2536955014 |
| | | | TASK#: 93-089 |

Field Information** Calm to erratic Light Breeze occasionally brought Engine Exhaust Fumes to Well Head Sample Site [illegible] 4/17/93

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Mably Title Sample control tech Date 4/20/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-J

9613500.1076

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/17/93

Ice Chest No. SADIE

Field Logbook No. EFL 1037

Bill of Lading/Airbill No. 2536955014

Offsite Property No. W93-0420-12

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

BO 8FW0

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

4/15/93
BO ~~8FW0~~ 8FW1

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

BO 8FW2

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| GG Hamilton GG Hamilton | 4/17/93 | 1644 | PC Cole PC Cole | 4/19/93 | 0730 |
| PC Cole PC Cole | 4/19/93 | 0730 | [illegible] | 4/20/93 | 1100 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:
FR16 #4

A-6000-407 (12/92) WEF061

66-K

9613500.1077

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4-17-93 Time 0715 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FW0 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FW1 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FW2 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-D-42012 |
| | | | BOL: #2536955014 |
| | | | TASK#: 93-089 |

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Rodriguez Title Sample control tech Date 4/20/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-K1

9613500.1078

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-BC-5

Ice Chest No. 169

Bill of Lading/Airbill No. 2536955036

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Telephone (509) 376-5045

Collection Date 4/19/93

Field Logbook No. EFL 1037

Offsite Property No. W93-0-420-15

Sample Identification

B08FJ1
- 3, 40ml, Gs, WATER; CLP-VOA
- 3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
- 1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
- 1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
- 1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
- 1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
- 1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
- 1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
- 1, 1L, P, WATER; Cn(NaOH)
- 2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
- 1, 1L, G/P,WATER; Tc-99 (HCl)
- 1, 250ml, Gs, WATER; TRITIUM/C-14

B08FJ2
- 1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FJ3
- 3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| KD Lee GG Hamilton | 4/19/93 | 1523 | AG Simpson AJ SIMPSON | 4/20/93 | 0746 |
| AG Simpson AJ SIMPSON | 4/20/93 | 0746 | Antonio Nakly | 4/21/93 | 1030 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: Samples set in refrig 4

Note: Bubbles Present: B08FJ1 CLP VOA
B08FJ3 CLP VOA
PC 4/20/93

A-6000-407 (12/92) WEF061

66-L

9613930.1073

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/19/93 Time 1145 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FJ1 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FJ2 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FJ3 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0-420-15 |
| | | | BOL: # 2536955036 |
| | | | TASK#: 93-089 |

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

## PART II: LABORATORY SECTION

Received by Alfonso Mokly Title Sample control tech Date 4/21/93

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-M

9613500.1080

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/19/93

Ice Chest No. SML-278

Field Logbook No. EFL1037

Bill of Lading/Airbill No. 2536955036

Offsite Property No. W93-0420-16

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FJ6

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FJ7

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FJ8

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| GG Hamilton | 4/19/93 | 1523 | PCCole PCCole | 4/20/93 | 0730 |
| PCCole PCCole | 4/20/93 | 0730 | [illegible] | 4/21/93 | 1070 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: Samples set in refrig #1 on 4/19/93 at 1523
Note: Bubbles Present in B08FJ6 CLP VOA & B08FJ8 CLP VOA @ 4/20/93

A-6000-407 (12/92) WEF061

66-N

9615560.1081

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/19/93 Time 1030 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B0 8FJ6 | ✓ 3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓ 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓ 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓ 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓ 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓ 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓ 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓ 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓ 1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓ 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓ 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓ 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B0 8FJ7 | ✓ 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B0 8FJ8 | ✓ 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-16 |
| | | | BOL: # 2536955036 |
| | | | TASK#: 93-089 |

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Hately Title Sample control tech Date 4/21/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-0

9613500.1082

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/19/93

Ice Chest No. SML-209

Field Logbook No. EFL-1037

Bill of Lading/Airbill No. 2536455036

Offsite Property No. W93-0-420-16

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FK1

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FK2

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FK3

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| K. Trapp / K. Trapp | 4/19/93 | 1523 | PC Cole PC Cole | 4/20/93 | 0730 |
| PC Cole PC Cole | 4/20/93 | 0730 | [illegible] | 4/21/93 | 0730 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments:

Generator exhaust detected while sampling. Samples set in refrig #1 on ~~4/2~~ 4/19/93 at 1523 KT

Note: Bubbles present in B08FK1 CLP VOA's (40 ml) PC 4/20/93

A-6000-407 (12/92) WEF061

9613500.1083

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/19/93 Time ~~1200~~ 0900 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FK1 | 3; 40ml; Gs*; | WATER | CLP-VOA |
| | 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | 1; 1L; P; | WATER | CLP-CN (NaOH) |
| | 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FK2 | 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FK3 | 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0-420-16 |
| | | | BOL: # 2536955036 |
| | | | TASK#: 93-089 |

Field Information** Note: Bubbles Present in B08FK1 CLP VOA's PC 4/20/93

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Galafyn Title Sample control tech Date 4/21/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

66-Q

A-6000-406(05/90

9613500.1084

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4.20.93

Ice Chest No. SML-SMILE

Field Logbook No. EFL-1237

Bill of Lading/Airbill No. 2536955071

Offsite Property No. W93-0420-17

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FK6
- 3, 40ml, Gs, WATER; CLP-VOA
- 3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
- 1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
- 1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
- 1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
- 1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
- 1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
- 1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
- 1, 1L, P, WATER; Cn(NaOH)
- 2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
- 1, 1L, G/P,WATER; Tc-99 (HCl)
- 1, 250ml, Gs, WATER; TRITIUM/C-14

B08FK7
- 1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FK8
- 3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| C. Celebrat C. Celebrat | 4.20.93 | 1410 | PCCole PCCole | 4/21/93 | 0730 |
| PCCole PCCole | 4/21/93 | 0730 | Alfonso Rakely | 4/22/93 | 1030 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: Refridg # 4 note: Bubbles Present in B08FK6 CLPVOAS PC 4/21/93
~~B08FK9 TOC/TOX~~ 4/21/93 PC
~~B08FL0~~ PC 4/21/93

A-6000-407 (12/92) WEF061

9615500.1085

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/20/93 Time 1010 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B0 8FK6 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B0 8FK7 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B0 8FK8 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-17 |
| | | | BOL: # 2536A5507T |
| | | | TASK#: 93-089 |

Field Information** Sunny 60° Slight wind

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Gabaly Title Sample control tech Date 4/22/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-5

9613500.1086

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4-20-93

Ice Chest No. GARY

Field Logbook No. EFL-1137

Bill of Lading/Airbill No. 253695507T

Offsite Property No. W93-0420-17

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FN6

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FN7

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FN8

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| C Colbert C. Colbert | 4.20 93 | 1410 | PC Cole PC Cole | 4/21/93 | 0730 |
| PC Cole PC Cole | 4/21/93 | 0730 | Alfonso Gakly | 4/22/93 | 0730 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: Refridg # 4 NOTE - Bubble IN CLP-VOA

A-6000-407 (12/92) WEF061

66-T

9615501.1967

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4-20-93 Time 0914 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B0 8FN6 | ✓3; 40ml; Gs*; | WATER | CLP-VOA |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B0 8FN7 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B0 8FN8 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0-42017 |
| | | | BOL: # 2536A5507T |
| | | | TASK#: 93-089 |

Field Information** Sunny, Slight wind, 50°

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Gokey Title Sample control tech Date 4/22/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-U

9615500.1068

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/21/93

Ice Chest No. SML-165

Field Logbook No. FRL -1036

Bill of Lading/Airbill No. 2536954307

Offsite Property No. W93-0420-19

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FP1

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FP2

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FP3

3, 40ml, Gs, WATER; CLP-VOA ✓B08FW5 3, 40ml, GS, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| Kathy D. Lee K.D. Lee | 4/21/93 | 1345 | PCCole PCCole | 4/22/93 | 0830 |
| PCCole PCCole | 4/22/93 | 0830 | Alfonso Mabe | 4/23/93 | -02 c |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments:
relinquish to fridge #4 by Kathy D. Lee 4/21/93 1345

A-6000-407 (12/92) WEF061

66-V

9615500.1089

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/21/93 Time 1111 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FP1 ✓ | 3; 40ml; Gs*; | WATER | CLP-VOA |
| ✓ | 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| ✓ | 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| ✓ | 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| ✓ | 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| ✓ | 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| ✓ | 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| ✓ | 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| ✓ | 1; 1L; P; | WATER | CLP-CN (NaOH) |
| ✓ | 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| ✓ | 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| ✓ | 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FP2 ✓ | 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FP3 ✓ | 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-19 |
| | | | BOL: # 2536954 30T |
| | | | TASK#: 93-089 |

Field Information** Same as groundwater sample report 199-B5-1; 4/21/93

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Mobley Title sample control tech Date 4/23/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

66-W

9415000.1090

Westinghouse Hanford Company

# CHAIN OF CUSTODY

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Project Designation/Sampling Locations 100-BC-5

Ice Chest No. Pokey

Bill of Lading/Airbill No. 253695430T

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Telephone (509) 376-5045

Collection Date 4/21/93

Field Logbook No. EFL 1037

Offsite Property No. W93-0420-20

**Sample Identification**

B08FQ1

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FQ2

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FQ3

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| KD Lee GG Hamilton | 4/21/93 | 1380 | PC Cole PC Cole | 4/22/93 | 0830 |
| PC Cole PC Cole | 4/22/93 | 0830 | [illegible] | 4/23/93 | 1030 |
| | | | | | |
| | | | | | |

**Final Sample Disposition**

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: Bubbles in B08FQ1 - Tritium / C-14 KT 4/23/93

FRIG #1

A-6000-407 (12/92) WEF061

66-X

9613500.1091

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/21/93 Time 0910 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| BO 8FQ1 ✓ | 3; 40ml; Gs*; | WATER | CLP-VOA |
| ✓ | 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| ✓ | 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| ✓ | 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| ✓ | 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| ✓ | 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| ✓ | 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| ✓ | 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| ✓ | 1; 1L; P; | WATER | CLP-CN (NaOH) |
| ✓ | 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| ✓ | 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| ✓ | 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| BO 8FQ2 ✓ | 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| BO 8FQ3 ✓ | 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-20 |
| | | | BOL: # 253695430T |
| | | | TASK#: 93-089 |

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by [illegible] Title Sample control tech Date 4/23/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

66-Y

A-6000-406(05/90)

9613300.1092

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/21/93

Ice Chest No. SML-182

Field Logbook No. EFL 1037

Bill of Lading/Airbill No. 253695430T

Offsite Property No. W93-0420-18

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FQ6

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FQ7

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FQ8

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| GG Hamilton | 4/21/93 | 1350 | PC Cole | 4/22/93 | 0830 |
| PC Cole | 4/22/93 | 0830 | [illegible] | 4/23/93 | 1030 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments: Bubble present in Tritium/C-14 vial 5-3
CRIB #1

A-6000-407 (12/92) WEF061

66-Z

9615010.1095

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/21/93 Time 1140 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08FQ6 ✓ | 3; 40ml; Gs*; | WATER | CLP-VOA |
| ✓ | 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| ✓ | 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| ✓ | 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| ✓ | 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| ✓ | 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| ✓ | 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| ✓ | 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| ✓ | 1; 1L; P; | WATER | CLP-CN (NaOH) |
| ✓ | 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| ✓ | 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| ✓ | 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08FQ7 ✓ | 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08FQ8 ✓ | 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0420-18 |
| | | | BOL: #253695430T |
| | | | TASK#: 93-089 |

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Medina Title Sample control tech Date 4/27/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90

66-AA

9613500.1094

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/21/93

Ice Chest No. SML-166

Field Logbook No. EFL-1036

Bill of Lading/Airbill No. 253695430T

Offsite Property No. W93-0420-18

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

*B08G60
- 3, 40ml, Gs, WATER; CLP-VOA
- 3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
- 1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
- 1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
- 1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
- 1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
- 1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
- 1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
- 1, 1L, P, WATER; Cn(NaOH)
- 2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
- 1, 1L, G/P,WATER; Tc-99 (HCl)
- 1, 250ml, Gs, WATER; TRITIUM/C-14

B08G61
- 1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08G62
- 3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 4/21/93 | 1345 | [illegible] | 4/22/93 | 0830 |
| [illegible] | 4/22/93 | 0830 | [illegible] | 4/23/93 | 1020 |
| | | | | | |
| | | | | | |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments: relinq. to fr.'g #4 by [illegible] 1345 4/21/93

* B08G60 → 1 VOA VIAL WAS BROKEN UPON RECEIPT AT TMA / NORCAL.

A-6000-407 (12/92) WEF061

66-AB

9613290.1095

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/21/93 Time 1111 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| B08G60 | ✓3; 40ml; Gs*; | WATER | CLP-VOA ONE VIAL broken |
| | ✓3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | ✓1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | ✓1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | ✓1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | ✓1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | ✓1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | ✓1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | ✓1; 1L; P; | WATER | CLP-CN (NaOH) |
| | ✓2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | ✓1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | ✓1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| B08G61 | ✓1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| B08G62 | ✓3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93-0-420-18 |
| | | | BOL: #253695430T |
| | | | TASK#: 93-089 |

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

## PART II: LABORATORY SECTION

Received by Alfonso Mobley Title sample control tech Date 4/23/93

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

LG-AC

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

Custody Form Initiator KD LEE/GG HAMILTON

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-BC-5

Collection Date 4/21/93

Ice Chest No. SMC-245

Field Logbook No. FFC-1036

Bill of Lading/Airbill No. ~~2531054430T~~ 2536554343 AJS 4/23/93

Offsite Property No. W93-0420-~~19~~ 21 PC 4/20/93.

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks

Sample Identification

B08FC1

3, 40ml, Gs, WATER; CLP-VOA
3, 2L, aG, WATER; CLP-SEMI VOA & PCB's/PEST
1, 1L, P, WATER; ANIONS(IC) SO4,F,PO4,Cl/COND./pH
1, 500ml, P, WATER; ANIONS/NO2-NO3 (H2SO4)
1, 1L, G, WATER; ALKALINITY/TOTAL DISSOLVED SOLIDS
1, 500ml, G, WATER; SULFIDE (Zink Acetate + NaOH pH>9)
1, 500ml, G, WATER; AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2)
1, 1L, P, WATER; ICP/AA METALS, Hg (HNO3) UNFILTERED
1, 1L, P, WATER; Cn(NaOH)
2, 4L, G/P, WATER; GROSS ALPHA/GROSS BETA,GAMMA SPEC./ALPHA SPEC (to include U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3)
1, 1L, G/P,WATER; Tc-99 (HCl)
1, 250ml, Gs, WATER; TRITIUM/C-14

B08FL2

1, 1L, P, WATER; ICP/AA METALS + Hg (HNO3) FILTERED

B08FL3

3, 40ml, Gs, WATER; CLP-VOA

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

| Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 4/21/93 | 1345 | [illegible] | 4/22/93 | 0830 |
| [illegible] | 4/22/93 | 0830 | [illegible] B WHITE | 4/22/93 | 1020 |
| [illegible] B WHITE | 4/23/93 | 1020 | [illegible] AJ SIMPSON | 4/23/92 | 0827 |
| [illegible] AJ SIMPSON | 4/23/93 | 0827 | [illegible] | 4/26/93 | 8:20 |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|
| | | |

Comments:

relinquished to frig 5 by [illegible] 4/21/93 1345

RECEIVED ICE CHEST ON APRIL 24, 1993 [illegible]

OPENED ICE CHEST ON APRIL 26, 1993 [illegible]

A-6000-407 (12/92) WEF061

66-AD

9613000.1097

Westinghouse Hanford Company

# SAMPLE ANALYSIS REQUEST

## PART I: FIELD SECTION

Collector K. Lee, G. Hamilton Date Sampled 4/21/93 Time 0841 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

| Sample Number | Number and Type of Sample Containers | Type of Sample* | Analysis Requested |
|---|---|---|---|
| BO 8FL1 | 3; 40ml; Gs*; | WATER | CLP-VOA |
| | 3; 2L; aG; | WATER | CLP-SEMI VOA & PCB's/PEST |
| | 1; 1L; P; | WATER | ANIONS (IC) SO4, F, PO4, Cl; COND; pH |
| | 1; 500ml; P; | WATER | ANIONS/NO3-NO2 (H2SO4) |
| | 1; 1L; G; | WATER | ALK./TOT. DISSOLVED SOLIDS |
| | 1; 500ml; G; | WATER | SULFIDE (add Zinc Acetate+NaOH pH>9) |
| | 1; 500ml; G; | WATER | AMMONIA/CHEMICAL OXYGEN DEMAND (H2SO4 pH<2) |
| | 1; 1L; P; | WATER | CLP-ICP/AA METALS & Hg (HNO3) UNFILTERED |
| | 1; 1L; P; | WATER | CLP-CN (NaOH) |
| | 2; 4L; G/P; | WATER | GROSS ALPHA/BETA, GAMMA SPEC, ALPHA SPEC |
| | | | (U-235/238,Pu-239/240, Am-241), Sr-90 (HNO3) |
| | 1; 1L; G/P; | WATER | Tc-99 (HCl) |
| | 1; 250ml; Gs; | WATER | TRITIUM/C-14 |
| | | | |
| BO 8FL2 | 1; 1L; P; | WATER | CLP-ICP/AA METAL & Hg (HNO3) FILTERED |
| | | | |
| BO 8FL3 | 3; 40ml; Gs | WATER | CLP-VOA |
| | | | OPC: # W93- 0420-AA21 PC 4/23/93 |
| | | | BOL: # ~~2536954 30~~ T 4/23/93 2536A54343 |
| | | | TASK#: 93-089 |

Field Information**

Special Handling and/or Storage

Possible Sample Hazards

## PART II: LABORATORY SECTION

Received by Alfonso Rodriguez Title Sample control tech Date 4/26/93

Analysis Required

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406(05/90)

GG-AE

9613500.1096

BC8FF6-TMA-491

TMA

RECORD COPY

JUN 1993
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SDLA

WESTINGHOUSE HANFORD COMPANY

Results of Analyses For:

ORGANICS & GENERAL CHEMISTRY
Case No 04-069
(TMA/ARLI Work Order # A3-04-069)

METALS & NITRATE/NITRITE
Case No. N3-04-101
(TMA/Skinner & Sherman W.O. # S3-04-232, S3-04-233, & S3-04-234)

June 17, 1993

TMA Master Work Order N3-04-101

# GENERAL CHEMISTRY RESULTS

## CASE NO. 04-069

Liquid Sample #:

B08FJ1 B08FJ6
B08FK1

## CASE NARRATIVE

The holding time for the pH analysis was exceeded. Careful review of the QC analysis indicates that the data is reliable.

The % RPD for the Fluoride analysis reported for the liquid sample B08FJ6 (A3-04-069-03F) was 28.6%. The results for the sample and duplicate were near the instrument detection limit. These results are acceptable based on the level of the Fluoride concentration.

Sample B08FJ1 (A3-04-069-01F) yielded a 72.0% recovery for the Phosphate analysis. The low Phosphate recovery compared to our laboratory sample indicated the presence of a matrix interference.

No other problems were encountered during sample analysis. All QC results were acceptable.

Maureen Parrish

Maureen Parrish

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 46 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 418 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01G TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 256 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-869

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01B TEST CODE WCCLPL NAME Anions & Wet Chem. - WR043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01J TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FJ6 FRACTION 03E TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 10.1 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.4 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 49 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 416 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-869

Received: 04/21/93 Results by Sample

SAMPLE ID B08FJ6 FRACTION 03G TEST CODE VCCLPL NAME Anions & Wet Chem. - VR043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 251 | mg/L | 5 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FJ6 FRACTION 03I TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B0BFJ6 FRACTION 03K TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05C TEST CODE WCCLPL NAME Anions & Wet Chem. - VW043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.7 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.9 | pH | 0.1 |
| Sulfate | 300.0 | 47 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 422 | umho/cm | 6 |
| | | | | |

FORM I

9613500.1109

TMA Inc. REPORT Work Order # X3-04-069 000021

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05D TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 260 | mg/L | 5 |
| | | | | |

FORM I

9613500.1110

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

9615900_1111

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05F TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

961550.1112



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SDLA

# CASE NO. 04-069

## DATA SUMMARY REPORT
## ORGANICS

PREPARED BY:

TMA ARLI
160 TAYLOR ST.
MONROVIA CA 91016

# CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 04-069

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : April 21, 1993

## 1.0 DESCRIPTION OF CASE :

Six water samples were analyzed for TCL Organics- Volatiles, Semivolatiles, and Pesticides/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 | pH |
|---|---|---|---|---|
| B08FJ1 | A3-04-069-01A | V | WATER | 7 |
| B08FJ1 | A3-04-069-01B | SV & P | WATER | |
| B08FJ1 MS | A3-04-069-01C | SV | WATER | |
| B08FJ1 MSD | A3-04-069-01D | SV | WATER | |
| B08FJ3 | A3-04-069-02A | V | WATER | 7 |
| B08FJ6 | A3-04-069-03A | V | WATER | 7 |
| B08FJ6 | A3-04-069-03B | SV & P | WATER | |
| B08FJ6 MS | A3-04-069-03C | P | WATER | |
| B08FJ6 MSD | A3-04-069-03D | P | WATER | |
| B08FJ8 | A3-04-069-04A | V | WATER | 7 |
| B08FK1 | A3-04-069-05A | V | WATER | 7 |
| B08FK1 | A3-04-069-05B | SV & P | WATER | |
| B08FK3 | A3-04-069-06A | V | WATER | 7 |
| B08FK3 MS | A3-04-069-06B | V | WATER | 7 |
| B08FK3 MSD | A3-04-069-06C | V | WATER | 7 |

## 3.0 COMMENTS :

### 3.1 SHIPPING AND DOCUMENTATION :

All of the samples were received unbroken and properly documented.

2 of the 3 VOA vials for sample B08FK1 contained air bubbles.
1 of the 3 VOA vials for sample B08FJ3 contained air bubbles.
1 of the 3 VOA vials for sample B08FJ6 contained air bubbles.
1 of the 3 VOA vials for sample B08FJ8 contained air bubbles.

## 3.2 ANALYSIS

### 3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times.

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

TUNES :

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

### 3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Sample B08FJ1 had a 2-Fluorophenol surrogate recovery above the QC limits. In sample B08FJ1MS the Phenol-d5 surrogate recovery was slightly above the QC limits. In addition, the advisory surrogate recovery for 2-Chlorophenol-d4 in samples B08FJ1 and B08FJ1MS were above the QC limits. Furthermore, the matrix spike recoveries for 4-Chloro-3-methylphenol, 4-Nitrophenol and Pentachlorophenol in samples B08FJ1MS and B08FJ1MSD were above the QC limits. In accordance with protocol, no further action was required.

All of the other 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 04/29/93 and was analyzed according to the CLP SOW. The sequence was analyzed by single injection into a dual column system.

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

The chromatograms are presented in the manner consistent with the capabilities of the Nelson 2700 Turbochrome Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. Sample BC8FK1 had DCB surrogate recoveries below the QC limits on both GC columns. The sample was re-injected on a different sequence yielding low DCB recoveries, thereby confirming the first injection. Only the original analysis results have been included in this package.

All of the other QC results were within the limits specified by 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 6/15/93
Nicole Roth
CLP Program Manager

Widayat 6/15/93
Wida Ang
Organics Manager

9615500 1A 116

EPA SAMPLE NO.

B08FJ1

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R15

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 10 | U |
| 67-64-1 | Acetone | 8 | J |
| 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 | 1 | J |
| 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 |

9613508 1E 1117

EPA SAMPLE NO.

B08FJ1

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R15

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

961550.018

1A

EPA SAMPLE NO.

B08FJ3

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R14

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 2 | J |
| 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 |

9613500.1119

000110
EPA SAMPLE NO.

B08FJ3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R14

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FJ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R13

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

9613500J121

EPA SAMPLE NO.

B08FJ6

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R13

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9615500 1122

1A

EPA SAMPLE NO.

B08FJ8

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R12

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

000114
EPA SAMPLE NO.

B08FJ8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R12

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9615500.1124

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FK1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R11

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

000116
EPA SAMPLE NO.

B08FK1

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R11

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FK3

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R08

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 2 | J |
| 67-64-1 | Acetone | 5 | J |
| 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 |

9615509 1E 1127

000118
EPA SAMPLE NO.

B08FK3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R08

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1B

EPA SAMPLE NO.

B08FJ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S18

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

EPA SAMPLE NO.

B08FJ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S18

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B08FJ1

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S18

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500.1151

000122

EPA SAMPLE NO.

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FJ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S21

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

EPA SAMPLE NO.

B08FJ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S21

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

9615508 1F 1135

EPA SAMPLE NO.

B08FJ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S21

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | BJ |

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

B08FK1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S22

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

EPA SAMPLE NO.

B08FK1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S22

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B08FK1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S22

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 11.23 | 6 | J |

9613508.1137

1D

EPA SAMPLE NO.

B08FJ1

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/21/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/01/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

000129
EPA SAMPLE NO.

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08FJ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/21/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/01/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9615540.1159

1D

EPA SAMPLE NO.

B08FK1

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/21/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/01/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9613500.1140

000001

**TMA**

**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**

*QUALITY ENVIRONMENTAL SERVICES*

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## *Report for*

**TMA/Norcal**

**WORK ORDER #S304233**

---

*Scientific Services Since 1922*

**TMA**
**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**
*300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200*
*1-800-4 LAB TEST FAX (617) 890-3883*

Page 2 Skinner&Sherman REPORT Work Order # S3-04-233

Received: 04/22/93 Results by Sample

SAMPLE ID B08FJ1 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/19/93 Category WATER

NO3NO2 5.85
mg N/L

SAMPLE ID B08FJ6 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/19/93 Category WATER

NO3NO2 6.43
mg N/L

SAMPLE ID B08FK1 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 04/19/93 Category WATER

NO3NO2 5.48
mg N/L

SAMPLE ID B08FK1 DUPL SAMPLE # 03 FRACTIONS: B
Date & Time Collected 04/19/93 Category WATER

NO3NO2 5.48
mg N/L

SAMPLE ID B08FK1 SPIKE SAMPLE # 03 FRACTIONS: C
Date & Time Collected 04/19/93 Category WATER

NO3NO2 7.61
mg N/L

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

NO3NO2 2.02
mg N/L

TMA
Thermo Analytical Inc.
Skinner & Sherman Laboratories Inc.

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

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

TMA
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(617) 890-7200
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May 24, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Three (3) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 22, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S304232.

**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 exception:

The selenium digestion spike recovery exceeded the control limit requirement.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

Steven Provencal

Steven R. Provencal
Lead Chemist

SAMPLE NUMBER:

B08EJ1

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-06-101 SAS No.: SDG No.: B08EJ1

Matrix (soil/water): WATER Lab Sample ID: 04232-01S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27.3 | B | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | B | W | F |
| 7440-39-3 | Barium | 24.0 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 48300 | | | P |
| 7440-47-3 | Chromium | 9.9 | B | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.4 | B | | P |
| 7439-89-6 | Iron | 30.2 | B | | P |
| 7439-92-1 | Lead | 3.0 | | S | F |
| 7439-95-4 | Magnesium | 7680 | | | P |
| 7439-96-5 | Manganese | 1.5 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5620 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 6.8 | B | | P |
| 7440-66-6 | Zinc | 21.5 | | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

SAMPLE NUMBER:

B08FJ6

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-101 SAS No.: SDG No.: B08FJ1

Matrix (soil/water): WATER Lab Sample ID: 04232-02S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.0 | B | W | F |
| 7440-39-3 | Barium | 32.9 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 50100 | | | P |
| 7440-47-3 | Chromium | 14.5 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 4.9 | B | | P |
| 7439-89-6 | Iron | 51.6 | B | | P |
| 7439-92-1 | Lead | 2.6 | B | | F |
| 7439-95-4 | Magnesium | 7720 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4840 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11500 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 7.5 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

SAMPLE NUMBER:

B08FK1

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ1

Matrix (soil/water): WATER Lab Sample ID: 04232-03S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.5 | U | W | F |
| 7440-39-3 | Barium | 23.0 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 50900 | | | P |
| 7440-47-3 | Chromium | 11.9 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 9.4 | B | | P |
| 7439-92-1 | Lead | 2.4 | B | | F |
| 7439-95-4 | Magnesium | 7860 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4810 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | MWN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11500 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | W | F |
| 7440-62-2 | Vanadium | 7.8 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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

9613500.1146

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May 24, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Three (3) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 22, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals. The analysis was performed under TMA/Skinner and Sherman work order S304234.

**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 aluminum and selenium digestion spike recoveries exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

Steven Provencal

Steven R. Provencal
Lead Chemist

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FJ2

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ2

Matrix (soil/water): WATER Lab Sample ID: 04234-01S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | N | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.6 | B | W | F |
| 7440-39-3 | Barium | 22.1 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 49000 | | | P |
| 7440-47-3 | Chromium | 9.1 | B | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 5.2 | B | | P |
| 7439-89-6 | Iron | 4.8 | U | | P |
| 7439-92-1 | Lead | 2.4 | B | W | F |
| 7439-95-4 | Magnesium | 7790 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5610 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11400 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 5.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FJ7

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ2

Matrix (soil/water): WATER Lab Sample ID: 04234-02S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | N | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.1 | B | W | F |
| 7440-39-3 | Barium | 31.2 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 50200 | | | P |
| 7440-47-3 | Chromium | 12.9 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 4.8 | U | | P |
| 7439-92-1 | Lead | 2.3 | B | | F |
| 7439-95-4 | Magnesium | 7740 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4920 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 5.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FK2

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ2

Matrix (soil/water): WATER Lab Sample ID: 04234-03S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | N | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.9 | B | W | F |
| 7440-39-3 | Barium | 19.5 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 49300 | | | P |
| 7440-47-3 | Chromium | 10.6 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 36.9 | B | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 7630 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4680 | B | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 5.0 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

004

# OFFICE OF SAMPLE MANAGEMENT

## RECORD OF DISPOSITION

ROD-93-0108
Record of Disposition No.

DATE: 4/23/93

LABORATORY: TMA

PROJECT TITLE/NO.: 100-BC-5/SAF 93-098

NCR NO.: 050054

SAMPLE IDENTIFICATION NUMBERS: B08FJ1 and B08FJ3

DESCRIPTION OF EVENT: Two of three VOA vials received at lab with bubbles.

DISPOSITION OF SAMPLES: Per concurrence with J.W. Roberts, project engineer, continue VOA analysis using vial without bubbles.

APPROVAL SIGNATURES:

M.M. Lane — 4/22/93
HASM Project Coordinator (Print/Sign Name) — Date

ORIGINAL LOST. THIS IS A COPY.

J.W. Roberts — 6-28-93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9615500.1151

Westinghouse Hanford Company

# NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 050054

QA Log No. EQA-93-073

| 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 | WATER SAMPLES | B08FJ1, B08FJ3 | N/A |

| 8. Program/Project/Other | 9. Safety Class | 10. ASME Code Items |
|---|---|---|
| 100-BC-5/SAF 93-089 | N/A | ☐ Yes ☒ No (If yes, notify authorized inspector) |

11. Supplier Name/Address: ENVIRONMENTAL FIELD SAMPLING SERVICES

12. Notification of Potential Occurence Required: ☐ Yes ☒ No

| 13. Code: Lot/Heat/Serial | 14. Lot Size | 15. Sample | 16. Qty. Acc. | 17. Inspection Criteria |
|---|---|---|---|---|
| N/A | 1 | 1 | 0 | ☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other ETIS S.8, App A, REV 3 Sec 5.0, Item 4 |

| 18. Item | 19. Description of Nonconformance (list serial no. where applicable) | 22. Disposition, Justification, and Instructions |
|---|---|---|
| | THREE SAMPLES FOR VOLATILE ORGANIC ANALYSIS WERE COLLECTED AND IDENTIFIED AS SAMPLE NUMBER 2CS1 2/9/93 B08FJ1, B08FJ3. HOWEVER, CONTRARY TO THE SAMPLE COLLECTION CRITERIA REFERENCED IN BLOCK 17 ABOVE, TWO OF THE THREE SAMPLE BOTTLES WERE FOUND TO CONTAIN AIR BUBBLES. | The two sample bottles containing air bubbles shall be discarded. The analysis shall continue utilizing the remaining bottle. See attached letter. |

20. Originator's Signature: M.M. LANE — M.M. Lane — Date 4/22/93

23. Design Document Change Required? ☐ Yes, Doc. No. _____ ☒ No

21. Cognizant QA Manager's Signature — Date 4/23/93

24. Corrective Action Required? ☐ Yes, No. _____ ☒ No

Disp. App.

| 25. Cognizant Engineer | Date | 26. Technical Rep. | Date | Signature/Org. | Date |
|---|---|---|---|---|---|
| J.W. Roberts | 4/30/93 | N/A | | N/A | |

| QA Engineer | Date | Signature/Org. | Date | Signature/Org. | Date |
|---|---|---|---|---|---|
| C.L. Corrigan | | | | | |

Close

27. Accept 2 Reject 0 Follow on NCR N/A — QA/C Personnel — Date 4-30-93

A-7310-104 (10/91)

9613500.1152

# QUALITY ASSURANCE

## NONCONFORMANCE REPORT DISTRIBUTION

| 1. FROM: | 2. MSIN: | 3. DATE: |
|---|---|---|
| Environmental Quality Assurance | H4-16 | April 23, 1993 |

| 4. NCR No.: | 5. Initiation, Disposition, or Closure (I, D, C): |
|---|---|
| 050054 / EQA-93-073 | I |

| | 6. TO: | MSIN | I | D | C |
|---|---|---|---|---|---|
| Cognizant Engineer | J. W. Roberts | H6-02 | | | |
| Cognizant Quality Engineer | G. S. Corrigan | H4-16 | | | |
| Originator | M. M. Lane | H4-23 | | | |
| Q. A. Manager | NA | NA | | | |
| Cognizant QE Manager | T. L. Bennington | H4-16 | | | |
| Facility Manager | NA | NA | | | |
| Engineering Records | L. M. McDaniel | H6-08 | | | |
| Safety | NA | NA | | | |
| QSDM | D. P. Trott | L4-86 | | | |
| Other: JCS Package | NA | NA | | | |
| Q. C. | NA | NA | | | |
| Buyer (Procurement) | NA | NA | | | |
| P.O. File (Procurement) | NA | NA | | | |
| Vendor File (Procurement) | B. M. Colley | H4-19 | | | |
| | EQA File | H4-16 | | | |
| | P. H. Butcher | H6-06 | | | |
| | J. H. Kessner | H4-23 | | | |

7. QST Codes

| Subject: | Cause: | Contr. Factor: | PPG: |
|---|---|---|---|
| AD-08 | PN-002 | | NA |

| 8. Responsible Action Party: | Org Code: |
|---|---|
| J. W. Roberts | 81310 |

A-6000-316 (09/91)

9613500.1153

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

DATE: 4/15/93

TO: Gary Corrigan

FROM: R. C. Smith RCS

Telephone: 372-2537

cc:

SUBJECT: Volume Requirements for VOA Analysis

According to CLP SOW (OLM01.8, d-15, 1.1), a 5 ml sample aliquot is used for volatile organic analysis. Thus, a single 40 ml vial is sufficient to continue with a VOA analysis. Within a batch of samples, one VOA analysis requires three 40 ml vials for QC purposes. This information should allow disposition of NCRs concerning VOA vials with bubbles.

9613500.1151

B08FF6-TMA-491

TMA

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WESTINGHOUSE HANFORD COMPANY

Results of Analyses For:

ORGANICS & GENERAL CHEMISTRY
Case No 04-070
(TMA/ARLI Work Order # A3-04-070)

METALS & NITRATE/NITRITE
Case No. N3-04-106
(TMA/Skinner & Sherman W.O. # S3-04-270, S3-04-271, & S3-04-272)

June 22, 1993

TMA Master Work Order N3-04-106

TRA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93

Results by Sample

SAMPLE ID B08FK6 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.4 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.9 | pH | 0.1 |
| Sulfate | 300.0 | 46 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 420 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93 Results by Sample

SAMPLE ID 808FK6 FRACTION 01G TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 252 | mg/L | 5 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93 Results by Sample

SAMPLE ID B08FK6 FRACTION 01I TEST CODE VCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93

Results by Sample

SAMPLE ID B08FK6 FRACTION 01K TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93 Results by Sample

SAMPLE ID B08FM6 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.4 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.9 | pH | 0.1 |
| Sulfate | 300.0 | 46 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 423 | umho/cm | 6 |
| | | | | |

FORM I

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TMA Inc. REPORT Work Order # A3-04-070

000015

Received: 04/22/93

Results by Sample

SAMPLE ID B08FN6 FRACTION 03G TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 256 | mg/L | 5 |
| | | | | |

FORM I

TRA Inc. REPORT

Work Order # A3-04-070

Received: 04/22/93

Results by Sample

SAMPLE ID B08FH6 FRACTION 03H TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93 Results by Sample

SAMPLE ID B08FM6 FRACTION 03J TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

9615500.1165



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# CASE NO. 04-070

DATA SUMMARY REPORT
ORGANICS

PREPARED BY:

TMA ARLI
160 TAYLOR ST.
MONROVIA CA 91016

# CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 04-070

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : April 22, 1993

## 1.0 DESCRIPTION OF CASE :

Four water samples were analyzed for TCL Organics- Volatiles, Semivolatiles, and Pesticides/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 | pH |
|---|---|---|---|---|
| B08FK6 | A3-04-070-01A | V | WATER | 7 |
| B08FK6 | A3-04-070-01B | SV & P | WATER | |
| B08FK6 MS | A3-04-070-01C | SV | WATER | |
| B08FK6 MSD | A3-04-070-01D | SV | WATER | |
| B08FK8 | A3-04-070-02A | V | WATER | 7 |
| B08FK8 MS | A3-04-070-02B | V | WATER | 7 |
| B08FK8 MSD | A3-04-070-02C | V | WATER | 7 |
| B08FN6 | A3-04-070-03A | V | WATER | 7 |
| B08FN6 | A3-04-070-03B | SV & P | WATER | |
| B08FN6 MS | A3-04-070-03C | P | WATER | |
| B08FN6 MSD | A3-04-070-03D | P | WATER | |
| B08FN8 | A3-04-070-04A | V | WATER | 7 |

## 3.0 COMMENTS :

### 3.1 SHIPPING AND DOCUMENTATION :

All of the samples were received unbroken and properly documented.

3 of the 3 VOA vials for sample B08FN6 contained air bubbles.
1 of the 3 VOA vials for sample B08FK6 contained air bubbles.

Samples B08FN6 and B08FK6 were analyzed in accordance with Westinghouse Hanford Company ROD 93-0110 and 93-0111, respectively.

## 3.2 ANALYSIS

### 3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times.

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

TUNES :

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

### 3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. The matrix spike recoveries for 4-Chloro-3-methylphenol, 4-Nitrophenol and Pentachlorophenol in samples B08FK6MS and B08FK6MSD were above the QC limits. Sample B08FK6MSD also had a matrix spike recovery for Pyrene above the QC limits. In accordance with protocol, no further action was required.

All of the other 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 05/17/93 and was analyzed according to the CLP SOW. The sequence was analyzed by single injection into a dual column system.

Aroclor-1260 and Aroclor-1254 were detected in several samples analyzed during this sequence. Standards for these two Aroclors were injected throughout the sequence for confirmation purposes only. Multiple instrument blanks were injected after the samples with high Aroclor concentrations to eliminate any possible carryover. Dilutions were performed on several samples in this sequence wherein the surrogates were diluted out.

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

The chromatograms are presented in the manner consistent with the capabilities of the Nelson 2700 Turbochrome Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL WATER :

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

All of the QC results were within the limits specified by 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 6/20/93
CLP Program Manager

Widayati 6/21/93
Wida Ang
Organics Manager

000005

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B12

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

9613500.1168

000006
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B12

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000007
EPA SAMPLE NO.

B08FK8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B13

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000008

EPA SAMPLE NO.

B08FK8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B13

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FN6

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B16

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

9613500.1172

000010

EPA SAMPLE NO.

B08FN6

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B16

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FN8

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B17

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 2 | J |
| 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 |

EPA SAMPLE NO.

B08FN8

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B17

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S08

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

EPA SAMPLE NO.

B08FK6

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S08

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000015
EPA SAMPLE NO.

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S08

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500.1179

1B

EPA SAMPLE NO.

B08FW6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507511

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S11

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

B08FN6

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S11

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN CYCLOHYDROCARBON | 7.07 | 2 | J |

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FX6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/22/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

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000020
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/22/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

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**TMA**

**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**

*QUALITY ENVIRONMENTAL SERVICES*

JUN 1993
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# *Report for*

## TMA/Norcal

**WORK ORDER #S304272**

*Scientific Services Since 1922*

**TMA**
**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**
*300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200*
*1-800-4 LAB TEST FAX (617) 890-3883*

Received: 04/23/93

Results by Sample

SAMPLE ID B08FK6 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/20/93 Category WATER

NO3NO2 5.22
mg N/L

SAMPLE ID B08FN6 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/20/93 Category WATER

NO3NO2 5.26
mg N/L

SAMPLE ID B08FN6D SAMPLE # 02 FRACTIONS: B
Date & Time Collected 04/20/93 Category WATER

NO3NO2 5.25
mg N/L

SAMPLE ID B08FN6S SAMPLE # 02 FRACTIONS: C
Date & Time Collected 04/20/93 Category WATER

NO3NO2 7.33
mg N/L

SAMPLE ID LCSW SAMPLE # 03 FRACTIONS: A
Date & Time Collected not specified Category WATER

NO3NO2 2.02
mg N/L

TMA
Thermo Analytical Inc.
Skinner & Sherman Laboratories Inc.

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

300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200
1-800-4 LAB TEST FAX (617) 890-3883

**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

9613500.1185

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RECEIVED SSLA

May 24, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Two (2) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 23, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals. The analysis was performed under TMA/Skinner and Sherman work order S304271.

**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 exception:

The selenium digestion spike recovery exceeded the control limit requirements.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

Steven Provencal

Steven R. Provencal
Lead Chemist

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FK7

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

Lab Code: SKINER Case No.: N3-04-1065AS No.: SDG No.: B08FK7

Matrix (soil/water): WATER Lab Sample ID: 04271-01S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.1 | B | W | F |
| 7440-39-3 | Barium | 15.4 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 45800 | | | P |
| 7440-47-3 | Chromium | 15.0 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 140 | | | P |
| 7439-92-1 | Lead | 2.7 | B | W | F |
| 7439-95-4 | Magnesium | 8600 | | | P |
| 7439-96-5 | Manganese | 2.4 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5240 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11400 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | W | F |
| 7440-62-2 | Vanadium | 7.1 | B | | P |
| 7440-66-6 | Zinc | 5.3 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

D02

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WESTINGHOUSE/HANFORD

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER:

B08FN7

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK7

Matrix (soil/water): WATER Lab Sample ID: 04271-02S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.8 | B | W | F |
| 7440-39-3 | Barium | 21.1 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 48000 | | | P |
| 7440-47-3 | Chromium | 13.4 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 39.4 | B | | P |
| 7439-92-1 | Lead | 1.6 | B | W | F |
| 7439-95-4 | Magnesium | 7750 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5160 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | W | F |
| 7440-62-2 | Vanadium | 7.0 | B | | P |
| 7440-66-6 | Zinc | 7.8 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

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

9613500.1188

RECORD COPY

JUN 1993
RECEIVED
SDLA

May 24, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Two (2) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 23, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S304270.

**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 exception:

The selenium digestion spike recovery exceeded the control limit requirement.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

Steven Provencal

Steven R. Provencal
Lead Chemist

SAMPLE NUMBER:

B08FK6

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK6

Matrix (soil/water): WATER Lab Sample ID: 04270-01S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.3 | B | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 4.2 | B | | F |
| 7440-39-3 | Barium | 16.4 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 45200 | | | P |
| 7440-47-3 | Chromium | 18.0 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 6.9 | B | | P |
| 7439-89-6 | Iron | 43.7 | B | | P |
| 7439-92-1 | Lead | 2.7 | B | W | F |
| 7439-95-4 | Magnesium | 8490 | | | P |
| 7439-96-5 | Manganese | 1.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5340 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 7.2 | B | | P |
| 7440-66-6 | Zinc | 11.8 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FN6

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK6

Matrix (soil/water): WATER Lab Sample ID: 04270-02S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | B | W | F |
| 7440-39-3 | Barium | 18.6 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 48000 | | | P |
| 7440-47-3 | Chromium | 18.0 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.1 | B | | P |
| 7439-89-6 | Iron | 45.5 | B | | P |
| 7439-92-1 | Lead | 2.3 | B | | F |
| 7439-95-4 | Magnesium | 7710 | | | P |
| 7439-96-5 | Manganese | 1.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5150 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 7.2 | B | | P |
| 7440-66-6 | Zinc | 5.2 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

FORM I - IN ILM02.1

9613500.1191

# OFFICE OF SAMPLE MANAGEMENT
# RECORD OF DISPOSITION

ROD-93-0111
Record of Disposition No.

| | |
|---|---|
| DATE: April 27, 1993 | LABORATORY: TMA |
| PROJECT TITLE/NO.: 100-BC-5/SAF#93-089 | NCR NO.: 050067 |

SAMPLE IDENTIFICATION NUMBERS: BO8FK6

DESCRIPTION OF EVENT: One of three VOA vials received at the laboratory contained bubbles.

DISPOSITION OF SAMPLES: With concurrence from the customer, proceed with analysis utilizing the two bottles which do not contain bubbles.

APPROVAL SIGNATURES:

Mary M. Lane — Mary M. Lane — April 27, 1993
HASM Project Coordinator (Print/Sign Name) — Date

James W. Roberts — J.W. Roberts — 4/29/93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9613550D.1192

Westinghouse Hanford Company

# NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 050066

QA Log No. EQA-93-075

| 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 | WATER SAMPLES | B08FN6 | N/A |

| 8. Program/Project/Other | 9. Safety Class | 10. ASME Code Items |
|---|---|---|
| 100-BC-5/93-089 | 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~~ B08FN6 WS 4.29.93 | 1 | 1 | 0 | ☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other EII 5.8, APPA, REV 3 SEC 5.0, ITEM 4 |

| 18. Item | 19. Description of Nonconformance (list serial no. where applicable) | 22. Disposition, Justification, and Instructions |
|---|---|---|
| | THREE SAMPLES FOR VOLATILE ORGANIC ANALYSIS WERE COLLECTED AND IDENTIFIED AS SAMPLE NUMBER B08FN6. HOWEVER, CONTRARY TO THE SAMPLE COLLECTION CRITERIA REFRENCED IN BLOCK 17 ABOVE, ~~TWO~~ THREE OF THE THREE SAMPLE BOTTLES WERE FOUND TO CONTAIN BUBBLES. TRL 4/28/93 | The analysis for volatile organics shall continue. The data shall be appropriately flagged. |

| 20. Originator's Signature | Date | 23. Design Document Change Required? |
|---|---|---|
| M.M. Lane<br>Mary M. Lane | April 27, 1993 | ☐ Yes, Doc. No. _____ ☒ No |

| 21. Cognizant QA Manager's Signature | Date | 24. Corrective Action Required? |
|---|---|---|
| W.R. Thackaberry<br>W.R. Thackaberry for TL Bennington | 4-29-93 | ☐ Yes, No. _____ ☒ No |

| Disp. App. | | | | | |
|---|---|---|---|---|---|
| 25. Cognizant Engineer: J.W. Roberts | Date: 6/30/93 | 26. Technical Rep.: NA | Date | Signature/Org.: NA | Date |
| QA Engineer: GS Corrigan | Date: 4-30-93 | Signature/Org. | Date | Signature/Org. | Date |

Close

27. Accept _____ Reject _____ Follow on NCR _____ QA/C Personnel _____ Date

A-7310-104 (10/91)

9613500.1193

# OFFICE OF SAMPLE MANAGEMENT

# RECORD OF DISPOSITION

ROD-93-0110
Record of Disposition No.

DATE: April 27, 1993

LABORATORY: TMA

PROJECT TITLE/NO.: 100-BC-5/SAF#93-089

NCR NO.: 050066

SAMPLE IDENTIFICATION NUMBERS: B08FN6

DESCRIPTION OF EVENT: Three of the three VOA vials received by the laboratory contained bubbles; however the bubbles were pinhead sized bubbles, and one of the VOA vials contained relatively small pinhead sized bubbles.

DISPOSITION OF SAMPLES: With concurrence from the customer, proceed with analysis, using only the bottle with the smallest bubbles.

APPROVAL SIGNATURES:

Mary M. Lane — Mary M. Lane — April 27, 1993
HASM Project Coordinator (Print/Sign Name) — Date

James W. Roberts — J.W. Roberts — 4/29/93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9613500.1194

# QUALITY ASSURANCE

## NONCONFORMANCE REPORT DISTRIBUTION

| 1. FROM: | 2. MSIN: | 3. DATE: |
|---|---|---|
| Environmental Quality Assurance | H4-16 | April 28, 1993 |

| 4. NCR No.: | 5. Initiation, Disposition, or Closure (I, D, C): |
|---|---|
| 050066 / EQA-93-075 | I |

| | 6. TO: | MSIN | I | D | C |
|---|---|---|---|---|---|
| Cognizant Engineer | J. W. Roberts | H6-02 | | | |
| Cognizant Quality Engineer | G. S. Corrigan | H4-16 | | | |
| Originator | M. M. Lane | H4-23 | | | |
| Q. A. Manager | NA | NA | | | |
| Cognizant QE Manager | T. L. Bennington | H4-16 | | | |
| Facility Manager | NA | NA | | | |
| Engineering Records | L. M. McDaniel | H6-08 | | | |
| Safety | NA | NA | | | |
| QSDM | D. P. Trott | L4-86 | | | |
| Other: | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | B. M. Colley | H4-19 | | | |
| | EQA File | H4-16 | | | |
| | P. H. Butcher | H6-06 | | | |
| | J. H. Kessner | H4-23 | | | |

7. QST Codes

| Subject: | Cause: | Contr. Factor: | PPG: |
|---|---|---|---|
| AD-08 | PN-002 | | NA |

| 8. Responsible Action Party: | Org Code: |
|---|---|
| J. W. Roberts | 81310 |

A-6000-816 (09/91)

9613500.1195

Westinghouse Hanford Company

# NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 050067

QA Log No. EQA-93-076

| 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 | RIFS | WATER SAMPLES | B08FK6 | N/A |

8. Program/Project/Other: 100-BC-5/93-089 4/28/93 ~~ENVIRONMENTAL FIELD SAMPLING SERVICES~~

9. Safety Class: N/A

10. ASME Code Items: ☐ Yes ☒ No (If yes, notify authorized inspector)

11. Supplier Name/Address: ENVIRONMENTAL FIELD SAMPLING SERVICES

12. Notification of Potential Occurence Required: ☐ Yes ☒ No

| 13. Code: Lot/Heat/Serial | 14. Lot Size | 15. Sample | 16. Qty. Acc. | 17. Inspection Criteria |
|---|---|---|---|---|
| ~~N/A~~ B08FK6 | 1 | 1 | 0 | ☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other EII S.8, APPA, REV 3 SEC. S.D, ITEM 4 |

| 18. Item | 19. Description of Nonconformance (list serial no. where applicable) | 22. Disposition, Justification, and Instructions |
|---|---|---|
| | THREE SAMPLES FOR VOLATILE ORGANIC ANALYSIS WERE COLLECTED AND IDENTIFIED AS SAMPLE NUMBER B08FK6. HOWEVER, CONTRARY TO THE SAMPLE COLLECTION CRITERIA REFRENCED IN BLOCK 17 ABOVE, ONE OF THE THREE SAMPLE BOTTLES WERE FOUND TO CONTAIN BUBBLES. | The one vial containing air bubbles shall be discarded. The analysis shall continue utilizing the remaining two bottles. See attached letter |

20. Originator's Signature: M.M. Lane — Mary M. Lane — Date: April 27 1993

23. Design Document Change Required? ☐ Yes, Doc. No. _____ ☒ No

21. Cognizant QA Manager's Signature: W.R. Thackaberry — W Thackaberry for T.L. Pennington — Date: 4-29-93

24. Corrective Action Required? ☐ Yes, No. _____ ☒ No

Disp. App.

| 25. Cognizant Engineer | Date | 26. Technical Rep. | Date | Signature/Org. | Date |
|---|---|---|---|---|---|
| J.W. Robert — J.W. Robert | 4/30/93 | NA | | NA | |
| **QA Engineer** | **Date** | **Signature/Org.** | **Date** | **Signature/Org.** | **Date** |
| GS CORRIGAN | | | | | |

Close

27. Accept 1 Reject 0 Follow on NCR NA — Gary Corrigan — QA/C Personnel — Date: 4-30-93

A-7310-104 (10/91)

9613500.1196

# OFFICE OF SAMPLE MANAGEMENT
# RECORD OF DISPOSITION

ROD-93-0111
Record of Disposition No.

DATE: April 27, 1993

LABORATORY: TMA

PROJECT TITLE/NO.: 100-BC-5/SAF#93-089

NCR NO.: 050067

SAMPLE IDENTIFICATION NUMBERS: BO8FK6

DESCRIPTION OF EVENT: One of three VOA vials received at the laboratory contained bubbles.

DISPOSITION OF SAMPLES: With concurrence from the customer, proceed with analysis utilizing the two bottles which do not contain bubbles.

APPROVAL SIGNATURES:

Mary M. Lane — Mary M. Lane — April 27 1993
HASM Project Coordinator (Print/Sign Name) — Date

James W. Roberts — J.W. Roberts — 4/29/93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9613500.1197

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

DATE: 4/15/93

TO: Gary Corrigan

FROM: R. C. Smith RCS

Telephone: 372-2537

cc:

SUBJECT: Volume Requirements for VOA Analysis

According to CLP SOW (OLM01.8, d-15, 1.1), a 5 ml sample aliquot is used for volatile organic analysis. Thus, a single 40 ml vial is sufficient to continue with a VOA analysis. Within a batch of samples, one VOA analysis requires three 40 ml vials for QC purposes. This information should allow disposition of NCRs concerning VOA vials with bubbles.

9613500.1198

# QUALITY ASSURANCE

## NONCONFORMANCE REPORT DISTRIBUTION

| 1. FROM: | 2. MSIN: | 3. DATE: |
|---|---|---|
| Environmental Quality Assurance | H4-16 | April 28, 1993 |

| 4. NCR No.: | 5. Initiation, Disposition, or Closure (I, D, C): |
|---|---|
| 050067 / EQA-93-076 | I |

| | 6. TO: | MSIN | I | D | C |
|---|---|---|---|---|---|
| Cognizant Engineer | J. W. Roberts | H6-02 | | | |
| Cognizant Quality Engineer | G. S. Corrigan | H4-16 | | | |
| Originator | M. M. Lane | H4-23 | | | |
| Q. A. Manager | NA | NA | | | |
| Cognizant QE Manager | T. L. Bennington | H4-16 | | | |
| Facility Manager | NA | NA | | | |
| Engineering Records | L. M. McDaniel | H6-08 | | | |
| Safety | NA | NA | | | |
| QSDM | D. P. Trott | L4-86 | | | |
| Other: | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | B. M. Colley | H4-19 | | | |
| | EQA File | H4-16 | | | |
| | P. H. Butcher | H6-06 | | | |
| | J. H. Kessner | H4-23 | | | |

7. QST Codes

| Subject: | Cause: | Contr. Factor: | PPG: |
|---|---|---|---|
| AD-08 | PN-002 | | NA |

| 8. Responsible Action Party: | Org Code: |
|---|---|
| J. W. Roberts | 81310 |

A-6000-816 (09/91)

9613500.1199

B08FF8-TMA-491

TMA

JUN 1993
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WESTINGHOUSE HANFORD COMPANY

Results of Analyses For:

ORGANICS & GENERAL CHEMISTRY
Case No 04-078
(TMA/ARLI Work Order # A3-04-078)

METALS & NITRATE/NITRITE
Case No. N3-04-126
(TMA/Skinner & Sherman W.O. # S3-04-334, S3-04-335, & S3-04-336)

June 22, 1993

TMA Master Work Order N3-04-126

# GENERAL CHEMISTRY RESULTS

CASE NO. 04-078

Water Sample #:

B08FL1

## CASE NARRATIVE

The Chain of Custody was broken for samples B08FL1, and B08FL3. In accordance with ROD-93-0112 the analysis was continued "for informational purposes only".

One aliquot of B08FL1, used to test Ammonia and COD, arrived on 4/30/93 from Skinner and Sherman.

The holding time for the pH, TDS, and Sulfide analysis was exceeded. Careful review of the QC analysis indicates that the data is reliable.

Sample B08FL1 (A3-04-078-01F) yielded a 76.0% recovery for the Phosphate analysis. The low Phosphate recovery compared to our laboratory control sample indicated the presence of a matrix interference.

No other problems were encountered during sample analysis. All QC results were acceptable.

Maureen Parrish

Maureen Parrish

TRA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93 Results by Sample

SAMPLE ID B08FL1 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.8 | pH | 0.1 |
| Sulfate | 300.0 | 43 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 368 | umho/cm | 6 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93

Results by Sample

SAMPLE ID B08FL1 FRACTION 01H TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 258 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93 Results by Sample

SAMPLE ID BDBFL1 FRACTION 01M TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

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

FORM I

TMA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93

Results by Sample

SAMPLE ID B08FL1 FRACTION 01J TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

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

FORM I

9613500.1205



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SDLA

# CASE NO. 04-078

DATA SUMMARY REPORT
ORGANICS

PREPARED BY:

TMA ARLI
160 TAYLOR ST.
MONROVIA CA 91016

# CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : C4-078

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : April 26, 1993

## 1.0 DESCRIPTION OF CASE :

Two water samples were analyzed for TCL Organics- Volatiles, Semivolatiles, and Pesticides/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 | pH |
|---|---|---|---|---|
| B08FL1 | A3-04-078-01A | V | WATER | 7 |
| B08FL1 | A3-04-078-01B | SV & P | WATER | |
| B08FL1 MS | A3-04-078-01C | SV & P | WATER | |
| B08FL1 MSD | A3-04-078-01D | SV & P | WATER | |
| B08FL3 | A3-04-078-03A | V | WATER | 7 |
| B08FL3 MS | A3-04-078-03B | V | WATER | 7 |
| B08FL3 MSD | A3-04-078-03C | V | WATER | 7 |

## 3.0 COMMENTS :

### 3.1 SHIPPING AND DOCUMENTATION :

All of the samples were received unbroken and properly documented.

### 3.2 ANALYSIS

#### 3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times.

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

TUNES :

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

3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. The matrix spike recoveries for 4-Nitrophenol in samples B08FL1MS and B08FL1MSD were above the QC limits. In accordance with protocol, no further action was required.

All of the other 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 05/17/93 and was analyzed according to the CLP SOW. The sequence was analyzed by single injection into a dual column system.

Aroclor-1260 and Aroclor-1254 were detected in several samples analyzed during this sequence. Standards for these two Aroclors were injected throughout the sequence for confirmation purposes only. Multiple instrument blanks were injected after the samples with high Aroclor concentrations to eliminate any possible carryover. Dilutions were performed on several samples in this sequence wherein the surrogates were diluted out.

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

The chromatograms are presented in the manner consistent with the capabilities of the Nelson 2700 Turbochrome Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL WATER :

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

All of the QC results were within the limits specified by 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 6/20/93
Nicole Roth
CLP Program Manager

Wida Ang 6/21/93
Wida Ang
Organics Manager

# 1A
## VOLATILE ORGANICS ANALYSIS DATA SHEET

000005
EPA SAMPLE NO.

B08FL1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B16

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

000006
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FL1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B16

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500.1211

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000007
EPA SAMPLE NO.

B08FL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B17

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

9613500.1212

1E

EPA SAMPLE NO.

B08FL3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B17

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500 1B 1213

EPA SAMPLE NO.

B08FL1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507I05

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/29/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

EPA SAMPLE NO.

B08FL1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507I05

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/29/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 3 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | J |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

9413500L1215

1F

EPA SAMPLE NO.

B08FL1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304078-01B

ample wt/vol: 1000 (g/mL) ML Lab File ID: 30507I05

evel: (low/med) LOW Date Received: 04/26/93

Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/29/93

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) N pH: ____

umber TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 28.92 | 2 | J |

9613500 1216

1D

EPA SAMPLE NO.

B08FL1

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/26/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/29/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9613500.1217

000001

**TMA**

**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**

*QUALITY ENVIRONMENTAL SERVICES*

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## *Report for*

**TMA/Norcal**

**WORK ORDER #S304336**

---

*Scientific Services Since 1922*


**TMA**
**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**
*300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200*
*1-800-4 LAB TEST FAX (617) 890-3883*

Page 2 Skinner&Sherman REPORT Work Order # S3-04-336

Received: 04/27/93 Results by Sample

SAMPLE ID B08FL1 SAMPLE # 01 FRACTIONS: A

Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.37

mg N/L

SAMPLE ID B08FL1D SAMPLE # 01 FRACTIONS: B

Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.41

mg N/L

SAMPLE ID B08FL1S SAMPLE # 01 FRACTIONS: C

Date & Time Collected 04/21/93 Category WATER

NO3NO2 5.42

mg N/L

SAMPLE ID LCSW SAMPLE # 02 FRACTIONS: A

Date & Time Collected not specified Category WATER

NO3NO2 2.03

mg N/L

TMA
Thermo Analytical Inc.
Skinner & Sherman Laboratories Inc.

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

300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200
1-800-4 LAB TEST FAX (617) 890-3883

**TMA** 9613500.1219
**Thermo Analytical Inc.**

**Skinner & Sherman Labs., Inc.**
300 Second Avenue
Post Office Box 521
Waltham, MA 02254-0521
(617) 890-7200
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May 28, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
One (1) water sample was submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 27, 1993. The sample was analyzed for the USEPA CLP metals. The analysis was performed under TMA/Skinner and Sherman work order S304335.

**Methodology**
The sample was 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 excepiton:

The selenium digestion spike recovery exceeded the control limit requirement.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

9615500.1220

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FL2

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

Lab Code: SKINER Case No.: N3-04-126SAS No.: SDG No.: B08FL2

Matrix (soil/water): WATER Lab Sample ID: 04335-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.6 | B | W | F |
| 7440-39-3 | Barium | 8.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 41800 | | | P |
| 7440-47-3 | Chromium | 16.1 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 33.9 | B | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 9350 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 6130 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 12200 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 12.5 | B | | P |
| 7440-66-6 | Zinc | 15.0 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

**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

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May 28, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

### Scope
One (1) water sample was submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 27, 1993 from TMA/Norcal. The sample was analyzed for the USEPA CLP metals and cyanide. The analysis was performed under TMA/Skinner and Sherman work order S304334.

### Methodology
The sample was 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 sample with the following exception:

The selenium digestion spike recovery exceeded the control limit requirement.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

9613500.1222

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FL1

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

Lab Code: SKINER Case No.: N3-04-126SAS No.: SDG No.: B08FL1

Matrix (soil/water): WATER Lab Sample ID: 04334-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.4 | B | W | F |
| 7440-39-3 | Barium | 8.8 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 41700 | | | P |
| 7440-47-3 | Chromium | 18.1 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 32.2 | B | | P |
| 7439-92-1 | Lead | 2.1 | B | | F |
| 7439-95-4 | Magnesium | 9400 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 6110 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 12200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 12.9 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

9613500.1223

# OFFICE OF SAMPLE MANAGEMENT

# RECORD OF DISPOSITION

ROD-93-0112
Record of Disposition No.

| | |
|---|---|
| DATE: 4/29/93 | LABORATORY: TMA |
| PROJECT TITLE/NO.: 100-BC-5/93-089 | NCR NO.: 050068 |

**SAMPLE IDENTIFICATION NUMBERS:**

B08FL1, B08FL2, B08FL3

**DESCRIPTION OF EVENT:**

Samples aliquots requiring chemical analyses were sent to TMA-ARLI from TMA-NORCAL without chain-of-custodies. The chain-of-custody for the aliquots requiring chemical analyses was broken.

**DISPOSITION OF SAMPLES:**

With concurrence from J. W. Roberts, project engineer, continue with analyses "for informational purposes only".

**APPROVAL SIGNATURES:**

R. C. Smith/ R. Clayton Smith — 4/29/93
OSM Project Coordinator (Print/Sign Name) — Date

J. W. Roberts/ J.W. Roberts — 4/30/93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9613500.1224

Westinghouse Hanford Company

# NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 050068

QA Log No. EQA-93-~~068~~ 077

| 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 | WATER SAMPLES | B08FL1, B08FL2, B08FL3 | N/A |

| 8. Program/Project/Other | 9. Safety Class | 10. ASME Code Items |
|---|---|---|
| 100-BC-5/93-089 | N/A | ☐ Yes ☒ No (If yes, notify authorized inspector) |

| 11. Supplier Name/Address | 12. Notification of Potential Occurence Required |
|---|---|
| TMA | ☐ Yes ☒ No |

| 13. Code: Lot/Heat/Serial | 14. Lot Size | 15. Sample | 16. Qty. Acc. | 17. Inspection Criteria |
|---|---|---|---|---|
| N/A | 3 | 3 | 0 | ☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other WAC-CM-7.7, EII 5.1, SEC 6.3 |

| 18. Item | 19. Description of Nonconformance (list serial no. where applicable) | 22. Disposition, Justification, and Instructions |
|---|---|---|
| | SAMPLES' ALIQUOTS REQUIRING CHEMICAL ANALYSES WERE SENT TO TMA-ARL1 FROM TMA-NORCAL WITHOUT CHAIN-OF-CUSTODIES. THE CHAIN-OF-CUSTODY WAS BROKEN. | The analysis shall continue for the affected samples. The resulting data shall be appropriately flagged. |

20. Originator's Signature: RC SMITH, R Clay Smith — Date: 4/29/93

23. Design Document Change Required? ☐ Yes, Doc. No. _____ ☒ No

21. Cognizant QA Manager's Signature: K.R. Thackaberry for TL Bennington, TL Bennington — Date: 4-30-93

24. Corrective Action Required? ☐ Yes, No. _____ ☒ No

Disp. App.

| 25. Cognizant Engineer | Date | 26. Technical Rep. | Date | Signature/Org. | Date |
|---|---|---|---|---|---|
| JW Roberts, J.W. Roberts | 5/4/93 | NA | | NA | |

| QA Engineer | Date | Signature/Org. | Date | Signature/Org. | Date |
|---|---|---|---|---|---|
| GS Corrigan, Gary S. Corrigan | 5-4-93 | | | | |

Close

27. Accept _____ Reject _____ Follow on NCR _____

QA/C Personnel _____ Date

A-7310-104 (10/91)

9013500.1225

# OFFICE OF SAMPLE MANAGEMENT

# RECORD OF DISPOSITION

ROD-93-0112
Record of Disposition No.

| | |
|---|---|
| DATE: 4/29/93 | LABORATORY: TMA |
| PROJECT TITLE/NO.: 100-BC-5/93-089 | NCR NO.: 050068 |

**SAMPLE IDENTIFICATION NUMBERS:**

B08FL1, B08FL2, B08FL3

**DESCRIPTION OF EVENT:**

Samples aliquots requiring chemical analyses were sent to TMA-ARLI from TMA-NORCAL without chain-of-custodies. The chain-of-custody for the aliquots requiring chemical analyses was broken.

**DISPOSITION OF SAMPLES:**

With concurrence from J. W. Roberts, project engineer, continue with analyses "for informational purposes only".

**APPROVAL SIGNATURES:**

R. C. Smith/ R. Clayton Smith — 4/29/93
OSM Project Coordinator (Print/Sign Name) — Date

J. W. Roberts/ J. W. Roberts — 4/30/93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9613590.1226

# QUALITY ASSURANCE

## NONCONFORMANCE REPORT DISTRIBUTION

| 1. FROM: | 2. MSIN: | 3. DATE: |
|---|---|---|
| Environmental Quality Assurance | H4-16 | April 30, 1993 |

| 4. NCR No.: | 5. Initiation, Disposition, or Closure (I, D, C): |
|---|---|
| 050068 / EQA-93-077 | I |

| 6. TO: | | MSIN | I | D | C |
|---|---|---|---|---|---|
| Cognizant Engineer | J. W. Roberts | H6-02 | | | |
| Cognizant Quality Engineer | G. S. Corrigan | H4-16 | | | |
| Originator | R. C. Smith | H4-23 | | | |
| Q. A. Manager | NA | NA | | | |
| Cognizant QE Manager | T. L. Bennington | H4-16 | | | |
| Facility Manager | NA | NA | | | |
| Engineering Records | L. M. McDaniel | H6-08 | | | |
| Safety | NA | NA | | | |
| QSDM | D. P. Trott | L4-86 | | | |
| Other: | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | B. M. Colley | H4-19 | | | |
| | EQA File | H4-16 | | | |
| | P. H. Butcher | H6-06 | | | |
| | J. H. Kessner | H4-23 | | | |

7. QST Codes

| Subject: | Cause: | Contr. Factor: | PPG: |
|---|---|---|---|
| AD-08 | PN-002 | | NA |

| 8. Responsible Action Party: | Org Code: |
|---|---|
| J. W. Roberts | 81310 |

A-6000-816 (09/91)

9613500.1227

B08FF6-TMA-491

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Results of Analyses For:

ORGANICS & GENERAL CHEMISTRY
Case No 04-072
(TMA/ARLI Work Order # A3-04-072)

METALS & NITRATE/NITRITE
Case No. N3-04-120
(TMA/Skinner & Sherman W.O. # S3-04-329, S3-04-330, & S3-04-332)

June 17, 1993

TMA Master Work Order N3-04-120

9613500.1228



JUN 1993
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WESTINGHOUSE HANFORD COMPANY

Results of Analyses For:

GENERAL CHEMISTRY
CASE NO. 04-072
(TMA/ARLI Work Order # A3-04-072)

ORGANICS
CASE NO. 04-072
(TMA/ARLI Work Order # A3-04-072)

General Chemistry and Organics results are presented
for the following WHC WATER sample(s):

| | |
|---|---|
| B08FP1 | B08FP3 |
| B08FQ1 | B08FQ3 |
| B08FQ6 | B08FQ8 |
| B08FW5 | B08G60 |
| B08G62 | |

Norcal Work Order # N3-04-120

Thermo Analytical Inc.
160 Taylor Street
Monrovia, CA 91016
(818) 357-3247

Date submitted:

6/14/93

5613500.1229

GENERAL CHEMISTRY RESULTS

CASE NO. 04-072

Water Sample #:

| | |
|---|---|
| B08FP1 | B08FQ1 |
| B08FQ6 | B08G60 |

CASE NARRATIVE

The holding time for the pH analysis was exceeded. Careful review of the QC analysis indicates that the data is reliable.

No problems were encountered during sample analysis. All QC results were acceptable.

Maureen Parrish

Maureen Parrish

TMA Inc. REPORT Work Order # A3-04-072



Received: 04/23/93

Results by Sample

SAMPLE ID B08FP1 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 6.7 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.5 | pH | 0.1 |
| Sulfate | 300.0 | 37 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 342 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08FP1 FRACTION 016 TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 103 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 237 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FP1 FRACTION Q11 TEST CODE WCCLPL NAME Anions & Wet Chem. - WW043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FP1 FRACTION 01K TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ1 FRACTION 04E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 8.4 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.6 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.8 | pH | 0.1 |
| Sulfate | 300.0 | 34 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 367 | umho/cm | 6 |
| | | | | |

FORM I

9613500.1235

TNA Inc. REPORT Work Order # A3-04872 000025

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ1 FRACTION 04G TEST CODE VCCLPL NAME Anions & Wet Chem. - VR043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 118 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 243 | mg/L | 5 |
| | | | | |

FORM I

TRA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ1 FRACTION O&M TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

9613500.1237

TMA Inc. REPORT Work Order # A3-04-072 000027

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ1 FRACTION 04J TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

9613500.1238

TMA Inc. REPORT Work Order # A3-04[illegible]000028

Received: 04/23/93 Results by Sample

SAMPLE ID B08F06 FRACTION 06C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 5.6 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.4 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 33 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 323 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ6 FRACTION 06D TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 113 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 229 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ6 FRACTION QSE TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08F06 FRACTION 06F TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08G60 FRACTION 08C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 6.8 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 | mg/L | 0.4 |
| pH | 150.1 | 7.5 | pH | 0.1 |
| Sulfate | 300.0 | 40 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 343 | umho/cm | 6 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-0[illegible] 000033

Received: 04/23/93

Results by Sample

SAMPLE ID B08660 FRACTION 08D TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 103 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 235 | mg/L | 5 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08660 FRACTION O&E TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 | mg/L | 1 |
| | | | | |

FORM I

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08G60 FRACTION 08F TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 | mg/L | 0.05 |
| COD | 410.0 | <5 | mg/L | 5 |
| | | | | |

FORM I

9613500.1246



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SDLA

# CASE NO. 04-072

## DATA SUMMARY REPORT
## ORGANICS

PREPARED BY:

TMA ARLI
160 TAYLOR ST.
MONROVIA CA 91016

# CASE NARRATIVE

LABORATORY : TMA/ARLI

CASE : 04-072

CONTRACT ID : WESTINGHOUSE HANFORD COMPANY

SDG RECEIPT DATE : April 23, 1993

## 1.0 DESCRIPTION OF CASE :

Nine water samples were analyzed for TCL Organics- Volatiles, Semivolatiles, and Pesticides/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 | pH |
|---|---|---|---|---|
| B08FP1 | A3-04-072-01A | V | WATER | 7 |
| B08FP1 | A3-04-072-01B | SV & P | WATER | |
| B08FP1 MS | A3-04-072-01C | SV | WATER | |
| B08FP1 MSD | A3-04-072-01D | SV | WATER | |
| B08FP3 | A3-04-072-02A | V | WATER | 7 |
| B08FP3 MS | A3-04-072-02B | V | WATER | 7 |
| B08FP3 MSD | A3-04-072-02C | V | WATER | 7 |
| B08FW5 | A3-04-072-03A | V | WATER | 7 |
| B08FQ1 | A3-04-072-04A | V | WATER | 7 |
| B08FQ1 | A3-04-072-04B | SV & P | WATER | |
| B08FQ1 MS | A3-04-072-04C | P | WATER | |
| B08FQ1 MSD | A3-04-072-04D | P | WATER | |
| B08FQ3 | A3-04-072-05A | V | WATER | 7 |
| B08FQ6 | A3-04-072-06A | V | WATER | 7 |
| B08FQ6 | A3-04-072-06B | SV & P | WATER | |
| B08FQ8 | A3-04-072-07A | V | WATER | 7 |
| B08G60 | A3-04-072-08A | V | WATER | 7 |
| B08G60 | A3-04-072-08B | SV & P | WATER | |
| B08G62 | A3-04-072-09A | V | WATER | 7 |

## 3.0 COMMENTS :

### 3.1 SHIPPING AND DOCUMENTATION :

All of the samples were received unbroken and properly documented.

## 3.2 ANALYSIS

### 3.2.1 VOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were analyzed within the CLP SOW holding times.

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

TUNES :

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

### 3.2.2 SEMIVOLATILE ANALYSIS COMMENTS :

LOW LEVEL WATER :

The samples were extracted and analyzed within the CLP SOW holding times. The matrix spike recoveries of 4-Nitrophenol and Pentachlorophenol in samples B08FP1MS and B08FP1MSD were above the QC limits. In accordance with protocol, no further action was required.

All of the other 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 05/17/93 and was analyzed according to the CLP SOW. The sequence was analyzed by single injection into a dual column system.

Aroclor-1260 and Aroclor-1254 were detected in several samples analyzed during this sequence. Standards for these two Aroclors were injected throughout the sequence for confirmation purposes only. Multiple instrument blanks were injected after the samples with high Aroclor concentrations to eliminate any possible carry-over. Dilutions were performed on several samples in this sequence wherein the surrogates were diluted out.

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

The chromatograms are presented in the manner consistent with the capabilities of the Nelson 2700 Turbochrome Data System which normalizes the largest peak to scale.

SAMPLE NOTES :

LOW LEVEL WATER :

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

All of the QC results were within the limits specified by 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 6/16/93
Nicole Roth
CLP Program Manager

Widayat
Wida Ang 6/16/93
Organics Manager

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1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000005
EPA SAMPLE NO.

B08FP1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B06

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08FP1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B06

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000007
EPA SAMPLE NO.

B08FP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B07

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000008
EPA SAMPLE NO.

B08FP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B07

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000009
EPA SAMPLE NO.

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B11

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000010
EPA SAMPLE NO.

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B11

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

EPA SAMPLE NO.

B08FQ3

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B12

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

EPA SAMPLE NO.

B08FQ3

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B12

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FQ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000014

B08FQ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613500.1260

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000015

EPA SAMPLE NO.

B08FQ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B14

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

9613500.1261

1E

000016

EPA SAMPLE NO.

B08FQ8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B14

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000017
EPA SAMPLE NO.

B08FW5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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

000018
EPA SAMPLE NO.

B08FW5

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000019
EPA SAMPLE NO.

B08G60

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000020
EPA SAMPLE NO.

B08G60

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000021
EPA SAMPLE NO.

B08G62

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

EPA SAMPLE NO.

B08G62

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000023
EPA SAMPLE NO.

B08FP1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

9615600.1269

1C

EPA SAMPLE NO.

B08FP1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 2 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000025
EPA SAMPLE NO.

B08FP1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.43 | 4 | BJ |

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000027
EPA SAMPLE NO.

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F

000028

EPA SAMPLE NO.

B08FQ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | BJ |

EPA SAMPLE NO.

B08FQ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

9613500.1275

1C

000030
EPA SAMPLE NO.

B08FQ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 28 | |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B08FQ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.48 | 3 | BJ |

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET



EPA SAMPLE NO.

B08G60

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30513S15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |

EPA SAMPLE NO.

B08G60

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30513S15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 6 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

1F



EPA SAMPLE NO.

B08G60

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30513S15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.33 | 4 | BJ |

9613500.1280

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

000035
EPA SAMPLE NO.

B08FP1

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-01B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9615500.1281

000036

EPA SAMPLE NO.

B08FQ1

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FQ6

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-06B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

1D

EPA SAMPLE NO.

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08G60

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-08B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

9613500.1284

000001

**TMA**

**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**

*QUALITY ENVIRONMENTAL SERVICES*

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## *Report for*

**TMA/Norcal**

**WORK ORDER #S304332**

*Scientific Services Since 1922*

**TMA**
**Thermo Analytical Inc.**
**Skinner & Sherman Laboratories Inc.**
*300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200*
*1-800-4 LAB TEST FAX (617) 890-3883*

Page 2 Skinner&Sherman REPORT Work Order # S3-04-332

Received: 04/27/93 Results by Sample

SAMPLE ID B08FP1 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.93
mg N/L

SAMPLE ID B08FQ1 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.49
mg N/L

SAMPLE ID B08FQ6 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 1.19
mg N/L

SAMPLE ID B08G60 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.82
mg N/L

SAMPLE ID B08G60D SAMPLE # 04 FRACTIONS: B
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.81
mg N/L

SAMPLE ID B08G60S SAMPLE # 04 FRACTIONS: C
Date & Time Collected 04/21/93 Category WATER

NO3NO2 5.92
mg N/L

SAMPLE ID LCSW SAMPLE # 05 FRACTIONS: A
Date & Time Collected not specified Category WATER

NO3NO2 2.03
mg N/L

TMA
Thermo Analytical Inc.
Skinner & Sherman Laboratories Inc.

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

300 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-7200
1-800-4 LAB TEST FAX (617) 890-3883

**TMA** 9613500.1286
**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

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JUN 1993
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May 28, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Four (4) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 27, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals. The analysis was performed under TMA/Skinner and Sherman work order S304330.

**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 the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

9613500.1287

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FP2

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.3 | B | | F |
| 7440-39-3 | Barium | 28.7 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 41700 | | | P |
| 7440-47-3 | Chromium | 34.2 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.5 | B | | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 7680 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4640 | B | | P |
| 7782-49-2 | Selenium | 3.5 | U | MW | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 9770 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 5.6 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

FORM I - IN ILM02.1

9613500.1288

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FQ2

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-025

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.4 | B | | P |
| 7440-36-0 | Antimony | 21.2 | B | | P |
| 7440-38-2 | Arsenic | 4.6 | B | | F |
| 7440-39-3 | Barium | 18.6 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.5 | B | | P |
| 7440-70-2 | Calcium | 34100 | | | P |
| 7440-47-3 | Chromium | 6.2 | B | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.9 | B | | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.5 | B | | F |
| 7439-95-4 | Magnesium | 10300 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 6100 | | | P |
| 7782-49-2 | Selenium | 3.5 | U | W | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 21600 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 19.2 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

FORM I - IN ILM02.1

9615500.1289

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08F07

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-03S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 28.5 | B | | P |
| 7440-36-0 | Antimony | 19.0 | B | | P |
| 7440-38-2 | Arsenic | 3.8 | B | | F |
| 7440-39-3 | Barium | 7.7 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 32200 | | | P |
| 7440-47-3 | Chromium | 21.4 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.2 | B | | F |
| 7439-95-4 | Magnesium | 9750 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 6680 | | | P |
| 7782-49-2 | Selenium | 3.5 | U | W | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 14600 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 27.0 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

004

FORM I - IN TLM02.F

9613500.1290

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08G61

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-04S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 19.2 | B | | P |
| 7440-38-2 | Arsenic | 1.5 | U | | F |
| 7440-39-3 | Barium | 28.3 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 42900 | | | P |
| 7440-47-3 | Chromium | 36.5 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.5 | B | | F |
| 7439-95-4 | Magnesium | 7870 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4840 | B | | P |
| 7782-49-2 | Selenium | 3.5 | U | W | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 10000 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 6.0 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

005

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**TMA** 9613500.1291
**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*

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May 28, 1993

TMA/NORCAL
2030 Wright Avenue
Richmond, CA 94804
Attention: Dan Stuermer

## Quality Control Narrative

**Scope**
Four (4) water samples were submitted to TMA/Skinner & Sherman Laboratories, Inc. on April 27, 1993 from TMA/Norcal. The samples were analyzed for the USEPA CLP metals and cyanide as indicated on the chain of custody. The analysis was performed under TMA/Skinner and Sherman work order S304329.

**Methodology**
The sample was 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.

Please feel free to call if there are any questions concerning the data package.

Respectfully submitted,

TMA/SKINNER & SHERMAN LABORATORIES, INC.

David N. Peterson
Assistant Laboratory Manager

9613500.1292

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FP1

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 31.0 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 27.4 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 41900 | | | P |
| 7440-47-3 | Chromium | 38.2 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 73.1 | B | | P |
| 7439-92-1 | Lead | 4.5 | | W | F |
| 7439-95-4 | Magnesium | 7790 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4790 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 9950 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 8.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

9613500.1293

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FQ1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-00-0108

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-02S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 24.6 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.7 | B | + | F |
| 7440-39-3 | Barium | 17.3 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 36600 | | | P |
| 7440-47-3 | Chromium | 6.5 | B | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 162 | | | P |
| 7439-92-1 | Lead | 1.6 | B | | F |
| 7439-95-4 | Magnesium | 11200 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 6570 | | | P |
| 7782-49-2 | Selenium | 14.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 23400 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 20.5 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

9613500.1294

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FQ6

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

Lab Code: SKINER Case No.: N5-04-1205AS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-03S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 5.1 | B | W | F |
| 7440-39-3 | Barium | 7.2 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 36200 | | | P |
| 7440-47-3 | Chromium | 30.0 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 69.1 | B | | P |
| 7439-92-1 | Lead | 2.8 | B | | F |
| 7439-95-4 | Magnesium | 11000 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 7450 | | | P |
| 7782-49-2 | Selenium | 14.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 16500 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 29.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

004

9615500.1295

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08G60

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-04S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | W | F |
| 7440-39-3 | Barium | 27.4 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 42200 | | | P |
| 7440-47-3 | Chromium | 36.5 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 80.4 | B | | P |
| 7439-92-1 | Lead | 1.3 | U | | F |
| 7439-95-4 | Magnesium | 7910 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4620 | B | | P |
| 7782-49-2 | Selenium | 14.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 9980 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 6.8 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

005

9615300.1296

# OFFICE OF SAMPLE MANAGEMENT

# RECORD OF DISPOSITION

ROD-93-0116
Record of Disposition No.

| | |
|---|---|
| DATE: 4/30/93 | LABORATORY: TMA |
| PROJECT TITLE/NO.: 100-BC-5/93-089 | NCR NO.: 050069 |

**SAMPLE IDENTIFICATION NUMBERS:**

B08G60

**DESCRIPTION OF EVENT:**

1 of 3 VOA vials was broken upon receipt at the lab.

**DISPOSITION OF SAMPLES:**

Continue analysis with remaining two VOA vials.

**APPROVAL SIGNATURES:**

R. C. Smith/ R Clayton Smith — 4/30/93
OSM Project Coordinator (Print/Sign Name) — Date

J. W. Roberts/ [signature] — 5-10-93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9613500.1297

Westinghouse Hanford Company

# NONCONFORMANCE REPORT

1. Page 1 of 1

2. Preprinted No. 050069

QA Log No. EQA-93-078

| 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 | WATER SAMPLES | B08660 | N/A |

| 8. Program/Project/Other | 9. Safety Class | 10. ASME Code Items |
|---|---|---|
| 100-BC-5 / 93-089 | 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 | 1 | 1 | 0 | ☐ Dwg. ☐ Spec. ☐ Insp. Plan ☒ Other ~~WHC GM-63, Sect 1.6~~ EII SP, App A, Rev 3 Sec 5.0 12 ~~Rev 1~~ NCR |

| 18. Item | 19. Description of Nonconformance (list serial no. where applicable) | 22. Disposition, Justification, and Instructions 5/4/93 |
|---|---|---|
| | 1 OF 3 VOLATILE ORGANIC ANALYSIS VIALS WAS RECEIVED BROKEN AT THE LAB. | The broken vial shall be discarded. Analysis shall continue on the remaining two vials. See attached letter. |

| 20. Originator's Signature | Date | 23. Design Document Change Required? |
|---|---|---|
| R.C. SMITH R Clyde Smith | 4/30/93 | ☐ Yes, Doc. No. ____ ☒ No |

| 21. Cognizant QA Manager's Signature | Date | 24. Corrective Action Required? |
|---|---|---|
| T.L. Bennington W.R. Thurlebeck for T.L. Bennington | 4/30/93 | ☐ Yes, No. ____ ☒ No |

| Disp. App. | 25. Cognizant Engineer | Date | 26. Technical Rep. | Date | Signature/Org. | Date |
|---|---|---|---|---|---|---|
| | JW Roberts / J.W. Roberts | 5/4/93 | NA | | NA | |
| | QA Engineer | Date | Signature/Org. | Date | Signature/Org. | Date |
| | GS Corrigan / Gary Corrigan | 5-4-93 | | | | |

Close

27. Accept 1 Reject 0 Follow on NCR NA

Gary Corrigan 5-4-93
QA/C Personnel Date

A-7310-104 (10/91)

9615500.1298

# OFFICE OF SAMPLE MANAGEMENT

# RECORD OF DISPOSITION

ROD-93-0116
Record of Disposition No.

| | |
|---|---|
| DATE: 4/30/93 | LABORATORY: TMA |
| PROJECT TITLE/NO.: 100-BC-5/93-089 | NCR NO.: 050069 |

**SAMPLE IDENTIFICATION NUMBERS:**

B08G60

**DESCRIPTION OF EVENT:**

1 of 3 VOA vials was broken upon receipt at the lab.

**DISPOSITION OF SAMPLES:**

Continue analysis with remaining two VOA vials.

**APPROVAL SIGNATURES:**

R. C. Smith/ RClayton Smith — 4/30/93
OSM Project Coordinator (Print/Sign Name) — Date

J. W. Roberts/ JP Hall — 5-10-93
Technical Representative (Print/Sign Name) — Date

N/A
Quality Assurance (Print/Sign Name) — Date

9615600.1299

**DON'T SAY IT** — *Write It!*

DATE: 4/15/93

TO: Gary Corrigan

FROM: R. C. Smith RCS

Telephone: 372-2537

cc:

SUBJECT: Volume Requirements for VOA Analysis

According to CLP SOW (OLM01.8, d-15, 1.1), a 5 ml sample aliquot is used for volatile organic analysis. Thus, a single 40 ml vial is sufficient to continue with a VOA analysis. Within a batch of samples, one VOA analysis requires three 40 ml vials for QC purposes. This information should allow disposition of NCRs concerning VOA vials with bubbles.

9613500.1500

# QUALITY ASSURANCE

## NONCONFORMANCE REPORT DISTRIBUTION

| 1. FROM: | 2. MSIN: | 3. DATE: |
|---|---|---|
| Environmental Quality Assurance | H4-16 | April 30, 1993 |

| 4. NCR No.: | 5. Initiation, Disposition, or Closure (I, D, C): |
|---|---|
| 050069 / EQA-93-078 | I |

| | 6. TO: | MSIN | I | D | C |
|---|---|---|---|---|---|
| Cognizant Engineer | J. W. Roberts | H6-02 | | | |
| Cognizant Quality Engineer | G. S. Corrigan | H4-16 | | | |
| Originator | R. C. Smith | H4-23 | | | |
| Q. A. Manager | NA | NA | | | |
| Cognizant QE Manager | T. L. Bennington | H4-16 | | | |
| Facility Manager | NA | NA | | | |
| Engineering Records | L. M. McDaniel | H6-08 | | | |
| Safety | NA | NA | | | |
| QSDM | D. P. Trott | L4-86 | | | |
| Other: | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | NA | NA | | | |
| | B. M. Colley | H4-19 | | | |
| | EQA File | H4-16 | | | |
| | P. H. Butcher | H6-06 | | | |
| | J. H. Kessner | H4-23 | | | |

MAY 1993 RECEIVED

7. QST Codes

| Subject: | Cause: | Contr. Factor: | PPG: |
|---|---|---|---|
| AD-08 | PN-002 | | NA |

| 8. Responsible Action Party: | Org Code: |
|---|---|
| J. W. Roberts | 81310 |

A-6000-816 (09/91)

9613500.1301

# VALIDATION SUMMARY

9615500.1502

000005

EPA SAMPLE NO.

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B17

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 9 | J |
| 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 |

DJT 8-10-93

9613500.1303

000006
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B17

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

DJ
8-E-93

9613500.1304

000007
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FF8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B04

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 5 | 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 | 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 |

DJT 8-10-93

9615500.1305

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000008
EPA SAMPLE NO.

B08FF8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B04

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

DAT
8-10-93

9613500.1306

000009

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B03

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

DJF 8-10-93

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EPA SAMPLE NO.

B08FG1

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B03

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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EPA SAMPLE NO.

B08FG3

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B18

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

DQ* 8-10-93

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08FG3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B18

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 10 | U |
| 67-64-1 | Acetone | 9 | ~~J~~ R |
| 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 |

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EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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EPA SAMPLE NO.

B08FG8

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

DJt 8-10-93

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EPA SAMPLE NO.

B08FG8

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FH1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B10

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 5 | 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 | 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 |

DJT 8-10-93

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000018

EPA SAMPLE NO.

B08FH1

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B10

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FH3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B11

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 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 |

DJ 8-10-93

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1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08FH3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B11

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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8-10-93

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EPA SAMPLE NO.

B08FH6

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

DJA 8-10-93

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EPA SAMPLE NO.

B08FH6

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FH8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 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 |

DJT 8-16-93

9615500.1521

000024

EPA SAMPLE NO.

B08FH8

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-10A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

DJ
8-10-93

9613500.1322

000025
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

DJT 8-11-93

EPA SAMPLE NO.

B08FW0

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

DJ
5-10-93

9615500.1524

000027

EPA SAMPLE NO.

B08PW2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-12A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 1 | J |
| 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 |

DJ 8-10-93

EPA SAMPLE NO.

B08FW2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-12A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423B15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

DJT
8-10-93

9615500 1326

1B

EPA SAMPLE NO.

B08FF6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | UJ |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | UJ |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | UJ |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | UJ |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | UJ |
| 105-67-9 | 2,4-Dimethylphenol | 10 | UJ |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | UJ |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | UJ |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | UJ |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | UJ |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | UJ |



PS 8/9/93

9613500 1327

000030
EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | UJ |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | UJ |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | UJ |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/9/93

9613509.1328

EPA SAMPLE NO.

B08FF6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S09

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.43 | 2 | ~~B~~ U |



PS 8/9/93

9613500.1329

1B

000032
EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FG1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/9/93

9613590 1550

1c

EPA SAMPLE NO.

B08FG1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/9/93

9613508-1331

000034

EPA SAMPLE NO.

B08FG1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S12

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 3

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.43 | 4 | ~~BJ~~ U |
| 2. | UNKNOWN GLYCOL ETHER | 12.30 | 34 | J |
| 3. | UNKNOWN HYDROCARBON | 22.15 | 2 | J |



PS 8/9/93

9615500 1B 332

EPA SAMPLE NO.

B08FG6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | UJ |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | UJ |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | UJ |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | UJ |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | UJ |
| 105-67-9 | 2,4-Dimethylphenol | 10 | UJ |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | UJ |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | UJ |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | UJ |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | UJ |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | UJ |

CCM 9/17/93



PS 8/9/93

9615500 1C 333

000030

EPA SAMPLE NO.

B08FG6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ____ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U J |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U J |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U J |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/9/93

4613500 1F 634

EPA SAMPLE NO.

B08FG6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S13

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 2

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.45 | 4 | ~~B~~ U |
| 2. | UNKNOWN HYDROCARBON | 20.12 | 13 | J |



P.S. 8/9/93

EPA SAMPLE NO.

B08FH1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | UJ |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | UJ |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | UJ |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | UJ |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | UJ |
| 105-67-9 | 2,4-Dimethylphenol | 10 | UJ |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | UJ |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | UJ |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | UJ |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | UJ |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | UJ |



PS 8/9/93

000039

EPA SAMPLE NO.

B08FH1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | UJ |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | UJ |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | UJ |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 12 | B |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/9/93

000040

EPA SAMPLE NO.

B08FH1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-07B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S14

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 4 | ~~BD~~ U |



PS 8/9/93

9613500 1338

1B

EPA SAMPLE NO.

B08FH6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/9/93

000042

EPA SAMPLE NO.

B08FH6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/9/93

9613508 1F 1340

EPA SAMPLE NO.

B08FH6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S15

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | ~~BJ~~ U |



P.S. 8/9/93

9613500 1B 341

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/9/9:

9613500 1C342

000045

EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | ~~2~~ 10 | ~~B~~ U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/9/93

9615538 1548

1F

EPA SAMPLE NO.

B08FW0

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S16

Level: (low/med) LOW Date Received: 04/20/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/22/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | ~~BJ~~ U |



PS 8/9/93

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FF6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | UR |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

8/10/93

9615500.1545

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

000048
EPA SAMPLE NO.

B08FG1

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304061-03B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | UR |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DBL 8/10/93

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FG6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-05B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | UR |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

CEPH 9/17/93

DL 8/10/93

9615580.1347

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FH1

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304061-07B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | ~~U~~ R |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

Cent 7/14/93

Del 8/10/93

000051
EPA SAMPLE NO.

B08FH6

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-09B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | UR |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DGL 08/10/93

9313500 1599

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

000052
EPA SAMPLE NO.

B08FW0

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04061 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304061-11B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/20/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/22/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/08/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | ~~U~~R |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

WESTINGHOUSE/HANFORD

9615500.1356

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FF6

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-01S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 25.7 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 29.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 49600 | | | P |
| 7440-47-3 | Chromium | 9.8 | B | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 175 | | | P |
| 7439-92-1 | Lead | 3.1 | | W UJ | F |
| 7439-95-4 | Magnesium | 8160 | | | P |
| 7439-96-5 | Manganese | 10.7 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 1900 | B | | P |
| 7782-49-2 | Selenium | 7.2 | | +N J | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11100 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W J | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 9.6 | ~~B~~ U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KGH 8/10/93

X02278

ORM I - IN ILM02.1

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FG1

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-02S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 66.4 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 37.0 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 51700 | | | P |
| 7440-47-3 | Chromium | 20.4 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 80.8 | B | | P |
| 7439-92-1 | Lead | 3.0 | B | W WJ | F |
| 7439-95-4 | Magnesium | 7770 | | | P |
| 7439-96-5 | Manganese | 2.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 1780 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | NJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 10200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEM 8/10/93

WESTINGHOUSE/HANFORD

9613500.1552

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FG6

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-03S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 66.7 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 25400 | | | P |
| 7440-47-3 | Chromium | 5.8 | U | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 107 | | | P |
| 7439-92-1 | Lead | 1.8 | B | U | F |
| 7439-95-4 | Magnesium | 9110 | | | P |
| 7439-96-5 | Manganese | 47.9 | | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5040 | | | P |
| 7782-49-2 | Selenium | 2.9 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 13100 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 31.0 | B | | P |
| 7440-66-6 | Zinc | 9.9 | B | U | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KZY
8/10/93

FORM I - IN ILM02.1

WESTINGHOUSE/HANFORD

9613500.1353

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FH1

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-04S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 35.8 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 38900 | | | P |
| 7440-47-3 | Chromium | 26.7 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 52.9 | B | U | P |
| 7439-92-1 | Lead | 1.8 | B | U | F |
| 7439-95-4 | Magnesium | 9570 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4060 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WN J | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 10900 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 7.9 | B | | P |
| 7440-66-6 | Zinc | 5.8 | B | U | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEY
8/10/93

FORM I - IN ILM02.1

WESTINGHOUSE/HANFORD

9613590.1354

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FH6

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-05S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | WJ | F |
| 7440-39-3 | Barium | 29.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 53200 | | | P |
| 7440-47-3 | Chromium | 10.5 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 18.6 | B | U | P |
| 7439-92-1 | Lead | 2.7 | B | U | F |
| 7439-95-4 | Magnesium | 7110 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 3940 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 4.1 | B U | | P |
| _____ | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEY
8/10/93

FORM I - IN ILM02.1

WESTINGHOUSE/HANFORD

9615900.1355

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FW0

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF6

Matrix (soil/water): WATER Lab Sample ID: 04226-06S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 36.4 | B | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | WJ | F |
| 7440-39-3 | Barium | 29.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 52700 | | | P |
| 7440-47-3 | Chromium | 11.2 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 34.2 | B | U | P |
| 7439-92-1 | Lead | 1.8 | B | U | F |
| 7439-95-4 | Magnesium | 7040 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4060 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 3.3 | U | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEY
8/10/93

FORM I - IN ILM02.1

9615710.1356

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FF7

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-01S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 29.8 | B | N UJ | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 32.6 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 50400 | | | P |
| 7440-47-3 | Chromium | 7.6 | B | U | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 25.1 | B | U | P |
| 7439-92-1 | Lead | 1.3 | U | | F |
| 7439-95-4 | Magnesium | 8320 | | | P |
| 7439-96-5 | Manganese | 2.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 2060 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WNJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 2.1 | U | | P |
| 7440-66-6 | Zinc | 13.0 | B | U | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KWG 8/10/93

FORM 1 - IN ILM02.1

9613500.1357

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FG2

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-02S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | NJ | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 33.4 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 49800 | | | P |
| 7440-47-3 | Chromium | 17.6 | | U | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 11.4 | B | U | P |
| 7439-92-1 | Lead | 3.1 | | WJ | F |
| 7439-95-4 | Magnesium | 7470 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 1800 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | NJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 10000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 2.1 | U | | P |
| 7440-66-6 | Zinc | 7.7 | B | U | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KLD 8/10/93

FORM I - IN ILM02.1

9613500.1358

SAMPLE NUMBER:

# INORGANIC ANALYSIS DATA SHEET

B08FG7

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-03S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 20.3 | B | N UJ | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.9 | B | | F |
| 7440-39-3 | Barium | 63.8 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 24900 | | | P |
| 7440-47-3 | Chromium | 3.3 | U | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 12.1 | B | U | P |
| 7439-92-1 | Lead | 2.0 | B | | F |
| 7439-95-4 | Magnesium | 8930 | | | P |
| 7439-96-5 | Manganese | 40.4 | | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5180 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WNJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 12900 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 30.2 | B | | P |
| 7440-66-6 | Zinc | 5.6 | B | U | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KWS 8/10/93

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FH2

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-04S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | NJ | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 33.4 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 39200 | | | P |
| 7440-47-3 | Chromium | 20.8 | | U | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 14.9 | B | U | P |
| 7439-92-1 | Lead | 1.4 | B | | F |
| 7439-95-4 | Magnesium | 9620 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4250 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WNJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 7.9 | B | | P |
| 7440-66-6 | Zinc | 8.1 | B | U | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEY 8/10/93

FORM 1 - IN ILM02.1

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FH7

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-05S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.9 | B | N UJ | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.1 | B | WJ | F |
| 7440-39-3 | Barium | 30.7 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 51800 | | | P |
| 7440-47-3 | Chromium | 11.1 | | U | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 37.5 | B | U | P |
| 7439-92-1 | Lead | 1.6 | B | | F |
| 7439-95-4 | Magnesium | 6930 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4100 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WNJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 3.8 | B | | P |
| 7440-66-6 | Zinc | 8.1 | B | U | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEG 8/10/93

# INORGANIC ANALYSIS DATA SHEET

SAMPLE NUMBER: B08FW1

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

Lab Code: SKINER Case No.: N3-04-097SAS No.: SDG No.: B08FF7

Matrix (soil/water): WATER Lab Sample ID: 04228-06S

Level (low/med): LOW Date Received: 04/21/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.2 | B | N UJ | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.3 | U | | F |
| 7440-39-3 | Barium | 30.5 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 51700 | | | P |
| 7440-47-3 | Chromium | 10.0 | | U | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 19.8 | B | U | P |
| 7439-92-1 | Lead | 2.7 | B | | F |
| 7439-95-4 | Magnesium | 6880 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4150 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WNJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 2.1 | U | | P |
| 7440-66-6 | Zinc | 5.6 | B | U | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEH 8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION OTE TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 7.3 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~0.4~~ J | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 41 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 370 | umho/cm | 6 |
| | | | | |

FORM I

Key 8/10/93

CCM 8/5/93

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TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION 01G TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 106 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 248 | mg/L | 5 |
| | | | | |

FORM I

KWS 8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION 01W TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 U | mg/L | 1 |
| | | | | |

FORM I

8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FF6 FRACTION 01J TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | 0.05 U | mg/L | 0.05 |
| COD | 410.0 | 5 U | mg/L | 5 |
| | | | | |

FORM I

8/10/93

7/19/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FG1 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.2 | mg/L | 0.1 |
| Phosphate | 300.0 | 0.4 J | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 50 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 371 | umho/cm | 6 |
| | | | | |

FORM I

KEW 8/10/93

CCK 9/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FG1 FRACTION 03G TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 95 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 233 | mg/L | 5 |
| | | | | |

FORM I

KLW 8/10/93

9613500.1368

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FG1 FRACTION 03I TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~<~~1 U | mg/L | 1 |
| | | | | |

FORM I

8/10/93 9/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08F61 FRACTION 03K TEST CODE WCCLPL NAME Anions & Wet Chem. - WR043

Date & Time Collected 04/16/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

RCW 8/10/93

CCM 9/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG6 FRACTION 05C TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 1.4 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.5 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~<~~0.4 JU | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 10 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 261 | umho/cm | 6 |
| | | | | |

FORM I

REY 8/10/93

CCM 9/17/93

9613500_1571

TMA Inc. REPORT Work Order # X3-04-061 000034

Received: 04/20/93 Results by Sample

SAMPLE ID B08F66 FRACTION 05D TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 122 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 170 | mg/L | 5 |
| | | | | |

FORM I

KEY 8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FG6 FRACTION 05E TEST CODE WCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~<1~~ U | mg/L | 1 |
| | | | | |

FORM I

8/10/93

8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FG6 FRACTION 05F TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

KEY 8/10/93

CGM 9/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FN1 FRACTION 07C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 7.6 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~0.4~~ J | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 42 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 341 | umho/cm | 6 |
| | | | | |

FORM I

KEY 8/10/93

CEMK 9/14/93

9615500.1575

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FB1 FRACTION 07D TEST CODE WCCLPL NAME Anions & Wet Chem. - WE043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 100 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 237 | mg/L | 5 |
| | | | | |

FORM I

KEY
8/10/93

9613500.1376

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FN1 FRACTION 07E TEST CODE WCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~1~~ U | mg/L | 1 |
| | | | | |

FORM I

8/10/93

cmt 3/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FM1 FRACTION 07F TEST CODE VCCLPL NAME Anions & Wet Chem. - VM043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

KEY 8/10/93

CGM 9/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FW6 FRACTION 09C TEST CODE WCCLPL NAME Anions & Wet Chem. - WW043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 10.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~0.4~~ J | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 47 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 389 | umho/cm | 6 |
| | | | | |

FORM 1

KEY 8/10/93

CONK 9/13/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FW6 FRACTION 09D TEST CODE WCCLPL NAME Anions & Wet Chem. - WW043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 268 | mg/L | 5 |
| | | | | |

FORM I

RGH 8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FN6 FRACTION 09E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~<1~~ U | mg/L | 1 |
| | | | | |

FORM I

KEY 8/10/93

cont 9/17/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93 Results by Sample

SAMPLE ID B08FN6 FRACTION 09F TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | ~~<0.05~~ U | mg/L | 0.05 |
| COD | 410.0 | ~~<5~~ U | mg/L | 5 |
| | | | | |

FORM I

WEW 8/10/93

CCMK 9/7/93

9615600.1382

000035

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 10.1 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~<0.4~~ J | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 47 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 392 | umho/cm | 6 |
| | | | | |

CEMK 9/17/93

FORM I

REY 8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11D TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 269 | mg/L | 5 |
| | | | | |

FORM I

KEY 8/10/93

TMA Inc. REPORT



Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FV0 FRACTION 11E TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 U | mg/L | 1 |
| | | | | |

FORM I

8/10/93

TMA Inc. REPORT Work Order # A3-04-061

Received: 04/20/93

Results by Sample

SAMPLE ID B08FW0 FRACTION 11F TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/17/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 V | mg/L | 0.05 |
| COD | 410.0 | <5 V | mg/L | 5 |
| | | | | |

FORM I

8/10/93

CGM 9/17/93

Page 2 Skinner&Sherman REPORT Work Order # S3-04-227

Received: 04/21/93 Results by Sample

SAMPLE ID B08FF6 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/16/93 Category WATER

NO3NO2 6.42 mgN/L

SAMPLE ID B08FG1 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/16/93 Category WATER

NO3NO2 6.05 mgN/L

SAMPLE ID B08FG6 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

NO3NO2 ~~<0.25~~ U mgN/L

SAMPLE ID B08FH1 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

NO3NO2 3.51 mgN/L

SAMPLE ID B08FH6 SAMPLE # 05 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

NO3NO2 5.30 mgN/L

SAMPLE ID B08FW0 SAMPLE # 06 FRACTIONS: A
Date & Time Collected 04/17/93 Category WATER

NO3NO2 5.33 mgN/L

SAMPLE ID B08FW0 DUPL SAMPLE # 06 FRACTIONS: B
Date & Time Collected 04/17/93 Category WATER

NO3NO2 5.54 mgN/L

8/10/93

TMA Thermo Analytical Inc.

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

Skinner & Sherman Laboratories Inc. 100 Second Avenue, P.O. Box 521, Waltham, Massachusetts 02254-0521 (617) 890-3200 FOR LAB TEST FAX (617) 890-2882

9615500.1587

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-01

B08FF6

| | | | |
|---|---|---|---|
| SDG | 7186 | Client | Westinghouse Hanford |
| Contact | Dinkar Kharkar | Contract | MBH-SVV-069262 |
| Lab sample id | N304100-01 | Client sample id | B08FF6 |
| Dept sample id | 7186-001 | Matrix | LIQUID |
| Received | 04/20/93 | Collected | 04/16/93 |
| | | Chain of custody id | EFL-1037 |

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -1.3 | 1.9 | 3 | 3 | U | 80A | |
| Gross Beta | Beta | 130 | 4.5 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 1.2 | 0.13 | 0.05 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.026 | 0.026 | 0.04 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.95 | 0.11 | 0.03 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0.017 | 0.012 | 0.01 | 0.05 | J | PU | 1,2 |
| Plutonium 239/240 | | 0.015 | 0.012 | 0.01 | 0.05 | J | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.007 | 0.013 | 0.03 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 44 | 1.7 | 0.9 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 90 | 4.9 | 4 | 5 | | TC | 1,3 |
| Tritium | 10028-17-8 | 3700 | 270 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | -2.7 | 19 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 20 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 80 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 8 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 9 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 40 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 30 | | U | GAM | |

GAMMA SCAN

1. Initial calibration data missing or incomplete
2. Continuing calibration data missing or incomplete
3. Continuing calibration criteria not met

| | |
|---|---|
| Lab id | TMAN |
| Protocol | WHC-HASM |
| Version | Ver 1.0 |
| Form | DVD-DS |
| Version | 2.23 |
| Report date | 06/17/93 |

DTW 8/18/93

9613530.1588

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-02

B08FG1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-02
Dept sample id 7186-002
Received 04/20/93

Client sample id B08FG1
Matrix LIQUID
Collected 04/16/93
Chain of custody id EFL-1037

working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -0.58 | 1.6 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 66 | 3.3 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 1.0 | 0.12 | 0.04 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.038 | 0.030 | 0.03 | 0.2 | J | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.84 | 0.11 | 0.02 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0.005 | 0.009 | 0.02 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0 | 0.005 | 0.02 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.003 | 0.007 | 0.03 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 18 | 3.1 | 0.9 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 71 | 4.5 | 4 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 11000 | 430 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | -5.4 | 19 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 70 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 40 | | U | GAM | |

① Initial calibration data missing or incomplete
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DRW 8/18/93

9613500L189

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-03

B08FG6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-03
Dept sample id 7186-003
Received 04/20/93

Client sample id B08FG6
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.74 | 1.5 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 5.0 | 1.4 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 1.1 | 0.13 | 0.04 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.062 | 0.030 | 0.03 | 0.2 | J | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.59 | 0.090 | 0.03 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0.002 | 0.008 | 0.02 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0.006 | 0.008 | 0.02 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.009 | 0.017 | 0.03 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | -0.22 | 0.24 | 0.8 | 2 | U | Y | 1 |
| Technetium 99 | 14133-76-7 | 0.95 | 0.65 | 1 | 5 | U | TC | 1,3 |
| Tritium | 10028-17-8 | 280 | 150 | 200 | 400 | J | H | 1,2 |
| Carbon 14 | 14762-75-5 | -0.66 | 18 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

1 Initial calibration data missing or incomplete
2 Continuing calibration data missing or incomplete
3 Continuing calibration criteria not met

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DRW 8/18/93

9613500.1390

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-04

B08FH1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-04
Dept sample id 7186-004
Received 04/20/93

Client sample id B08FH1
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 1.3 | 1.5 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 10 | 1.7 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.57 | 0.20 | 0.1 | 0.2 | R | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.017 | 0.034 | 0.1 | 0.2 | U R | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.54 | 0.18 | 0.1 | 0.2 | R | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.02 | 0.05 | U R | PU | 1,2 |
| Plutonium 239/240 | | -0.002 | 0.004 | 0.02 | 0.05 | U R | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0 | 0.007 | 0.03 | 0.05 | U R | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 0.001 | 1.1 | 0.8 | 2 | U U | Y | 1 |
| Technetium 99 | 14133-76-7 | 12 | 1.9 | 3 | 5 | U | TC | 1 |
| Tritium | 10028-17-8 | 12000 | 440 | 200 | 400 | U | H | 1,2 |
| Carbon 14 | 14762-75-5 | 5.6 | 22 | 40 | 50 | U U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 70 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 30 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 70 | | U | GAM | |

① Initial calibration data missing or incomplete
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DTCW 8/18/93

9613500.1391

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-05

B08FH6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-05
Dept sample id 7186-005
Received 04/20/93

Client sample id B08FH6
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

Copy (illegible)

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.42 | 1.8 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 71 | 3.5 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.74 | 0.11 | 0.05 | 0.2 | R | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.049 | 0.030 | 0.04 | 0.2 | J R | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.63 | 0.094 | 0.03 | 0.2 | R | U | 1,2 |
| Plutonium 238 | 13981-16-3 | -0.002 | 0.004 | 0.02 | 0.05 | U R | PU | 1,2 |
| Plutonium 239/240 | | 0.006 | 0.008 | 0.02 | 0.05 | U R | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.005 | 0.010 | 0.04 | 0.05 | U R | AM | 1,2,5 |
| Strontium 90 | 10098-97-2 | 20 | 1.0 | 0.8 | 2 | | Y | 1,3 |
| Technetium 99 | 14133-76-7 | 61 | 4.2 | 4 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2700 | 240 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 4.4 | 18 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

1 Initial calibration data missing or incomplete
2 Continuing calibration data missing or incomplete
3 Continuing calibration criteria not met
5 Chemical yield < 30%

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DEW 8/18/93

9613500.1592

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-07

B08FJ1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-07
Dept sample id 7186-007
Received 04/21/93

Client sample id B08FJ1
Matrix LIQUID
Collected 04/19/93
Chain of custody id EFL-1037

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 1.8 | 1.9 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 46 | 2.8 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.63 | 0.23 | 0.1 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.019 | 0.038 | 0.1 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.63 | 0.20 | 0.1 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | -0.002 | 0.007 | 0.02 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | -0.002 | 0.003 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0 | 0.011 | 0.02 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 1.1 | 0.37 | 0.7 | 2 | J | Y | 1 |
| Technetium 99 | 14133-76-7 | 77 | 4.8 | 4 | 5 | | TC | 1,3 |
| Tritium | 10028-17-8 | 2800 | 240 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 6.0 | 21 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 20 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 20 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 70 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 30 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 40 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 60 | | U | GAM | |

1. Initial calibration data missing or incomplete
2. Continuing calibration data missing or incomplete
3. Continuing calibration criteria not met

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93



DTW 8/18/93

9613500.1393

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-08

B08FJ6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-08
Dept sample id 7186-008
Received 04/21/93

Client sample id B08FJ6
Matrix LIQUID
Collected 04/19/93
Chain of custody id EFL-1037

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 4.3 | 2.7 | 3 | 3 | | 80A | |
| Gross Beta | Beta | 87 | 3.8 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.62 | 0.22 | 0.1 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.054 | 0.072 | 0.1 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.53 | 0.19 | 0.1 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0 | 0.006 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | -0.002 | 0.003 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0 | 0.005 | 0.02 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 23 | 1.9 | 0.8 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 77 | 5.2 | 4 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2700 | 240 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 5.0 | 23 | 40 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

① Initial calibration data missing or incomplete
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DTW 8/18/93

9615501.1394

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-09

B08FK1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-09
Dept sample id 7186-009
Received 04/21/93

Client sample id B08FK1
Matrix LIQUID
Collected 04/19/93
Chain of custody id EFL-1037

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -0.67 | 1.8 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 100 | 4.0 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.58 | 0.21 | 0.1 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.035 | 0.035 | 0.1 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.52 | 0.18 | 0.1 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0 | 0.004 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.003 | 0.007 | 0.03 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 30 | 1.4 | 0.8 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 62 | 4.2 | 4 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2700 | 240 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 5.8 | 20 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 20 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 90 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

① Initial calibration data missing or incomplete
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DKW 8/18/93

9613500.1595

N304100-10

TMA NORCAL
REPORTING GROUP 7186

DATA SHEET

B08FK6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-10
Dept sample id 7186-010
Received 04/22/93

Client sample id B08FK6
Matrix LIQUID
Collected 04/20/93
Chain of custody id EFL-1037

working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | -0.052 | 1.8 | 3 | 3 | U | 80A | |
| Gross Beta | Beta | 44 | 2.7 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.63 | 0.18 | 0.09 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.029 | 0.059 | 0.1 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.67 | 0.18 | 0.09 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0 | 0.003 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | -0.001 | 0.003 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.008 | 0.033 | 0.06 | 0.05 | U J | AM | 1,2,6 |
| Strontium 90 | 10098-97-2 | 5.6 | 0.62 | 0.9 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 58 | 3.9 | 4 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2400 | 230 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 34 | 22 | 40 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 300 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 40 | 30 | U J | GAM | 6 |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 20 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 20 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 70 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 30 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 30 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 60 | | U | GAM | |

1 Initial calibration data missing or incomplete
2 Continuing calibration data missing or incomplete
6 MDA exceeded RDL

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DRW 8/18/93

9613500.1396

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-16

B08FL1

| | | | |
|---|---|---|---|
| SDG | 7186 | Client | Westinghouse Hanford |
| Contact | Dinkar Kharkar | Contract | MBH-SVV-069262 |
| Lab sample id | N304100-16 | Client sample id | B08FL1 |
| Dept sample id | 7186-016 | Matrix | LIQUID |
| Received | 04/26/93 | Collected | 04/21/93 |
| | | Chain of custody id | EFL-1036 |

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.35 | 1.9 | 3 | 3 | U | 80A | |
| Gross Beta | Beta | 28 | 2.4 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.56 | 0.076 | 0.04 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.024 | 0.020 | 0.03 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.43 | 0.063 | 0.02 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0.004 | 0.004 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.003 | 0.006 | 0.02 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 0.83 | 0.57 | 0.8 | 2 | J | Y | 1,3 |
| Technetium 99 | 14133-76-7 | 42 | 2.5 | 2 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 1600 | 200 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 100 | 22 | 30 | 50 | B U | C | 1,2,4 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

1. Initial calibration data missing or incomplete
2. Continuing calibration data missing or incomplete
3. Continuing calibration criteria not met
4. Analyte detected in method blank



| | |
|---|---|
| Lab id | TMAN |
| Protocol | WHC-HASM |
| Version | Ver 1.0 |
| Form | DVD-DS |
| Version | 2.23 |
| Report date | 06/17/93 |

DRW 8/18/93

9613500.1397

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-11

B08FN6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-11
Dept sample id 7186-011
Received 04/22/93

Client sample id B08FN6
Matrix LIQUID
Collected 04/20/93
Chain of custody id EFL-1037

working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.085 | 1.6 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 45 | 2.8 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.58 | 0.17 | 0.1 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | -0.012 | 0.024 | 0.09 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.42 | 0.13 | 0.08 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | -0.002 | 0.004 | 0.02 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | -0.002 | 0.008 | 0.02 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.015 | 0.025 | 0.04 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 5.6 | 0.66 | 0.8 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 66 | 3.9 | 3 | 5 | | TC | 1,3 |
| Tritium | 10028-17-8 | 2300 | 230 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | -0.42 | 17 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

1. Initial calibration data missing or incomplete
2. Continuing calibration data missing or incomplete
3. Continuing calibration criteria not met.

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DRW 8/18/93

9613500.1398

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-12

B08FP1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-12
Dept sample id 7186-012
Received 04/23/93

Client sample id B08FP1
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1036

Copy Sullivan

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 2.2 | 1.8 | 2 | 3 | J | 80A | |
| Gross Beta | Beta | 29 | 2.4 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.50 | 0.17 | 0.1 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.016 | 0.032 | 0.1 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.39 | 0.14 | 0.1 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0.004 | 0.007 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0.002 | 0.007 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | -0.008 | 0.025 | 0.05 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 1.1 | 0.36 | 0.8 | 2 | J | Y | 1 |
| Technetium 99 | 14133-76-7 | 53 | 3.4 | 3 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2100 | 220 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 8.4 | 21 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 80 | | U | GAM | |

① Initial calibration data missing or incomplete
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93



DKW 8/18/93

9613900.1595

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-13

B08FQ1

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-13
Dept sample id 7186-013
Received 04/23/93

Client sample id B08FQ1
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1037

working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 3.4 | 2.1 | 2 | 3 | | 80A | |
| Gross Beta | Beta | 16 | 2.0 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.98 | 0.27 | 0.1 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.018 | 0.037 | 0.1 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.76 | 0.23 | 0.1 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0 | 0.004 | 0.02 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0.002 | 0.009 | 0.02 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.008 | 0.012 | 0.02 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | -0.11 | 0.25 | 0.8 | 2 | U | Y | 1 |
| Technetium 99 | 14133-76-7 | 27 | 2.5 | 3 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 28000 | 660 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | -7.3 | 21 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 200 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 30 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 20 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 60 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 20 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

① Initial calibration data missing or incomplete.
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DKW 4/28/93

9615500.1400

TMA NORCAL
REPORTING GROUP 7186

N304100-14

DATA SHEET

B08FQ6

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-14
Dept sample id 7186-014
Received 04/23/93

Client sample id B08FQ6
Matrix LIQUID
Collected 04/21/93
Chain of custody id EFL-1037

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.73 | 1.5 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 9.9 | 1.6 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.78 | 0.11 | 0.04 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.060 | 0.028 | 0.03 | 0.2 | J | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.45 | 0.079 | 0.04 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0.006 | 0.007 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0 | 0.004 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | 0.004 | 0.016 | 0.03 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | -0.024 | 0.96 | 0.8 | 2 | U | Y | 1 |
| Technetium 99 | 14133-76-7 | 10 | 1.1 | 2 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 930 | 180 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 9.9 | 26 | 40 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 20 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 10 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 90 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 9 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 50 | | U | GAM | |

① Initial calibration data missing or incomplete
② Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93

DRW 8/18/93

9613500.1401

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-06

B08FW0

SDG 7186
Contact Dinkar Kharkar

Client Westinghouse Hanford
Contract MBH-SVV-069262

Lab sample id N304100-06
Dept sample id 7186-006
Received 04/20/93

Client sample id B08FW0
Matrix LIQUID
Collected 04/17/93
Chain of custody id EFL-1037

Working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI-FIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 1.6 | 2.0 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 79 | 3.6 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.66 | 0.17 | 0.07 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.022 | 0.022 | 0.08 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.59 | 0.15 | 0.07 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | -0.004 | 0.004 | 0.02 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | -0.002 | 0.004 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | -0.014 | 0.020 | 0.04 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 21 | 2.2 | 0.9 | 2 | | Y | 1 |
| Technetium 99 | 14133-76-7 | 57 | 4.1 | 4 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2500 | 230 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | -7.4 | 19 | 30 | 50 | U | C | 1,2 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 100 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 30 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 60 | | U | GAM | |

1 Initial calibration data missing or incomplete
2 Continuing calibration data missing or incomplete

Lab id TMAN
Protocol WHC-HASM
Version Ver 1.0
Form DVD-DS
Version 2.23
Report date 06/17/93



DRW 8/18/93

9613500.1402

# TMA NORCAL
REPORTING GROUP 7186

## DATA SHEET

N304100-15

B08G60

| | | | |
|---|---|---|---|
| SDG | 7186 | Client | Westinghouse Hanford |
| Contact | Dinkar Kharkar | Contract | MBH-SVV-069262 |
| Lab sample id | N304100-15 | Client sample id | B08G60 |
| Dept sample id | 7186-015 | Matrix | LIQUID |
| Received | 04/23/93 | Collected | 04/21/93 |
| | | Chain of custody id | EFL-1036 |

working copy

| PARAMETER | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALIFIERS | TEST | |
|---|---|---|---|---|---|---|---|---|
| Gross Alpha | Alpha | 0.51 | 1.5 | 2 | 3 | U | 80A | |
| Gross Beta | Beta | 30 | 2.4 | 2 | 4 | | 80B | |
| Uranium 233/234 | | 0.62 | 0.083 | 0.03 | 0.2 | | U | 1,2 |
| Uranium 235 | 15117-96-1 | 0.006 | 0.017 | 0.03 | 0.2 | U | U | 1,2 |
| Uranium 238 | 7440-61-1 | 0.40 | 0.062 | 0.02 | 0.2 | | U | 1,2 |
| Plutonium 238 | 13981-16-3 | 0.003 | 0.003 | 0.01 | 0.05 | U | PU | 1,2 |
| Plutonium 239/240 | | 0.003 | 0.007 | 0.01 | 0.05 | U | PU | 1,2 |
| Americium 241 | 14596-10-2 | -0.004 | 0.022 | 0.05 | 0.05 | U | AM | 1,2 |
| Strontium 90 | 10098-97-2 | 0.21 | 0.74 | 1 | 2 | U | Y | 1 |
| Technetium 99 | 14133-76-7 | 58 | 2.2 | 2 | 5 | | TC | 1 |
| Tritium | 10028-17-8 | 2300 | 230 | 200 | 400 | | H | 1,2 |
| Carbon 14 | 14762-75-5 | 120 | 24 | 40 | 50 | B J | C | 1,2,4 |
| GAMMA SCAN ANALYTES | | | | | | | | |
| Potassium 40 | 13966-00-2 | U | | 100 | | U | GAM | |
| Iron 59 | 14596-12-4 | U | | 30 | 30 | U | GAM | |
| Chromium 51 | 14392-02-0 | U | | 100 | | U | GAM | |
| Cobalt 60 | 10198-40-0 | U | | 20 | 30 | U | GAM | |
| Zinc 65 | 13982-39-3 | U | | 20 | | U | GAM | |
| Ruthenium 106 | 13967-48-1 | U | | 80 | | U | GAM | |
| Cesium 134 | 13967-70-9 | U | | 10 | | U | GAM | |
| Cesium 137 | 10045-97-3 | U | | 10 | 20 | U | GAM | |
| Cerium 144 | 14762-78-8 | U | | 50 | | U | GAM | |
| Europium 152 | 14683-23-9 | U | | 20 | 40 | U | GAM | |
| Europium 154 | 15585-10-1 | U | | 10 | 40 | U | GAM | |
| Radium 226 | 13982-63-3 | U | | 20 | | U | GAM | |
| Thorium 228 | 14274-82-9 | U | | 20 | | U | GAM | |
| Thorium 232 | 7440-29-1 | U | | 40 | | U | GAM | |

1 Initial calibration data missing or incomplete
2 Continuing calibration data missing or incomplete
4 Analyte detected in method blank



| | |
|---|---|
| Lab id | TMAN |
| Protocol | WHC-HASM |
| Version | Ver 1.0 |
| Form | DVD-DS |
| Version | 2.23 |
| Report date | 06/17/93 |

DKW 8/18/93

9613500.1403

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FJ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R15

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 10 | U |
| 67-64-1 | Acetone | 8 | J |
| 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 | 1 | J |
| 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 |

MW
PBS
8/29/93

000161

EPA SAMPLE NO.

B08FJ1

9613500 1E 1404

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R15

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

8/23/93

9613500.1405

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FJ3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R14

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 2 | J |
| 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 |



3/23/93

9613500B1406

EPA SAMPLE NO.

B08FJ3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R14

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



8/23/90

9613508 1A 1407

EPA SAMPLE NO.

B08FJ6

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R13

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



8/23/93

000181

EPA SAMPLE NO.

B08FJ6

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R13

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



MM
PBD
8/23/93

9613509 1A 1409

000187
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FJ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R12

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

8/23/93

000188

9613500 1E 1410

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FJ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R12

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

9613580 1411

LA

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FK1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R11

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |



MW 5/23/93

EPA SAMPLE NO.

B08FK1

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R11

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



3/23/93

000205

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FK3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R08

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 2 | J |
| 67-64-1 | Acetone | 5 | J |
| 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 |

8/23/93

9613500 1414

000206

EPA SAMPLE NO.

B08FK3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30423R08

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: not dec. ____ Date Analyzed: 04/23/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

8/23/93

9613500.4015

1B

EPA SAMPLE NO.

B08FJ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S18

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



5/23/93

9613500.1416

EPA SAMPLE NO.

B08FJ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S18

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

8/23/93

000277

9613500.1417

EPA SAMPLE NO.

B08FJ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S18

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/05/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

8/23/93

9613500.1418

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FJ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S21

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



8/23/02

9615502 ic 1415

EPA SAMPLE NO.

B08FJ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S21

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

8/23/93

000289

EPA SAMPLE NO.

B08FJ6

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S21

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | BJ |

8/23/93

9613500.1431

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FK1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S22

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



4/23/93

1c

EPA SAMPLE NO.

B08FK1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S22

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



8/23/93

EPA SAMPLE NO.

B08FK1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30505S22

Level: (low/med) LOW Date Received: 04/21/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/06/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 11.23 | 6 | J |

8/28/93

9613598.1424

000412

EPA SAMPLE NO.

B08FJ1

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-01B

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

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/21/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/01/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

MM PBD 8/23/93

9613500.1425

1D

000423

EPA SAMPLE NO.

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08FJ6

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304069-03B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/21/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/01/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

NN PBD 8/23/93

9613500 1426

1D

000431

EPA SAMPLE NO.

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08FK1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04069 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304069-05B

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

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/21/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/01/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

MM
PBD
8/23/93

SAMPLE NUMBER:

B08FJ1

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ1

Matrix (soil/water): WATER Lab Sample ID: 04232-01S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27.3 | B | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | B | W | F |
| 7440-39-3 | Barium | 24.0 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 48300 | | | P |
| 7440-47-3 | Chromium | 9.9 | B | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.4 | B | | P |
| 7439-89-6 | Iron | 30.2 | B | | P |
| 7439-92-1 | Lead | 3.0 | | S | F |
| 7439-95-4 | Magnesium | 7680 | | | P |
| 7439-96-5 | Manganese | 1.5 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5620 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 6.8 | B | | P |
| 7440-66-6 | Zinc | 21.5 | | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

8/23/93

9615500.1428

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

B08FJ6

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ1

Matrix (soil/water): WATER Lab Sample ID: 04232-02S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.0 | B | W | F |
| 7440-39-3 | Barium | 32.9 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 50100 | | | P |
| 7440-47-3 | Chromium | 14.5 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 4.9 | B | | P |
| 7439-89-6 | Iron | 51.6 | B | | P |
| 7439-92-1 | Lead | 2.6 | B | | F |
| 7439-95-4 | Magnesium | 7720 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4840 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11500 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 7.5 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MW
8/23/93

FORM I - IN ILM02.1

SAMPLE NUMBER:

B08FK1

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-101 SAS No.: SDG No.: B08FJ1

Matrix (soil/water): WATER Lab Sample ID: 04232-03S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 2.5 | U | W | F |
| 7440-39-3 | Barium | 23.0 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 50900 | | | P |
| 7440-47-3 | Chromium | 11.9 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 9.4 | B | | P |
| 7439-92-1 | Lead | 2.4 | B | | F |
| 7439-95-4 | Magnesium | 7860 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4810 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | MWN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11500 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | W | F |
| 7440-62-2 | Vanadium | 7.8 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

NW
8/23/93

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FJ2

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

ab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ2

atrix (soil/water): WATER Lab Sample ID: 04234-01S

evel (low/med): LOW Date Received: 04/22/93

Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | N | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.6 | B | W | F |
| 7440-39-3 | Barium | 22.1 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 49000 | | | P |
| 7440-47-3 | Chromium | 9.1 | B | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 5.2 | B | | P |
| 7439-89-6 | Iron | 4.8 | U | | P |
| 7439-92-1 | Lead | 2.4 | B | W | F |
| 7439-95-4 | Magnesium | 7790 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5610 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11400 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 5.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

8/23/93

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FJ7

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

ab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ2

atrix (soil/water): WATER Lab Sample ID: 04234-02S

evel (low/med): LOW Date Received: 04/22/93

Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | N | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.1 | B | W | F |
| 7440-39-3 | Barium | 31.2 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 50200 | | | P |
| 7440-47-3 | Chromium | 12.9 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 4.8 | U | | P |
| 7439-92-1 | Lead | 2.3 | B | | F |
| 7439-95-4 | Magnesium | 7740 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4920 | B | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 5.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

003

FORM I - IN 1LM02.1

8/23/93

SAMPLE NUMBER:

B08FK2

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-101SAS No.: SDG No.: B08FJ2

Matrix (soil/water): WATER Lab Sample ID: 04234-03S

Level (low/med): LOW Date Received: 04/22/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | N | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.9 | B | W | F |
| 7440-39-3 | Barium | 19.5 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 49300 | | | P |
| 7440-47-3 | Chromium | 10.6 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 36.9 | B | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 7630 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4680 | B | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11000 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 5.0 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

004



AM
FBD
8/23/93

TMA Inc. REPORT

Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 U | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 46 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 418 | umho/cm | 6 |
| | | | | |

FORM I

NM
PBD
8/23/93

TMA Inc.

REPORT



Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01G TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 256 | mg/L | 5 |
| | | | | |

FORM I

NV
PBD
8/23/93

9613500.1435

000014

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01W TEST CODE WCCLPL NAME Anions & Wet Chem. - WW043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 U | mg/L | 1 |
| | | | | |

FORM I

MM
8/23/95

TKA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ1 FRACTION 01J TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

8/23/93

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ6 FRACTION 03E TEST CODE VCCLPL NAME Anions & Wet Chem. - WM043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 10.1 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.4 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 U | mg/L | 0.4 |
| pH | 150.1 | 8.0 | pH | 0.1 |
| Sulfate | 300.0 | 49 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 416 | umho/cm | 6 |
| | | | | |

FORM I

8/23/93

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ6 FRACTION 03G TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 251 | mg/L | 5 |
| | | | | |

FORM I

MM
PSB
8/23/93

TRA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ6 FRACTION 03I TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~<1~~ U | mg/L | 1 |
| | | | | |

FORM I

MM
8/23/93

9613500.1440

TMA Inc.

REPORT

Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FJ6 FRACTION 03K TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

MW
PRD
8/23/93

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93

Results by Sample

SAMPLE ID B08FK1 FRACTION 05C TEST CODE VCCLPL NAME Anions & Wet Chem. - VW043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.7 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 U | mg/L | 0.4 |
| pH | 150.1 | 7.9 | pH | 0.1 |
| Sulfate | 300.0 | 47 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 422 | umho/cm | 6 |
| | | | | |

FORM I

MW
PBS
8/23/93

9613500.1442

TRA Inc. REPORT Work Order # X3-06-069 000021

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05D TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 06/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 107 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 260 | mg/L | 5 |
| | | | | |

FORM I

NM
8/23/93

9613500.1443

TMA Inc. REPORT Work Order # A3-84-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 U | mg/L | 1 |
| | | | | |

FORM I

MM
PB
8/23/93

9613500.1444

TMA Inc. REPORT Work Order # A3-04-069

Received: 04/21/93 Results by Sample

SAMPLE ID B08FK1 FRACTION 05F TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/19/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

M

8/23/93

Received: 04/22/93 Results by Sample

SAMPLE ID B08FJ1 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/19/93 Category WATER

NO3NO2 5.85
mg N/L

SAMPLE ID B08FJ6 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/19/93 Category WATER

NO3NO2 6.43
mg N/L

SAMPLE ID B08FK1 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 04/19/93 Category WATER

NO3NO2 5.48
mg N/L

SAMPLE ID B08FK1 DUPL SAMPLE # 03 FRACTIONS: B
Date & Time Collected 04/19/93 Category WATER

NO3NO2 5.48
mg N/L

SAMPLE ID B08FK1 SPIKE SAMPLE # 03 FRACTIONS: C
Date & Time Collected 04/19/93 Category WATER

NO3NO2 7.61
mg N/L

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

NO3NO2 2.02
mg N/L

MM
PBS
8/23/93

XO 727 | 9413500.1446

000030

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B12

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

8/23/93

9613500.1447

1E

000051

EPA SAMPLE NO.

B08FK6

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B12

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

MM
8/23/93

9613500.1448

000057

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FK8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B13

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |

NM PGD 8/23/93

9615500_1445

1E

000058

EPA SAMPLE NO.

B08FK8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B13

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

8/23/92

9613500_1450

000064

EPA SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B16

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

MJ 8/23/92

9615500_1451

000065

EPA SAMPLE NO.

B08FN6

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B16

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

MW
8/23/93

9613500.1452

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000073
EPA SAMPLE NO.

B08FN8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B17

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 2 | J |
| 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 |

8/23/92

9613500.1453

1E

000074

EPA SAMPLE NO.

B08FN8

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30426B17

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: not dec. ____ Date Analyzed: 04/26/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

FORM I VOA-TIC 3/90

8b2h2

1B

000141

EPA SAMPLE NO.

B08FK6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S08

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



8/22/93

9614600 1455

1C

000142
EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S08

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



8/23/92

9613500.1456

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000143

EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S08

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

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8/23/93

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000155
EPA SAMPLE NO.

B08FN6
B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S11

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



8/22/93

EPA SAMPLE NO. 000156

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S11

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 1 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

MM
8/23/92

9413500_1459

1F

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

000157
EPA SAMPLE NO.

B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S11

Level: (low/med) LOW Date Received: 04/22/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/23/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN CYCLOHYDROCARBON | 7.07 | 2 | J |

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8/23/93

9613500 1460

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

000267
EPA SAMPLE NO.

B08FK6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/22/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

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EPA SAMPLE NO.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

B08FN6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04070 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304070-03B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/22/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/23/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

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8/23/93

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WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

B08FK6

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK6

Matrix (soil/water): WATER Lab Sample ID: 04270-01S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.3 | B | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 4.2 | B | | F |
| 7440-39-3 | Barium | 16.4 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 45200 | | | P |
| 7440-47-3 | Chromium | 18.0 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 6.9 | B | | P |
| 7439-89-6 | Iron | 43.7 | B | | P |
| 7439-92-1 | Lead | 2.7 | B | W | F |
| 7439-95-4 | Magnesium | 8490 | | | P |
| 7439-96-5 | Manganese | 1.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5340 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | W | F |
| 7440-62-2 | Vanadium | 7.2 | B | | P |
| 7440-66-6 | Zinc | 11.8 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002

MM PRD 8/23/92

FORM I - IN ILM02.1

SAMPLE NUMBER:

B08FN6

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK6

Matrix (soil/water): WATER Lab Sample ID: 04270-02S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | B | W | F |
| 7440-39-3 | Barium | 18.6 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 48000 | | | P |
| 7440-47-3 | Chromium | 18.0 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.1 | B | | P |
| 7439-89-6 | Iron | 45.5 | B | | P |
| 7439-92-1 | Lead | 2.3 | B | | F |
| 7439-95-4 | Magnesium | 7710 | | | P |
| 7439-96-5 | Manganese | 1.3 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 5150 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 11200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 7.2 | B | | P |
| 7440-66-6 | Zinc | 5.2 | B | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:



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8/23/93

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WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FK7

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK7

Matrix (soil/water): WATER Lab Sample ID: 04271-01S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.1 | B | W | F |
| 7440-39-3 | Barium | 15.4 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 45800 | | | P |
| 7440-47-3 | Chromium | 15.0 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 140 | | | P |
| 7439-92-1 | Lead | 2.7 | B | W | F |
| 7439-95-4 | Magnesium | 8600 | | | P |
| 7439-96-5 | Manganese | 2.4 | B | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5240 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11400 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | W | F |
| 7440-62-2 | Vanadium | 7.1 | B | | P |
| 7440-66-6 | Zinc | 5.3 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

D02

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9613500.1465

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FN7

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

Lab Code: SKINER Case No.: N3-04-106SAS No.: SDG No.: B08FK7

Matrix (soil/water): WATER Lab Sample ID: 04271-02S

Level (low/med): LOW Date Received: 04/23/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.8 | B | W | F |
| 7440-39-3 | Barium | 21.1 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 48000 | | | P |
| 7440-47-3 | Chromium | 13.4 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 39.4 | B | | P |
| 7439-92-1 | Lead | 1.6 | B | W | F |
| 7439-95-4 | Magnesium | 7750 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 5160 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 11300 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | W | F |
| 7440-62-2 | Vanadium | 7.0 | B | | P |
| 7440-66-6 | Zinc | 7.8 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

AM
8/23/93

003

TRA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93

Results by Sample

SAMPLE ID B08FK6 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.4 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 U | mg/L | 0.4 |
| pH | 150.1 | 7.9 | pH | 0.1 |
| Sulfate | 300.0 | 46 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 420 | umho/cm | 6 |
| | | | | |

FORM I

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8/23/93

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TMA Inc. REPORT Work Order # A3-04-678

:eceived: 04/22/93

Results by Sample

'AMPLE ID 808FK6 FRACTION 01G TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 252 | mg/L | 5 |
| | | | | |

FORM I

MJ
8/23/93

TRA Inc. REPORT



Work Order # A3-04-078

Received: 04/22/93

Results by Sample

SAMPLE ID B08FK6 FRACTION 01I TEST CODE VCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | <1 U | mg/L | 1 |
| | | | | |

FORM I

M
8/23/93

9613500.1469

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TRA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93

Results by Sample

SAMPLE ID B08FK6 FRACTION 01K TEST CODE VCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

MW
8/23/93

9613500.1470

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TMA Inc. REPORT Work Order # A3-04-078

Received: 04/22/93

Results by Sample

SAMPLE ID B08FN6 FRACTION 03E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.4 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 U | mg/L | 0.4 |
| pH | 150.1 | 7.9 | pH | 0.1 |
| Sulfate | 300.0 | 46 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 423 | umho/cm | 6 |
| | | | | |

FORM I

MJ PBD 8/23/93

9615500.1471

TMA Inc. REPORT Work Order # A3-04-070 000015

Received: 04/22/93 Results by Sample

SAMPLE ID B08FN6 FRACTION 03G TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 256 | mg/L | 5 |
| | | | | |

FORM I

M 8/23/93

TMA Inc. REPORT Work Order # A3-04-070

Received: 04/22/93

Results by Sample

SAMPLE ID B08FN6 FRACTION 03W TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~<1~~ U | mg/L | 1 |
| | | | | |

FORM I

MM 8/23/93

TMA Inc. REPORT Work Order # A3-04-078

Received: 04/22/93

Results by Sample

SAMPLE ID B08FN6 FRACTION 03J TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/20/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

MM 8/23/93

Page 2 Skinner&Sherman REPORT Work Order # S3-04-272

Received: 04/23/93 Results by Sample

SAMPLE ID B08FK6 SAMPLE # 01 FRACTIONS: A

Date & Time Collected 04/20/93 Category WATER

NO3NO2 5.22 mg N/L

SAMPLE ID B08FN6 SAMPLE # 02 FRACTIONS: A

Date & Time Collected 04/20/93 Category WATER

NO3NO2 5.26 mg N/L

SAMPLE ID B08FN6D SAMPLE # 02 FRACTIONS: B

Date & Time Collected 04/20/93 Category WATER

NO3NO2 5.25 mg N/L

SAMPLE ID B08FN6S SAMPLE # 02 FRACTIONS: C

Date & Time Collected 04/20/93 Category WATER

NO3NO2 7.33 mg N/L

SAMPLE ID LCSW SAMPLE # 03 FRACTIONS: A

Date & Time Collected not specified Category WATER

NO3NO2 2.02 mg N/L

MRD 8/23/93

EPA SAMPLE NO.

B08FL1

9613508A1475

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B16

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

MPD 8/23/93

9613500 1476

EPA SAMPLE NO.

B08FL1

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B16

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

NM PBD 8/23/93

9613588.1477

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FL3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B17

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |

8/23/93

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9613500E1478

1E

EPA SAMPLE NO.

B08FL3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30429B17

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: not dec. ____ Date Analyzed: 04/29/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |

MM PM 8/23/93

9613500 1479

1B

000119

EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FL1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507I05

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/29/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



NM 8/23/93

9613500214480

EPA SAMPLE NO.

B08FL1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507I05

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/29/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 3 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 2 | J |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

NM 8/23/93

9F3500.1481

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B08FL1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507I05

Level: (low/med) LOW Date Received: 04/26/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/29/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 28.92 | 2[illegible] | J |

MM
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8/23/93

9613500b 1482

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FL1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04078 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304078-01B

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

% Moisture: _____ decanted: (Y/N) ___ Date Received: 04/26/93

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/29/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

MM PRD 8/23/93

9613500.1483

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FL1

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

Lab Code: SKINER Case No.: N3-04-126SAS No.: SDG No.: B08FL1

Matrix (soil/water): WATER Lab Sample ID: 04334-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.4 | B | W | F |
| 7440-39-3 | Barium | 8.8 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 41700 | | | P |
| 7440-47-3 | Chromium | 18.1 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 32.2 | B | | P |
| 7439-92-1 | Lead | 2.1 | B | | F |
| 7439-95-4 | Magnesium | 9400 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 6110 | | | P |
| 7782-49-2 | Selenium | 3.3 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 12200 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | | F |
| 7440-62-2 | Vanadium | 12.9 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

NM

PBD 8/23/93

002

9613500.1484

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

B08FL2

# INORGANIC ANALYSIS DATA SHEET

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

Lab Code: SKINER Case No.: N3-04-126SAS No.: SDG No.: B08FL2

Matrix (soil/water): WATER Lab Sample ID: 04335-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.6 | B | W | F |
| 7440-39-3 | Barium | 8.6 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 41800 | | | P |
| 7440-47-3 | Chromium | 16.1 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 33.9 | B | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 9350 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 6130 | | | P |
| 7782-49-2 | Selenium | 16.5 | U | WN | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 12200 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 12.5 | B | | P |
| 7440-66-6 | Zinc | 15.0 | B | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MM PBD 8/23/93

002

TMA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93

Results by Sample

SAMPLE ID B08FL1 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 9.2 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | <0.4 U | mg/L | 0.4 |
| pH | 150.1 | 7.8 | pH | 0.1 |
| Sulfate | 300.0 | 43 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 368 | umho/cm | 6 |
| | | | | |

FORM I

8/23/93

TRA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93

Results by Sample

SAMPLE ID B08FL1 FRACTION 01M TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 108 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 258 | mg/L | 5 |
| | | | | |

FORM I

NMB 8/23/93

TMA Inc. REPORT Work Order # A3-04-078

Received: 04/26/93

Results by Sample

SAMPLE ID B08FL1 FRACTION 01J TEST CODE VCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 9030 | ~~<1~~ U | mg/L | 1 |
| | | | | |

FORM I

NM
PD
8/23/93

TMA Inc. REPORT Work Order # A3-84-078

eceived: 04/26/93 Results by Sample

AMPLE ID BDSFL1 FRACTION 01M TEST CODE WCCLPL NAME Anions & Wet Chem.

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | ~~<~~0.05 U | mg/L | 0.05 |
| COD | 410.2 | ~~<~~5 U | mg/L | 5 |
| | | | | |

FORM I

NM 8/23/93

Page 2 Skinner&Sherman REPORT Work Order # S3-04-336

Received: 04/27/93 Results by Sample

SAMPLE ID B08FL1 SAMPLE # 01 FRACTIONS: A

Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.37

mg N/L

SAMPLE ID B08FL1D SAMPLE # 01 FRACTIONS: B

Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.41

mg N/L

SAMPLE ID B08FL1S SAMPLE # 01 FRACTIONS: C

Date & Time Collected 04/21/93 Category WATER

NO3NO2 5.42

mg N/L

SAMPLE ID LCSW SAMPLE # 02 FRACTIONS: A

Date & Time Collected not specified Category WATER

NO3NO2 2.03

mg N/L

8/23/93

9613500.1490

000005

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FP1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B06

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



PS 8/12/93

9613500 1491

000006

EPA SAMPLE NO.

B08FP1

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B06

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS 8/12/93

9613500.1492

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000007

EPA SAMPLE NO.

B08FP3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B07

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



PS 8/12/93

9613500 J493

1E

000008

EPA SAMPLE NO.

B08FP3

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-02A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B07

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS 8/12/93

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B11

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



PS 8/12/93

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000010
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B11

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS 8/12/93

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FQ3

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B12

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | Trichloro thene | 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 |



PS 8/12/93

EPA SAMPLE NO.

B08FQ3

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-05A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B12

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS. 8/12/93

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EPA SAMPLE NO.

B08FQ6

1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |



PS 8/12/93

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B08FQ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



P.S. 8/12/93

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EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08FQ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B14

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



PS 8/12/93

9613508.1501

000016
EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FQ8

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-07A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B14

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS 8/12/93

9613500A1502

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# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FW5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 | 1 | J |
| 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 |



Ps 8/12 L13

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

B08FW5

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-03A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



P.S 8/12/93

9613500 1A 1504

000019

EPA SAMPLE NO.

# VOLATILE ORGANICS ANALYSIS DATA SHEET

B08G60

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

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

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



P.S 8/12/93

9613500 1E 1505

EPA SAMPLE NO.

B08G60

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ____ Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS 8/12/93

2A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

000021
EPA SAMPLE NO.

B08G62

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. ___ Date Analyzed: 04/27/93

GC Column: CAP 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/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 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 |



PS 8/12/93

9613500 1B 1507

EPA SAMPLE NO.

B08G62

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-09A

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 30427B16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: not dec. Date Analyzed: 04/27/93

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

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

Number TICs found: 0

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |



PS. 8/12/93

EPA SAMPLE NO.

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FP1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/6/93

9613500.1509

1C

EPA SAMPLE NO.

B08FP1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 2 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/6/93

9613500.1510

000025

EPA SAMPLE NO.

B08FP1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S13

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.43 | 4 | ~~BJ~~ U |

Laboratory Method Blank Contamination

FORM I SV-TIC 3/90

PS 8/6/93

000026

EPA SAMPLE NO.

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/6/93

9613500.1512

1C

000027
EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FQ1

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS. 8/6/93

EPA SAMPLE NO.

B08FQ1

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-04B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S16

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.47 | 3 | ~~BJ~~ U |

Laboratory Method Blank Contamination



PS 8/6/93

9613500 1B 1514

000029

EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B08FQ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/6/93

9613500 1515

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000030
EPA SAMPLE NO.

B08FQ6

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 28 | |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/6/93

9615500.1516

1F

EPA SAMPLE NO.

B08FQ6

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-06B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30507S17

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.48 | 3 | ~~BG~~ U |

Laboratory Method Blank contamination



PS 8/6/93

EPA SAMPLE NO.

B08G60

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-08B

ample wt/vol: 1000 (g/mL) ML Lab File ID: 30513S15

evel: (low/med) LOW Date Received: 04/23/93

Moisture: ____ decanted: (Y/N) ____ Date Extracted: 04/27/93

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/93

njection Volume: 2.0 (uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) N pH: ____

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | 2,2'-oxybis(1-Chloropropane) | 10 | U |
| 106-44-5 | 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-Di-n-Propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)Methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 106-47-8 | 4-Chloroaniline | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-Methylphenol | 10 | U |
| 91-57-6 | 2-Methylnaphthalene | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 88-74-4 | 2-Nitroaniline | 25 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 99-09-2 | 3-Nitroaniline | 25 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |



PS 8/6/93

9613500.1518

1C

EPA SAMPLE NO.

B08G60

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30513S15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 100-02-7 | 4-Nitrophenol | 25 | U |
| 132-64-9 | Dibenzofuran | 10 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 100-01-6 | 4-Nitroaniline | 25 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 86-74-8 | Carbazole | 10 | U |
| 84-74-2 | Di-n-Butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10 | U |
| 56-55-3 | Benzo(a)Anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)Phthalate | 6 | J |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-Octyl Phthalate | 10 | U |
| 205-99-2 | Benzo(b)Fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)Fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)Pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)Pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)Anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)Perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine



PS 8/6/93

9613500 1519

1F

000034

EPA SAMPLE NO.

B08G60

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TMA/ARLI Contract: WHC

Lab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: A304072-08B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 30513S15

Level: (low/med) LOW Date Received: 04/23/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/27/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 1. | UNKNOWN HYDROCARBON | 6.33 | 4 | ~~BJ~~ U |

Laboratory Method Blank Contaminant



PS 8/6/93

9613500.1520

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

000035
EPA SAMPLE NO.

B08FP1

.b Name: TMA/ARLI Contract: WHC

.b Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

.trix: (soil/water) WATER Lab Sample ID: A304072-01B

.mple wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

:traction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

›ncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ᵊC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DKW 8/11/93

9616500_1521

000036

EPA SAMPLE NO.

B08FQ1

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-04B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DKW 8/11/93

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08FQ6

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-06B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DKW 8/11/93

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B08G60

ab Name: TMA/ARLI Contract: WHC

ab Code: TMALA Case No.: 04072 SAS No.: NA SDG No.: NA

atrix: (soil/water) WATER Lab Sample ID: A304072-08B

ample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Moisture: _____ decanted: (Y/N) ___ Date Received: 04/23/93

xtraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/27/93

oncentrated Extract Volume: 10000 (uL) Date Analyzed: 05/20/93

njection Volume: 1.00 (uL) Dilution Factor: 1.00

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

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.050 | U |
| 319-85-7 | beta-BHC | 0.050 | U |
| 319-86-8 | delta-BHC | 0.050 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.050 | U |
| 76-44-8 | Heptachlor | 0.050 | U |
| 309-00-2 | Aldrin | 0.050 | U |
| 1024-57-3 | Heptachlor epoxide | 0.050 | U |
| 959-98-8 | Endosulfan I | 0.050 | U |
| 60-57-1 | Dieldrin | 0.10 | U |
| 72-55-9 | 4,4'-DDE | 0.10 | U |
| 72-20-8 | Endrin | 0.10 | U |
| 33213-65-9 | Endosulfan II | 0.10 | U |
| 72-54-8 | 4,4'-DDD | 0.10 | U |
| 1031-07-8 | Endosulfan sulfate | 0.10 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.50 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 7421-36-3 | Endrin aldehyde | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.050 | U |
| 5103-74-2 | gamma-Chlordane | 0.050 | U |
| 8001-35-2 | Toxaphene | 5.0 | U |
| 12674-11-2 | Aroclor-1016 | 1.0 | U |
| 11104-28-2 | Aroclor-1221 | 2.0 | U |
| 11141-16-5 | Aroclor-1232 | 1.0 | U |
| 53469-21-9 | Aroclor-1242 | 1.0 | U |
| 12672-29-6 | Aroclor-1248 | 1.0 | U |
| 11097-69-1 | Aroclor-1254 | 1.0 | U |
| 11096-82-5 | Aroclor-1260 | 1.0 | U |

DKW 8/11/93

9615501.1524

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FP1

Lab Name: SKINNER & SHERM/ Ct: 68-D0-0108

Lab Code: SKINER Ca X02269 No.: SDG No.: B08FP1

Matrix (soil/water): WATE Lab Sample ID: 04329-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 31.0 | B | U | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | | F |
| 7440-39-3 | Barium | 27.4 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 41900 | | | P |
| 7440-47-3 | Chromium | 38.2 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 73.1 | B | U | P |
| 7439-92-1 | Lead | 4.5 | | WJ | F |
| 7439-95-4 | Magnesium | 7790 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4790 | B | | P |
| 7782-49-2 | Selenium | 2.9 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 9950 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 8.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KWJ 8/9/93

002

9614500.1525

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FQ1

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-00-0108

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-02S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 24.6 | B | U | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 4.7 | B | +J | F |
| 7440-39-3 | Barium | 17.3 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 36600 | | | P |
| 7440-47-3 | Chromium | 6.5 | B | U | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 162 | | | P |
| 7439-92-1 | Lead | 1.6 | B | | F |
| 7439-95-4 | Magnesium | 11200 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 6570 | | | P |
| 7782-49-2 | Selenium | 14.5 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 23400 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 20.5 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KLG 8/9/93

003

9615300.1526

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FQ6

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

Lab Code: SKINER Case No.: N3-04-1205AS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-03S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 5.1 | B | WJ | F |
| 7440-39-3 | Barium | 7.2 | B | U | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 36200 | | | P |
| 7440-47-3 | Chromium | 30.0 | | U | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 69.1 | B | U | P |
| 7439-92-1 | Lead | 2.8 | B | | F |
| 7439-95-4 | Magnesium | 11000 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 7450 | | | P |
| 7782-49-2 | Selenium | 14.5 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 16500 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 29.6 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

8/9/93

004

FORM I - IN ILM02.1

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08G60

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP1

Matrix (soil/water): WATER Lab Sample ID: 04329-04S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 23.5 | U | | P |
| 7440-36-0 | Antimony | 17.9 | U | | P |
| 7440-38-2 | Arsenic | 3.5 | U | WJ | F |
| 7440-39-3 | Barium | 27.4 | B | | P |
| 7440-41-7 | Beryllium | 0.50 | U | | P |
| 7440-43-9 | Cadmium | 1.7 | U | | P |
| 7440-70-2 | Calcium | 42200 | | | P |
| 7440-47-3 | Chromium | 36.5 | | | P |
| 7440-48-4 | Cobalt | 3.8 | U | | P |
| 7440-50-8 | Copper | 4.2 | U | | P |
| 7439-89-6 | Iron | 80.4 | B | U | P |
| 7439-92-1 | Lead | 1.3 | U | | F |
| 7439-95-4 | Magnesium | 7910 | | | P |
| 7439-96-5 | Manganese | 1.8 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 6.1 | U | | P |
| 7440-09-7 | Potassium | 4620 | B | | P |
| 7782-49-2 | Selenium | 14.5 | U | WNJ | F |
| 7440-22-4 | Silver | 3.8 | U | | P |
| 7440-23-5 | Sodium | 9980 | | | P |
| 7440-28-0 | Thallium | 1.2 | U | WJ | F |
| 7440-62-2 | Vanadium | 6.8 | B | | P |
| 7440-66-6 | Zinc | 3.4 | U | | P |
| | Cyanide | 10.0 | U | | CA |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEY 8/9/93

005

9613500.1526

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FP2

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-01S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 18.6 | U | | P |
| 7440-38-2 | Arsenic | 3.3 | B | | F |
| 7440-39-3 | Barium | 28.7 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 41700 | | | P |
| 7440-47-3 | Chromium | 34.2 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.5 | B | U | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.8 | B | | F |
| 7439-95-4 | Magnesium | 7680 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4640 | B | | P |
| 7782-49-2 | Selenium | 3.5 | U | MWJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 9770 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 5.6 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KWD 8/4/93

002

FORM I - IN

ILM02.1

9615880.1529

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08FQ2

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-02S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.4 | B | U | P |
| 7440-36-0 | Antimony | 21.2 | B | | P |
| 7440-38-2 | Arsenic | 4.6 | B | | F |
| 7440-39-3 | Barium | 18.6 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.5 | B | | P |
| 7440-70-2 | Calcium | 34100 | | | P |
| 7440-47-3 | Chromium | 6.2 | B | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 3.9 | B | U | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.5 | B | | F |
| 7439-95-4 | Magnesium | 10300 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 6100 | | | P |
| 7782-49-2 | Selenium | 3.5 | U | WJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 21600 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 19.2 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

RKH 8/9/93

003

FORM I - IN

ILM02.1

9615500.1550

WESTINGHOUSE/HANFORD

1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08F07

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-03S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 28.5 | B | U | P |
| 7440-36-0 | Antimony | 19.0 | B | | P |
| 7440-38-2 | Arsenic | 3.8 | B | | F |
| 7440-39-3 | Barium | 7.7 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 32200 | | | P |
| 7440-47-3 | Chromium | 21.4 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.2 | B | | F |
| 7439-95-4 | Magnesium | 9750 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 6680 | | | P |
| 7782-49-2 | Selenium | 3.5 | U | WJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 14600 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 27.0 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KEW 8/9/93

004

FORM I - IN TLM02.1

9613500.1551

WESTINGHOUSE/HANFORD
1

SAMPLE NUMBER:

INORGANIC ANALYSIS DATA SHEET

B08G61

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

Lab Code: SKINER Case No.: N3-04-120SAS No.: SDG No.: B08FP2

Matrix (soil/water): WATER Lab Sample ID: 04330-04S

Level (low/med): LOW Date Received: 04/27/93

% Solids: 0.0

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

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 19.2 | U | | P |
| 7440-36-0 | Antimony | 19.2 | B | | P |
| 7440-38-2 | Arsenic | 1.5 | U | | F |
| 7440-39-3 | Barium | 28.3 | B | | P |
| 7440-41-7 | Beryllium | 0.30 | U | | P |
| 7440-43-9 | Cadmium | 1.4 | U | | P |
| 7440-70-2 | Calcium | 42900 | | | P |
| 7440-47-3 | Chromium | 36.5 | | | P |
| 7440-48-4 | Cobalt | 2.9 | U | | P |
| 7440-50-8 | Copper | 2.7 | U | | P |
| 7439-89-6 | Iron | 8.4 | U | | P |
| 7439-92-1 | Lead | 1.5 | B | | F |
| 7439-95-4 | Magnesium | 7870 | | | P |
| 7439-96-5 | Manganese | 1.0 | U | | P |
| 7439-97-6 | Mercury | 0.10 | U | | AV |
| 7440-02-0 | Nickel | 4.2 | U | | P |
| 7440-09-7 | Potassium | 4840 | B | | P |
| 7782-49-2 | Selenium | 3.5 | U | WJ | F |
| 7440-22-4 | Silver | 3.3 | U | | P |
| 7440-23-5 | Sodium | 100000 | | | P |
| 7440-28-0 | Thallium | 2.7 | U | | F |
| 7440-62-2 | Vanadium | 6.0 | B | | P |
| 7440-66-6 | Zinc | 4.8 | U | | P |
| | Cyanide | | | | NR |

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

KWS 8/9/93

005

FORM I - IN ILM02.1

TMA Inc. REPORT Work Order # A3-04-072 000020

Received: 04/23/93

Results by Sample

SAMPLE ID B08FP1 FRACTION 01E TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 6.7 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~0~~0.4 JU | mg/L | 0.4 |
| pH | 150.1 | 7.5 J | pH | 0.1 |
| Sulfate | 300.0 | 37 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 342 | umho/cm | 6 |
| | | | | |

FORM I

KWS 8/9/93

CPM 9/17/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FP1 FRACTION 016 TEST CODE VCCLPL NAME Anions & Wet Chem. - VH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 103 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 237 | mg/L | 5 |
| | | | | |

FORM I

KWG 6/9/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FP1 FRACTION 01I TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | 1U | mg/L | 1 |
| | | | | |

FORM I

WEB 8/9/93

9/17/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08FP1 FRACTION 01K TEST CODE WCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | ~~0.05~~ U | mg/L | 0.05 |
| COD | 410.0 | ~~5~~ U | mg/L | 5 |
| | | | | |

FORM I

KW 9/9/93

copy 9/17/93

TMA Inc. REPORT Work Order # A3-04-072

eceived: 04/23/93 Results by Sample

AMPLE ID B08FQ1 FRACTION 04E TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 8.4 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.6 | mg/L | 0.1 |
| Phosphate | 300.0 | 0.4 J | mg/L | 0.4 |
| pH | 150.1 | 7.8 J | pH | 0.1 |
| Sulfate | 300.0 | 34 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 367 | umho/cm | 6 |
| | | | | |

FORM I

KCW 8/2/93

CDM 7/13/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID 808FQ1 FRACTION 04G TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 118 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 243 | mg/L | 5 |
| | | | | |

FORM I

KW 8/5/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08FQ1 FRACTION 04W TEST CODE WCCLPL NAME Anions & Wet Chem. - WW043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~1~~ U | mg/L | 1 |
| | | | | |

FORM I

KLS 8/9/93

9613500.1559

TMA Inc. REPORT Work Order # A3-04-072 000027

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ1 FRACTION 04J TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | ~~<~~0.05 U | mg/L | 0.05 |
| COD | 410.0 | ~~<~~5 U | mg/L | 5 |
| | | | | |

FORM I

KWS 8/2/93

CRM 8/2/93

9615500.1540

TMA Inc. REPORT Work Order # A3-04 000023

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ6 FRACTION 06C TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 5.6 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.4 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~0.4~~ JU | mg/L | 0.4 |
| pH | 150.1 | 8.0 J | pH | 0.1 |
| Sulfate | 300.0 | 33 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 323 | umho/cm | 6 |
| | | | | |

FORM I

KWS 8/9/93

CPK 9/17/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08FQ6 FRACTION Q6D TEST CODE VCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 113 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 229 | mg/L | 5 |
| | | | | |

FORM I

KEJ 8/9/93

9613500_1542

000030

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08F06 FRACTION 06E TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | 1 U | mg/L | 1 |
| | | | | |

FORM I

8/5/93

CEM 9/13/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08FQ6 FRACTION 06F TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | <0.05 U | mg/L | 0.05 |
| COD | 410.0 | <5 U | mg/L | 5 |
| | | | | |

FORM I

KES 9/9/93

9/17/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID 808660 FRACTION 08C TEST CODE WCCLPL NAME Anions & Wet Chem. - VN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Chloride | 300.0 | 6.8 | mg/L | 0.2 |
| Fluoride | 300.0 | 0.3 | mg/L | 0.1 |
| Phosphate | 300.0 | ~~0.4~~ J U | mg/L | 0.4 |
| pH | 150.1 | 7.5 J | pH | 0.1 |
| Sulfate | 300.0 | 40 | mg/L | 1 |
| Elect. Conductivity | 120.1 | 343 | umho/cm | 6 |
| | | | | |

FORM I

WCLS 8/9/93

CENK 9/13/93

TMA Inc. REPORT Work Order # A3-04-072 000033

eceived: 04/23/93 Results by Sample

AMPLE ID B08G60 FRACTION OBD TEST CODE WCCLPL NAME Anions & Wet Chem. - WM043
Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Alkalinity | 310.1 | 103 | mg/L | 2 |
| Tot. Dissolved Solids | 160.1 | 235 | mg/L | 5 |
| | | | | |

FORM I

KZM 8/9/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93 Results by Sample

SAMPLE ID B08660 FRACTION 08E TEST CODE WCCLPL NAME Anions & Wet Chem. - WH043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Sulfide | 376.1 | ~~<~~1 U | mg/L | 1 |
| | | | | |

FORM I

KWS 8/13/93

CEMH 9/19/93

TMA Inc. REPORT Work Order # A3-04-072

Received: 04/23/93

Results by Sample

SAMPLE ID B08G60 FRACTION 08F TEST CODE WCCLPL NAME Anions & Wet Chem. - WN043

Date & Time Collected 04/21/93 Category

ANIONS AND WET CHEMISTRY - LIQUIDS

| ANALYSIS | METHOD | RESULT | UNITS | LIMIT |
|---|---|---|---|---|
| Ammonia Nitrogen | 350.3 | 0.05 V | mg/L | 0.05 |
| COD | 410.0 | 5 V | mg/L | 5 |
| | | | | |

FORM I

8/5/93

9/19/93

Page 2 Skinner&Sherman REPORT Work Order # S3-04-332

Received: 04/27/93 Results by Sample

SAMPLE ID B08FP1 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.93
mg N/L

SAMPLE ID B08FQ1 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.49
mg N/L

SAMPLE ID B08FQ6 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 1.19
mg N/L

SAMPLE ID B08G60 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.82
mg N/L

SAMPLE ID B08G60D SAMPLE # 04 FRACTIONS: B
Date & Time Collected 04/21/93 Category WATER

NO3NO2 3.81
mg N/L

SAMPLE ID B08G60S SAMPLE # 04 FRACTIONS: C
Date & Time Collected 04/21/93 Category WATER

NO3NO2 5.92
mg N/L

SAMPLE ID LCSW SAMPLE # 05 FRACTIONS: A
Date & Time Collected not specified Category WATER

NO3NO2 2.03
mg N/L

KWG 8/9/93

TMA Thermo Analytical Inc.
This report is rendered upon all of the following conditions: Skinner & Sherman Laboratories, Inc.; retains ownership of this report until all associated submitted invoices is satisfied. Expert witness services shall be available in conjunction with this report only if prior notification of this potential requirement was made and accepted, before the analysis. Client will be responsible for Skinner & Sherman costs and consulting fees if our services are required by subpoena or otherwise in legal proceedings. Total liability is limited to the invoice amount. The results listed refer only to tested samples and applicable parameters. Samples are not analyzed in accordance with New York State protocol unless indicated. Product endorsement is neither inferred nor implied. Skinner & Sherman Laboratories, Inc. will exercise due diligence but will not be responsible for lost or destroyed samples or evidence unless client makes appropriate insurance coverage arrangements. Samples are held for thirty days following issuance of report; thereafter will be stored at client's expense if authorized in writing.
Skinner & Sherman Laboratories Inc. 300 Second Avenue P.O. Box 521 Waltham, Massachusetts 02254-0521 (617) 890-7200