

U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT  
CONTRACT DACA21-92-D-0002, DELIVERY ORDER #0101

## **CLOSURE REPORT**

WASTE OIL TANK  
BUILDING 1175, TANK 45  
FACILITY ID NUMBER: 9-089054\*Z  
FT. STEWART, GEORGIA

PREPARED BY:

**ANDERSON COLUMBIA ENVIRONMENTAL, INC.**

OCTOBER 1996

P.O. Box 1386, Lake City, Florida 32056-1386  
Phone: (904) 755-1196 Fax: (904) 758-9050

US Army Corps of Engineers  
Delivery Order 0101  
Ft. Stewart, Hinesville, Georgia  
Underground Storage Tank Removal and Closure

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Prepared by

*Anderson Columbia Enviornmental, Inc.*

TAB 1

GEORGIA CLOSURE REPORT  
FORMS

# Georgia Department of Natural Resources

Environmental Protection Division  
Underground Storage Tank Management Program  
4244 International Parkey, Suite 104, Atlanta, Georgia 30354  
Lonice C. Barrett, Commissioner  
Harold F. Reheis, Director  
(404) 362-2687



## CLOSURE REPORT FORM

Please complete the following form, include the listed items and check all of the boxes that apply. This form can be used as a Closure Report, provided documentation is attached when specified, to substantiate the information on this form, as outlined in the guidance document "So You Want to Close an UST?" (GUST-9). If one of the items does not apply to your tank closure, please provide a written explanation for the omission. If soil was excavated and disposed of, be sure to complete the applicable sections and attach the proper disposal documents.

### 1. Owner of UST System:

Name: US Army/Ft. Stewart  
Phone Number: (912) 767-2010/1234  
Company: US Army  
Address: Cdr. 3rd Inf. Div. (Mech.), Attn: AFZP-DEV, Bldg. 1139  
Ft. Stewart GA 31314-5000  
(city) (state) (zip code)

I hereby certify that the information contained in this Closure Report and in all the attachments is true, accurate, and complete, and the Closure Report satisfies all criteria and requirements of Rule 391-3-15-.09 of the Georgia Rules for Underground Storage Tank Management.

Resubmitted: Thomas C. Fry Date: 03/03/99  
Signature: ORIGINAL SIGNED Date: NOV 1996

### 2. UST System Site Location:

Facility Name: Ft. Stewart, GA FAC 1175  
Street Address: FAC 1175  
Ft. Stewart GA 31314-5000  
(city) (state) (zip code)  
Facility ID# 9-089054

### 3. Contract Certification:

I hereby certify that I have performed or supervised the work detailed in this report, and have examined and am familiar with the information submitted in this and all attached documents. The submitted information is, to the best of knowledge, true, accurate, complete, and in accordance with the Georgia Rules for Underground Storage Tank Management, revised February, 1995.

Name: David F. Black  
Address: PO Box 1386 Lake City, Florida 32056

Signature: [Signature] Date: 10/29/96

4. Site-specific Hydrogeology:

Depth to Groundwater ~ 8' ft. if encountered

☐ Not Applicable

5. Site Map: Include the following items on an attached site map:

**REFER TO TAB 5**

- Tank Pit Area
- Sewer Lines (if present)
- Sample Locations (with sample numbers and depths)
- Scale 1/4 in = 1 ft
- Piping Trenches
- Water Lines
- North Arrow
- Dispensers
- Tanks with thier ID#s, corresponding to the Notification Form 7530-1

6. Tank Removal

- Date of Removal: 9-Jul-96
- Tank Information: 

| <u>Tank #</u> | <u>Tank Size (gallons)</u> | <u>Tank Contents</u> |
|---------------|----------------------------|----------------------|
| 45            | 500                        | Waste Oil            |
|               |                            |                      |
|               |                            |                      |

(This information should correspond to the 7530-1 Form.)

- Attach Amended Notification Form 7530-1
- Describe Soil Sampling Procedures (and groundwater, if encountered):

**REFER TO TAB 6**

**REFER TO TAB 6**

7. Laboratory Analytical Data: The following items must be included on attached copies

**REFER TO TAB 7**

- Laboratory Method
- Detection Limits
- Date of Sampling
- Signed Chain of Custody
- Date of Analysis
- Quality Control Data

8. Regulated Substance Released: Check the applicable box(es).

☐ Gasoline ☐ Diesel ☐ Kerosene ☒ Used Oil ☐ Other \_\_\_\_\_

9. Excavation and Treatment/Disposal of Contaminated Soil:

- Attach Soil Disposal Manifests
- Volume of Soil Excavated (less than 6 ft from USTs and 4 ft from piping or dispenser islands)  
43.36 Tons OR \_\_\_\_\_ yd<sup>3</sup>

☐ Not Applicable

10. Local Water Resources: Attach documentation only if Table B Soil Threshold Values and/or in-Stream Water Quality Standards are proposed for soil disposal, or No Further Action Required status. Check the applicable box(es).

☐ Drinking water supplies are NOT located in:  
*High or average groundwater pollution susceptibility area\*:*  
Public water systems within 2.0 miles and  
Non-public water systems within 0.5 mile

OR

*Low groundwater pollution susceptibility area\*:*  
Public water systems within 1.0 mile and  
Non-public water systems within 0.25 mile

\* As defined by the Groundwater Pollution Susceptibility Map of Georgia

☐ Streams, Lakes, and Ponds:  
Distance to closest surface water body: \_\_\_\_\_ mile(s) or \_\_\_\_\_ feet

☒ Not Applicable

SEE TAB 7, 10

11. Conclusions or Recommendations: Choose one.

☒ Clean Closure, thus No Further Action is Required.

☒ Soil Excavated within the Limits Specified in Question 7 (GUST-9) and Transported to an EPD Treatment/Disposal Facility, Thus No Further Action is Required.

TAB 4

SITE PHOTOGRAPHS

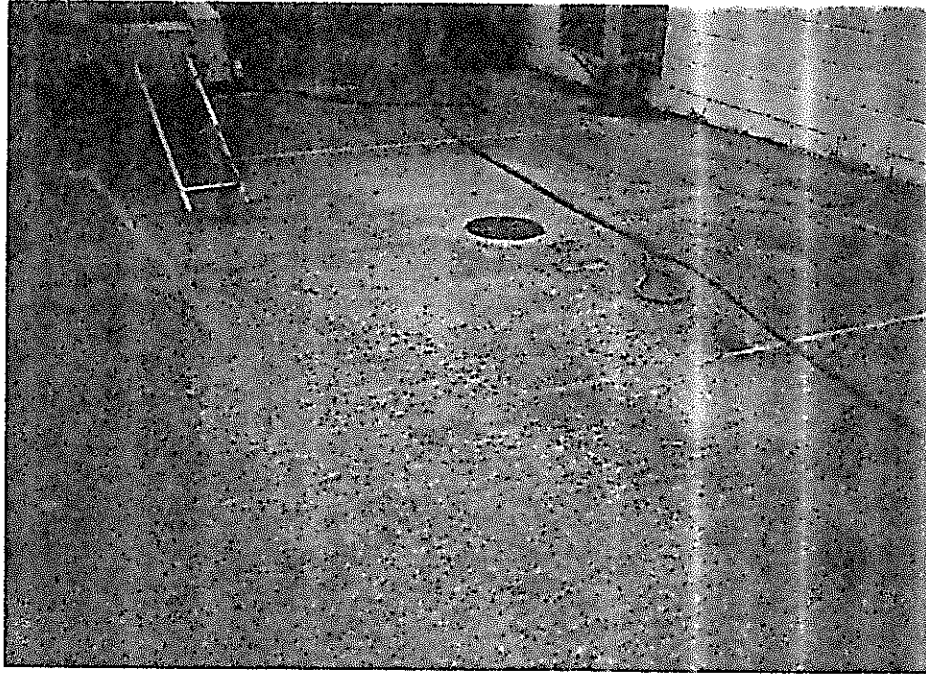


Photo 1. The Tank 45 site just prior to concrete cutting, breaking and removal.

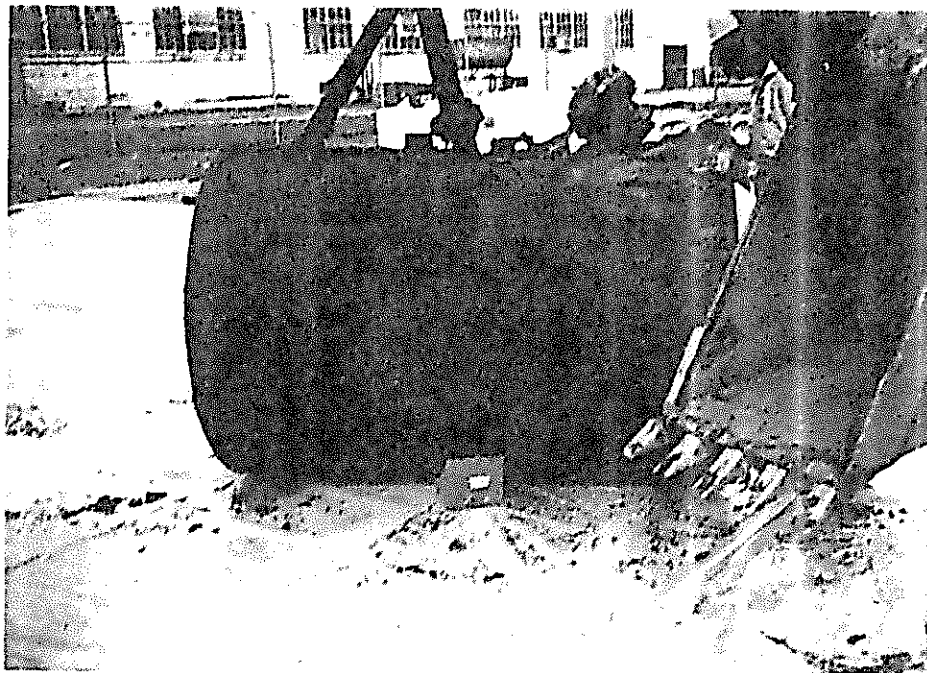
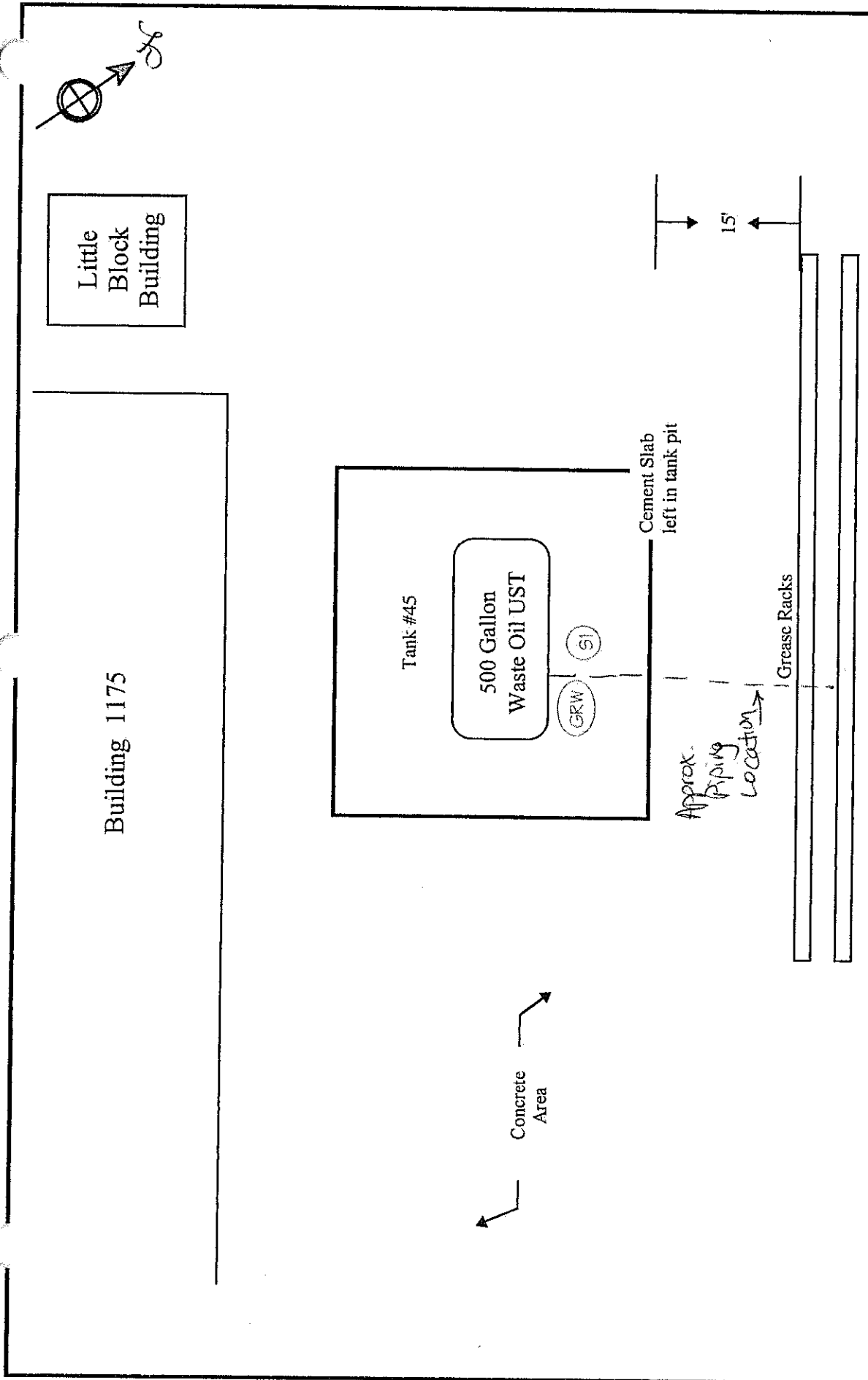


Photo 2. Tank 45 after removal from the tank pit.

**TAB 5**

**SITE MAPS**



## LEGEND

(S1) Location of Closure Sample

(GRW) Location of Groundwater Sample

## ANDERSON COLUMBIA

Environmental, Inc.

P.O. BOX 1386, LAKE CITY, FLORIDA 32056-1386 PHONE: (904) 755-1196 FAX: (904) 758-9050

DR. AJR

DR. APP.

DATE: 2 August 96

SCALE: 1/4" = 1'

Sampling Map - Tank 45

Building 1175

Ft. Stewart, Georgia

Delivery Order 101

FIGURE NO.: 1

Fac ID # 19-089054

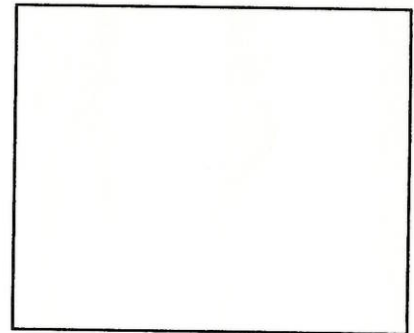
TAB 6

EPA FORM 7530-1  
&  
FIELD ASSESSMENT METHODS

STATE OF GEORGIA  
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part I: Facility Data

state use only



FACILITY ID NUMBER: 9-089054

OWNER'S ID: 197

INITIAL DATE RECEIVED: 5/6/86

DATE AMENDED LAST: \_\_\_\_\_

NOTIFICATION TYPE: ☐ New ☒ Amended ☒ Closure

OWNERSHIP OF TANK (S): \_\_\_\_\_ NUMBER OF TANK (S): 1

Name : US ARMY/FT STEWART  
Mailing Address : HQ 3RD INF DIV (M), AFZP-DEV/BLDG 1139  
City : FT STEWART State: GEORGIA Zip Code: 31314-5000  
Phone : 912-767-1071 County: LIBERTY

LOCATION OF TANK (S):

Name : FT STEWART/FAC 1175  
Street Address : FAC 1175  
City : FT STEWART State: GEORGIA Zip Code: 31314-5000  
County : LIBERTY Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
Phone : \_\_\_\_\_

OWNER TYPE: ☒ Federal ☐ State ☐ Local ☐ Commercial ☐ Private

FACILITY TYPE (S):

|                                            |                                                  |                                          |
|--------------------------------------------|--------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Gas Station       | <input type="checkbox"/> Local Government        | <input type="checkbox"/> Contractor      |
| <input type="checkbox"/> Petroleum Dist    | <input type="checkbox"/> State Government        | <input type="checkbox"/> Truck/Transport |
| <input type="checkbox"/> Air Tax (Airport) | <input type="checkbox"/> Fed Non-Military        | <input type="checkbox"/> Utilities       |
| <input type="checkbox"/> Aircraft Owner    | <input checked="" type="checkbox"/> Fed Military | <input type="checkbox"/> Farm            |
| <input type="checkbox"/> Auto Dealership   | <input type="checkbox"/> Commercial              | <input type="checkbox"/> Residential     |
| <input type="checkbox"/> Railroad          | <input type="checkbox"/> Industrial              | <input type="checkbox"/> Other           |
| <input type="checkbox"/> Hospital          | <input type="checkbox"/> Educational             |                                          |

CONTACT PERSON IN CHARGE OF TANK (S):

Name : US ARMY/FT STEWART Title: JOHN SPEAR/ENV ENG  
Address : HQ 3RD INF DIV (M), AFZP-DEV/BLDG 1139  
City : FT STEWART State: GEORGIA Zip Code: 31314-5000  
Phone : 912-767-1071

**STATE OF GEORGIA**  
**NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK**

**Part I: Facility Data**

**FINANCIAL RESPONSIBILITY:**

**FACILITY ID NUMBER:**

- ☐ I meet the financial responsibility requirements of SS12-13-9 Official Code of Georgia Annotated by providing or participating in one of the following financial assurance mechanisms.

**Primary Financial Responsibility Mechanism (check one)**

- |                                               |                                                       |
|-----------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> GUST Trust Fund      | <input type="checkbox"/> Insurance                    |
| <input type="checkbox"/> Surety Bond          | <input type="checkbox"/> Guarantee                    |
| <input type="checkbox"/> Letter of Credit     | <input type="checkbox"/> Trust Fund (other than GUST) |
| <input type="checkbox"/> Risk Retention Group | <input checked="" type="checkbox"/> Other Method      |
| <input type="checkbox"/> Self-insured         | <input type="checkbox"/> None                         |

If a primary coverage mechanism other than GUST Trust Fund is checked, provide the following information pursuant to GUST Rule 391-3-15-.12 (1) :

**Financial Responsibility Provider (primary):**

Name: US Army

Address: HQ 3rd Inf. Div. (M) AFZP-DEV/BLDG 1139 City: Ft. Stewart State: GA

Mechanism Id Number: \_\_\_\_\_

Mechanism Anniversary Date: \_\_\_\_\_

**Deductible Financial Responsibility, if any: (check one)**

**Note:** If your primary Financial Responsibility Mechanism is provided through participation in the GUST Trust Fund by payment of Environmental Assurance Fees, as required under GUST Rule 391-3-15-.13, you must also check one of the following boxes indicating how coverage for the GUST Trust Fund \$10,000 deductible is being provided.

If your Financial Responsibility Mechanism is other than GUST Trust Fund and it has a deductible, you must also check one of the following boxes indicating how coverage for the deductible is being provided.

- |                                               |                                                       |
|-----------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Surety Bond          | <input type="checkbox"/> Insurance                    |
| <input type="checkbox"/> Letter of Credit     | <input type="checkbox"/> Guarantee                    |
| <input type="checkbox"/> Risk Retention Group | <input type="checkbox"/> Trust Fund (other than GUST) |
| <input type="checkbox"/> Self-insured         | <input type="checkbox"/> Other Method                 |

Provide the name and address of Financial Responsibility Provider for Deductible pursuant to GUST Rule 391-15-.12 (1) :

**Financial Responsibility Provider (deductible):**

Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

Mechanism Id Number: \_\_\_\_\_

Mechanism Anniversary Date: \_\_\_\_\_

STATE OF GEORGIA  
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part II: Tank Data

|                                 |              |  |  |  |  |
|---------------------------------|--------------|--|--|--|--|
| FACILITY ID                     | 9-089054     |  |  |  |  |
| TANK ID                         | 45           |  |  |  |  |
| <b>Status of Tank</b>           |              |  |  |  |  |
| Currently in Use                | <del>x</del> |  |  |  |  |
| Temp. Out of Use                |              |  |  |  |  |
| Perm. Out of Use                | <del>x</del> |  |  |  |  |
| Date of Installation            | 1-Jan-83     |  |  |  |  |
| Age                             | 13           |  |  |  |  |
| Est. Total Capacity             | 500          |  |  |  |  |
| <b>MATERIAL OF CONSTRUCTION</b> |              |  |  |  |  |
| Asphalt or Bare Steel           | x            |  |  |  |  |
| Cath. Protected Steel           |              |  |  |  |  |
| Epoxy Coated Steel              |              |  |  |  |  |
| Composite                       |              |  |  |  |  |
| Fiberglass Reinf. Plas.         |              |  |  |  |  |
| Lined Interior                  |              |  |  |  |  |
| Double Walled                   |              |  |  |  |  |
| Poly. Tank Jacket               |              |  |  |  |  |
| Concrete                        |              |  |  |  |  |
| Excavation Liner                |              |  |  |  |  |
| Unknown                         |              |  |  |  |  |
| Other, Explanation              |              |  |  |  |  |
| Date Tank Repaired              |              |  |  |  |  |
| <b>PIPING MATERIAL</b>          |              |  |  |  |  |
| Bare Steel                      |              |  |  |  |  |
| Galvanized Steel                | x            |  |  |  |  |
| Fiberglass                      |              |  |  |  |  |
| Copper                          |              |  |  |  |  |
| Cathodically Protected          |              |  |  |  |  |
| Double Walled                   |              |  |  |  |  |
| Secondary Containment           |              |  |  |  |  |
| Unknown                         |              |  |  |  |  |
| Other, Explanation              |              |  |  |  |  |
| Date Piping Installed           |              |  |  |  |  |
| <b>Piping Type</b>              |              |  |  |  |  |
| Suction: No Valve               |              |  |  |  |  |
| Suction: Valve                  |              |  |  |  |  |
| Pressure                        |              |  |  |  |  |
| Gravity Fed                     |              |  |  |  |  |
| Date Piping Repaired            |              |  |  |  |  |
| <b>Substance Stored in Tank</b> |              |  |  |  |  |
| Gasoline                        |              |  |  |  |  |
| Diesel                          |              |  |  |  |  |
| Gasohol                         |              |  |  |  |  |
| Kerosene                        |              |  |  |  |  |
| Heating Oil                     |              |  |  |  |  |
| Used Oil                        | x            |  |  |  |  |
| Propane                         |              |  |  |  |  |
| Empty                           |              |  |  |  |  |
| Other, Explanation              |              |  |  |  |  |

STATE OF GEORGIA  
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part II: Tank Data

|                                 |          |        |      |        |      |        |      |        |      |        |  |
|---------------------------------|----------|--------|------|--------|------|--------|------|--------|------|--------|--|
| FACILITY ID                     | 9-089054 |        |      |        |      |        |      |        |      |        |  |
| TANK ID                         | 45       |        |      |        |      |        |      |        |      |        |  |
| <b>Substance Stored in Tank</b> |          |        |      |        |      |        |      |        |      |        |  |
| Hazardous Substance             |          |        |      |        |      |        |      |        |      |        |  |
| CERCLA Name                     |          |        |      |        |      |        |      |        |      |        |  |
| CAS Number                      |          |        |      |        |      |        |      |        |      |        |  |
| Mixture                         |          |        |      |        |      |        |      |        |      |        |  |
| Mixture, Specification          |          |        |      |        |      |        |      |        |      |        |  |
| <b>Out of Use/Chg. Ser.</b>     | Tank     | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |  |
| Est. Date Last Used             | 7/2/96   | 7/2/96 |      |        |      |        |      |        |      |        |  |
| Est. Date Closed                | 7/9/96   | 7/9/96 |      |        |      |        |      |        |      |        |  |
| Removed from Ground             | X        |        |      |        |      |        |      |        |      |        |  |
| Closed in Ground                |          | X      |      |        |      |        |      |        |      |        |  |
| Filled with Iner. Mat.          |          |        |      |        |      |        |      |        |      |        |  |
| Change in Service               |          |        |      |        |      |        |      |        |      |        |  |
| Site Assessment Compl.          |          |        |      |        |      |        |      |        |      |        |  |
| Leak Detected                   |          |        |      |        |      |        |      |        |      |        |  |
| <b>Installation</b>             |          |        |      |        |      |        |      |        |      |        |  |
| Certified by Manufac.           |          |        |      |        |      |        |      |        |      |        |  |
| Certified by Imple. Agn.        |          |        |      |        |      |        |      |        |      |        |  |
| Inspected by Engineer           |          |        |      |        |      |        |      |        |      |        |  |
| Checklists Completed            |          |        |      |        |      |        |      |        |      |        |  |
| Another Allowed Method          |          |        |      |        |      |        |      |        |      |        |  |
| Method Description              |          |        |      |        |      |        |      |        |      |        |  |
| Certified by Imple. Agn.        |          |        |      |        |      |        |      |        |      |        |  |
| Inspected by Engineer           |          |        |      |        |      |        |      |        |      |        |  |
| Checklists Completed            |          |        |      |        |      |        |      |        |      |        |  |
| Another Allowed Method          |          |        |      |        |      |        |      |        |      |        |  |
| Method Description              |          |        |      |        |      |        |      |        |      |        |  |
| <b>Release Detection</b>        | Tank     | Piping | Tank | Piping | Tank | Piping | Tank | Piping | Tank | Piping |  |
| Tank Tightness Testing          |          |        |      |        |      |        |      |        |      |        |  |
| Inventory Controls              |          |        |      |        |      |        |      |        |      |        |  |
| SIR                             |          |        |      |        |      |        |      |        |      |        |  |
| Automatic Tank Gauging          |          |        |      |        |      |        |      |        |      |        |  |
| Inter. Mon./Double Wall         |          |        |      |        |      |        |      |        |      |        |  |
| Groundwater Monitoring          |          |        |      |        |      |        |      |        |      |        |  |
| Manual Tank Gauging             |          |        |      |        |      |        |      |        |      |        |  |
| Vapor Monitoring                |          |        |      |        |      |        |      |        |      |        |  |
| Inter. Mon./Sec. Cont.          |          |        |      |        |      |        |      |        |      |        |  |
| Auto. Line Leak Detect.         |          |        |      |        |      |        |      |        |      |        |  |
| Line Tightness Testing          |          |        |      |        |      |        |      |        |      |        |  |
| Other Method                    |          |        |      |        |      |        |      |        |      |        |  |
| Other Description               |          |        |      |        |      |        |      |        |      |        |  |
| <b>Spill and Overfill</b>       |          |        |      |        |      |        |      |        |      |        |  |
| Date Overfill Device            |          |        |      |        |      |        |      |        |      |        |  |
| Date Spill Device               |          |        |      |        |      |        |      |        |      |        |  |
| <b>Installer Certification</b>  |          |        |      |        |      |        |      |        |      |        |  |
| Name                            |          |        |      |        |      |        |      |        |      |        |  |
| Position                        |          |        |      |        |      |        |      |        |      |        |  |
| Company                         |          |        |      |        |      |        |      |        |      |        |  |
| Date                            |          |        |      |        |      |        |      |        |      |        |  |

## **TAB 6**

### **FIELD ASSESSMENT METHODS (Tank Removal)**

#### **SOIL SAMPLE**

One (1) soil sample for analytical testing was collected by Anderson Columbia Environmental, Inc. (ACE) personnel two (2) feet below the center of the excavated tank. The soil sample was collected into precleaned, labeled laboratory sample bottles and immediately placed on ice. The sample was shipped under Chain of Custody to the Corps of Engineers contract laboratory, Ecosys Laboratory Services.

Soil samples for field screening were collected by ACE personnel from each side of the excavation and from the bottom of the excavated tank pit. Soil samples were collected at various intervals and soil vapors were withdrawn for volatile organic compounds (VOCs) with a Heath PORTA-FID II, Model No. 8000 Flame Ionization Detector (FID) fitted with a membrane filter. Calibration was performed prior to field sampling with a 100 ppm methane/air mixture.

FID readings of soil samples were collected by filling a clean glass jar one-half full with soil, capping the jar with clean aluminum foil and allowing conditions to equilibrate for approximately 15 minutes. The tip of the FID was then carefully inserted through the aluminum foil and an air sample from the jar's headspace was analyzed for total VOCs.

#### **GROUNDWATER SAMPLE**

Upon reaching the water table, one (1) groundwater sample was collected using a disposable Teflon bailer. The groundwater sample was collected into precleaned, labeled laboratory sample bottles and immediately placed on ice. The sample was shipped under Chain of Custody to Ecosys Laboratory Services.

# CLOSURE REPORT

UST #45, FACILITY ID. NO. 9-089054

## CLOSURE OF PIPING

**TAB 6**

The undersigned certifies that the piping associated with former Tank #45, Building 1172/1175, Facility Identification Number 9-089054, Fort Stewart, Georgia, was purged and cleaned by our contractor, Anderson Columbia Environmental, prior to abandoning the piping in-place. In-place closure consisted of placing an absorbent sock in the pipe and then grouting the ends (i.e., the end at the tank and the ends located on the grease rack).

The undersigned also certifies that the piping at this facility was associated with Tank #45, which was used for storage of waste oil. The piping was not greater than 25 feet. Therefore, in accordance with GUST Rules, sampling is not required.

Name: Thomas C. Fry                      Title: Acting Chief,  
Environmental & Natural Division

Signature: Thomas C. Fry Date: 03/03/99

**TAB 7**

**ANALYTICAL DATA**

## TAB 7 - Laboratory Analytical Data

Delivery Order #101  
Fort Stewart, Georgia  
Tank Number 45  
Building Number 1175

| <i>Method</i><br>Sample ID<br><i>unit</i> | 9073<br>TRPH<br>ppm | 9071A<br>TRPH<br>ppm | 8020A<br>BTEX<br>ppb | 8270B<br>Semi-Volatile Organics<br>ppb |
|-------------------------------------------|---------------------|----------------------|----------------------|----------------------------------------|
| 45-T1-S1                                  |                     | 545                  | bdl                  | bdl                                    |
| 45-T1-GW                                  |                     |                      | bdl                  | 1670                                   |
| bdl= below method detection limits        |                     |                      |                      |                                        |

\*\*Fort Stewart is in an area of 'High or Average Groundwater pollution susceptibility' and these tanks are within 1500 feet of a public water well (but greater than 500 feet from the well). These analytical results should be compared with Table A, >500 feet to withdrawal point on the sheet that follows.

43.36 tons of petroleum contaminated soil was removed from the Tank 45 pit.

### *Complete Data Package Follows*

Table A

### Petroleum Constituents and Soil Threshold Levels<sup>a</sup>

At UST corrective action sites where withdrawal points for public and non-public water supplies exist within distances defined in GUST Rule 391-3-15-.09(3):

| CONSTITUENT                                  | AVERAGE OR HIGHER<br>GROUNDWATER POLLUTION<br>SUSCEPTIBILITY AREA <sup>b</sup><br>(Where public water supplies exist<br>within 2.0 miles and/or non-public<br>supplies exist within 0.5 miles) |                                  | LOWER<br>GROUNDWATER POLLUTION<br>SUSCEPTIBILITY AREA <sup>c</sup><br>(Where public water supplies exist<br>within 1.0 mile and/or non-public<br>supplies exist within 0.25 mile) |                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                                              | ≤500 feet to<br>withdrawal point                                                                                                                                                               | >500 feet to<br>withdrawal point | ≤500 feet to<br>withdrawal point                                                                                                                                                  | >500 feet to<br>withdrawal point |
| <b>VOLATILE ORGANIC<br/>COMPOUNDS</b>        |                                                                                                                                                                                                |                                  |                                                                                                                                                                                   |                                  |
| Benzene <sup>d</sup>                         | 0.005 mg/kg <sup>d</sup>                                                                                                                                                                       | 0.008 mg/kg                      | 0.005 mg/kg <sup>d</sup>                                                                                                                                                          | 0.71 mg/kg                       |
| Toluene                                      | 0.400 mg/kg                                                                                                                                                                                    | 6.00 mg/kg                       | 0.400 mg/kg                                                                                                                                                                       | 500.00 mg/kg                     |
| Ethylbenzene                                 | 0.370 mg/kg                                                                                                                                                                                    | 10.00 mg/kg                      | 0.500 mg/kg                                                                                                                                                                       | 140.00 mg/kg                     |
| Xylenes (total)                              | 20.00 mg/kg                                                                                                                                                                                    | 700.00 mg/kg                     | 27.00 mg/kg                                                                                                                                                                       | 700.00 mg/kg                     |
| <b>POLYNUCLEAR AROMATIC<br/>HYDROCARBONS</b> |                                                                                                                                                                                                |                                  |                                                                                                                                                                                   |                                  |
| Acenaphthene                                 | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Anthracene                                   | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Benz(a)anthracene                            | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Benzo(a)pyrene                               | 0.660 mg/kg <sup>d</sup>                                                                                                                                                                       | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Benzo(b)fluoranthene                         | 0.820 mg/kg <sup>d,f</sup>                                                                                                                                                                     | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Benzo(g,h,i)perylene                         | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Benzo(k)fluoranthene                         | 1.60 mg/kg <sup>d,f</sup>                                                                                                                                                                      | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Chrysene                                     | 0.660 mg/kg <sup>d</sup>                                                                                                                                                                       | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Dibenz(a,h)anthracene                        | 1.50 mg/kg <sup>d,f</sup>                                                                                                                                                                      | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Fluoranthene                                 | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Fluorene                                     | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Indeno(1,2,3-c,d)pyrene                      | 0.660 mg/kg <sup>d</sup>                                                                                                                                                                       | N/A <sup>e</sup>                 | 0.660 mg/kg <sup>d</sup>                                                                                                                                                          | N/A <sup>e</sup>                 |
| Naphthalene                                  | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Phenanthrene                                 | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |
| Pyrene                                       | N/A <sup>e</sup>                                                                                                                                                                               | N/A <sup>e</sup>                 | N/A <sup>e</sup>                                                                                                                                                                  | N/A <sup>e</sup>                 |

- a - Based on worst-case assumptions for one-dimensional vadose zone and groundwater contaminant fate and transport models.
- b - Based on an assumed distance of 0.5 feet between contaminated soils and the water table.
- c - Based on an assumed distance of 5.0 feet between contaminated soils and the water table.
- d - Estimated Quantitation Limit. The health-based threshold level is less than the laboratory method limit of detection.
- e - Not applicable. The health-based threshold level exceeds the expected soil concentration under free product condition.
- f - In order to protect surface waters, the soil threshold level in Table B may supersede that found in Table A.
- g - In the presence of other petroleum contaminants in concentrations exceeding 1.0 mg/kg, the Estimated Quantitation Limit, and hence the soil threshold level, may be substantially greater, as approved by EPD.

Table B

Petroleum Constituents and Soil Threshold<sup>a</sup> Levels

Other UST corrective action sites where withdrawal points for public and non-public water supplies do not exist within distances defined in GUST Rule 391-3-15-.09(3):

| CONSTITUENT                          | AVERAGE OR HIGHER<br>GROUNDWATER POLLUTION<br>SUSCEPTIBILITY AREA <sup>b</sup> |                                      | LOWER<br>GROUNDWATER POLLUTION<br>SUSCEPTIBILITY AREA <sup>c</sup> |                                      |
|--------------------------------------|--------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|--------------------------------------|
|                                      | ≤500 feet to sur-<br>face water body                                           | >500 feet to sur-<br>face water body | ≤500 feet to sur-<br>face water body                               | >500 feet to sur-<br>face water body |
| VOLATILE ORGANIC<br>COMPOUNDS        |                                                                                |                                      |                                                                    |                                      |
| Benzene <sup>f</sup>                 | 0.017 mg/kg                                                                    | 0.120 mg/kg                          | 0.020 mg/kg                                                        | 11.30 mg/kg                          |
| Toluene                              | 115.00 mg/kg                                                                   | 500.00 mg/kg                         | 135.00 mg/kg                                                       | 500.00 mg/kg                         |
| Ethylbenzene                         | 18.00 mg/kg                                                                    | 140.00 mg/kg                         | 28.00 mg/kg                                                        | 140.00 mg/kg                         |
| Xylenes (total)                      | 700.00 mg/kg                                                                   | 700.00 mg/kg                         | 700.00 mg/kg                                                       | 700.00 mg/kg                         |
| POLYNUCLEAR AROMATIC<br>HYDROCARBONS |                                                                                |                                      |                                                                    |                                      |
| Acenaphthene                         | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Anthracene                           | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Benz(a)anthracene                    | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Benzo(a)pyrene                       | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Benzo(b)fluoranthene                 | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Benzo(g,h,i)perylene                 | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Benzo(k)fluoranthene                 | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Chrysene                             | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Dibenz(a,h)anthracene                | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Fluoranthene                         | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Fluorene                             | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Indeno(1,2,3-c,d)pyrene              | 0.660 mg/kg <sup>d</sup>                                                       | N/A <sup>e</sup>                     | 0.660 mg/kg <sup>d</sup>                                           | N/A <sup>e</sup>                     |
| Naphthalene                          | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Phenanthrene                         | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |
| Pyrene                               | N/A <sup>e</sup>                                                               | N/A <sup>e</sup>                     | N/A <sup>e</sup>                                                   | N/A <sup>e</sup>                     |

<sup>a</sup> based on worst-case assumptions for one-dimensional vadose zone and groundwater contaminant fate and transport models.

<sup>b</sup> based on an assumed distance of 0.5 feet between contaminated soils and the water table.

<sup>c</sup> based on an assumed distance of 5.0 feet between contaminated soils and the water table.

<sup>d</sup> Estimated Quantitation Limit. The health-based threshold level is less than the laboratory method limit of detection.

<sup>e</sup> Not applicable. The health-based threshold level exceeds the expected soil concentration under free product condition.

<sup>f</sup> In the presence of other petroleum contaminants in concentrations exceeding 1.0 mg/kg, the Estimated Quantitation Limit, and hence the soil threshold level, may be substantially greater, as approved by EPD.

TRANSMITTAL OF SAD LABORATORY REPORT(S)

TO: Commander, Savannah District  
US Army Corps of Engineers  
ATTN: CESAS-PM-H  
Mr. Brent Rose  
P.O. Box 889  
Savannah, GA 31402-0889

FROM: Director (CESAD-ET-EL)  
SAD Laboratory  
USACE  
611 South Cobb Drive  
Marietta, GA 30060-3112

PROJECT: Ft. Stewart

REQN NO: PMS-96-109  
W.O. NO: 7996

SUBJECT: Chemical Analysis

1. Enclosed is our report of analytical test results and chain of custody forms for three samples collected 11 July 1996 from Ft. Stewart.

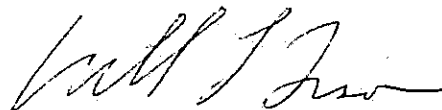
2. If you have any questions, please call Mr. Blaise Willis at 770-919-5295 or me at 770-919-3990.

SUBMITTED BY:

SIGNATURE

DATE:

WILLIAM L. TISON, P. E.  
Director, SAD Laboratory



14 Aug 1996

South Atlantic Division Laboratory  
U. S. Army Corps of Engineers  
611 South Cobb Drive  
Marietta, Georgia 30060-3112

District - SAVANNAH

Date Received - 96/07/11

Date Reported - 96/08/14 08:03:53

FT. STEWART ARMY AF

Requisition - PMS-96-109

Work Order - 7996 Job Number - 4004

Lab # Field ID  
-----  
29483 #45-T1-S1

Date Sampled  
-----  
96/07/09

Time Sampled  
-----  
17:15

Test Performed  
-----

Result  
-----

Units  
-----

Tested  
By

Test  
Date

TOTAL SOLIDS, % OF WET  
AROMATIC VOLATILE ORGANICS  
SEMIVOLATILE ORGANICS GC/MS  
TRPH

86.30

%

\*

\*

545.0

MG/KG

ECO

ECO

ECO

ECO

96/07/16

96/07/23

96/08/02

96/07/17

\*NOTE: See Attached

Sampled by District Personnel

Checked by: ATP

Signed by:

*Blaise Willis*

Blaise Willis  
Chemist

Page 1 of 3

Lab # Field ID  
-----  
184 #45-T1-GW

Date Sampled  
-----  
96/07/09

Time Sampled  
-----  
17:20

Test Performed  
-----  
AROMATIC VOLATILE ORGANICS  
SEMIVOLATILE ORGANICS GC/MS

Result Units  
-----  
\*  
\*

Tested By Test Date  
-----  
ECO 96/07/23  
ECO 96/08/02

\*NOTE: See Attached

Sampled by District Personnel

Checked by: A TP

Signed by:

*Blaise Willis for*

Blaise Willis  
Chemist

Page 2 of 3

Lab #    Field ID  
-----  
22485    TRIP BK #9

Date Sampled                      Time Sampled  
-----  
                 96/07/09                      00:00

Test Performed  
-----  
AROMATIC VOLATILE ORGANICS

| Result | Units | Tested By | Test Date |
|--------|-------|-----------|-----------|
| -----  | ----- | -----     | -----     |
| *      |       | ECO       | 96/07/23  |

\*NOTE: See Attached

Sampled by District Personnel

Checked by: ATP

Signed by:

*Blaise Willis* for

Blaise Willis  
Chemist

Set 3 of 3

# ANDERSON COLUMBIA

ENVIRONMENTAL, INC.  
CHAIN OF CUSTODY RECORD

Page 7 of 1

Project No.

AP101

Project Name

FT. STEINART

Suppliers (Signature)

*James J. Kennedy*

Sample Number

Date

Time

g

Comp.

Sample Location

No. of Containers

Preservative

Remarks:

8000  
8270  
9073

29483  
29484  
29485  
29486  
29487  
29488  
29489  
29490  
29491  
29492  
29493  
29494  
29495  
29496  
29497  
29498  
29499  
29500

These samples were collected on 7-2-96.

Soil & 21 parameters analyzed

Sample

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Temp. 11.1 2-2-96

Relinquished by:

*James J. Kennedy*

Date / Time

7-2-96

Received by:

*James J. Kennedy*

Relinquished by:

*James J. Kennedy*

Date / Time

7/1/96

Received by:

*James J. Kennedy*

Remarks:

Relinquished by:

Date / Time

Received by:

Relinquished by:

Date / Time

Received by:

Remarks:

temp 7c

SOUTH ATLANTIC DIVISION LABORATORY  
SAMPLE RECEIVING AND COOLER RECEIPT DATA SHEET  
CHEMICAL SECTION - Sample Log-In

DATE: 7/11/96

Number of coolers 1 Returned cooler(s) to: (D)

PROJECT: Fr. Stewart W.O.# \_\_\_\_\_ JOB# 4004

Coolers(s) opened by (print name) Robert C. McDonald (sign) [Signature]

1. Did cooler come with shipping slip? yes ☒ yes ☐ no  
If yes, enter Tracking Number here 128 226 565 5
2. Were custody seals on out side of cooler?  
How many? 4 Date on seal(s) 7/10/96 Name on seal(s) L.K. yes ☒ yes ☐ no
3. Were custody seals unbroken upon receipt? yes ☒ yes ☐ no
4. Did you screen sample(s) for "Radioactivity"? yes ☒ yes ☐ no
5. Were custody papers filled out properly? (ink, signed, etc..) yes ☒ yes ☐ no
6. Temperature of sample(s) upon receipt: 7°C
7. Describe cooler packing: Styrofoam chips
8. Did all sample containers arrive unbroken? yes ☒ yes ☐ no
9. Were the sample containers sealed in separate plastic bags? yes ☒ yes ☐ no
10. Were labels on containers in good condition and agree with Custody paper? yes ☒ yes ☐ no
11. Were correct containers used for the test(s) indicated? yes ☒ yes ☐ no
12. Were correct preservatives added to sample(s)? ☐ yes ☐ no ☒ N/A
13. Was a sufficient amount of sample sent for test? yes ☒ yes ☐ no
14. Were bubbles absent in Volatile sample(s)? ☐ yes ☒ no ☐ N/A  
If no, list field ID# 29485 → TRIP Bx #9
15. Numbers of days from sample date, samples received in Lab 2 days
16. Number of Samples: 3 Sample Type: ☐ soil ☒ water ☐ other \_\_\_\_\_
- SAMPLE ANALYSIS PERFORMED BY: EA 343 TAT Regular
- COMMENTS: \_\_\_\_\_

17. Did you sign custody papers in the appropriate place?

yes ☒ yes ☐ no

LAB NUMBER(S): 29483-85

SIGNATURE: [Signature]

1412 Oakbrook Drive  
Suite 105  
Dorcross, Georgia 30093  
Phone (770) 368-0636  
Fax (770) 368-0806

USACE-SAD  
Blaisdell Willis  
611 South Cobb Drive  
Marietta, GA 30060  
P: 919-5270 F: 919-4977

Client Code 29112130  
Ledger Number 107920  
P.O. Number  
Date Received 07/12/96  
Time Received 10:31  
Reporting Date 08/13/96

Lab Sample ID AB35819 Client Site # 29483  
Project # 4004 Client Sample # #45-T1-S1  
Project Name FT. STEWART  
Sampling Date/Time 07/09/96 17:15

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** Results are reported on a dry weight basis. The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes.

**SEMI (GC/MS) SOIL**

Prep Date 08/01/96

Batch 0802960002

|       |                              |         |                  |      |       |     |          |     |          |
|-------|------------------------------|---------|------------------|------|-------|-----|----------|-----|----------|
| 8270B | PHENOL                       | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 108-95-2 | GOR | 08/02/96 |
| 8270B | BIS(2-CHLOROETHYL) ETHER     | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 111-44-4 | GOR | 08/02/96 |
| 8270B | 2-CHLOROPHENOL               | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 95-57-8  | GOR | 08/02/96 |
| 8270B | 1,3-DICHLOROBENZENE          | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 541-73-1 | GOR | 08/02/96 |
| 8270B | 1,4-DICHLOROBENZENE          | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 106-46-7 | GOR | 08/02/96 |
| 8270B | 1,2-DICHLOROBENZENE          | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 95-50-1  | GOR | 08/02/96 |
| 8270B | BIS(2-CHLOROISOPROPYL) ETHER | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 108-60-1 | GOR | 08/02/96 |
| 8270B | 2-METHYLPHENOL               | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 95-48-7  | GOR | 08/02/96 |
| 8270B | 4-METHYLPHENOL               | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 106-44-5 | GOR | 08/02/96 |
| 8270B | N-NITROSODI-N-PROPYLAMINE    | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 621-64-7 | GOR | 08/02/96 |
| 8270B | HEXACHLOROETHANE             | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 67-72-1  | GOR | 08/02/96 |
| 8270B | NITROBENZENE                 | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 98-95-3  | GOR | 08/02/96 |
| 8270B | ISOPHORONE                   | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 78-59-1  | GOR | 08/02/96 |
| 8270B | 2-NITROPHENOL                | \$06013 | <i>Below MDL</i> | 2547 | ug/Kg | 3.3 | 88-75-5  | GOR | 08/02/96 |
| 8270B | 2,4-DIMETHYLPHENOL           | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 105-67-9 | GOR | 08/02/96 |
| 8270B | BIS(2-CHLOROETHOXY)METHANE   | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 111-91-1 | GOR | 08/02/96 |
| 8270B | 2,4-DICHLOROPHENOL           | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 120-83-2 | GOR | 08/02/96 |
| 8270B | 1,2,4-TRICHLOROBENZENE       | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 120-82-1 | GOR | 08/02/96 |
| 8270B | NAPHTHALENE                  | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 91-20-3  | GOR | 08/02/96 |
| 8270B | 4-CHLOROANILINE              | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 106-47-8 | GOR | 08/02/96 |
| 8270B | HEXACHLOROBUTADIENE          | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 87-68-3  | GOR | 08/02/96 |
| 8270B | 4-CHLORO-3-METHYLPHENOL      | \$06013 | <i>Below MDL</i> | 2547 | ug/Kg | 3.3 | 59-50-7  | GOR | 08/02/96 |
| 8270B | 2-METHYLNAPHTHALENE          | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 91-57-6  | GOR | 08/02/96 |
| 8270B | HEXACHLOROCYCLOPENTADIENE    | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 77-47-4  | GOR | 08/02/96 |
| 8270B | 2,4,6-TRICHLOROPHENOL        | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 88-06-2  | GOR | 08/02/96 |
| 8270B | 2,4,5-TRICHLOROPHENOL        | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 95-95-4  | GOR | 08/02/96 |
| 8270B | 2-CHLORONAPHTHALENE          | \$06013 | <i>Below MDL</i> | 1273 | ug/Kg | 3.3 | 91-58-7  | GOR | 08/02/96 |

Lab Sample ID AB35819  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time 07/09/96 17:15

Client Site # 29483  
 Client Sample # #45-T1-S1

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** Results are reported on a dry weight basis. The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes.

SEMI (GC/MS) SOIL      Prep Date 08/01/96      Batch 0802960002

|       |                             |         |           |      |       |     |            |     |          |
|-------|-----------------------------|---------|-----------|------|-------|-----|------------|-----|----------|
| 8270B | 2-NITROANILINE              | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 88-74-4    | GOR | 08/02/96 |
| 8270B | DIMETHYL PHTHALATE          | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 131-11-3   | GOR | 08/02/96 |
| 8270B | ACENAPHTHYLENE              | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 208-96-8   | GOR | 08/02/96 |
| 8270B | 2,6-DINITROTOLUENE          | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 606-20-2   | GOR | 08/02/96 |
| 8270B | 3-NITROANILINE              | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 99-09-2    | GOR | 08/02/96 |
| 8270B | ACENAPHTHENE                | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 83-32-9    | GOR | 08/02/96 |
| 8270B | 2,4-DINITROPHENOL           | \$06013 | Below MDL | 6367 | ug/Kg | 3.3 | 51-28-5    | GOR | 08/02/96 |
| 8270B | 4-NITROPHENOL               | \$06013 | Below MDL | 6367 | ug/Kg | 3.3 | 100-02-7   | GOR | 08/02/96 |
| 8270B | DIBENZOFURAN                | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 132-64-9   | GOR | 08/02/96 |
| 8270B | 2,4-DINITROTOLUENE          | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 121-14-2   | GOR | 08/02/96 |
| 8270B | DIETHYL PHTHALATE           | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 84-66-2    | GOR | 08/02/96 |
| 8270B | 4-CHLOROPHENYL PHENYL ETHER | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 7005-72-3  | GOR | 08/02/96 |
| 8270B | FLUORENE                    | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 86-73-7    | GOR | 08/02/96 |
| 8270B | 4-NITROANILINE              | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 100-01-6   | GOR | 08/02/96 |
| 8270B | 2-METHYL-4,6-DINITROPHENOL  | \$06013 | Below MDL | 6367 | ug/Kg | 3.3 | 534-52-1   | GOR | 08/02/96 |
| 8270B | N-NITROSODIPHENYLAMINE      | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 86-30-6    | GOR | 08/02/96 |
| 8270B | 4-BROMOPHENYL PHENYL ETHER  | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 101-55-3   | GOR | 08/02/96 |
| 8270B | HEXACHLOROBENZENE           | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 118-74-1   | GOR | 08/02/96 |
| 8270B | PENTACHLOROPHENOL           | \$06013 | Below MDL | 6367 | ug/Kg | 3.3 | 87-86-5    | GOR | 08/02/96 |
| 8270B | PHENANTHRENE                | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 85-01-8    | GOR | 08/02/96 |
| 8270B | ANTHRACENE                  | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 120-12-7   | GOR | 08/02/96 |
| 8270B | DI-N-BUTYL PHTHALATE        | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 84-74-2    | GOR | 08/02/96 |
| 8270B | FLUORANTHENE                | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 206-44-0   | GOR | 08/02/96 |
| 8270B | PYRENE                      | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 129-00-0   | GOR | 08/02/96 |
| 8270B | BUTYL BENZYL PHTHALATE      | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 85-68-7    | GOR | 08/02/96 |
| 8270B | 3,3'-DICHLOROBENZIDINE      | \$06013 | Below MDL | 2547 | ug/Kg | 3.3 | 91-94-1    | GOR | 08/02/96 |
| 8270B | BENZO(A)ANTHRACENE          | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 56-55-3    | GOR | 08/02/96 |
| 8270B | BIS(2-ETHYLHEXYL) PHTHALATE | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 117-81-7   | GOR | 08/02/96 |
| 8270B | CHRYSENE                    | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 218-01-9   | GOR | 08/02/96 |
| 8270B | DI-N-OCTYL PHTHALATE        | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 117-84-0   | GOR | 08/02/96 |
| 8270B | BENZO(B)FLUORANTHENE        | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 205-99-2   | GOR | 08/02/96 |
| 8270B | BENZO(K)FLUORANTHENE        | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 207-08-9   | GOR | 08/02/96 |
| 8270B | BENZO(A)PYRENE              | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 50-32-8    | GOR | 08/02/96 |
| 8270B | INDENO(1,2,3-CD)PYRENE      | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 193-39-5   | GOR | 08/02/96 |
| 8270B | DIBENZO(A,H)ANTHRACENE      | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 53-70-3    | GOR | 08/02/96 |
| 8270B | BENZO(G,H,I)PERYLENE        | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 191-24-2   | GOR | 08/02/96 |
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06013 | 56        | %    | REC   | 1.0 | 367-12-4   | GOR | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06013 | 46        | %    | REC   | 1.0 | 13127-88-3 | GOR | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06013 | 67        | %    | REC   | 1.0 | 4165-60-0  | GOR | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06013 | 70        | %    | REC   | 1.0 | 321-60-8   | GOR | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06013 | 91        | %    | REC   | 1.0 | 118-79-6   | GOR | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06013 | 103       | %    | REC   | 1.0 | 1718-51-0  | GOR | 08/02/96 |
| 8270B | CARBAZOLE                   | \$06013 | Below MDL | 1273 | ug/Kg | 3.3 | 86-74-8    | GOR | 08/02/96 |

## BTEX (GC) SOIL

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |           |           |     |           |     |          |
|-------|-------------------------------|---------|-----------|-----------|-----|-----------|-----|----------|
| 8020A | BENZENE                       | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 71-43-2   | DTA | 07/23/96 |
| 8020A | TOLUENE                       | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 108-88-3  | DTA | 07/23/96 |
| 8020A | ETHYLBENZENE                  | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 100-41-4  | DTA | 07/23/96 |
| 8020A | XYLENES (TOTAL)               | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 1330-20-7 | DTA | 07/23/96 |
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08006 | 77        | % REC     | 1.0 | 98-08-8   | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08006 | 151       | % REC     | 1.0 | 460-00-4  | DTA | 07/23/96 |
| 8020A | CHLOROBENZENE                 | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 108-90-7  | DTA | 07/23/96 |
| 8020A | 1,2-DICHLOROBENZENE           | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 95-50-1   | DTA | 07/23/96 |
| 8020A | 1,3-DICHLOROBENZENE           | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 541-73-1  | DTA | 07/23/96 |
| 8020A | 1,4-DICHLOROBENZENE           | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 106-46-7  | DTA | 07/23/96 |
| 8020A | TERT-METHYLBUTYL ETHER        | \$08006 | Below MDL | 1.2 ug/Kg | 1.0 | 1634-04-4 | DTA | 07/23/96 |

Prep Date 07/17/96

Batch 071796B

|       |                 |       |     |            |     |  |    |          |
|-------|-----------------|-------|-----|------------|-----|--|----|----------|
| 9071A | TRPH 9071A SOIL | 08041 | 545 | 11.6 mg/Kg | 1.0 |  | ML | 07/17/96 |
|-------|-----------------|-------|-----|------------|-----|--|----|----------|

Prep Date 07/16/96

Batch 071696

|       |                           |       |      |       |     |  |    |          |
|-------|---------------------------|-------|------|-------|-----|--|----|----------|
| 160.3 | % TOTAL SOLIDS SOIL (N/C) | 09099 | 86.3 | 0.1 % | 1.0 |  | MN | 07/16/96 |
|-------|---------------------------|-------|------|-------|-----|--|----|----------|

Lab Sample ID AB35820

Client Site # 29484

Project # 4004

Client Sample # #45-T1-GW

Project Name FT. STEWART

Sampling Date/Time 07/09/96 17:20

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

Sample Comment Results are reported on a wet weight basis. The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes.

## SEMI (GC/MS) WATER

Prep Date 08/01/96

Batch 0801960004

|       |                              |         |           |          |      |          |    |          |
|-------|------------------------------|---------|-----------|----------|------|----------|----|----------|
| 8270B | PHENOL                       | \$06113 | Below MDL | 100 ug/L | 10.0 | 108-95-2 | GC | 08/02/96 |
| 8270B | BIS(2-CHLOROETHYL) ETHER     | \$06113 | Below MDL | 100 ug/L | 10.0 | 111-44-4 | GC | 08/02/96 |
| 8270B | 2-CHLOROPHENOL               | \$06113 | Below MDL | 100 ug/L | 10.0 | 95-57-8  | GC | 08/02/96 |
| 8270B | 1,3-DICHLOROBENZENE          | \$06113 | Below MDL | 100 ug/L | 10.0 | 541-73-1 | GC | 08/02/96 |
| 8270B | 1,4-DICHLOROBENZENE          | \$06113 | Below MDL | 100 ug/L | 10.0 | 106-46-7 | GC | 08/02/96 |
| 8270B | 1,2-DICHLOROBENZENE          | \$06113 | Below MDL | 100 ug/L | 10.0 | 95-50-1  | GC | 08/02/96 |
| 8270B | BIS(2-CHLOROISOPROPYL) ETHER | \$06113 | Below MDL | 100 ug/L | 10.0 | 108-60-1 | GC | 08/02/96 |
| 8270B | 2-METHYLPHENOL               | \$06113 | Below MDL | 100 ug/L | 10.0 | 95-48-7  | GC | 08/02/96 |
| 8270B | 4-METHYLPHENOL               | \$06113 | Below MDL | 100 ug/L | 10.0 | 106-44-5 | GC | 08/02/96 |
| 8270B | N-NITROSODI-N-PROPYLAMINE    | \$06113 | Below MDL | 100 ug/L | 10.0 | 621-64-7 | GC | 08/02/96 |
| 8270B | HEXACHLOROETHANE             | \$06113 | Below MDL | 100 ug/L | 10.0 | 67-72-1  | GC | 08/02/96 |
| 8270B | NITROBENZENE                 | \$06113 | Below MDL | 100 ug/L | 10.0 | 98-95-3  | GC | 08/02/96 |
| 8270B | ISOPHORONE                   | \$06113 | Below MDL | 100 ug/L | 10.0 | 78-59-1  | GC | 08/02/96 |
| 8270B | 2-NITROPHENOL                | \$06113 | Below MDL | 200 ug/L | 10.0 | 88-75-5  | GC | 08/02/96 |
| 8270B | 2,4-DIMETHYLPHENOL           | \$06113 | Below MDL | 100 ug/L | 10.0 | 105-67-9 | GC | 08/02/96 |
| 8270B | BIS(2-CHLOROETHOXY)METHANE   | \$06113 | Below MDL | 100 ug/L | 10.0 | 111-91-1 | GC | 08/02/96 |
| 8270B | 2,4-DICHLOROPHENOL           | \$06113 | Below MDL | 100 ug/L | 10.0 | 120-83-2 | GC | 08/02/96 |
| 8270B | 1,2,4-TRICHLOROBENZENE       | \$06113 | Below MDL | 100 ug/L | 10.0 | 120-82-1 | GC | 08/02/96 |
| 8270B | NAPHTHALENE                  | \$06113 | 405       | 100 ug/L | 10.0 | 91-20-3  | GC | 08/02/96 |
| 8270B | 4-CHLOROANILINE              | \$06113 | Below MDL | 100 ug/L | 10.0 | 106-47-8 | GC | 08/02/96 |
| 8270B | HEXACHLOROBUTADIENE          | \$06113 | Below MDL | 100 ug/L | 10.0 | 87-68-3  | GC | 08/02/96 |
| 8270B | 4-CHLORO-3-METHYLPHENOL      | \$06113 | Below MDL | 100 ug/L | 10.0 | 59-50-7  | GC | 08/02/96 |
| 8270B | 2-METHYLNAPHTHALENE          | \$06113 | 1020      | 100 ug/L | 10.0 | 91-57-6  | GC | 08/02/96 |
| 8270B | HEXACHLOROCYCLOPENTADIENE    | \$06113 | Below MDL | 100 ug/L | 10.0 | 77-47-4  | GC | 08/02/96 |

Lab Sample ID AB35820  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time 07/09/96 17:20

Client Site # 29484  
 Client Sample # #45-T1-GW

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** Results are reported on a wet weight basis. The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes.

| SEMI (GC/MS) WATER |                             |         |           | Prep Date 08/01/96 |      | Batch 0801960004 |            |    |          |
|--------------------|-----------------------------|---------|-----------|--------------------|------|------------------|------------|----|----------|
| 8270B              | 2,4,6-TRICHLOROPHENOL       | \$06113 | Below MDL | 100                | ug/L | 10.0             | 88-06-2    | GC | 08/02/96 |
| 8270B              | 2,4,5-TRICHLOROPHENOL       | \$06113 | Below MDL | 100                | ug/L | 10.0             | 95-95-4    | GC | 08/02/96 |
| 8270B              | 2-CHLORONAPHTHALENE         | \$06113 | Below MDL | 100                | ug/L | 10.0             | 91-58-7    | GC | 08/02/96 |
| 8270B              | 2-NITROANILINE              | \$06113 | Below MDL | 100                | ug/L | 10.0             | 88-74-4    | GC | 08/02/96 |
| 8270B              | DIMETHYL PHTHALATE          | \$06113 | Below MDL | 100                | ug/L | 10.0             | 131-11-3   | GC | 08/02/96 |
| 8270B              | ACENAPHTHYLENE              | \$06113 | Below MDL | 100                | ug/L | 10.0             | 208-96-8   | GC | 08/02/96 |
| 8270B              | 2,6-DINITROTOLUENE          | \$06113 | Below MDL | 100                | ug/L | 10.0             | 606-20-2   | GC | 08/02/96 |
| 8270B              | 3-NITROANILINE              | \$06113 | Below MDL | 100                | ug/L | 10.0             | 99-09-2    | GC | 08/02/96 |
| 8270B              | ACENAPHTHENE                | \$06113 | Below MDL | 100                | ug/L | 10.0             | 83-32-9    | GC | 08/02/96 |
| 8270B              | 2,4-DINITROPHENOL           | \$06113 | Below MDL | 500                | ug/L | 10.0             | 51-28-5    | GC | 08/02/96 |
| 8270B              | 4-NITROPHENOL               | \$06113 | Below MDL | 500                | ug/L | 10.0             | 100-02-7   | GC | 08/02/96 |
| 8270B              | DIBENZOFURAN                | \$06113 | Below MDL | 100                | ug/L | 10.0             | 132-64-9   | GC | 08/02/96 |
| 8270B              | 2,4-DINITROTOLUENE          | \$06113 | Below MDL | 100                | ug/L | 10.0             | 121-14-2   | GC | 08/02/96 |
| 8270B              | DIETHYL PHTHALATE           | \$06113 | Below MDL | 100                | ug/L | 10.0             | 84-66-2    | GC | 08/02/96 |
| 8270B              | 4-CHLOROPHENYL PHENYL ETHER | \$06113 | Below MDL | 100                | ug/L | 10.0             | 7005-72-3  | GC | 08/02/96 |
| 8270B              | FLUORENE                    | \$06113 | Below MDL | 100                | ug/L | 10.0             | 86-73-7    | GC | 08/02/96 |
| 8270B              | 4-NITROANILINE              | \$06113 | Below MDL | 100                | ug/L | 10.0             | 100-01-6   | GC | 08/02/96 |
| 8270B              | 2-METHYL-4,6-DINITROPHENOL  | \$06113 | Below MDL | 500                | ug/L | 10.0             | 534-52-1   | GC | 08/02/96 |
| 8270B              | N-NITROSODIPHENYLAMINE      | \$06113 | Below MDL | 100                | ug/L | 10.0             | 86-30-6    | GC | 08/02/96 |
| 8270B              | 4-BROMOPHENYL PHENYL ETHER  | \$06113 | Below MDL | 100                | ug/L | 10.0             | 101-55-3   | GC | 08/02/96 |
| 8270B              | HEXACHLOROBENZENE           | \$06113 | Below MDL | 100                | ug/L | 10.0             | 118-74-1   | GC | 08/02/96 |
| 8270B              | PENTACHLOROPHENOL           | \$06113 | Below MDL | 500                | ug/L | 10.0             | 87-86-5    | GC | 08/02/96 |
| 8270B              | PHENANTHRENE                | \$06113 | 143       | 100                | ug/L | 10.0             | 85-01-8    | GC | 08/02/96 |
| 8270B              | ANTHRACENE                  | \$06113 | Below MDL | 100                | ug/L | 10.0             | 120-12-7   | GC | 08/02/96 |
| 8270B              | DI-N-BUTYL PHTHALATE        | \$06113 | Below MDL | 100                | ug/L | 10.0             | 84-74-2    | GC | 08/02/96 |
| 8270B              | FLUORANTHENE                | \$06113 | Below MDL | 100                | ug/L | 10.0             | 206-44-0   | GC | 08/02/96 |
| 8270B              | PYRENE                      | \$06113 | 102       | 100                | ug/L | 10.0             | 129-00-0   | GC | 08/02/96 |
| 8270B              | BUTYL BENZYL PHTHALATE      | \$06113 | Below MDL | 100                | ug/L | 10.0             | 85-68-7    | GC | 08/02/96 |
| 8270B              | 3,3'-DICHLOROBENZIDINE      | \$06113 | Below MDL | 100                | ug/L | 10.0             | 91-94-1    | GC | 08/02/96 |
| 8270B              | BENZO(A)ANTHRACENE          | \$06113 | Below MDL | 100                | ug/L | 10.0             | 56-55-3    | GC | 08/02/96 |
| 8270B              | BIS(2-ETHYLHEXYL) PHTHALATE | \$06113 | Below MDL | 200                | ug/L | 10.0             | 117-81-7   | GC | 08/02/96 |
| 8270B              | CHRYSENE                    | \$06113 | Below MDL | 100                | ug/L | 10.0             | 218-01-9   | GC | 08/02/96 |
| 8270B              | DI-N-OCTYL PHTHALATE        | \$06113 | Below MDL | 100                | ug/L | 10.0             | 117-84-0   | GC | 08/02/96 |
| 8270B              | BENZO(B)FLUORANTHENE        | \$06113 | Below MDL | 100                | ug/L | 10.0             | 205-99-2   | GC | 08/02/96 |
| 8270B              | BENZO(K)FLUORANTHENE        | \$06113 | Below MDL | 100                | ug/L | 10.0             | 207-08-9   | GC | 08/02/96 |
| 8270B              | BENZO(A)PYRENE              | \$06113 | Below MDL | 100                | ug/L | 10.0             | 50-32-8    | GC | 08/02/96 |
| 8270B              | INDENO(1,2,3-CD)PYRENE      | \$06113 | Below MDL | 100                | ug/L | 10.0             | 193-39-5   | GC | 08/02/96 |
| 8270B              | DIBENZO(A,H)ANTHRACENE      | \$06113 | Below MDL | 100                | ug/L | 10.0             | 53-70-3    | GC | 08/02/96 |
| 8270B              | BENZO(G,H,I)PERYLENE        | \$06113 | Below MDL | 100                | ug/L | 10.0             | 191-24-2   | GC | 08/02/96 |
| 8270B              | 2-FLUOROPHENOL (SURR)       | \$06113 | 50        | %                  | REC  | 1.0              | 367-12-4   | GC | 08/02/96 |
| 8270B              | PHENOL-D5 (SURR)            | \$06113 | 26        | %                  | REC  | 1.0              | 13127-88-3 | GC | 08/02/96 |
| 8270B              | NITROBENZENE-D5 (SURR)      | \$06113 | 101       | %                  | REC  | 1.0              | 4165-60-0  | GC | 08/02/96 |
| 8270B              | 2-FLUOROBIPHENYL (SURR)     | \$06113 | 80        | %                  | REC  | 1.0              | 321-60-8   | GC | 08/02/96 |

Lab Sample ID AB35820  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time 07/09/96 17:20

Client Site # 29484  
 Client Sample # #45-T1-GW

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** Results are reported on a wet weight basis. The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes.

| SEMI (GC/MS) WATER |                               |         |           | Prep Date 08/01/96 |      | Batch 0801960004 |           |     |          |
|--------------------|-------------------------------|---------|-----------|--------------------|------|------------------|-----------|-----|----------|
| 8270B              | 2,4,6-TRIBROMOPHENOL (SURR)   | \$06113 | 100       | %                  | REC  | 1.0              | 118-79-6  | GC  | 08/02/96 |
| 8270B              | TERPHENYL-D14 (SURR)          | \$06113 | 107       | %                  | REC  | 1.0              | 1718-51-0 | GC  | 08/02/96 |
| 8270B              | CARBAZOLE                     | \$06113 | Below MDL | 100                | ug/L | 10.0             | 86-74-8   | GC  | 08/02/96 |
| BTEX (GC) WATER    |                               |         |           | Prep Date 07/23/96 |      | Batch 072396BW   |           |     |          |
| 8020A              | ETHYLBENZENE                  | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 100-41-4  | DTA | 07/23/96 |
| 8020A              | XYLENES (TOTAL)               | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 1330-20-7 | DTA | 07/23/96 |
| 8020A              | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08106 | 82        | %                  | REC  | 1.0              | 98-08-8   | DTA | 07/23/96 |
| 8020A              | 4-BROMOFLUOROBENZENE (SURR)   | \$08106 | 81        | %                  | REC  | 1.0              | 460-00-4  | DTA | 07/23/96 |
| 8020A              | CHLOROBENZENE                 | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 108-90-7  | DTA | 07/23/96 |
| 8020A              | 1,2-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 95-50-1   | DTA | 07/23/96 |
| 8020A              | 1,3-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 541-73-1  | DTA | 07/23/96 |
| 8020A              | 1,4-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 106-46-7  | DTA | 07/23/96 |
| 8020A              | TERT-METHYLBUTYL ETHER        | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 1634-04-4 | DTA | 07/23/96 |
| 8020A              | BENZENE                       | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 71-43-2   | DTA | 07/23/96 |
| 8020A              | TOLUENE                       | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 108-88-8  | DTA | 07/23/96 |

Lab Sample ID AB35821  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time 07/09/96 :

Client Site # 29485  
 Client Sample # TRIP BK #9

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

| BTEX (GC) WATER |                               |         |           | Prep Date 07/23/96 |      | Batch 072396BW |           |     |          |
|-----------------|-------------------------------|---------|-----------|--------------------|------|----------------|-----------|-----|----------|
| 8020A           | BENZENE                       | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 71-43-2   | DTA | 07/23/96 |
| 8020A           | TOLUENE                       | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 108-88-8  | DTA | 07/23/96 |
| 8020A           | ETHYLBENZENE                  | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 100-41-4  | DTA | 07/23/96 |
| 8020A           | XYLENES (TOTAL)               | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 1330-20-7 | DTA | 07/23/96 |
| 8020A           | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08106 | 91        | %                  | REC  | 1.0            | 98-08-8   | DTA | 07/23/96 |
| 8020A           | 4-BROMOFLUOROBENZENE (SURR)   | \$08106 | 85        | %                  | REC  | 1.0            | 460-00-4  | DTA | 07/23/96 |
| 8020A           | CHLOROBENZENE                 | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 108-90-7  | DTA | 07/23/96 |
| 8020A           | 1,2-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 95-50-1   | DTA | 07/23/96 |
| 8020A           | 1,3-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 541-73-1  | DTA | 07/23/96 |
| 8020A           | 1,4-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 106-46-7  | DTA | 07/23/96 |
| 8020A           | TERT-METHYLBUTYL ETHER        | \$08106 | Below MDL | 1.0                | ug/L | 1.0            | 1634-04-4 | DTA | 07/23/96 |

Lab Sample ID AB35822  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time / / :

Client Site #  
 Client Sample # METHOD BLANK SOIL

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** The holding time for Semi-Volatiles has passed; therefore the results may not be valid for compliance monitoring purposes.

SEMI (GC/MS) SOIL \

Prep Date 08/01/96

Batch 0802960002

|       |                              |         |                  |      |       |     |           |    |          |
|-------|------------------------------|---------|------------------|------|-------|-----|-----------|----|----------|
| 8270B | PHENOL                       | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 108-95-2  | GC | 08/02/96 |
| 8270B | BIS(2-CHLOROETHYL) ETHER     | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 111-44-4  | GC | 08/02/96 |
| 8270B | 2-CHLOROPHENOL               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 95-57-8   | GC | 08/02/96 |
| 8270B | 1,3-DICHLOROBENZENE          | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 541-73-1  | GC | 08/02/96 |
| 8270B | 1,4-DICHLOROBENZENE          | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 106-46-7  | GC | 08/02/96 |
| 8270B | 1,2-DICHLOROBENZENE          | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 95-50-1   | GC | 08/02/96 |
| 8270B | BIS(2-CHLOROISOPROPYL) ETHER | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 108-60-1  | GC | 08/02/96 |
| 8270B | 2-METHYLPHENOL               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 95-48-7   | GC | 08/02/96 |
| 8270B | 4-METHYLPHENOL               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 106-44-5  | GC | 08/02/96 |
| 8270B | N-NITROSODI-N-PROPYLAMINE    | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 621-64-7  | GC | 08/02/96 |
| 8270B | HEXACHLOROETHANE             | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 67-72-1   | GC | 08/02/96 |
| 8270B | NITROBENZENE                 | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 98-95-3   | GC | 08/02/96 |
| 8270B | ISOPHORONE                   | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 78-59-1   | GC | 08/02/96 |
| 8270B | 2-NITROPHENOL                | \$06013 | <i>Below MDL</i> | 660  | ug/Kg | 1.0 | 88-75-5   | GC | 08/02/96 |
| 8270B | 2,4-DIMETHYLPHENOL           | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 105-67-9  | GC | 08/02/96 |
| 8270B | BIS(2-CHLOROETHOXY)METHANE   | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 111-91-1  | GC | 08/02/96 |
| 8270B | 2,4-DICHLOROPHENOL           | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 120-83-2  | GC | 08/02/96 |
| 8270B | 1,2,4-TRICHLOROBENZENE       | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 120-82-1  | GC | 08/02/96 |
| 8270B | NAPHTHALENE                  | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 91-20-3   | GC | 08/02/96 |
| 8270B | 4-CHLOROANILINE              | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 106-47-8  | GC | 08/02/96 |
| 8270B | HEXACHLOROBUTADIENE          | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 87-68-3   | GC | 08/02/96 |
| 8270B | 4-CHLORO-3-METHYLPHENOL      | \$06013 | <i>Below MDL</i> | 660  | ug/Kg | 1.0 | 59-50-7   | GC | 08/02/96 |
| 8270B | 2-METHYLNAPHTHALENE          | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 91-57-6   | GC | 08/02/96 |
| 8270B | HEXACHLOROCYCLOPENTADIENE    | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 77-47-4   | GC | 08/02/96 |
| 8270B | 2,4,6-TRICHLOROPHENOL        | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 88-06-2   | GC | 08/02/96 |
| 8270B | 2,4,5-TRICHLOROPHENOL        | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 95-95-4   | GC | 08/02/96 |
| 8270B | 2-CHLORONAPHTHALENE          | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 91-58-7   | GC | 08/02/96 |
| 8270B | 2-NITROANILINE               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 88-74-4   | GC | 08/02/96 |
| 8270B | DIMETHYL PHTHALATE           | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 131-11-3  | GC | 08/02/96 |
| 8270B | ACENAPHTHYLENE               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 208-96-8  | GC | 08/02/96 |
| 8270B | 2,6-DINITROTOLUENE           | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 606-20-2  | GC | 08/02/96 |
| 8270B | 3-NITROANILINE               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 99-09-2   | GC | 08/02/96 |
| 8270B | ACENAPHTHENE                 | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 83-32-9   | GC | 08/02/96 |
| 8270B | 2,4-DINITROPHENOL            | \$06013 | <i>Below MDL</i> | 1650 | ug/Kg | 1.0 | 51-28-5   | GC | 08/02/96 |
| 8270B | 4-NITROPHENOL                | \$06013 | <i>Below MDL</i> | 1650 | ug/Kg | 1.0 | 100-02-7  | GC | 08/02/96 |
| 8270B | DIBENZOFURAN                 | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 132-64-9  | GC | 08/02/96 |
| 8270B | 2,4-DINITROTOLUENE           | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 121-14-2  | GC | 08/02/96 |
| 8270B | DIETHYL PHTHALATE            | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 84-66-2   | GC | 08/02/96 |
| 8270B | 4-CHLOROPHENYL PHENYL ETHER  | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 7005-72-3 | GC | 08/02/96 |
| 8270B | FLUORENE                     | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 86-73-7   | GC | 08/02/96 |
| 8270B | 4-NITROANILINE               | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 100-01-6  | GC | 08/02/96 |
| 8270B | 2-METHYL-4,6-DINITROPHENOL   | \$06013 | <i>Below MDL</i> | 1650 | ug/Kg | 1.0 | 534-52-1  | GC | 08/02/96 |
| 8270B | N-NITROSODIPHENYLAMINE       | \$06013 | <i>Below MDL</i> | 330  | ug/Kg | 1.0 | 86-30-6   | GC | 08/02/96 |

Lab Sample ID AB35822  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time / / :

Client Site #  
 Client Sample # METHOD BLANK SOIL

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** The holding time for Semi-Volatiles has passed; therefore the results may not be valid for compliance monitoring purposes.

SEMI (GC/MS) SOIL ( ) Prep Date 08/01/96 Batch 0802960002

|       |                             |         |           |            |     |            |    |          |
|-------|-----------------------------|---------|-----------|------------|-----|------------|----|----------|
| 8270B | 4-BROMOPHENYL PHENYL ETHER  | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 101-55-3   | GC | 08/02/96 |
| 8270B | HEXACHLOROBENZENE           | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 118-74-1   | GC | 08/02/96 |
| 8270B | PENTACHLOROPHENOL           | \$06013 | Below MDL | 1650 ug/Kg | 1.0 | 87-86-5    | GC | 08/02/96 |
| 8270B | PHENANTHRENE                | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 85-01-8    | GC | 08/02/96 |
| 8270B | ANTHRACENE                  | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 120-12-7   | GC | 08/02/96 |
| 8270B | DI-N-BUTYL PHTHALATE        | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 84-74-2    | GC | 08/02/96 |
| 8270B | FLUORANTHENE                | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 206-44-0   | GC | 08/02/96 |
| 8270B | PYRENE                      | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 129-00-0   | GC | 08/02/96 |
| 8270B | BUTYL BENZYL PHTHALATE      | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 85-68-7    | GC | 08/02/96 |
| 8270B | 3,3'-DICHLOROBENZIDINE      | \$06013 | Below MDL | 660 ug/Kg  | 1.0 | 91-94-1    | GC | 08/02/96 |
| 8270B | BENZO(A)ANTHRACENE          | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 56-55-3    | GC | 08/02/96 |
| 8270B | BIS(2-ETHYLHEXYL) PHTHALATE | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 117-81-7   | GC | 08/02/96 |
| 8270B | CHRYSENE                    | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 218-01-9   | GC | 08/02/96 |
| 8270B | DI-N-OCTYL PHTHALATE        | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 117-84-0   | GC | 08/02/96 |
| 8270B | BENZO(B)FLUORANTHENE        | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 205-99-2   | GC | 08/02/96 |
| 8270B | BENZO(K)FLUORANTHENE        | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 207-08-9   | GC | 08/02/96 |
| 8270B | BENZO(A)PYRENE              | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 50-32-8    | GC | 08/02/96 |
| 8270B | INDENO(1,2,3-CD)PYRENE      | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 193-39-5   | GC | 08/02/96 |
| 8270B | DIBENZO(A,H)ANTHRACENE      | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 53-70-3    | GC | 08/02/96 |
| 8270B | BENZO(G,H,I)PERYLENE        | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 191-24-2   | GC | 08/02/96 |
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06013 | 70        | % REC      | 1.0 | 367-12-4   | GC | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06013 | 59        | % REC      | 1.0 | 13127-88-3 | GC | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06013 | 79        | % REC      | 1.0 | 4165-60-0  | GC | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06013 | 73        | % REC      | 1.0 | 321-60-8   | GC | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06013 | 91        | % REC      | 1.0 | 118-79-6   | GC | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06013 | 116       | % REC      | 1.0 | 1718-51-0  | GC | 08/02/96 |
| 8270B | CARBAZOLE                   | \$06013 | Below MDL | 330 ug/Kg  | 1.0 | 86-74-8    | GC | 08/02/96 |

BTEX (GC) SOIL Prep Date 07/23/96 Batch 072396BW

|       |                               |         |           |           |     |           |     |          |
|-------|-------------------------------|---------|-----------|-----------|-----|-----------|-----|----------|
| 8020A | BENZENE                       | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 71-43-2   | DTA | 07/23/96 |
| 8020A | TOLUENE                       | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 108-88-3  | DTA | 07/23/96 |
| 8020A | ETHYLBENZENE                  | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 100-41-4  | DTA | 07/23/96 |
| 8020A | XYLENES (TOTAL)               | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 1330-20-7 | DTA | 07/23/96 |
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08006 | 88        | % REC     | 1.0 | 98-08-8   | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08006 | 87        | % REC     | 1.0 | 460-00-4  | DTA | 07/23/96 |
| 8020A | CHLOROBENZENE                 | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 108-90-7  | DTA | 07/23/96 |
| 8020A | 1,2-DICHLOROBENZENE           | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 95-50-1   | DTA | 07/23/96 |
| 8020A | 1,3-DICHLOROBENZENE           | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 541-73-1  | DTA | 07/23/96 |
| 8020A | 1,4-DICHLOROBENZENE           | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 106-46-7  | DTA | 07/23/96 |
| 8020A | TERT-METHYLBUTYL ETHER        | \$08006 | Below MDL | 1.0 ug/Kg | 1.0 | 1634-04-4 | DTA | 07/23/96 |

Prep Date 07/17/96 Batch 071796B

9071A TRPH 9071A SOIL 08041 Below MDL 10.0 mg/Kg 1.0 ML 07/17/96

Lab Sample ID AB35823  
 Project # 4004  
 Facility Name FT. STEWART  
 Sampling Date/Time / / :

Client Site #  
 Client Sample # METHOD BLANK WATER

| METHOD                                                                                                                                     | ANALYTE                      | TEST CODE | RESULT    | MDL                | UNITS | Dilution<br>Factor | CAS #            | ANALYST | DATE OF<br>ANALYSIS |
|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|-----------|--------------------|-------|--------------------|------------------|---------|---------------------|
| Sample Comment The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes. |                              |           |           |                    |       |                    |                  |         |                     |
| SEMI (GC/MS) WATER                                                                                                                         |                              |           |           | Prep Date 08/01/96 |       |                    | Batch 0801960004 |         |                     |
| 8270B                                                                                                                                      | PHENOL                       | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 108-95-2         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | BIS(2-CHLOROETHYL) ETHER     | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 111-44-4         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2-CHLOROPHENOL               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 95-57-8          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 1,3-DICHLOROBENZENE          | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 541-73-1         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 1,4-DICHLOROBENZENE          | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 106-46-7         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 1,2-DICHLOROBENZENE          | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 95-50-1          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | BIS(2-CHLOROISOPROPYL) ETHER | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 108-60-1         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2-METHYLPHENOL               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 95-48-7          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 4-METHYLPHENOL               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 106-44-5         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | N-NITROSODI-N-PROPYLAMINE    | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 621-64-7         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | HEXACHLOROETHANE             | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 67-72-1          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | NITROBENZENE                 | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 98-95-3          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | ISOPHORONE                   | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 78-59-1          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2-NITROPHENOL                | \$06113   | Below MDL | 20.0               | ug/L  | 1.0                | 88-75-5          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,4-DIMETHYLPHENOL           | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 105-67-9         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | BIS(2-CHLOROETHOXY)METHANE   | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 111-91-1         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,4-DICHLOROPHENOL           | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 120-83-2         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 1,2,4-TRICHLOROBENZENE       | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 120-82-1         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | NAPHTHALENE                  | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 91-20-3          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 4-CHLOROANILINE              | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 106-47-8         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | HEXACHLOROBUTADIENE          | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 87-68-3          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 4-CHLORO-3-METHYLPHENOL      | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 59-50-7          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2-METHYLNAPHTHALENE          | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 91-57-6          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | HEXACHLOROCYCLOPENTADIENE    | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 77-47-4          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,4,6-TRICHLOROPHENOL        | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 88-06-2          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,4,5-TRICHLOROPHENOL        | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 95-95-4          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2-CHLORONAPHTHALENE          | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 91-58-7          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2-NITROANILINE               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 88-74-4          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | DIMETHYL PHTHALATE           | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 131-11-3         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | ACENAPHTHYLENE               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 208-96-8         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,6-DINITROTOLUENE           | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 606-20-2         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 3-NITROANILINE               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 99-09-2          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | ACENAPHTHENE                 | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 83-32-9          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,4-DINITROPHENOL            | \$06113   | Below MDL | 50.0               | ug/L  | 1.0                | 51-28-5          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 4-NITROPHENOL                | \$06113   | Below MDL | 50.0               | ug/L  | 1.0                | 100-02-7         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | DIBENZOFURAN                 | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 132-64-9         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 2,4-DINITROTOLUENE           | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 121-14-2         | GC      | 08/01/96            |
| 8270B                                                                                                                                      | DIETHYL PHTHALATE            | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 84-66-2          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 4-CHLOROPHENYL PHENYL ETHER  | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 7005-72-3        | GC      | 08/01/96            |
| 8270B                                                                                                                                      | FLUORENE                     | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 86-73-7          | GC      | 08/01/96            |
| 8270B                                                                                                                                      | 4-NITROANILINE               | \$06113   | Below MDL | 10.0               | ug/L  | 1.0                | 100-01-6         | GC      | 08/01/96            |

Lab Sample ID AB35823  
 Project # 4004  
 Project Name FT. STEWART  
 Sampling Date/Time / / :

Client Site #  
 Client Sample # METHOD BLANK WATER

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----|-------|-----------------|-------|---------|------------------|

**Sample Comment** The holding time for Semi-Volatiles has passed; therefore, the results may not be valid for compliance monitoring purposes.

| SEMI (GC/MS) WATER |                               |         |           | Prep Date 08/01/96 |      | Batch 0801960004 |            |     |          |
|--------------------|-------------------------------|---------|-----------|--------------------|------|------------------|------------|-----|----------|
| 8270B              | 2-METHYL-4,6-DINITROPHENOL    | \$06113 | Below MDL | 50.0               | ug/L | 1.0              | 534-52-1   | GC  | 08/01/96 |
| 8270B              | N-NITROSODIPHENYLAMINE        | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 86-30-6    | GC  | 08/01/96 |
| 8270B              | 4-BROMOPHENYL PHENYL ETHER    | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 101-55-3   | GC  | 08/01/96 |
| 8270B              | HEXACHLOROBENZENE             | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 118-74-1   | GC  | 08/01/96 |
| 8270B              | PENTACHLOROPHENOL             | \$06113 | Below MDL | 50.0               | ug/L | 1.0              | 87-86-5    | GC  | 08/01/96 |
| 8270B              | PHENANTHRENE                  | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 85-01-8    | GC  | 08/01/96 |
| 8270B              | ANTHRACENE                    | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 120-12-7   | GC  | 08/01/96 |
| 8270B              | DI-N-BUTYL PHTHALATE          | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 84-74-2    | GC  | 08/01/96 |
| 8270B              | FLUORANTHENE                  | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 206-44-0   | GC  | 08/01/96 |
| 8270B              | PYRENE                        | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 129-00-0   | GC  | 08/01/96 |
| 8270B              | BUTYL BENZYL PHTHALATE        | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 85-68-7    | GC  | 08/01/96 |
| 8270B              | 3,3'-DICHLOROBENZIDINE        | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 91-94-1    | GC  | 08/01/96 |
| 8270B              | BENZO(A)ANTHRACENE            | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 56-55-3    | GC  | 08/01/96 |
| 8270B              | BIS(2-ETHYLHEXYL) PHTHALATE   | \$06113 | Below MDL | 20.0               | ug/L | 1.0              | 117-81-7   | GC  | 08/01/96 |
| 8270B              | CHRYSENE                      | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 218-01-9   | GC  | 08/01/96 |
| 8270B              | DI-N-OCTYL PHTHALATE          | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 117-84-0   | GC  | 08/01/96 |
| 8270B              | BENZO(B)FLUORANTHENE          | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 205-99-2   | GC  | 08/01/96 |
| 8270B              | BENZO(K)FLUORANTHENE          | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 207-08-9   | GC  | 08/01/96 |
| 8270B              | BENZO(A)PYRENE                | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 50-32-8    | GC  | 08/01/96 |
| 8270B              | INDENO(1,2,3-CD)PYRENE        | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 193-39-5   | GC  | 08/01/96 |
| 8270B              | DIBENZO(A,H)ANTHRACENE        | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 53-70-3    | GC  | 08/01/96 |
| 8270B              | BENZO(G,H,I)PERYLENE          | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 191-24-2   | GC  | 08/01/96 |
| 8270B              | 2-FLUOROPHENOL (SURR)         | \$06113 | 47        | %                  | REC  | 1.0              | 367-12-4   | GC  | 08/01/96 |
| 8270B              | PHENOL-D5 (SURR)              | \$06113 | 25        | %                  | REC  | 1.0              | 13127-88-3 | GC  | 08/01/96 |
| 8270B              | NITROBENZENE-D5 (SURR)        | \$06113 | 75        | %                  | REC  | 1.0              | 4165-60-0  | GC  | 08/01/96 |
| 8270B              | 2-FLUOROBIPHENYL (SURR)       | \$06113 | 76        | %                  | REC  | 1.0              | 321-60-8   | GC  | 08/01/96 |
| 8270B              | 2,4,6-TRIBROMOPHENOL (SURR)   | \$06113 | 84        | %                  | REC  | 1.0              | 118-79-6   | GC  | 08/01/96 |
| 8270B              | TERPHENYL-D14 (SURR)          | \$06113 | 123       | %                  | REC  | 1.0              | 1718-51-0  | GC  | 08/01/96 |
| 8270B              | CARBAZOLE                     | \$06113 | Below MDL | 10.0               | ug/L | 1.0              | 86-74-8    | GC  | 08/01/96 |
| BTEX (GC) WATER    |                               |         |           | Prep Date 07/23/96 |      | Batch 072396BW   |            |     |          |
| 8020A              | BENZENE                       | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 71-43-2    | DTA | 07/23/96 |
| 8020A              | TOLUENE                       | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 108-88-8   | DTA | 07/23/96 |
| 8020A              | ETHYLBENZENE                  | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 100-41-4   | DTA | 07/23/96 |
| 8020A              | XYLENES (TOTAL)               | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 1330-20-7  | DTA | 07/23/96 |
| 8020A              | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08106 | 88        | %                  | REC  | 1.0              | 98-08-8    | DTA | 07/23/96 |
| 8020A              | 4-BROMOFLUOROBENZENE (SURR)   | \$08106 | 91        | %                  | REC  | 1.0              | 460-00-4   | DTA | 07/23/96 |
| 8020A              | CHLOROBENZENE                 | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 108-90-7   | DTA | 07/23/96 |
| 8020A              | 1,2-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 95-50-1    | DTA | 07/23/96 |
| 8020A              | 1,3-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 541-73-1   | DTA | 07/23/96 |
| 8020A              | 1,4-DICHLOROBENZENE           | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 106-46-7   | DTA | 07/23/96 |
| 8020A              | TERT-METHYLBUTYL ETHER        | \$08106 | Below MDL | 1.0                | ug/L | 1.0              | 1634-04-4  | DTA | 07/23/96 |

Lab Sample ID AB36265  
Project # 3997  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # LCS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

BTEX (GC) WATER

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |    |   |     |     |          |     |          |
|-------|-------------------------------|---------|----|---|-----|-----|----------|-----|----------|
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08106 | 86 | % | REC | 1.0 | 98-08-8  | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08106 | 92 | % | REC | 1.0 | 460-00-4 | DTA | 07/23/96 |

Lab Sample ID AB36266  
Project # 3997  
Project Name FT. STEWART  
Sampling Date/Time / / :

Client Site #  
Client Sample # MS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

BTEX (GC) WATER

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |    |   |     |     |          |     |          |
|-------|-------------------------------|---------|----|---|-----|-----|----------|-----|----------|
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08106 | 89 | % | REC | 1.0 | 98-08-8  | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08106 | 91 | % | REC | 1.0 | 460-00-4 | DTA | 07/23/96 |

Lab Sample ID AB36267  
Project # 3997  
Project Name FT. STEWART  
Sampling Date/Time / / :

Client Site #  
Client Sample # MSD

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

BTEX (GC) WATER

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |    |   |     |     |          |     |          |
|-------|-------------------------------|---------|----|---|-----|-----|----------|-----|----------|
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08106 | 81 | % | REC | 1.0 | 98-08-8  | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08106 | 83 | % | REC | 1.0 | 460-00-4 | DTA | 07/23/96 |

Lab Sample ID AB36268  
Project # 3997  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # LCS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

BTEX (GC) SOIL

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |    |   |     |     |          |     |          |
|-------|-------------------------------|---------|----|---|-----|-----|----------|-----|----------|
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08006 | 92 | % | REC | 1.0 | 98-08-8  | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08006 | 90 | % | REC | 1.0 | 460-00-4 | DTA | 07/23/96 |

Lab Sample ID AB36269  
Project # 3997  
Project Name FT. STEWART  
Sampling Date/Time / / :

Client Site #  
Client Sample # MS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----------|-----------------|-------|---------|------------------|

BTEX (GC) SOIL

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |    |       |     |          |     |          |
|-------|-------------------------------|---------|----|-------|-----|----------|-----|----------|
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08006 | 84 | % REC | 1.0 | 98-08-8  | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08006 | 79 | % REC | 1.0 | 460-00-4 | DTA | 07/23/96 |

Lab Sample ID AB36270  
Project # 3997  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # MSD

| METHOD | ANALYTE | TEST CODE | RESULT | MDL UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----------|-----------------|-------|---------|------------------|

BTEX (GC) SOIL

Prep Date 07/23/96

Batch 072396BW

|       |                               |         |    |       |     |          |     |          |
|-------|-------------------------------|---------|----|-------|-----|----------|-----|----------|
| 8020A | A,A,A-TRIFLUOROTOLUENE (SURR) | \$08006 | 73 | % REC | 1.0 | 98-08-8  | DTA | 07/23/96 |
| 8020A | 4-BROMOFLUOROBENZENE (SURR)   | \$08006 | 71 | % REC | 1.0 | 460-00-4 | DTA | 07/23/96 |

Sample ID AB36643  
Project # 4004  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # MS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL UNITS | Dilution Factor | CAS # | ANALYST | DATE OF ANALYSIS |
|--------|---------|-----------|--------|-----------|-----------------|-------|---------|------------------|
|--------|---------|-----------|--------|-----------|-----------------|-------|---------|------------------|

SEMI (GC/MS) SOIL

Prep Date 08/01/96

Batch 0802960002

|       |                             |         |    |       |     |            |    |          |
|-------|-----------------------------|---------|----|-------|-----|------------|----|----------|
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06013 | 57 | % REC | 1.0 | 367-12-4   | GC | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06013 | 46 | % REC | 1.0 | 13127-88-3 | GC | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06013 | 60 | % REC | 1.0 | 4165-60-0  | GC | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06013 | 60 | % REC | 1.0 | 321-60-8   | GC | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06013 | 85 | % REC | 1.0 | 118-79-6   | GC | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06013 | 85 | % REC | 1.0 | 1718-51-0  | GC | 08/02/96 |

Lab Sample ID AB36644  
Project # 4004  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # MSD

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

SEMI (GC/MS) SOIL

Prep Date 08/01/96

Batch 0802960002

|       |                             |         |    |   |     |     |            |     |          |
|-------|-----------------------------|---------|----|---|-----|-----|------------|-----|----------|
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06013 | 57 | % | REC | 1.0 | 367-12-4   | GOR | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06013 | 46 | % | REC | 1.0 | 13127-88-3 | GOR | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06013 | 57 | % | REC | 1.0 | 4165-60-0  | GOR | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06013 | 58 | % | REC | 1.0 | 321-60-8   | GOR | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06013 | 79 | % | REC | 1.0 | 118-79-6   | GOR | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06013 | 77 | % | REC | 1.0 | 1718-51-0  | GOR | 08/02/96 |

Lab Sample ID AB36645  
Project # 4004  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # LCS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

SEMI (GC/MS) SOIL

Prep Date 08/01/96

Batch 0802960002

|       |                             |         |     |   |     |     |            |     |          |
|-------|-----------------------------|---------|-----|---|-----|-----|------------|-----|----------|
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06013 | 78  | % | REC | 1.0 | 367-12-4   | GOR | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06013 | 64  | % | REC | 1.0 | 13127-88-3 | GOR | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06013 | 80  | % | REC | 1.0 | 4165-60-0  | GOR | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06013 | 76  | % | REC | 1.0 | 321-60-8   | GOR | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06013 | 99  | % | REC | 1.0 | 118-79-6   | GOR | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06013 | 111 | % | REC | 1.0 | 1718-51-0  | GOR | 08/02/96 |

Lab Sample ID AB36646  
Project # 4004  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # LCS

| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

SEMI (GC/MS) WATER

Prep Date 08/01/96

Batch 0801960004

|       |                             |         |     |   |     |     |            |    |          |
|-------|-----------------------------|---------|-----|---|-----|-----|------------|----|----------|
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06113 | 73  | % | REC | 1.0 | 367-12-4   | GC | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06113 | 60  | % | REC | 1.0 | 13127-88-3 | GC | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06113 | 74  | % | REC | 1.0 | 4165-60-0  | GC | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06113 | 73  | % | REC | 1.0 | 321-60-8   | GC | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06113 | 99  | % | REC | 1.0 | 118-79-6   | GC | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06113 | 109 | % | REC | 1.0 | 1718-51-0  | GC | 08/02/96 |

Lab Sample ID AB36647  
Project # 4004  
Project Name FT. STEWART  
Sampling Date/Time / /

Client Site #  
Client Sample # LCSD

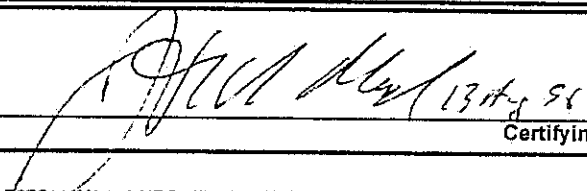
| METHOD | ANALYTE | TEST CODE | RESULT | MDL | UNITS | Dilution<br>Factor | CAS # | ANALYST | DATE OF<br>ANALYSIS |
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|
|--------|---------|-----------|--------|-----|-------|--------------------|-------|---------|---------------------|

SEMI (GC/MS) WATER

Prep Date 08/01/96

Batch 0801960004

|       |                             |         |     |   |     |     |            |    |          |
|-------|-----------------------------|---------|-----|---|-----|-----|------------|----|----------|
| 8270B | 2-FLUOROPHENOL (SURR)       | \$06113 | 78  | % | REC | 1.0 | 367-12-4   | GC | 08/02/96 |
| 8270B | PHENOL-D5 (SURR)            | \$06113 | 57  | % | REC | 1.0 | 13127-88-3 | GC | 08/02/96 |
| 8270B | NITROBENZENE-D5 (SURR)      | \$06113 | 75  | % | REC | 1.0 | 4165-60-0  | GC | 08/02/96 |
| 8270B | 2-FLUOROBIPHENYL (SURR)     | \$06113 | 70  | % | REC | 1.0 | 321-60-8   | GC | 08/02/96 |
| 8270B | 2,4,6-TRIBROMOPHENOL (SURR) | \$06113 | 96  | % | REC | 1.0 | 118-79-6   | GC | 08/02/96 |
| 8270B | TERPHENYL-D14 (SURR)        | \$06113 | 107 | % | REC | 1.0 | 1718-51-0  | GC | 08/02/96 |

  
Certifying Scientist

Organics and Inorganics in Wastewater, Solids, and Wastes

NC-DEHNR 441, SC-DHEC 98013, GA, TN-DOH 02826, UT-DOH E-228, FL-DEP 940134 HRS E87511 (Water) HRS 87485 (Drinking Water), NY-DEH ELAP 11551,  
WI-DNR 998014380

Radioactive Materials License ISO 9000 EPA ID EPA Reg Waste GA APHIS Fed Lab ID US Army Corps of  
GA-DNR 1283-1 A2LA:0594-01 GA-00058 GA-0001011006 S-3966 58-188334 Engineers Validation

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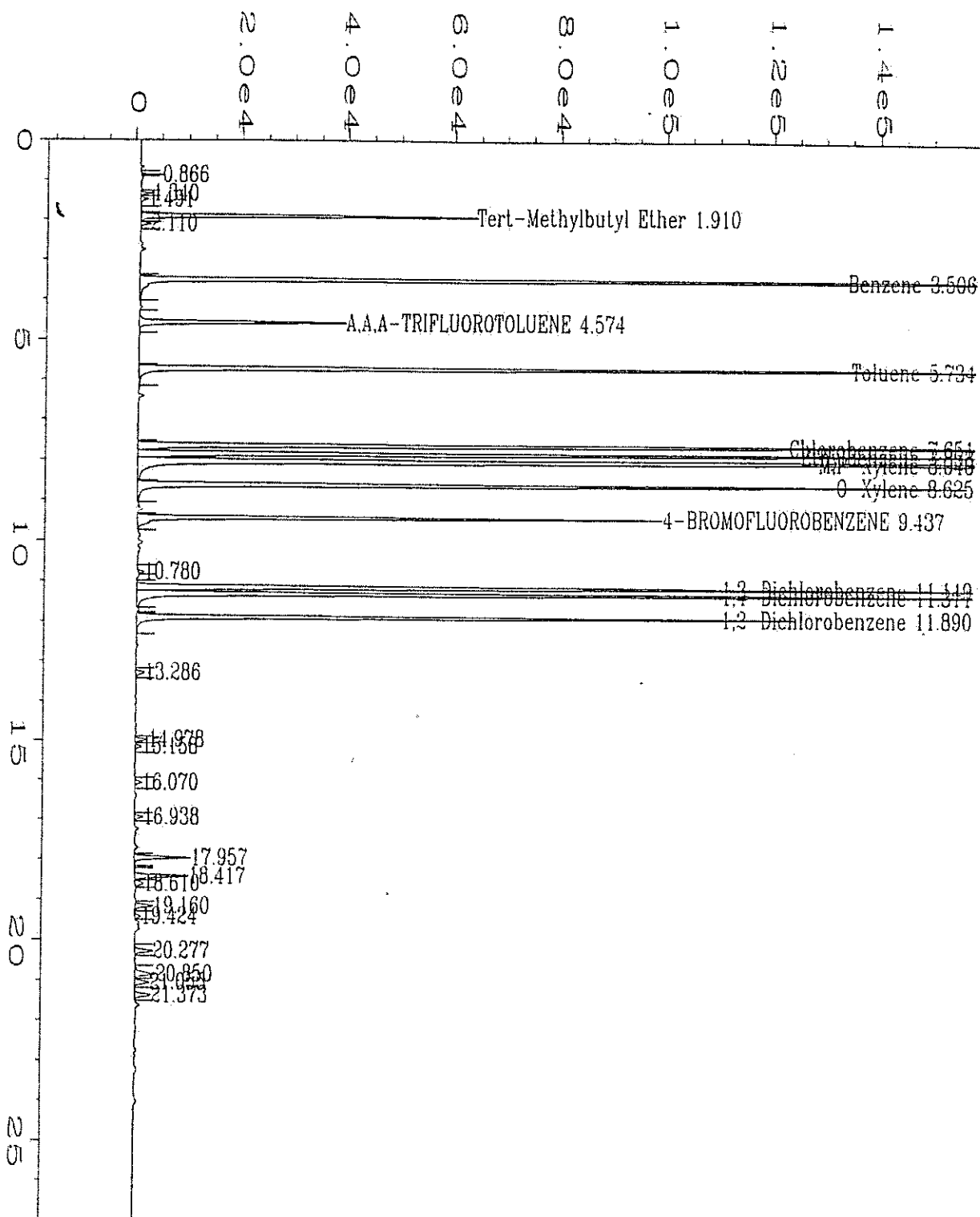
External Standard Report

```

Data File Name      : C:\HPCHEM\1\DATA\B072396\30723F09.D
Operator            : Doug Anderson
Instrument          : GC3
Sample Name         : 20ppb 8020 ccv
Run Time Bar Code   :
Acquired on         : 23 Jul 96 09:08 PM
Report Created on    : 01 Aug 96 07:50 AM
Last Recalib On     : 14 JUN 96 10:38 AM
Multiplier          : 1
Page Number         : 1
Vial Number         : 9
Injection Number    : 1
Sequence Line       : 1
Instrument Method    : 3B061396.MTH
Analysis Method     : 3B061396.MTH
Sample Amount       : 0
ISTD Amount         :
  
```

Sig. 1 in C:\HPCHEM\1\DATA\B072396\30723F09.D

| Ret Time | Area    | Type | Width | Ref# | ppb    | Name                   |
|----------|---------|------|-------|------|--------|------------------------|
| 1.910    | 238907  | BV   | 0.059 | 1    | 20.630 | Tert-Methylbutyl Ether |
| 3.506    | 749386  | BV   | 0.056 | 1    | 19.141 | Benzene                |
| 4.574    | 166125  | PV   | 0.066 | 1    | 15.040 | A,A,A-TRIFLUOROTOLUENE |
| 5.734    | 708071  | BB   | 0.059 | 1    | 18.848 | Toluene                |
| 7.651    | 712023  | BV   | 0.058 | 1    | 18.889 | Chlorobenzene          |
| 7.858    | 639595  | VV   | 0.061 | 1    | 19.032 | Ethylbenzene           |
| 8.046    | 1481349 | VV   | 0.062 | 1    | 38.313 | M,P-Xylene             |
| 8.625    | 628559  | VV   | 0.063 | 1    | 19.075 | O-Xylene               |
| 9.437    | 381401  | PV   | 0.060 | 1    | 14.976 | 4-BROMOFLUOROBENZENE   |
| 11.149   | 632234  | BV   | 0.060 | 1    | 18.687 | 1,3-Dichlorobenzene    |
| 11.311   | 648232  | VV   | 0.061 | 1    | 18.933 | 1,4-Dichlorobenzene    |
| 11.890   | 487599  | VB   | 0.061 | 1    | 20.473 | 1,2-Dichlorobenzene    |



|                    |                                       |                    |                |
|--------------------|---------------------------------------|--------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\B072396\30723F09.D | Page Number        | : 1            |
| Operator           | : Doug Anderson                       | Vial Number        | : 9            |
| Instrument         | : GC3                                 | Injection Number   | : 1            |
| Sample Name        | : 20ppb 8020 ccv                      | Sequence Line      | : 1            |
| Run Time Bar Code: |                                       | Instrument Method: | 3B061396.MTH   |
| Acquired on        | : 23 Jul 96 09:08 PM                  | Analysis Method    | : 3B061396.MTH |
| Report Created on: | 01 Aug 96 07:50 AM                    | Sample Amount      | : 0            |
| Last Recalib on    | : 14 JUN 96 10:38 AM                  | ISTD Amount        | :              |
| Multiplier         | : 1                                   |                    |                |

# BTEX Method Blank Summary

|                        |                        |
|------------------------|------------------------|
| Lab Name: EcoSys, Inc. | Client: ACE-SAD        |
| Ledger No(s): 107920   |                        |
| Batch No: 072396BW     | Date Analyzed: 7/23/96 |
| Lab File ID: 30723F10  | Time Analyzed: 21:42   |
| Lab Sample ID: AB35822 | Level: Low             |
| Instrument ID: GC3     | Matrix: Soil           |

*This method blank applies to the following samples, MS and MSD:*

|    | Client<br>Sample No. | Lab<br>Sample ID | Lab<br>File ID | Date<br>Analyzed |
|----|----------------------|------------------|----------------|------------------|
| 1  | NA                   | AB36268 LCS      | 30723F11       | 7/23/96          |
| 2  | NA                   | AB36269 MS       | 30723F12       | 7/23/96          |
| 3  | NA                   | AB36270 MSD      | 30723F14       | 7/23/96          |
| 4  | #45-T1-S1            | AB35819          | 30723F18       | 7/23/96          |
| 5  |                      |                  |                |                  |
| 6  |                      |                  |                |                  |
| 7  |                      |                  |                |                  |
| 8  |                      |                  |                |                  |
| 9  |                      |                  |                |                  |
| 10 |                      |                  |                |                  |
| 11 |                      |                  |                |                  |
| 12 |                      |                  |                |                  |
| 13 |                      |                  |                |                  |
| 14 |                      |                  |                |                  |
| 15 |                      |                  |                |                  |
| 16 |                      |                  |                |                  |
| 17 |                      |                  |                |                  |
| 18 |                      |                  |                |                  |
| 19 |                      |                  |                |                  |
| 20 |                      |                  |                |                  |

NA = Not Applicable

 13 Aug 96  
 QA/QC Officer

Comments:

# Soil BTEX MS/MSD Recovery

Lab Name: EcoSys, Inc.  
 Ledger No: 107920  
 Batch No: 072396BW  
 Lab File ID: 30723F12/30723F14

Client: ACE-SAD  
 Matrix Spike/Lab Sample No: AB35736 REF  
 AB36269 MS  
 AB36270 MSD

| Compound     | Spike Added<br>(ug/Kg) | Sample<br>Conc<br>(ug/Kg) | MS<br>Conc<br>(ug/Kg) | MS %<br>Recovery | # | QC Limits<br>Recovery |
|--------------|------------------------|---------------------------|-----------------------|------------------|---|-----------------------|
| Benzene      | 20                     | ND                        | 16                    | 80               |   | 40-160                |
| Toluene      | 20                     | ND                        | 16                    | 81               |   | 40-160                |
| Ethylbenzene | 20                     | ND                        | 16                    | 81               |   | 40-160                |
| m,p-Xylene   | 40                     | ND                        | 33                    | 82               |   | 40-160                |
| o-Xylene     | 20                     | ND                        | 16                    | 82               |   | 40-160                |

| Compound     | Spike Added<br>(ug/Kg) | MSD<br>Conc<br>(ug/Kg) | MSD %<br>Recovery | # | % RPD | # | QC Limits |          |
|--------------|------------------------|------------------------|-------------------|---|-------|---|-----------|----------|
| Benzene      | 20                     | 15                     | 77                |   | 4     |   | RPD       | Recovery |
| Toluene      | 20                     | 15                     | 75                |   | 7     |   | 30        | 40-160   |
| Ethylbenzene | 20                     | 15                     | 76                |   | 7     |   | 30        | 40-160   |
| m,p-Xylene   | 40                     | 31                     | 76                |   | 7     |   | 30        | 40-160   |
| o-Xylene     | 20                     | 15                     | 77                |   | 7     |   | 30        | 40-160   |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

ND = Not Detected

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

QA/QC Officer

Comments:

# BTEX LCS Recoveries (Soil)

Lab Name: EcoSys, Inc.  
 Ledger No: 107920  
 Batch No: 072396BW  
 Lab File ID: 30723F11

Client: ACE-SAD  
 Laboratory Control Sample No: AB36268  
 Level (Low/Med): Low

| Compound     | Spike Added<br>(ug/Kg) | LCS<br>Conc<br>(ug/Kg) | LCS %<br>Recovery | # | QC Limits<br>Recovery |
|--------------|------------------------|------------------------|-------------------|---|-----------------------|
| Benzene      | 20                     | 18                     | 90                |   | 40-160                |
| Toluene      | 20                     | 19                     | 93                |   | 40-160                |
| Ethylbenzene | 20                     | 19                     | 93                |   | 40-160                |
| m,p-Xylene   | 40                     | 37                     | 94                |   | 40-160                |
| o-Xylene     | 20                     | 18                     | 92                |   | 40-160                |

\* Values outside of QC limits  
 ND = Not Detected

Spike Recovery: 0 out of 5 outside limits

QA/QC Officer

Comments:

## BTEX Surrogate Recovery Summary

|         |         |
|---------|---------|
| Client: | ACE-SAD |
| Matrix: | Soil    |
| Level:  | Low     |

[illegible]

Surrogate Recovery Limits: 40-160%

# Column to be used to flag recovery values

\* Values outside of required QC limits

ND = Not Detected

DO = Diluted Out

QA/QC Officer

Comments:

## SemiVolatiles DFTPP

Lab Name: EcoSys, Inc.Client: ACE-SADLedger No: 107920DFTPP Injection Date: 8/2/96Lab File ID: DFTPP080296DFTPP Injection Time: 6:47Instrument ID: MSD-2Batch Number: 0802960002

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 30.0 - 60.0% of mass 198           | 53.4                 |
| 68  | Less than 2.0% of mass 69          | 0.0                  |
| 69  | Mass 69 relative abundance         | 63.1 (1)             |
| 70  | Less than 2.0% of mass 69          | 0.1                  |
| 127 | 40.0 - 60.0% of mass 198           | 49.2                 |
| 197 | Less than 1.0% of mass 198         | 0.0 (1)              |
| 198 | Base Peak, 100% relative abundance | 100.0                |
| 199 | 5.0 to 9.0% of mass 198            | 6.8                  |
| 275 | 10.0 - 30.0% of mass 198           | 19.5                 |
| 365 | Greater than 1% of mass 198        | 1.7                  |
| 441 | Present, but less than mass 443    | 80.4                 |
| 442 | Greater than 40% of mass 198       | 58.6                 |
| 443 | 17.0 - 23.0% of mass 442           | 19.3 (2)             |

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

|  | CLIENT<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|--|----------------------|------------------|----------------|------------------|------------------|
|  | 01 NA                | CCV              | BNA0101001     | 08/02/96         | 7:15 AM          |
|  | 02 NA                | AB35822 MB       | BNA0501005     | 08/02/96         | 11:16 AM         |
|  | 03 NA                | AB36645 LCS      | BNA0601006     | 08/02/96         | 12:09 PM         |
|  | 04 NA                | AB36643 MS       | BNA0801008     | 08/02/96         | 1:57 PM          |
|  | 05 NA                | AB36644 MSD      | BNA0901009     | 08/02/96         | 2:51 PM          |
|  | 06 #45-T1-S1         | AB35819          | BNA0701007     | 08/02/96         | 1:03 PM          |
|  | 07                   |                  |                |                  |                  |
|  | 08                   |                  |                |                  |                  |
|  |                      |                  |                |                  |                  |
|  |                      |                  |                |                  |                  |

NA: Not Applicable.

Comments:

QA/QC OFFICER

Ecosys, Inc.

ata file : /chem/msd\_2.i/2-080296.b/DFTPP080296.d  
Lab. Id. : DFTPP02  
Inj Date : 02-AUG-96 06:47 Autotune Date: 31-Jul-96 09:13:5  
Operator : GORDON Inst ID: msd\_2.i  
Ap Info : 50NG of dft-05-39  
Disc Info : TUNE FOR INSTRUMENT msd2.i  
Comment :  
Method : /chem/msd\_2.i/2-080296.b/dftpp288.m  
Ath Date : 02-Aug-1996 06:29  
Cal Date : Cal File:  
Is bottle: 1 QC Sample: DFTPP  
Ul Factor: 1.000 Target Version: Target 2.20  
Integrator: HP RTE Compound Sublist: all.sub  
Sample Type: WATER

|              |      | CONCENTRATIONS   |         |                  |       |           |
|--------------|------|------------------|---------|------------------|-------|-----------|
|              |      | ON-COL           | FINAL   |                  |       |           |
| RT (REL RT)  | MASS | RESPONSE ( ug/L) | ( ug/L) | TARGET           | RANGE | RATIO     |
|              |      |                  |         | CAS #: 5074-71-5 |       |           |
| dftpp        |      |                  |         |                  |       | 100.00(Q) |
| 7.917(0.000) | 198  | 412757           |         | 0.00-            | 0.00  | 53.16     |
| 7.917(0.000) | 51   | 219412           |         | 0.00-            | 0.00  | 0.00      |
| 7.917(0.000) | 68   | 0                |         | 0.00-            | 0.00  | 0.00      |
| 7.917(0.000) | 69   | 260025           |         | 0.00-            | 0.00  | 63.00     |
| 7.917(0.000) | 70   | 240              |         | 0.00-            | 0.00  | 0.09      |
| 7.917(0.000) | 127  | 202892           |         | 0.00-            | 0.00  | 49.16     |
| 7.917(0.000) | 197  | 0                |         | 0.00-            | 0.00  | 0.00      |
| 7.917(0.000) | 199  | 28084            |         | 0.00-            | 0.00  | 6.80      |
| 7.917(0.000) | 275  | 80504            |         | 0.00-            | 0.00  | 19.50     |
| 7.917(0.000) | 365  | 7166             |         | 0.00-            | 0.00  | 1.74      |
| 7.917(0.000) | 441  | 37525            |         | 0.00-            | 0.00  | 80.37     |
| 7.917(0.000) | 442  | 241680           |         | 0.00-            | 0.00  | 58.55     |
| 7.917(0.000) | 443  | 46690            |         | 0.00-            | 0.00  | 19.32     |

Flag Legend

- Qualifier signal failed the ratio test.

Ecosys, Inc.

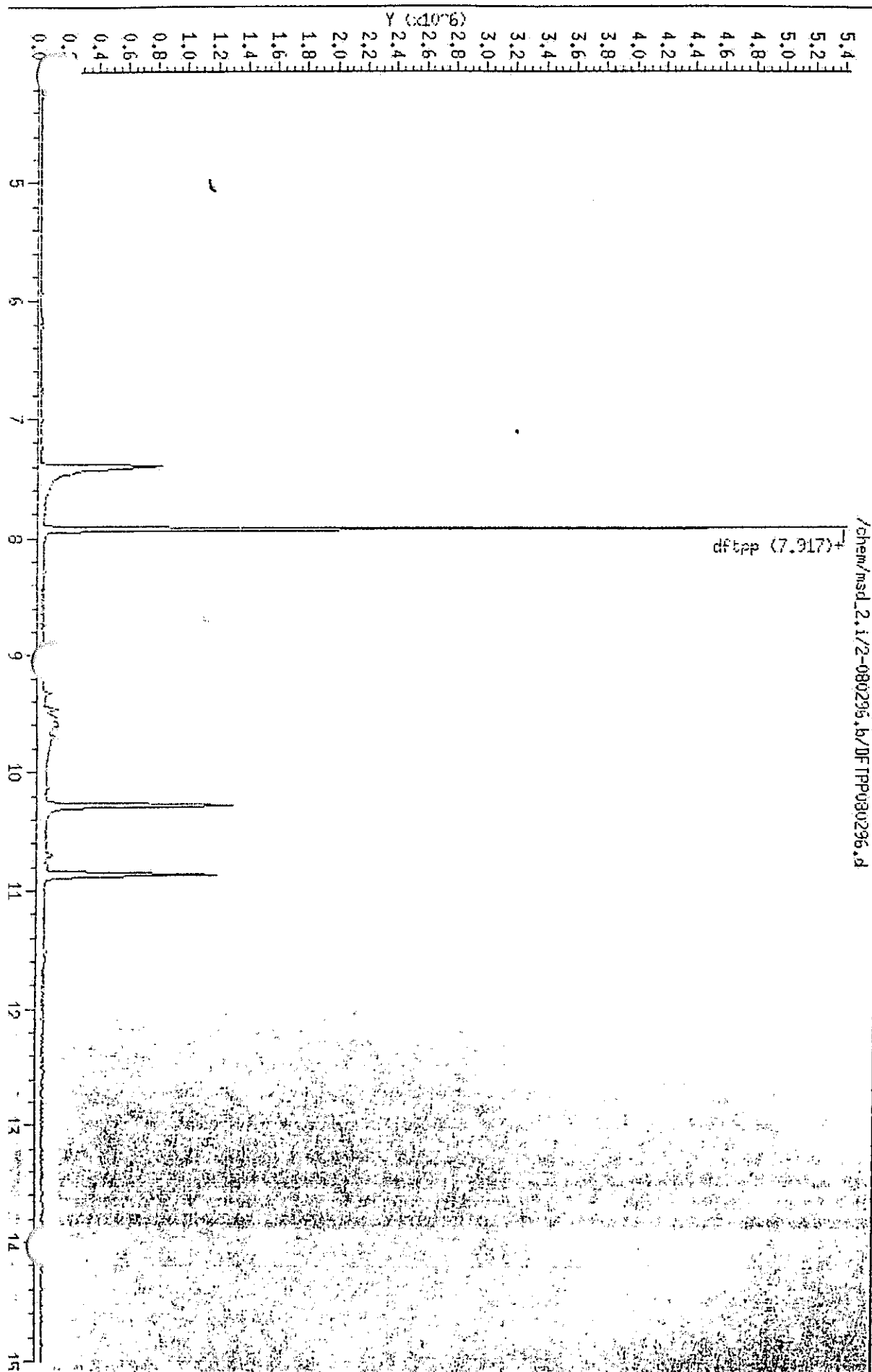
TARGET COMPOUNDS

|                                       |                        |
|---------------------------------------|------------------------|
| Client Name:                          | Client SDG: 2-080296.b |
| Client Sample ID: DFTPP02             | Sample Date:           |
| Sample Location:                      | Sample Point:          |
| Lab Sample ID: DFTPP02                | Date Received:         |
| Sample Type: WATER                    |                        |
| Analysis Type: SU                     | Level: LOW             |
| Data Type: MS DATA                    | Column Number: 1       |
| Misc Info: TUNE FOR INSTRUMENT msd2.i |                        |

| CAS NO.             | COMPOUND | CONCENTRATION UNITS: |       |
|---------------------|----------|----------------------|-------|
|                     |          | (ug/L or ug/KG) ug/L | Q     |
| 5074-71-5-----dftpp |          | 0.0                  |       |
| =====               | =====    | =====                | ===== |
|                     |          |                      |       |

Data File: /chem/msd\_2.1/2-080296.b/DFTPP080296.d  
Date : 02-0UG-96 06:47  
Instrument : msd\_2.1  
Sample ID : DFTPP02  
Column phase :  
Volume Injected (ul) : 1.0

Column diameter : 2.00



Date : 02-AUG-96 06:47

Document : msd\_2.i

Sample ID : DFTPP02

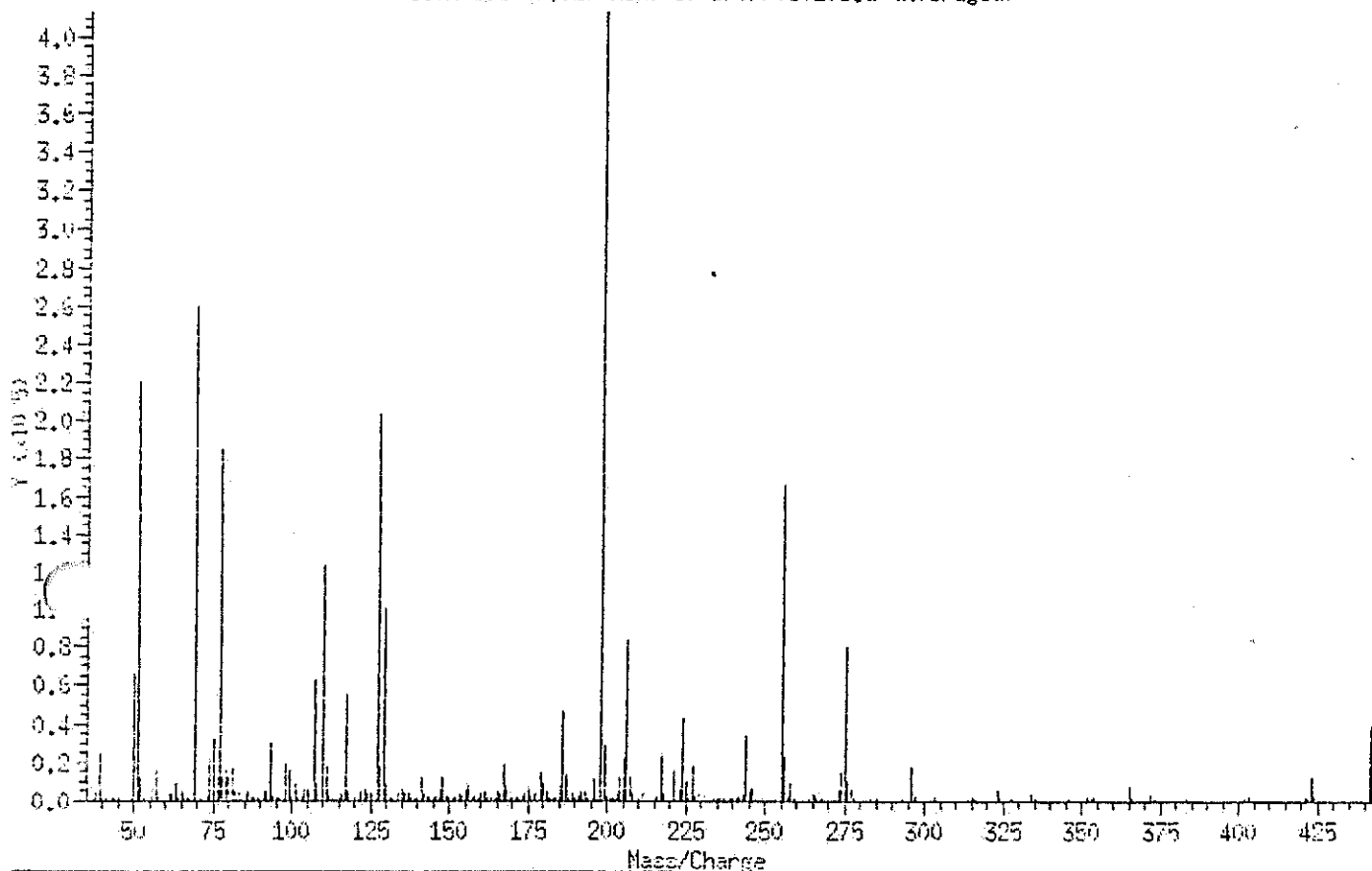
Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

1 dftpp

Scan 395 (7.917 min) of DFTPP080296.d (Averaged)



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 198 | Base Peak, 100% relative abundance | 100.0                |
| 51  | Mass 51 relative abundance         | 53.2                 |
| 68  | Mass 68 relative abundance         | 0.0                  |
| 69  | Mass 69 relative abundance         | 63.0                 |
| 70  | Mass 70 relative abundance         | 0.1                  |
| 127 | Mass 127 relative abundance        | 49.2                 |
| 197 | Mass 197 relative abundance        | 0.0                  |
| 199 | Mass 199 relative abundance        | 6.8                  |
| 275 | Mass 275 relative abundance        | 19.5                 |
| 365 | Mass 365 relative abundance        | 1.7                  |
| 441 | Mass 441 relative abundance        | 80.4                 |
| 442 | Mass 442 relative abundance        | 58.6                 |
| 443 | Mass 443 relative abundance        | 19.3                 |

Date : 02-AUG-96 06:47

Document : msd\_2.i

Sample ID : DFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scan 395-397 (7.917 min) Subtraction Scan 392

Base Peak: 198.00

Number of mass peaks: 301

| Mass  | Abund  | Mass   | Abund  | Mass   | Abund | Mass   | Abund |
|-------|--------|--------|--------|--------|-------|--------|-------|
| 37.00 | 1130   | 124.00 | 3444   | 202.00 | 658   | 285.00 | 982   |
| 38.00 | 4679   | 125.00 | 2942   | 203.00 | 2806  | 286.00 | 83    |
| 39.00 | 22786  | 127.00 | 202892 | 204.00 | 11719 | 289.00 | 142   |
| 40.00 | 1187   | 128.00 | 17747  | 205.00 | 21967 | 290.00 | 133   |
| 41.00 | 578    | 129.00 | 100052 | 206.00 | 84184 | 291.00 | 196   |
| 44.00 | 149    | 130.00 | 8034   | 207.00 | 11272 | 292.00 | 361   |
| 45.00 | 1114   | 131.00 | 1368   | 208.00 | 2887  | 293.00 | 904   |
| 47.00 | 293    | 132.00 | 834    | 209.00 | 939   | 294.00 | 452   |
| 49.00 | 449    | 133.00 | 165    | 210.00 | 656   | 295.00 | 17278 |
| 50.00 | 65906  | 134.00 | 2951   | 211.00 | 3057  | 297.00 | 1981  |
| 51.00 | 219412 | 135.00 | 7089   | 212.00 | 281   | 298.00 | 87    |
| 52.00 | 11784  | 136.00 | 2798   | 213.00 | 297   | 301.00 | 280   |
| 53.00 | 303    | 137.00 | 3620   | 215.00 | 1061  | 302.00 | 309   |
| 54.00 | 223    | 138.00 | 932    | 216.00 | 1938  | 303.00 | 1944  |
| 55.00 | 1375   | 139.00 | 350    | 217.00 | 25322 | 304.00 | 540   |
| 56.00 | 6641   | 140.00 | 1356   | 218.00 | 3045  | 308.00 | 283   |
| 57.00 | 15208  | 141.00 | 11726  | 219.00 | 297   | 309.00 | 159   |
| 58.00 | 692    | 142.00 | 3284   | 221.00 | 15003 | 310.00 | 183   |
| 59.00 | 153    | 143.00 | 1965   | 223.00 | 5474  | 312.00 | 85    |
| 61.00 | 2873   | 144.00 | 824    | 224.00 | 42878 | 313.00 | 92    |
| 62.00 | 2757   | 145.00 | 659    | 225.00 | 10389 | 314.00 | 795   |
| 63.00 | 8162   | 146.00 | 1817   | 226.00 | 1246  | 315.00 | 1817  |
| 64.00 | 1068   | 147.00 | 5254   | 227.00 | 17951 | 316.00 | 823   |
| 65.00 | 3387   | 148.00 | 12509  | 228.00 | 2695  | 317.00 | 179   |
| 66.00 | 757    | 149.00 | 2349   | 229.00 | 3818  | 321.00 | 452   |
| 67.00 | 958    | 150.00 | 757    | 230.00 | 997   | 322.00 | 280   |
| 69.00 | 260025 | 151.00 | 1232   | 231.00 | 1812  | 323.00 | 5607  |
| 70.00 | 240    | 152.00 | 458    | 232.00 | 47    | 324.00 | 1059  |
| 71.00 | 74     | 153.00 | 3113   | 233.00 | 315   | 326.00 | 125   |
| 72.00 | 267    | 154.00 | 2701   | 234.00 | 1206  | 327.00 | 1040  |
| 73.00 | 1953   | 155.00 | 5564   | 235.00 | 1229  | 328.00 | 557   |
| 74.00 | 20919  | 156.00 | 7992   | 236.00 | 1024  | 329.00 | 118   |
| 75.00 | 33077  | 157.00 | 1535   | 237.00 | 1330  | 332.00 | 295   |
| 76.00 | 12038  | 158.00 | 2049   | 238.00 | 223   | 333.00 | 537   |
| 77.00 | 184133 | 159.00 | 1474   | 239.00 | 656   | 334.00 | 3590  |

Date: 02-AUG-96 06:47

Document: msd\_2.i

Sample ID: DFTPP02

Column phase:

Column diameter: 2.00

Volume Injected (uL): 1.0

Spectrum: Scan 395-397 (7.917 min) Subtraction Scan 392

Base Peak: 198.00

Number of mass peaks: 301

| Mass   | Abund  | Mass   | Abund | Mass   | Abund  | Mass   | Abund  |
|--------|--------|--------|-------|--------|--------|--------|--------|
| 78.00  | 12023  | 160.00 | 3165  | 240.00 | 722    | 335.00 | 962    |
| 79.00  | 15085  | 161.00 | 4336  | 241.00 | 978    | 340.00 | 70     |
| 80.00  | 11938  | 162.00 | 1382  | 242.00 | 2319   | 341.00 | 502    |
| 81.00  | 16321  | 163.00 | 572   | 243.00 | 2890   | 346.00 | 910    |
| 82.00  | 3765   | 164.00 | 714   | 244.00 | 33916  | 347.00 | 66     |
| 83.00  | 2942   | 165.00 | 3608  | 245.00 | 4374   | 351.00 | 74     |
| 84.00  | 324    | 166.00 | 3259  | 246.00 | 6704   | 352.00 | 1997   |
| 85.00  | 2424   | 167.00 | 18262 | 247.00 | 1317   | 353.00 | 1307   |
| 86.00  | 4497   | 168.00 | 7501  | 248.00 | 250    | 354.00 | 1668   |
| 87.00  | 2013   | 169.00 | 1074  | 249.00 | 1337   | 355.00 | 366    |
| 88.00  | 993    | 170.00 | 623   | 250.00 | 244    | 356.00 | 74     |
| 89.00  | 662    | 171.00 | 1155  | 251.00 | 457    | 365.00 | 7166   |
| 91.00  | 4060   | 172.00 | 2090  | 252.00 | 188    | 366.00 | 1177   |
| 92.00  | 4444   | 173.00 | 2102  | 253.00 | 797    | 367.00 | 85     |
| 93.00  | 29066  | 174.00 | 3678  | 255.00 | 166010 | 370.00 | 215    |
| 94.00  | 1849   | 175.00 | 6845  | 256.00 | 23412  | 371.00 | 329    |
| 95.00  | 337    | 176.00 | 2139  | 257.00 | 1963   | 372.00 | 3063   |
| 96.00  | 894    | 177.00 | 3428  | 258.00 | 9089   | 373.00 | 785    |
| 98.00  | 19944  | 178.00 | 502   | 259.00 | 1335   | 374.00 | 79     |
| 99.00  | 15172  | 179.00 | 14275 | 260.00 | 94     | 383.00 | 814    |
| 100.00 | 1352   | 180.00 | 9190  | 261.00 | 271    | 384.00 | 85     |
| 101.00 | 8718   | 181.00 | 4809  | 262.00 | 173    | 390.00 | 301    |
| 102.00 | 568    | 182.00 | 767   | 264.00 | 446    | 391.00 | 373    |
| 103.00 | 2572   | 183.00 | 620   | 265.00 | 3426   | 392.00 | 301    |
| 104.00 | 6311   | 184.00 | 1456  | 266.00 | 89     | 401.00 | 239    |
| 105.00 | 5560   | 185.00 | 7265  | 267.00 | 68     | 402.00 | 1147   |
| 107.00 | 62517  | 186.00 | 46141 | 268.00 | 143    | 403.00 | 1743   |
| 108.00 | 9117   | 187.00 | 12978 | 270.00 | 531    | 404.00 | 479    |
| 110.00 | 122752 | 188.00 | 1383  | 271.00 | 386    | 421.00 | 1702   |
| 111.00 | 17937  | 189.00 | 3466  | 272.00 | 711    | 422.00 | 1615   |
| 112.00 | 2072   | 190.00 | 597   | 273.00 | 5305   | 423.00 | 11938  |
| 113.00 | 664    | 191.00 | 1840  | 274.00 | 14575  | 424.00 | 2567   |
| 115.00 | 479    | 192.00 | 4441  | 275.00 | 80504  | 425.00 | 216    |
| 116.00 | 3326   | 193.00 | 4369  | 276.00 | 10404  | 441.00 | 37525  |
| 117.00 | 54508  | 194.00 | 1002  | 277.00 | 5723   | 442.00 | 241680 |

Sample ID : DF1PP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

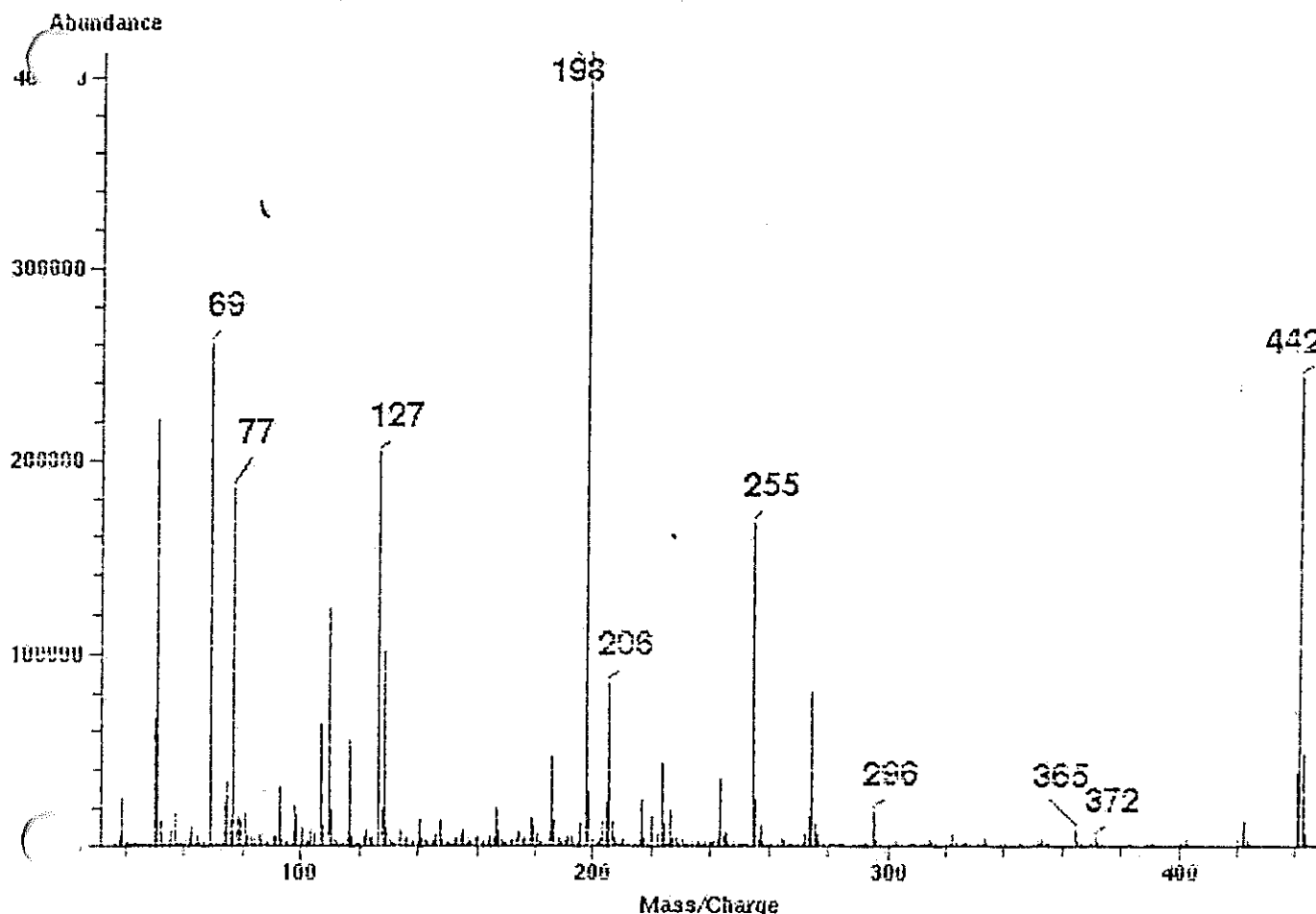
Spectrum: Scan 395-397 (7.917 min) Subtraction Scan 392

Base Peak: 198.00

Number of mass peaks: 301

| Mass   | Abund | Mass   | Abund  | Mass   | Abund | Mass   | Abund |
|--------|-------|--------|--------|--------|-------|--------|-------|
| 118.00 | 4037  | 195.00 | 659    | 278.00 | 1017  | 443.00 | 46690 |
| 119.00 | 273   | 196.00 | 10940  | 279.00 | 16    | 444.00 | 4802  |
| 120.00 | 790   | 198.00 | 412757 | 281.00 | 75    | 445.00 | 251   |
| 121.00 | 340   | 199.00 | 28084  | 282.00 | 95    |        |       |
| 122.00 | 4492  | 200.00 | 2169   | 283.00 | 596   |        |       |
| 123.00 | 6976  | 201.00 | 1515   | 284.00 | 491   |        |       |

Average of 7.907 to 7.927 min. from DFTPP060296.d  
msd\_2 (ms5971-2); /chem/config/doc/ms5971-2/dftpp.u; Tuned at 09:13 AM EDT on Wed Jul 31, 1996



| assl | Ion abundance criteria             | %relative abundance |
|------|------------------------------------|---------------------|
| 51   | 30.0 - 60.0% of mass 198           | 53.4                |
| 63   | Less than 2.0% of mass 69          | 0.0                 |
| 69   | Mass 69 relative abundance is      | 63.1                |
| 70   | Less than 2.0% of mass 69          | 0.1                 |
| 27   | 40.0 to 60.0% of mass 198          | 49.2                |
| 97   | Less than 1.0% of mass 198         | 0.0                 |
| 98   | Base peak, 100% relative abundance | 100.0               |
| 99   | 5.0 to 9.0% of mass 198            | 6.8                 |
| 25   | 10.0 - 30.0% of mass 198           | 19.5                |
| 65   | Greater than 1% of mass 198        | 1.7                 |
| 41   | Present, but less than mass 443    | 80.4                |
| 42   | Greater than 40.0% of mass 198     | 58.6                |
| 43   | 17.0 - 23.0% of mass 442           | 19.3                |

Ecosys, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 28-MAY-93 15:51  
 End Cal Date : 31-JUL-1996 13:17  
 Start Method : ISTD  
 Calibration Curve Type : Averaged  
 Target Version : Target 2.20  
 Integrator : HP RTE  
 Method File : /chem/msd\_2.i/2-073196.b/MA-BNA.m  
 Date : 01-Aug-1996 06:42 target

## Calibration File Names:

Level 2: /chem/msd\_2.i/2-073196.b/BNA0201002.d  
 Level 3: /chem/msd\_2.i/2-073196.b/BNA0301003.d  
 Level 4: /chem/msd\_2.i/2-073196.b/BNA0501005.d  
 Level 5: /chem/msd\_2.i/2-073196.b/BNA0401004.d  
 Level 6: /chem/msd\_2.i/2-073196.b/BNA0501005.d

| Compound                        | Level 2  | Level 3  | Level 4  | Level 5  | Level 6  | RRF      | % RSD/R <sup>2</sup> |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------------------|
| 2 Line                          | 0.664671 | 1.065651 | 1.005731 | 1.451251 | 1.378491 | 1.113161 | 28.3951              |
| 4 Anol **                       | 0.927431 | 1.022611 | 1.114321 | 1.166211 | 1.196291 | 1.085371 | 10.1511              |
| 5 Bis(2-chloroethyl) ether      | 1.301831 | 1.081181 | 1.219191 | 1.179901 | 1.226251 | 1.201651 | 6.7011               |
| 6 2-Chlorophenol                | 1.161731 | 1.220241 | 1.256661 | 1.455971 | 1.319291 | 1.292771 | 8.7651               |
| 7 1,3-Dichlorobenzene           | 1.460411 | 1.470161 | 1.537751 | 1.542131 | 1.546831 | 1.511471 | 2.8061               |
| 9 1,4-Dichlorobenzene **        | 1.462661 | 1.501791 | 1.562921 | 1.590461 | 1.635921 | 1.550731 | 4.4601               |
| 10 1,2-Dichlorobenzene          | 1.388791 | 1.400591 | 1.467531 | 1.497231 | 1.545621 | 1.459961 | 4.5141               |
| 11 Benzyl alcohol               | 0.779781 | 0.920021 | 0.933841 | 0.906451 | 0.841791 | 0.876391 | 7.3591               |
| 12 2-Methylphenol               | 0.811761 | 0.863211 | 0.908541 | 1.079491 | 0.991011 | 0.931891 | 11.2961              |
| 13 Bis(2-chloroisopropyl) ether | 0.907761 | 0.918531 | 0.979691 | 1.168411 | 1.129561 | 1.020791 | 11.8521              |
| 14 N-Nitrosodi-n-propylamine *  | 0.707711 | 0.693371 | 0.714801 | 0.687871 | 0.691551 | 0.699061 | 1.6571               |
| 15 4-Methylphenol               | 0.767991 | 0.877731 | 0.950131 | 1.119571 | 1.049091 | 0.952701 | 14.5201              |
| 16 Hexachloroethane             | 0.639691 | 0.643931 | 0.669621 | 0.685811 | 0.716901 | 0.670991 | 4.7391               |
| 18 Nitrobenzene                 | 0.353901 | 0.391781 | 0.408171 | 0.421601 | 0.415131 | 0.398121 | 6.8071               |
| 19 Isophorone                   | 0.673251 | 0.695821 | 0.727051 | 0.610491 | 0.708921 | 0.693111 | 6.5991               |
| 20 2-Nitrophenol **             | 0.228711 | 0.257521 | 0.271431 | 0.273291 | 0.295291 | 0.265251 | 9.2341               |
| 21 2,4-Dimethylphenol           | 0.327251 | 0.385641 | 0.415781 | 0.341821 | 0.386451 | 0.371391 | 9.7301               |
| 22 Bis(2-chloroethoxy)methane   | 0.359891 | 0.376011 | 0.403601 | 0.348131 | 0.393701 | 0.376271 | 6.1051               |
| 23 2,4-Dichlorophenol **        | 0.284751 | 0.336551 | 0.337171 | 0.307191 | 0.299661 | 0.313061 | 7.4021               |
| 24 Benzoic acid                 | 0.220301 | 0.182361 | 0.194241 | 0.254531 | 0.239561 | 0.218201 | 13.8231              |
| 25 1,2,4-Trichlorobenzene       | 0.368121 | 0.383521 | 0.394191 | 0.381811 | 0.397161 | 0.384961 | 2.9891               |
| 27 Naphthalene                  | 1.094111 | 1.130781 | 1.187251 | 1.167541 | 1.157971 | 1.147531 | 3.1481               |
| 28 4-Chloroaniline              | 0.260201 | 0.314191 | 0.332191 | 0.407791 | 0.375521 | 0.337991 | 16.8231              |
| 29 Hexachlorobutadiene **       | 0.227201 | 0.222301 | 0.225181 | 0.219811 | 0.224101 | 0.223721 | 1.2591               |
| 30 4-Chloro-3-methylphenol **   | 0.326261 | 0.343101 | 0.366661 | 0.367811 | 0.345211 | 0.349811 | 5.0111               |
| 31 Methyl-naphthalene           | 0.731581 | 0.745511 | 0.769391 | 0.724671 | 0.752421 | 0.744721 | 2.3671               |
| 32 Chlorocyclopentadiene *      | 0.293491 | 0.254601 | 0.255471 | 0.284061 | 0.298141 | 0.259151 | 14.0101              |
| 33 2,4,6-Trichlorophenol **     | 0.259441 | 0.303611 | 0.332131 | 0.361731 | 0.350821 | 0.321561 | 12.7891              |
| 34 2,4,5-Trichlorophenol        | 0.333081 | 0.356231 | 0.374891 | 0.395291 | 0.347411 | 0.361381 | 6.7141               |

Ecosys, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 28-MAY-93 15:51  
 End Cal Date : 31-JUL-1996 13:17  
 Start Method : ISTD  
 Cal Curve Type : Averaged  
 Target Version : Target 2.20  
 Integrator : HP RTE  
 Method file : /chem/msd\_2.i/2-073196.b/MA-B11A.m  
 Cal Date : 01-Aug-1996 06:42 target

## Calibration File Names:

Level 2: /chem/msd\_2.i/2-073196.b/BNA0201002.d  
 Level 3: /chem/msd\_2.i/2-073196.b/BNA0301003.d  
 Level 4: /chem/msd\_2.i/2-073196.b/BNA0601006.d  
 Level 5: /chem/msd\_2.i/2-073196.b/BNA0401004.d  
 Level 6: /chem/msd\_2.i/2-073196.b/BNA0501005.d

| Compound                       | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | RRF     | 1% RSD/R <sup>2</sup> |
|--------------------------------|---------|---------|---------|---------|---------|---------|-----------------------|
| 36 Aloronaphthalene            | 1.13479 | 1.18116 | 1.23548 | 1.21694 | 1.24983 | 1.20164 | 4.166                 |
| 37 2-Nitroaniline              | 0.31532 | 0.31374 | 0.32014 | 0.32646 | 0.29772 | 0.31468 | 3.399                 |
| 38 Dimethyl phthalate          | 1.53443 | 1.39211 | 1.53044 | 1.54900 | 1.52436 | 1.50607 | 4.272                 |
| 39 2,6-Dinitrotoluene          | 0.32402 | 0.33601 | 0.30488 | 0.29565 | 0.31131 | 0.31237 | 6.129                 |
| 42 Acenaphthylene              | 1.70680 | 1.83976 | 1.89627 | 1.89086 | 1.92512 | 1.94956 | 4.633                 |
| 41 3-Nitroaniline              | 0.20153 | 0.10292 | 0.15493 | 0.22854 | 0.16385 | 0.17035 | 28.130                |
| 43 Acenaphthene **             | 1.17690 | 1.20977 | 1.20593 | 1.24295 | 1.25779 | 1.21867 | 2.629                 |
| 44 2,4-Dinitrophenol *         | +++++   | 0.07469 | 0.11086 | 0.13015 | 0.13043 | 0.11153 | 23.503                |
| 47 2,4-Dinitrotoluene          | 0.35910 | 0.39177 | 0.42081 | 0.38998 | 0.42362 | 0.39706 | 6.650                 |
| 45 4-Nitrophenol *             | 0.11579 | 0.12201 | 0.16167 | 0.14751 | 0.12335 | 0.13407 | 14.621                |
| 46 Dibenzofuran                | 1.54299 | 1.60570 | 1.64029 | 1.68959 | 1.71874 | 1.64346 | 4.259                 |
| 48 Diethyl phthalate           | 1.57139 | 1.47849 | 1.61389 | 1.53164 | 1.48934 | 1.53675 | 3.699                 |
| 50 Fluorene                    | 1.15400 | 1.25010 | 1.28855 | 1.34247 | 1.38706 | 1.28444 | 6.975                 |
| 49 4-Chlorophenyl phenyl ether | 0.60238 | 0.61464 | 0.62956 | 0.65278 | 0.67651 | 0.63518 | 4.688                 |
| 52 4-Nitroaniline              | 0.11718 | 0.12711 | 0.13126 | 0.13647 | 0.14422 | 0.13125 | 7.720                 |
| 51 4,6-Dinitro-2-methylphenol  | 0.07389 | 0.09802 | 0.11428 | 0.13540 | 0.13392 | 0.11111 | 23.283                |
| 53 N-Nitrosodiphenylamine **   | 0.47209 | 0.44330 | 0.40617 | 0.41486 | 0.37711 | 0.42271 | 8.592                 |
| 54 1,2-Diphenylhydrazine       | 2.12393 | 2.09748 | 2.04161 | 2.02511 | 2.17141 | 2.09191 | 2.865                 |
| 56 4-Bromophenyl phenyl ether  | 0.29573 | 0.30323 | 0.28802 | 0.31305 | 0.29834 | 0.29967 | 3.099                 |
| 57 Hexachlorobenzene           | 0.33781 | 0.33608 | 0.32286 | 0.33314 | 0.33927 | 0.33383 | 1.961                 |
| 58 Pentachlorophenol **        | 0.10790 | 0.10803 | 0.12565 | 0.14551 | 0.12921 | 0.12326 | 12.854                |
| 60 Phenanthrene                | 1.21068 | 1.23195 | 1.36382 | 1.46502 | 1.45517 | 1.34533 | 8.929                 |
| 61 Anthracene                  | 1.18514 | 1.20530 | 1.23675 | 1.29740 | 1.29147 | 1.24321 | 4.045                 |
| 62 Carbazole                   | 0.75283 | 0.56202 | 0.55738 | 0.72086 | 0.58909 | 0.63643 | 14.635                |
| 63 Di-n-butyl phthalate        | 2.04394 | 2.00785 | 1.96648 | 2.13475 | 1.87178 | 2.00496 | 4.835                 |
| 64 Phenanthrene **             | 1.01621 | 1.03898 | 1.22756 | 1.22107 | 1.22142 | 1.14505 | 9.393                 |
| 65 Pyrene                      | 2.39729 | 2.40590 | 1.99877 | 2.01945 | 2.05139 | 2.17456 | 9.571                 |
| 67 Butyl benzyl phthalate      | 1.52748 | 1.45777 | 1.26894 | 1.36805 | 1.23604 | 1.37166 | 8.977                 |
| 68 Di-(2-ethylhexyl) adipate   | 1.25841 | 1.28324 | 1.06330 | 1.20481 | 1.11429 | 1.18481 | 7.922                 |

## Ecosys, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 28-MAY-93 15:51  
 End Cal Date : 31-JUL-1996 13:17  
 Quant Method : ISTD  
 Cal Curve Type : Averaged  
 Target Version : Target 2.20  
 Integrator : HP RTE  
 Method File : /chem/msd\_2.i/2-073196.b/MA-BNA.m  
 Cal Date : 01-Aug-1996 06:42 target

## Calibration File Names:

Level 2: /chem/msd\_2.i/2-073196.b/BNA0201002.d  
 Level 3: /chem/msd\_2.i/2-073196.b/BNA0301003.d  
 Level 4: /chem/msd\_2.i/2-073196.b/BNA0601006.d  
 Level 5: /chem/msd\_2.i/2-073196.b/BNA0401004.d  
 Level 6: /chem/msd\_2.i/2-073196.b/BNA0501005.d

| Compound                       | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | RRF     | % RSD/R <sup>2</sup> |
|--------------------------------|---------|---------|---------|---------|---------|---------|----------------------|
| 3,4-Dichlorobenzidine          | 0.17801 | 0.12933 | 0.13336 | 0.14203 | 0.12978 | 0.14250 | 14.398               |
| 71 Benz(a)anthracene           | 1.14772 | 1.23207 | 1.26699 | 1.29354 | 1.31018 | 1.25010 | 5.152                |
| 70 Bis(2-ethylhexyl) phthalate | 2.30514 | 2.18057 | 1.92232 | 2.30296 | 1.88546 | 2.11929 | 9.598                |
| 73 Chrysene                    | 1.17939 | 1.15770 | 1.15993 | 1.12971 | 1.18142 | 1.16163 | 1.799                |
| 74 Di-n-octyl phthalate **     | 5.96630 | 5.80127 | 6.04103 | 6.44683 | 5.57462 | 5.96601 | 5.413                |
| 75 Benzo(b)fluoranthene        | 1.46153 | 1.64385 | 1.72229 | 1.84736 | 2.01947 | 1.73890 | 12.089               |
| 76 Benzo(k)fluoranthene        | 2.05495 | 1.92860 | 2.15527 | 1.92126 | 1.76823 | 1.96566 | 7.479                |
| 77 Benzo(a)pyrene **           | 1.33555 | 1.42128 | 1.45451 | 1.44299 | 1.48508 | 1.42788 | 3.958                |
| 79 Indeno(1,2,3-cd)pyrene      | 1.00556 | 1.17424 | 1.10880 | 1.03513 | 1.05039 | 1.07482 | 6.243                |
| 80 Dibenz(a,h)anthracene       | 0.79569 | 0.92959 | 0.90776 | 0.98283 | 1.01363 | 0.92590 | 9.074                |
| 81 Benzo(g,h,i)perylene        | 0.91354 | 1.03065 | 1.05425 | 1.01117 | 1.03272 | 1.00847 | 5.475                |
| 1 2-Fluorophenol               | 1.07719 | 1.03327 | 1.06103 | 1.25352 | 1.13636 | 1.11227 | 7.367                |
| 3 Phenol-d5                    | 0.91115 | 1.04258 | 1.04072 | 1.12015 | 1.19510 | 1.06194 | 9.953                |
| 17 Nitrobenzene-d5             | 0.40403 | 0.41454 | 0.43224 | 0.43902 | 0.43268 | 0.42450 | 3.446                |
| 35 2-Fluorobiphenyl            | 1.39256 | 1.40234 | 1.44907 | 1.48808 | 1.49777 | 1.44597 | 3.321                |
| 55 2,4,6-Tribromophenol        | 0.12096 | 0.13033 | 0.14170 | 0.15114 | 0.14271 | 0.13737 | 8.580                |
| 66 Terphenyl-d14               | 1.48972 | 1.55202 | 1.37206 | 1.43639 | 1.39074 | 1.44799 | 5.082                |

Report Date: 02-Aug-1996 08:13

Ecosys, Inc.

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd\_2.i Injection Date: 02-AUG-1996 07:15  
 Lab File ID: BNA0101001.d Init. Calibration Date(s): 05/28/93 07/31/96  
 Analysis Type: WATER Init. Calibration Times: 15:51 13:17  
 Lab Sample ID: Method File: /chem/msd\_2.i/2-080296.b/MA-BNA.m

| COMPOUND                     | RRF   | RF80  | MIN   | MAX   |
|------------------------------|-------|-------|-------|-------|
| =====                        | ===== | ===== | ===== | ===== |
| 12-Fluorophenol              | 1.112 | 1.058 | 0.050 | 4.9   |
| Aniline                      | 1.113 | 1.050 | 0.050 | 5.6   |
| Phenol-d5                    | 1.062 | 1.118 | 0.050 | 5.3   |
| Phenol **                    | 1.085 | 1.313 | 0.050 | 21.0  |
| Bis(2-chloroethyl) ether     | 1.202 | 1.176 | 0.050 | 2.1   |
| 2-Chlorophenol               | 1.283 | 1.257 | 0.050 | 2.0   |
| 1,3-Dichlorobenzene          | 1.511 | 1.545 | 0.050 | 2.2   |
| 1,4-Dichlorobenzene **       | 1.551 | 1.596 | 0.050 | 2.9   |
| 1,2-Dichlorobenzene          | 1.460 | 1.479 | 0.050 | 1.3   |
| Benzyl alcohol               | 0.876 | 0.990 | 0.050 | 13.0  |
| 2-Methylphenol               | 0.932 | 0.888 | 0.050 | 4.7   |
| Bis(2-chloroisopropyl) ether | 1.021 | 1.063 | 0.050 | 4.2   |
| 4-Nitrosodi-n-propylamine *  | 0.699 | 0.775 | 0.050 | 10.8  |
| 4-Methylphenol               | 0.953 | 0.890 | 0.050 | 6.5   |
| Hexachloroethane             | 0.671 | 0.697 | 0.050 | 3.8   |
| Nitrobenzene-d5              | 0.424 | 0.439 | 0.050 | 3.4   |
| Nitrobenzene                 | 0.398 | 0.396 | 0.050 | 0.6   |
| Isophorone                   | 0.683 | 0.764 | 0.050 | 11.9  |
| 2-Nitrophenol **             | 0.265 | 0.276 | 0.050 | 3.9   |
| 2,4-Dimethylphenol           | 0.371 | 0.399 | 0.050 | 7.4   |
| Bis(2-chloroethoxy)methane   | 0.376 | 0.391 | 0.050 | 4.0   |
| 2,4-Dichlorophenol **        | 0.313 | 0.341 | 0.050 | 9.0   |
| Benzoic acid                 | 0.218 | 0.230 | 0.050 | 5.3   |
| 1,2,4-Trichlorobenzene       | 0.385 | 0.419 | 0.050 | 8.8   |
| Naphthalene                  | 1.148 | 1.213 | 0.050 | 5.7   |
| 4-Chloroaniline              | 0.338 | 0.345 | 0.050 | 2.1   |
| Hexachlorobutadiene **       | 0.224 | 0.249 | 0.050 | 11.1  |
| 4-Chloro-3-methylphenol **   | 0.350 | 0.324 | 0.050 | 7.4   |
| 2-Methylnaphthalene          | 0.745 | 0.788 | 0.050 | 5.8   |
| Hexachlorocyclopentadiene *  | 0.259 | 0.263 | 0.050 | 1.7   |
| 2,4,6-Trichlorophenol **     | 0.322 | 0.337 | 0.050 | 4.8   |
| 2,4,5-Trichlorophenol        | 0.361 | 0.392 | 0.050 | 8.6   |
| 2-Fluorobiphenyl             | 1.446 | 1.520 | 0.050 | 5.1   |
| 2-Chloronaphthalene          | 1.202 | 1.220 | 0.050 | 1.5   |
| 2-Nitroaniline               | 0.315 | 0.319 | 0.050 | 1.4   |
| Dimethyl phthalate           | 1.506 | 1.437 | 0.050 | 4.6   |
| 2,6-Dinitrotoluene           | 0.312 | 0.314 | 0.050 | 0.4   |
| Acenaphthylene               | 1.850 | 1.848 | 0.050 | 0.1   |
| 2-Nitroaniline               | 0.170 | 0.165 | 0.050 | 3.4   |
| Acenaphthene **              | 1.219 | 1.205 | 0.050 | 1.1   |
| 2,4-Dinitrophenol *          | 0.112 | 0.095 | 0.050 | 14.6  |
| 2,4-Dinitrotoluene           | 0.397 | 0.431 | 0.050 | 8.5   |
| 4-Nitrophenol *              | 0.134 | 0.119 | 0.050 | 11.2  |
| Dibenzofuran                 | 1.643 | 1.677 | 0.050 | 2.0   |
| Diethyl phthalate            | 1.537 | 1.626 | 0.050 | 5.8   |

Ecosys, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd\_2.i Injection Date: 02-AUG-1996 07:15  
ab File ID: BNA0101001.d Init. Calibration Date(s): 05/28/93 07/31/96  
Analysis Type: WATER Init. Calibration Times: 15:51 13:17  
ab Sample ID: Method File: /chem/msd\_2.i/2-080296.b/MA-BNA.m

| COMPOUND                    | RRF   | RF80  | MIN   | %D   | MAX  |
|-----------------------------|-------|-------|-------|------|------|
| Fluorene                    | 1.284 | 1.363 | 0.050 | 6.1  | 30.0 |
| 4-Chlorophenyl phenyl ether | 0.635 | 0.678 | 0.050 | 6.7  | 30.0 |
| 4-Nitroaniline              | 0.131 | 0.149 | 0.050 | 13.3 | 30.0 |
| 4,6-Dinitro-2-methylphenol  | 0.111 | 0.112 | 0.050 | 0.9  | 30.0 |
| N-Nitrosodiphenylamine **   | 0.423 | 0.484 | 0.050 | 14.4 | 30.0 |
| 1,2-Diphenylhydrazine       | 2.092 | 2.114 | 0.050 | 1.1  | 30.0 |
| 2,4,6-Tribromophenol        | 0.137 | 0.172 | 0.050 | 25.5 | 30.0 |
| 4-Bromophenyl phenyl ether  | 0.300 | 0.330 | 0.050 | 10.0 | 30.0 |
| Hexachlorobenzene           | 0.334 | 0.384 | 0.050 | 15.1 | 30.0 |
| Pentachlorophenol **        | 0.123 | 0.142 | 0.050 | 15.6 | 30.0 |
| Phenanthrene                | 1.345 | 1.492 | 0.050 | 10.9 | 30.0 |
| Anthracene                  | 1.243 | 1.334 | 0.050 | 7.3  | 30.0 |
| Carbazole                   | 0.636 | 0.720 | 0.050 | 13.1 | 30.0 |
| Di-n-butyl phthalate        | 2.005 | 2.072 | 0.050 | 3.3  | 30.0 |
| Fluoranthene **             | 1.145 | 1.341 | 0.050 | 17.1 | 30.0 |
| Pyrene                      | 2.175 | 1.997 | 0.050 | 8.2  | 30.0 |
| Terphenyl-d14               | 1.448 | 1.359 | 0.050 | 6.2  | 30.0 |
| Butyl benzyl phthalate      | 1.372 | 1.221 | 0.050 | 11.0 | 30.0 |
| Di(2-ethylhexyl) adipate    | 1.185 | 0.988 | 0.050 | 16.7 | 30.0 |
| 3,3'-Dichlorobenzidine      | 0.143 | 0.156 | 0.050 | 9.5  | 30.0 |
| Benz(a)anthracene           | 1.250 | 1.289 | 0.050 | 3.1  | 30.0 |
| Bis(2-ethylhexyl) phthalate | 2.119 | 1.873 | 0.050 | 11.6 | 30.0 |
| Chrysene                    | 1.162 | 1.154 | 0.050 | 0.7  | 30.0 |
| Di-n-octyl phthalate **     | 5.966 | 5.313 | 0.050 | 10.9 | 30.0 |
| Benzo(b)fluoranthene        | 1.739 | 1.756 | 0.050 | 1.0  | 30.0 |
| Benzo(k)fluoranthene        | 1.966 | 1.942 | 0.050 | 1.2  | 30.0 |
| Benzo(a)pyrene **           | 1.428 | 1.429 | 0.050 | 0.1  | 30.0 |
| Indeno(1,2,3-cd)pyrene      | 1.075 | 1.287 | 0.050 | 19.8 | 30.0 |
| Dibenz(a,h)anthracene       | 0.926 | 1.031 | 0.050 | 11.4 | 30.0 |
| Benzo(g,h,i)perylene        | 1.008 | 1.017 | 0.050 | 0.8  | 30.0 |

# SemiVolatile Method Blank Summary

|                         |                             |
|-------------------------|-----------------------------|
| Lab Name: EcoSys, Inc.  | Client: ACE-SAD             |
| Ledger No(s): 107920    | Extraction Method No.: 3550 |
| Batch No(s): 0802960002 | Date Extracted: 8/1/96      |
| Lab File ID: BNA0501005 | Date Analyzed: 8/2/96       |
| Lab Sample ID: AB35822  | Time Analyzed: 11:16        |
| Cleanup Method: NA      | Level: Low                  |
| Instrument ID: MSD-2    | Matrix: Soil                |

*This method blank applies to the following samples, LCS, MS, and MSD:*

|    | Client<br>Sample No. | Lab<br>Sample ID | Lab<br>File ID | Date<br>Analyzed |
|----|----------------------|------------------|----------------|------------------|
| 1  | NA                   | AB36645 LCS      | BNA0601006     | 8/2/96           |
| 2  | NA                   | AB36643 MS       | BNA0801008     | 8/2/96           |
| 3  | NA                   | AB36644 MSD      | BNA0901009     | 8/2/96           |
| 4  | #45-T1-S1            | AB35819          | BNA0701007     | 8/2/96           |
| 5  |                      |                  |                |                  |
| 6  |                      |                  |                |                  |
| 7  |                      |                  |                |                  |
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| 11 |                      |                  |                |                  |
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| 18 |                      |                  |                |                  |
| 19 |                      |                  |                |                  |
| 20 |                      |                  |                |                  |
| 21 |                      |                  |                |                  |
| 22 |                      |                  |                |                  |
| 23 |                      |                  |                |                  |
| 24 |                      |                  |                |                  |

 13 Aug 96  
 QA/QC Officer

Comments:

## SemiVolatile MS/MSD Recovery

Lab Name: EcoSys, Inc.

Client: ACE-SAD

Ledger No(s): 107920

Matrix Spike/Spike dup AB35819 REF

Batch No(s): 0802960002

AB36643 MS

Lab File ID: BNA0801008/BNA0901009

AB36644 MSD

| Compound                   | Spike Added<br>(ug/Kg) | Sample<br>Conc<br>(ug/Kg) | MS<br>Conc<br>(ug/Kg) | MS %<br>Recovery | # | QC Limits<br>Recovery |
|----------------------------|------------------------|---------------------------|-----------------------|------------------|---|-----------------------|
| Phenol                     | 10000                  | ND                        | 5460                  | 55               |   | 26-90                 |
| 2-Chlorophenol             | 10000                  | ND                        | 6110                  | 61               |   | 25-102                |
| 1,4-Dichlorobenzene        | 5000                   | ND                        | 3170                  | 63               |   | 28-104                |
| N-Nitroso-di-n-propylamine | 5000                   | ND                        | 3230                  | 65               |   | 41-126                |
| 1,2,4-Trichlorobenzene     | 5000                   | ND                        | 3290                  | 66               |   | 38-107                |
| 4-Chloro-3-methylphenol    | 10000                  | ND                        | 8610                  | 86               |   | 26-103                |
| Acenaphthene               | 5000                   | ND                        | 3600                  | 72               |   | 31-137                |
| 4-Nitrophenol              | 10000                  | ND                        | 8990                  | 90               |   | 11-114                |
| 2,4-Dinitrotoluene         | 5000                   | ND                        | 3380                  | 68               |   | 28-89                 |
| Pentachlorophenol          | 10000                  | ND                        | 7930                  | 79               |   | 17-109                |
| Pyrene                     | 5000                   | ND                        | 4940                  | 99               |   | 35-142                |

| Compound                   | Spike Added<br>(ug/Kg) | MSD<br>Conc<br>(ug/Kg) | MSD %<br>Recovery | # | % RPD | # | QC Limits |          |
|----------------------------|------------------------|------------------------|-------------------|---|-------|---|-----------|----------|
| Phenol                     | 10000                  | 6040                   | 60                |   | 10    |   | RPD       | Recovery |
| 2-Chlorophenol             | 10000                  | 6670                   | 67                |   | 9     |   | 35        | 26-90    |
| 1,4-Dichlorobenzene        | 5000                   | 3430                   | 69                |   | 8     |   | 50        | 25-102   |
| N-Nitroso-di-n-propylamine | 5000                   | 3560                   | 71                |   | 10    |   | 27        | 28-104   |
| 1,2,4-Trichlorobenzene     | 5000                   | 3540                   | 71                |   | 7     |   | 38        | 41-126   |
| 4-Chloro-3-methylphenol    | 10000                  | 8900                   | 89                |   | 3     |   | 23        | 38-107   |
| Acenaphthene               | 5000                   | 3720                   | 74                |   | 3     |   | 33        | 26-103   |
| 4-Nitrophenol              | 10000                  | 8520                   | 85                |   | 5     |   | 19        | 31-137   |
| 2,4-Dinitrotoluene         | 5000                   | 3530                   | 71                |   | 4     |   | 50        | 11-114   |
| Pentachlorophenol          | 10000                  | 7920                   | 79                |   | 0     |   | 47        | 28-89    |
| Pyrene                     | 5000                   | 4800                   | 96                |   | 3     |   | 47        | 17-109   |
|                            |                        |                        |                   |   |       |   | 36        | 35-142   |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

ND = Not Detected

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

QA/QC Officer

Comments:

## SemiVolatile LCS Recovery

Lab Name: EcoSys, Inc.  
 Ledger No(s): 107920  
 Batch No(s): 0802960002  
 Lab File ID: BNA0601006

Client: ACESAD  
 Lab Control Spike/LCS Dup No: AB36645 LCS

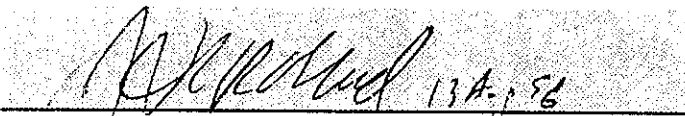
| Compound                   | Spike Added<br>(ug/Kg) | Sample          | LCS             | LCS %<br>Recovery | # | QC Limits<br>Recovery |
|----------------------------|------------------------|-----------------|-----------------|-------------------|---|-----------------------|
|                            |                        | Conc<br>(ug/Kg) | Conc<br>(ug/Kg) |                   |   |                       |
| Phenol                     | 3330                   | NR              | 2350            | 71                |   | 26-90                 |
| 2-Chlorophenol             | 3330                   | NR              | 2690            | 81                |   | 25-102                |
| 1,4-Dichlorobezene         | 1670                   | NR              | 1360            | 81                |   | 28-104                |
| N-Nitroso-di-n-propylamine | 1670                   | NR              | 1430            | 86                |   | 41-126                |
| 1,2,4-Trichlorobenzene     | 1670                   | NR              | 1340            | 80                |   | 38-107                |
| 4-Chloro-3-methylphenol    | 3330                   | NR              | 3060            | 92                |   | 26-103                |
| Acenaphthene               | 1670                   | NR              | 1410            | 84                |   | 31-137                |
| 4-Nitrophenol              | 3330                   | NR              | 2820            | 85                |   | 11-114                |
| 2,4-Dinitrotoluene         | 1670                   | NR              | 1380            | 83                |   | 28-89                 |
| Pentachlorophenol          | 3330                   | NR              | 2590            | 78                |   | 17-109                |
| Pyrene                     | 1670                   | NR              | 1930            | 116               |   | 35-142                |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

NR = Not Required

Spike Recovery: 0 out of 11 outside limits

  
 QA/QC Officer

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# SemiVolatile Surrogate Recovery (Soil)

Lab Name: EcoSys, Inc.

Client: ACESAD

Ledger No(s): 107920

Level: Low

Batch No.(s): 0802960002

| Lab         | S1      | S2      | S3      | S4      | S5      | S6      | Total |
|-------------|---------|---------|---------|---------|---------|---------|-------|
| Sample No.  | (2FP) # | (PHL) # | (NBZ) # | (FBP) # | (TBP) # | (TPH) # | Out   |
| AB35822 MB  | 70      | 59      | 79      | 73      | 91      | 116     | 0     |
| AB36645 LCS | 78      | 64      | 80      | 76      | 99      | 111     | 0     |
| AB36643 MS  | 57      | 46      | 60      | 60      | 85      | 85      | 0     |
| AB36644 MSD | 57      | 46      | 57      | 58      | 79      | 77      | 0     |
| AB35819     | 56      | 46      | 67      | 70      | 91      | 103     | 0     |
|             |         |         |         |         |         |         |       |
|             |         |         |         |         |         |         |       |
|             |         |         |         |         |         |         |       |

# Column used to flag recovery values

\* = Values outside of required QC limits

ND = Not Detected

|                               | QC Limits |
|-------------------------------|-----------|
| S1 (2FP) 2-Fluorophenol       | 25-121    |
| S2 (PHL) Phenol-d5            | 24-113    |
| S3 (NBZ) Nitrobenzene-d5      | 23-120    |
| S4 (FBP) 2-Fluorobiphenyl     | 30-115    |
| S5 (TBP) 2,4,6-Tribromophenol | 19-122    |
| S6 (TPH) Terphenyl-d14        | 18-137    |

QA/QC Officer

Comments:

# General Chemistry Method Blank Summary

Lab Name: EcoSys, Inc.

Ledger: 107920

Lab Sample ID: AB35822

Client: ACE-SAD

Client Sample ID: Soil Method Blank

Prep Date: 7/17/96

Batch ID: 071796B

|    | ANALYTE    | BLANK<br>VALUE | MDL<br>mg/Kg | DATE<br>ANALYZED |
|----|------------|----------------|--------------|------------------|
| 1  | TRPH 9071A | <MDL           | 10.0         | 7/17/96          |
| 2  |            |                |              |                  |
| 3  |            |                |              |                  |
| 4  |            |                |              |                  |
| 5  |            |                |              |                  |
| 6  |            |                |              |                  |
| 7  |            |                |              |                  |
| 8  |            |                |              |                  |
| 9  |            |                |              |                  |
| 10 |            |                |              |                  |
| 11 |            |                |              |                  |
| 12 |            |                |              |                  |
| 13 |            |                |              |                  |
| 14 |            |                |              |                  |
| 15 |            |                |              |                  |
| 16 |            |                |              |                  |
| 17 |            |                |              |                  |
| 18 |            |                |              |                  |
| 19 |            |                |              |                  |
| 20 |            |                |              |                  |
| 21 |            |                |              |                  |
| 22 |            |                |              |                  |
| 23 |            |                |              |                  |
| 24 |            |                |              |                  |

QA/QC Officer

Comments:

# General Chemistry MS/MSD Recovery

Lab Name: EcoSys, Inc.  
Ledger No(s): 107920

Client: ACESAD  
AB35672 REF

| MS         | Spike Added<br>mg/Kg | Sample Conc.<br>mg/Kg | MS Conc.<br>mg/Kg | MS %<br>Recovery | QC Limits<br>Required |
|------------|----------------------|-----------------------|-------------------|------------------|-----------------------|
| TRPH 9071A | 155                  | ND                    | 144               | 93               | 80-120                |

| MSD        | Spike Added<br>mg/Kg | MSD Conc.<br>mg/Kg | MSD %<br>mg/Kg | QC Limits<br>Required | %RPD |
|------------|----------------------|--------------------|----------------|-----------------------|------|
| TRPH 9071A | 155                  | 138                | 89             | 80-120                | 4    |

NR = Not Required

NC = Not Calculable due to values less than CRDL

ND = Not Detected

QA/QC Officer

Comments:

# General Chemistry LCS Recovery

Lab Name: EcoSys, Inc.  
Ledger No(s): 107920

Client: ACE-SAD  
Batch ID: 071796B

LCS

|            | Spike Added<br>mg/Kg | Sample Conc.<br>mg/Kg | LCS Conc.<br>mg/Kg | LCS %<br>Recovery | QC Limits<br>Required |
|------------|----------------------|-----------------------|--------------------|-------------------|-----------------------|
| TRPH 9071A | 155                  | NR                    | 148                | 96                | 80-120                |

NR = Not Required

ND = Not Detected

NC = Not Calculable due to value(s) less than CRDL

 13 Aug 01

QA/QC Officer

Comments:

General Chemistry Duplicate Recovery

Lab Name: EcoSys, Inc.

Client: ACE-SAD

Ledger No(s): 107920

Sample 35671

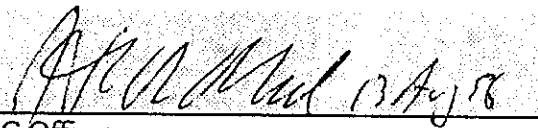
|            | Sample Result<br>(mg/Kg) | Dup. Sample<br>Result (mg/Kg) | % RPD |
|------------|--------------------------|-------------------------------|-------|
| TRPH 9071A | ND                       | ND                            | NC    |

RPD Limit 20%

NR = Not Required

ND = Not Detected

NC = Not Calculable due to value(s) less than CRDL

  
QA/QC Officer

Comments:

Sample AB35671 is not a USACE sample.

External Standard Report

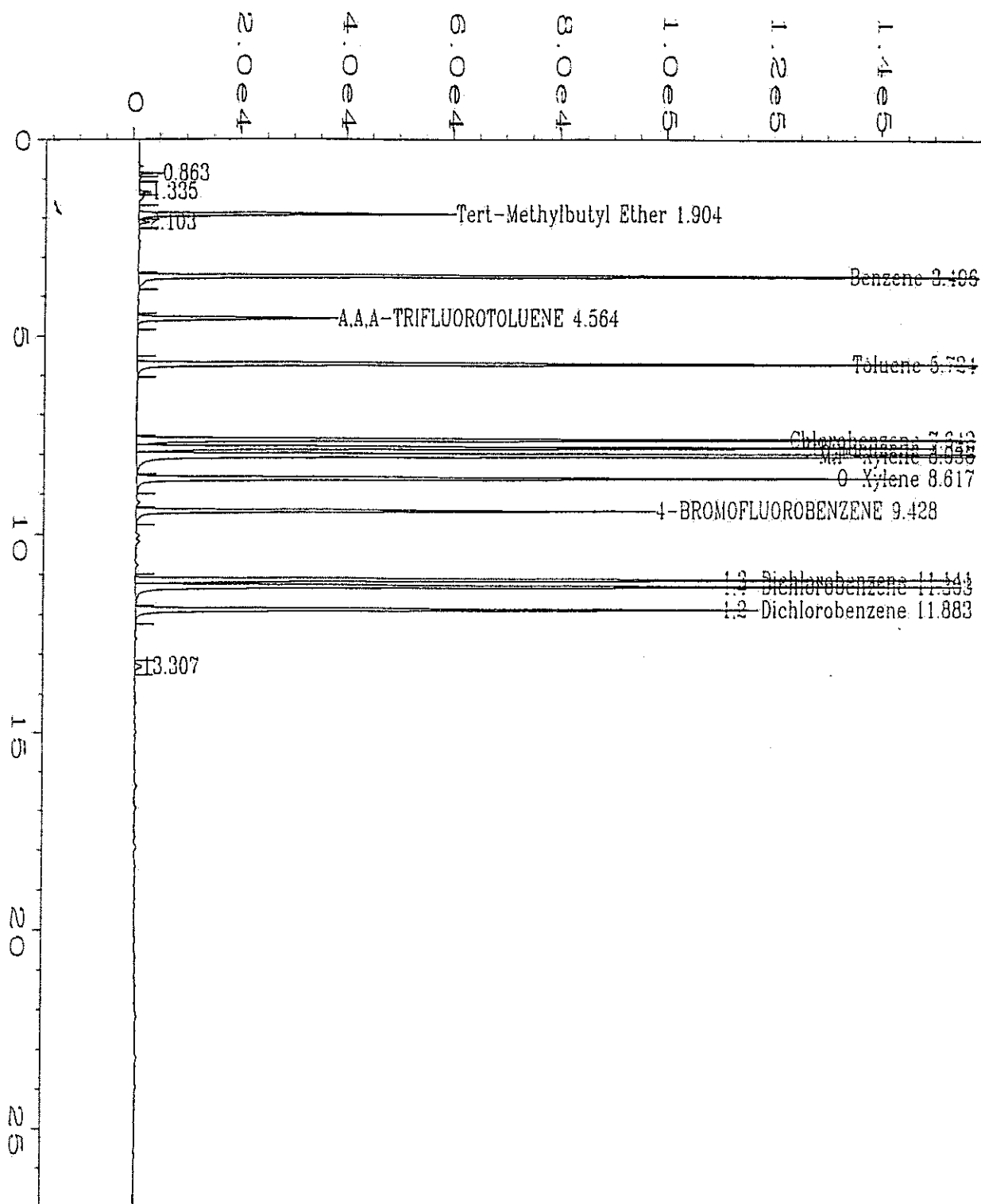
```

Data File Name   : C:\HPCHEM\1\DATA\b072396\30723F01.D
Operator        : Doug Anderson
Instrument       : GC3
Sample Name     : 20ppb 8020 ccv
Run Time Bar Code:
Acquired on    : 23 Jul 96 04:41 PM
Report Created on: 23 Jul 96 05:15 PM
Last Recalib on : 14 JUN 96 10:38 AM
Multiplier     : 1
Sample Info    : 16ppb surr

Page Number      : 1
Vial Number     : 1
Injection Number : 1
Sequence Line   : 1
Instrument Method: 3B061396.MTH
Analysis Method  : 3B061396.MTH
Sample Amount    : 0
ISTD Amount      :
  
```

Sig. 1 in C:\HPCHEM\1\DATA\b072396\30723F01.D

| Ret Time | Area    | Type | Width | Ref# | ppb    | Name                   |
|----------|---------|------|-------|------|--------|------------------------|
| 1.904    | 223777  | BV   | 0.059 | 1    | 19.153 | Tert-Methylbutyl Ether |
| 3.496    | 674281  | BV   | 0.056 | 1    | 17.090 | Benzene                |
| 4.564    | 155103  | BB   | 0.065 | 1    | 14.042 | A,A,A-TRIFLUOROTOLUENE |
| 5.724    | 653855  | BV   | 0.059 | 1    | 17.308 | Toluene                |
| 7.642    | 660365  | BV   | 0.058 | 1    | 17.445 | Chlorobenzene          |
| 7.849    | 588483  | VV   | 0.061 | 1    | 17.423 | Ethylbenzene           |
| 8.036    | 1352584 | VV   | 0.062 | 1    | 34.760 | M,P-Xylene             |
| 8.617    | 572078  | VB   | 0.062 | 1    | 17.266 | O-Xylene               |
| 9.428    | 368581  | PB   | 0.059 | 1    | 14.472 | 4-BROMOFLUOROBENZENE   |
| 11.141   | 590019  | BV   | 0.060 | 1    | 17.390 | 1,3-Dichlorobenzene    |
| 11.303   | 603378  | VV   | 0.060 | 1    | 17.557 | 1,4-Dichlorobenzene    |
| 11.883   | 457753  | VB   | 0.061 | 1    | 19.159 | 1,2-Dichlorobenzene    |



|                    |                                       |                    |                |
|--------------------|---------------------------------------|--------------------|----------------|
| Data File Name     | : C:\HPCHEM\1\DATA\b072396\30723F01.D | Page Number        | : 1            |
| Operator           | : Doug Anderson                       | Vial Number        | : 1            |
| Instrument         | : GC3                                 | Injection Number   | : 1            |
| Sample Name        | : 20ppb 8020 ccv                      | Sequence Line      | : 1            |
| Run Time Bar Code: |                                       | Instrument Method: | 3B061396.MTH   |
| Acquired on        | : 23 Jul 96 04:41 PM                  | Analysis Method    | : 3B061396.MTH |
| Report Created on: | 23 Jul 96 05:15 PM                    | Sample Amount      | : 0            |
| Last Recalib on    | : 14 JUN 96 10:38 AM                  | ISTD Amount        | :              |
| Multiplier         | : 1                                   |                    |                |
| Sample Info        | : 16ppb surr                          |                    |                |

# BTEX Method Blank Summary

|                        |                        |
|------------------------|------------------------|
| Lab Name: EcoSys, Inc. | Client: ACESAD         |
| Ledger No(s): 107920   |                        |
| Batch No: 072396BW     | Date Analyzed: 7/23/96 |
| Lab File ID: 30723F01  | Time Analyzed: 17:16   |
| Lab Sample ID: AB35823 | Level: Low             |
| Instrument ID: GC3     | Matrix: Water          |

*This method blank applies to the following samples, LCS, MS, and MSD:*

|    | Client<br>Sample No. | Lab<br>Sample ID | Lab<br>File ID | Date<br>Analyzed |
|----|----------------------|------------------|----------------|------------------|
| 1  | NA                   | AB36265 LCS      | 30723F03       | 7/23/96          |
| 2  | NA                   | AB36266 MS       | 30723F04       | 7/23/96          |
| 3  | NA                   | AB36267 MSD      | 30723F05       | 7/23/96          |
| 4  | #45-T1-GW            | AB35820          | 30723F08       | 7/23/96          |
| 5  | TRIP BLANK #9        | AB35821          | 30723F07       | 7/23/96          |
| 6  |                      |                  |                |                  |
| 7  |                      |                  |                |                  |
| 8  |                      |                  |                |                  |
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| 17 |                      |                  |                |                  |
| 18 |                      |                  |                |                  |
| 19 |                      |                  |                |                  |
| 20 |                      |                  |                |                  |

NA = Not Applicable



QA/QC Officer

Comments:

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# Water BTEX MS/MSD Recovery

Lab Name: EcoSys, Inc.

Ledger No: 107920

Batch No: 0723596BW

Lab File ID: 30723F04/30723F05

Client: ACE-SAD

Matrix Spike/Matrix Dup No.: AB35738 REF

AB36266 MS

AB36267 MSD

Level (Low/Med): Low

| Compound     | Spike Added<br>(ug/L) | Sample<br>Conc<br>(ug/L) | MS<br>Conc<br>(ug/L) | MS %<br>Recovery | # | QC Limits<br>Recovery |
|--------------|-----------------------|--------------------------|----------------------|------------------|---|-----------------------|
| Benzene      | 20                    | ND                       | 18                   | 91               |   | 80-120                |
| Toluene      | 20                    | ND                       | 20                   | 100              |   | 80-120                |
| Ethylbenzene | 20                    | ND                       | 19                   | 95               |   | 80-120                |
| m,p-Xylene   | 40                    | 1.12                     | 40                   | 98               |   | 80-120                |
| o-Xylene     | 20                    | 4.08                     | 24                   | 98               |   | 80-120                |

| Compound     | Spike Added<br>(ug/L) | MSD<br>Conc<br>(ug/L) | MSD %<br>Recovery | # | % RPD | # | QC Limits |          |
|--------------|-----------------------|-----------------------|-------------------|---|-------|---|-----------|----------|
| Benzene      | 20                    | 17                    | 83                |   | 9     |   | RPD       | Recovery |
| Toluene      | 20                    | 18                    | 90                |   | 11    |   | 30        | 80-120   |
| Ethylbenzene | 20                    | 17                    | 86                |   | 10    |   | 30        | 80-120   |
| m,p-Xylene   | 40                    | 37                    | 89                |   | 10    |   | 30        | 80-120   |
| o-Xylene     | 20.0                  | 21                    | 87                |   | 12    |   | 30        | 80-120   |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of OC limits

ND = None Detected

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

*[Signature]*

QA/QC Officer

Comments: \_\_\_\_\_

# BTEX LCS Recoveries (Water)

Lab Name: EcoSys, Inc.  
 Ledger No: 107920  
 Batch No: 072396BW  
 Lab File ID: 30723F03

Client: ACE-SAD  
 Lab Control Spike: AB36265  
 Level (Low/Med): Low

| Compound     | Spike Added<br>(ug/L) | Sample<br>Conc.<br>(ug/L) | LCS<br>Conc<br>(ug/L) | LCS %<br>Recovery | # | QC Limits<br>Recovery |
|--------------|-----------------------|---------------------------|-----------------------|-------------------|---|-----------------------|
| Benzene      | 20                    | NR                        | 19                    | 93                |   | 80-120                |
| Toluene      | 20                    | NR                        | 19                    | 94                |   | 80-120                |
| Ethylbenzene | 20                    | NR                        | 19                    | 95                |   | 80-120                |
| m,p-Xylene   | 40                    | NR                        | 38                    | 95                |   | 80-120                |
| o-Xylene     | 20                    | NR                        | 19                    | 95                |   | 80-120                |

\* Values outside of QC limits  
 ND = Not Detected  
 NR = Not Required

Spike Recovery: 0 out of 5 outside limits

QA/QC Officer

Comments:

## BTEX Surrogate Recovery Summary

Lab Name: EcoSys, Inc  
Ledger No(s): 107920  
Batch No.: 072396BW  
GC Column : DB-VXR

Client: ACE-SAD

Matrix: Water  
Level: Low

[illegible]

Surrogate Recovery Limits: 80-120%

# Column to be used to flag recovery values

\* Values outside of required QC limits

ND = Not Detected

DO = Diluted Out

QA/QC Officer

Comments:

## SemiVolatiles DFTPP

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Lab Name: <u>EcoSys, Inc.</u>   | Client: <u>ACE-SAD</u>              |
| Ledger No: <u>107920</u>        | DFTPP Injection Date: <u>8/1/96</u> |
| Lab File ID: <u>DFTPP080196</u> | DFTPP Injection Time: <u>7:19</u>   |
| Instrument ID: <u>MSD-2</u>     | Batch Number: <u>0801960004</u>     |

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 30.0 - 60.0% of mass 198           | 56.9                 |
| 68  | Less than 2.0% of mass 69          | 0.0                  |
| 69  | Mass 69 relative abundance         | 69.2 (1)             |
| 70  | Less than 2.0% of mass 69          | 0.5                  |
| 127 | 40.0 - 60.0% of mass 198           | 51.6                 |
| 197 | Less than 1.0% of mass 198         | 0.0 (1)              |
| 198 | Base Peak, 100% relative abundance | 100.0                |
| 199 | 5.0 to 9.0% of mass 198            | 6.1                  |
| 275 | 10.0 - 30.0% of mass 198           | 18.3                 |
| 365 | Greater than 1% of mass 198        | 1.5                  |
| 441 | Present, but less than mass 443    | 77.0                 |
| 442 | Greater than 40% of mass 198       | 45.2                 |
| 443 | 17.0 - 23.0% of mass 442           | 19.7 (2)             |

1-Value is % mass 69

2-Value is % mass 442

| THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS: |                      |                  |                |                  |                  |  |  |
|------------------------------------------------------------------------------|----------------------|------------------|----------------|------------------|------------------|--|--|
|                                                                              | CLIENT<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |  |  |
|                                                                              | 01 NA                | CCV              | BNA0101001     | 08/01/96         | 7:47 AM          |  |  |
|                                                                              | 02 NA                | AB35823 MB       | BNA0801008     | 08/01/96         | 3:26 PM          |  |  |
|                                                                              | 03                   |                  |                |                  |                  |  |  |
|                                                                              | 04                   |                  |                |                  |                  |  |  |
|                                                                              | 05                   |                  |                |                  |                  |  |  |
|                                                                              | 06                   |                  |                |                  |                  |  |  |
|                                                                              | 07                   |                  |                |                  |                  |  |  |
|                                                                              | 08                   |                  |                |                  |                  |  |  |

NA: Not Applicable

Comments:

QA/QC OFFICER

Ecosys, Inc.

Data file : /chem/msd\_2.i/2-080196.b/DFTPP080196.d  
Lab. Id. : DFTPP02  
Inj Date : 01-AUG-96 07:19 Autotune Date: 31-Jul-96 09:13:5  
Operator : GORDON Inst ID: msd\_2.i  
Emp Info : 50HG of dft-05-39  
Disc Info : TUNE FOR INSTRUMENT msd2.i  
Comment :  
Method : /chem/msd\_2.i/2-080196.b/dftpp288.m  
Meth Date : 01-Aug-1996 07:05  
Cal Date : Cal File:  
Vls bottle: 1 QC Sample: DFTPP  
Dil Factor: 1.000 Target Version: Target 2.20  
Integrator: HP RTE Compound Sublist: all.sub  
Sample Type: WATER

|              |      | CONCENTRATIONS   |         |                  |           |
|--------------|------|------------------|---------|------------------|-----------|
|              |      | ON-COL           | FINAL   |                  |           |
| RT (REL RT)  | MASS | RESPONSE ( ug/L) | ( ug/L) | TARGET RANGE     | RATIO     |
| 1 dftpp      |      |                  |         | CAS #: 5074-71-5 |           |
| 16(0.000)    | 198  | 357653           |         |                  | 100.00(Q) |
| 7.916(0.000) | 51   | 196270           |         | 0.00- 0.00       | 54.88     |
| 7.916(0.000) | 68   | 0                |         | 0.00- 0.00       | 0.00      |
| 7.916(0.000) | 69   | 236341           |         | 0.00- 0.00       | 66.08     |
| 7.916(0.000) | 70   | 1045             |         | 0.00- 0.00       | 0.44      |
| 7.916(0.000) | 127  | 180373           |         | 0.00- 0.00       | 50.43     |
| 7.916(0.000) | 197  | 0                |         | 0.00- 0.00       | 0.00      |
| 7.916(0.000) | 199  | 22391            |         | 0.00- 0.00       | 6.26      |
| 7.916(0.000) | 275  | 66512            |         | 0.00- 0.00       | 18.60     |
| 7.916(0.000) | 365  | 6214             |         | 0.00- 0.00       | 1.74      |
| 7.916(0.000) | 441  | 32742            |         | 0.00- 0.00       | 79.62     |
| 7.916(0.000) | 442  | 211552           |         | 0.00- 0.00       | 59.15     |
| 7.916(0.000) | 443  | 41121            |         | 0.00- 0.00       | 19.44     |

QC Flag Legend

- Qualifier signal failed the ratio test.

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TARGET COMPOUNDS

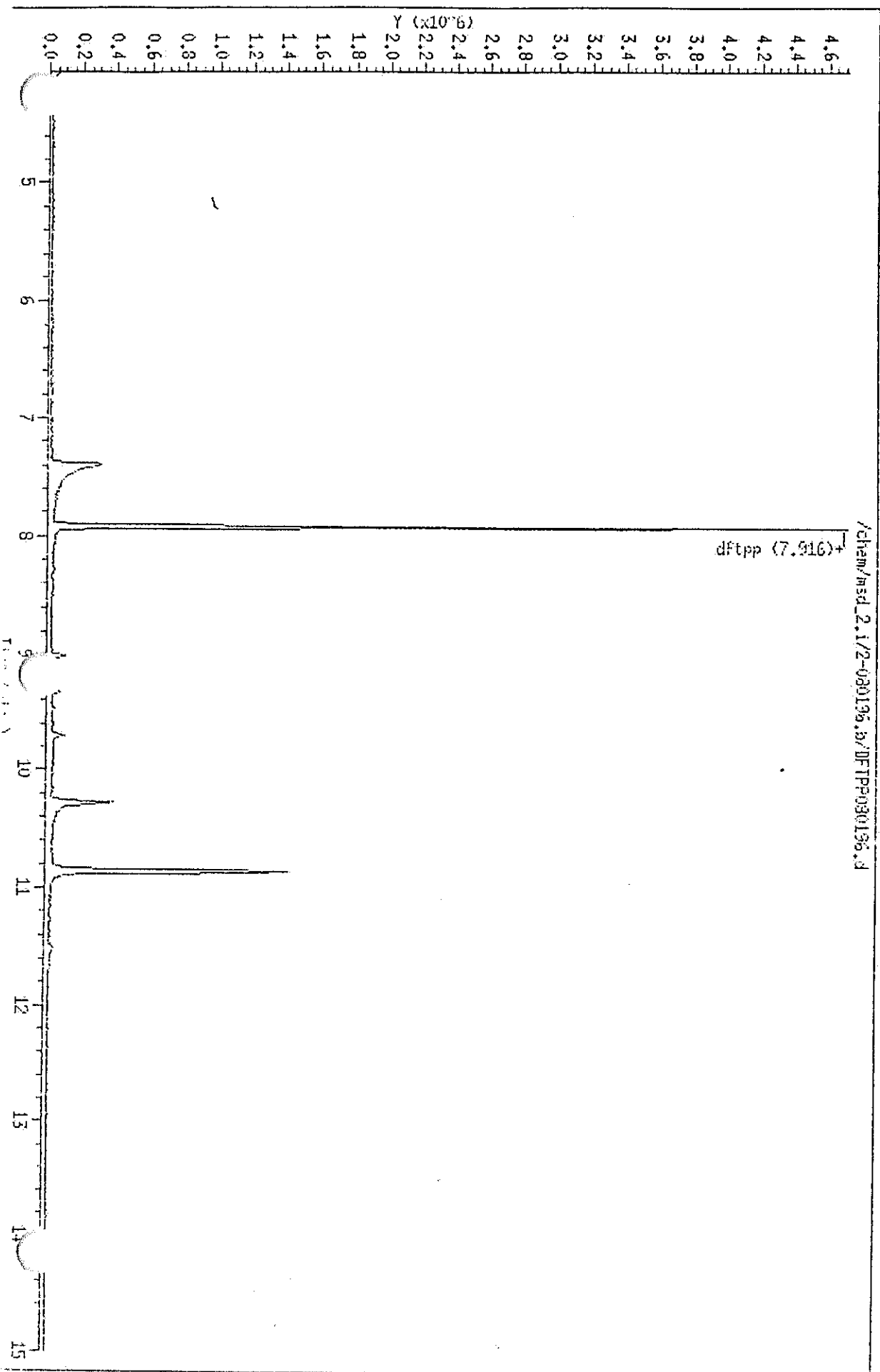
|                                       |                        |
|---------------------------------------|------------------------|
| Client Name:                          | Client SDG: 2-080196.b |
| Client Sample ID: DFTPP02             | Sample Date:           |
| Sample Location:                      | Sample Point:          |
| Lab Sample ID: DFTPP02                | Date Received:         |
| Sample Type: WATER                    |                        |
| Analysis Type: SU                     | Level: LOW             |
| Data Type: MS DATA                    | Column Number: 1       |
| Misc Info: TUNE FOR INSTRUMENT msd2.i |                        |

| CAS NO.             | COMPOUND | CONCENTRATION UNITS: |       |
|---------------------|----------|----------------------|-------|
|                     |          | (ug/L or ug/KG)      | ug/L  |
| 5074-71-5-----dftpp |          | 0.0                  |       |
| =====               |          | =====                | ===== |

Data File: /chem/msd\_2.1/2-080196.b/DTFPP080196.d  
Date : 01-AUG-96 07:19  
Instrument : msd\_2.1  
Sample ID : DTFPP02  
Column phase :  
Volume Injected (uL) : 1.0

Column diameter : 2.00

Page 3



Date : 01-AUG-96 07:19

Instrument : msd\_2.1

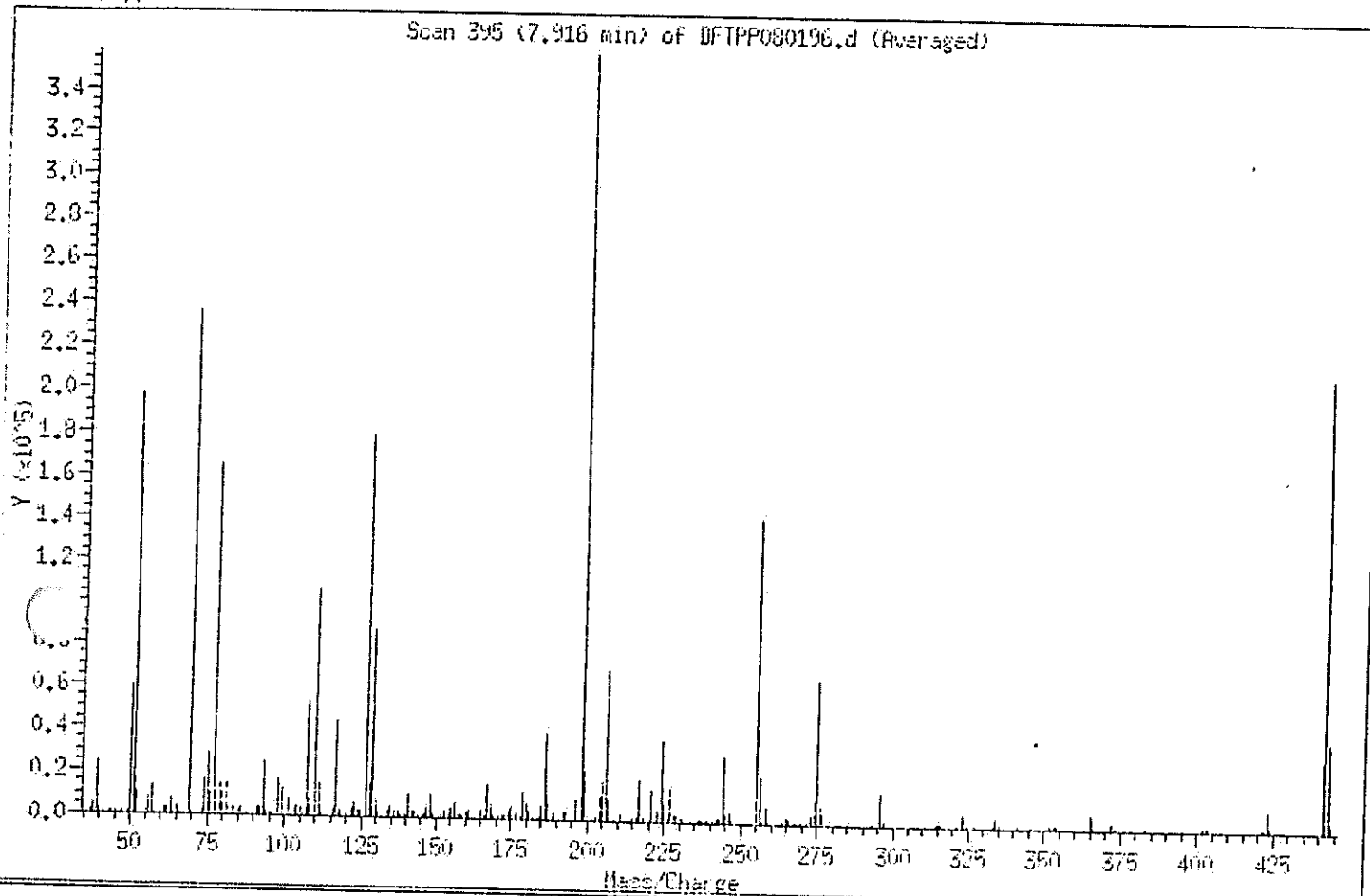
Sample ID : DFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

1 dftpp



| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 199 | Base Peak, 100% relative abundance | 100.0                |
| 51  | Mass 51 relative abundance         | 54.9                 |
| 68  | Mass 68 relative abundance         | 0.0                  |
| 69  | Mass 69 relative abundance         | 66.1                 |
| 70  | Mass 70 relative abundance         | 0.4                  |
| 127 | Mass 127 relative abundance        | 56.4                 |
| 137 | Mass 137 relative abundance        | 0.0                  |
| 199 | Mass 199 relative abundance        | 6.3                  |
| 275 | Mass 275 relative abundance        | 18.6                 |
| 365 | Mass 365 relative abundance        | 1.7                  |
| 441 | Mass 441 relative abundance        | 79.6                 |
| 442 | Mass 442 relative abundance        | 59.2                 |
| 443 | Mass 443 relative abundance        | 19.4                 |

Date : 01-AUG-96 07:19

Instrument : msd\_2.1

Sample ID : DFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scan 395-397 (7.916 min) Subtraction Scan 392

Base Peak: 198.00

Number of mass peaks: 300

| Mass  | Abund  | Mass   | Abund  | Mass   | Abund  | Mass   | Abund |
|-------|--------|--------|--------|--------|--------|--------|-------|
| 35.00 | 94     | 118.00 | 2898   | 196.00 | 9267   | 281.00 | 75    |
| 36.00 | 58     | 119.00 | 433    | 198.00 | 357653 | 283.00 | 450   |
| 37.00 | 1401   | 120.00 | 386    | 199.00 | 22381  | 284.00 | 332   |
| 38.00 | 3782   | 121.00 | 280    | 200.00 | 1898   | 285.00 | 900   |
| 39.00 | 21959  | 122.00 | 3543   | 201.00 | 1273   | 286.00 | 102   |
| 40.00 | 942    | 123.00 | 6419   | 203.00 | 2314   | 289.00 | 153   |
| 41.00 | 756    | 124.00 | 3157   | 204.00 | 10038  | 290.00 | 84    |
| 42.00 | 224    | 125.00 | 2645   | 205.00 | 17943  | 291.00 | 95    |
| 43.00 | 36     | 127.00 | 189573 | 206.00 | 69818  | 292.00 | 88    |
| 45.00 | 301    | 128.00 | 15350  | 207.00 | 9354   | 293.00 | 1023  |
| 46.00 | 96     | 129.00 | 87132  | 208.00 | 2223   | 294.00 | 245   |
| 47.00 | 251    | 130.00 | 7036   | 209.00 | 822    | 296.00 | 13923 |
| 48.00 | 256    | 131.00 | 1565   | 211.00 | 3182   | 297.00 | 1761  |
| 49.00 | 717    | 132.00 | 372    | 212.00 | 164    | 298.00 | 326   |
| 50.00 | 58751  | 134.00 | 2348   | 213.00 | 186    | 301.00 | 273   |
| 51.00 | 196270 | 135.00 | 5897   | 215.00 | 913    | 302.00 | 219   |
| 52.00 | 10055  | 136.00 | 2406   | 216.00 | 1510   | 303.00 | 1522  |
| 53.00 | 143    | 137.00 | 2978   | 217.00 | 19096  | 304.00 | 442   |
| 54.00 | 304    | 138.00 | 558    | 218.00 | 2236   | 308.00 | 271   |
| 55.00 | 1095   | 139.00 | 446    | 219.00 | 256    | 309.00 | 77    |
| 56.00 | 7274   | 140.00 | 902    | 221.00 | 14539  | 310.00 | 177   |
| 57.00 | 12813  | 141.00 | 10053  | 223.00 | 4396   | 314.00 | 584   |
| 58.00 | 646    | 142.00 | 3111   | 224.00 | 37378  | 315.00 | 1526  |
| 59.00 | 174    | 143.00 | 2098   | 225.00 | 8655   | 316.00 | 938   |
| 60.00 | 179    | 144.00 | 626    | 226.00 | 913    | 321.00 | 591   |
| 61.00 | 2207   | 145.00 | 682    | 227.00 | 15582  | 322.00 | 199   |
| 62.00 | 2279   | 146.00 | 1629   | 228.00 | 2155   | 323.00 | 5633  |
| 63.00 | 6302   | 147.00 | 4459   | 229.00 | 3011   | 324.00 | 1147  |
| 64.00 | 559    | 148.00 | 10812  | 230.00 | 554    | 325.00 | 134   |
| 65.00 | 2735   | 149.00 | 2156   | 231.00 | 1484   | 326.00 | 96    |
| 67.00 | 314    | 150.00 | 498    | 232.00 | 369    | 327.00 | 852   |
| 69.00 | 236341 | 151.00 | 993    | 233.00 | 170    | 328.00 | 429   |
| 70.00 | 1045   | 152.00 | 166    | 234.00 | 1022   | 332.00 | 363   |
| 71.00 | 137    | 153.00 | 2722   | 235.00 | 1047   | 333.00 | 596   |
| 72.00 | 75     | 154.00 | 2251   | 236.00 | 835    | 334.00 | 3494  |

Date : 01-AUG-96 07:19

Instrument : msd\_2.i

Sample ID : DFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scan 395-397 (7.916 min) Subtraction Scan 392

Base Peak: 198.00

Number of mass peaks: 300

| Mass   | Abund  | Mass   | Abund | Mass   | Abund  | Mass   | Abund  |
|--------|--------|--------|-------|--------|--------|--------|--------|
| 73.00  | 1807   | 155.00 | 4501  | 237.00 | 1153   | 335.00 | 744    |
| 74.00  | 18173  | 156.00 | 6300  | 238.00 | 233    | 341.00 | 588    |
| 75.00  | 30029  | 157.00 | 1505  | 239.00 | 531    | 342.00 | 100    |
| 76.00  | 10326  | 158.00 | 1739  | 240.00 | 426    | 346.00 | 968    |
| 77.00  | 164723 | 159.00 | 1058  | 241.00 | 807    | 347.00 | 188    |
| 78.00  | 11082  | 160.00 | 2649  | 242.00 | 1971   | 350.00 | 74     |
| 79.00  | 14106  | 161.00 | 3879  | 243.00 | 1976   | 352.00 | 1550   |
| 80.00  | 10060  | 162.00 | 1192  | 244.00 | 30742  | 353.00 | 1203   |
| 81.00  | 13950  | 163.00 | 276   | 245.00 | 4110   | 354.00 | 1702   |
| 82.00  | 2870   | 164.00 | 220   | 246.00 | 4722   | 355.00 | 373    |
| 83.00  | 3365   | 165.00 | 3130  | 247.00 | 908    | 359.00 | 78     |
| 84.00  | 21     | 166.00 | 1652  | 248.00 | 285    | 365.00 | 6214   |
| 85.00  | 2397   | 167.00 | 15195 | 249.00 | 1004   | 366.00 | 823    |
| 86.00  | 3823   | 168.00 | 6559  | 250.00 | 172    | 370.00 | 69     |
| 87.00  | 1782   | 169.00 | 1127  | 251.00 | 157    | 371.00 | 397    |
| 88.00  | 779    | 170.00 | 773   | 252.00 | 418    | 372.00 | 2598   |
| 89.00  | 476    | 171.00 | 451   | 253.00 | 896    | 373.00 | 618    |
| 91.00  | 3710   | 172.00 | 1564  | 255.00 | 142210 | 383.00 | 583    |
| 92.00  | 3855   | 173.00 | 2295  | 256.00 | 20640  | 384.00 | 337    |
| 93.00  | 24371  | 174.00 | 3419  | 257.00 | 1373   | 390.00 | 356    |
| 94.00  | 1697   | 175.00 | 5952  | 258.00 | 7224   | 391.00 | 220    |
| 95.00  | 46     | 176.00 | 1823  | 259.00 | 1090   | 392.00 | 320    |
| 96.00  | 1145   | 177.00 | 2871  | 260.00 | 200    | 401.00 | 227    |
| 98.00  | 17217  | 178.00 | 1051  | 262.00 | 97     | 402.00 | 831    |
| 99.00  | 12575  | 179.00 | 12018 | 263.00 | 117    | 403.00 | 1588   |
| 100.00 | 1378   | 180.00 | 7743  | 264.00 | 282    | 404.00 | 446    |
| 101.00 | 7733   | 181.00 | 4100  | 265.00 | 2868   | 410.00 | 74     |
| 102.00 | 317    | 182.00 | 721   | 266.00 | 1457   | 421.00 | 1393   |
| 103.00 | 2672   | 183.00 | 339   | 267.00 | 71     | 422.00 | 1229   |
| 104.00 | 4898   | 184.00 | 1517  | 268.00 | 199    | 423.00 | 9966   |
| 105.00 | 4067   | 185.00 | 6446  | 269.00 | 82     | 424.00 | 2130   |
| 106.00 | 281    | 186.00 | 39249 | 270.00 | 135    | 425.00 | 262    |
| 107.00 | 53052  | 187.00 | 11291 | 271.00 | 293    | 441.00 | 32742  |
| 108.00 | 7645   | 188.00 | 1184  | 272.00 | 565    | 442.00 | 211552 |
| 110.00 | 107186 | 189.00 | 2736  | 273.00 | 4147   | 443.00 | 41121  |

Data File: /chem/msd\_2.1/2-080196.h/DFTPP080196.d

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Date : 01-AUG-96 07:19

Instrument : msd\_2.1

Sample ID : DFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

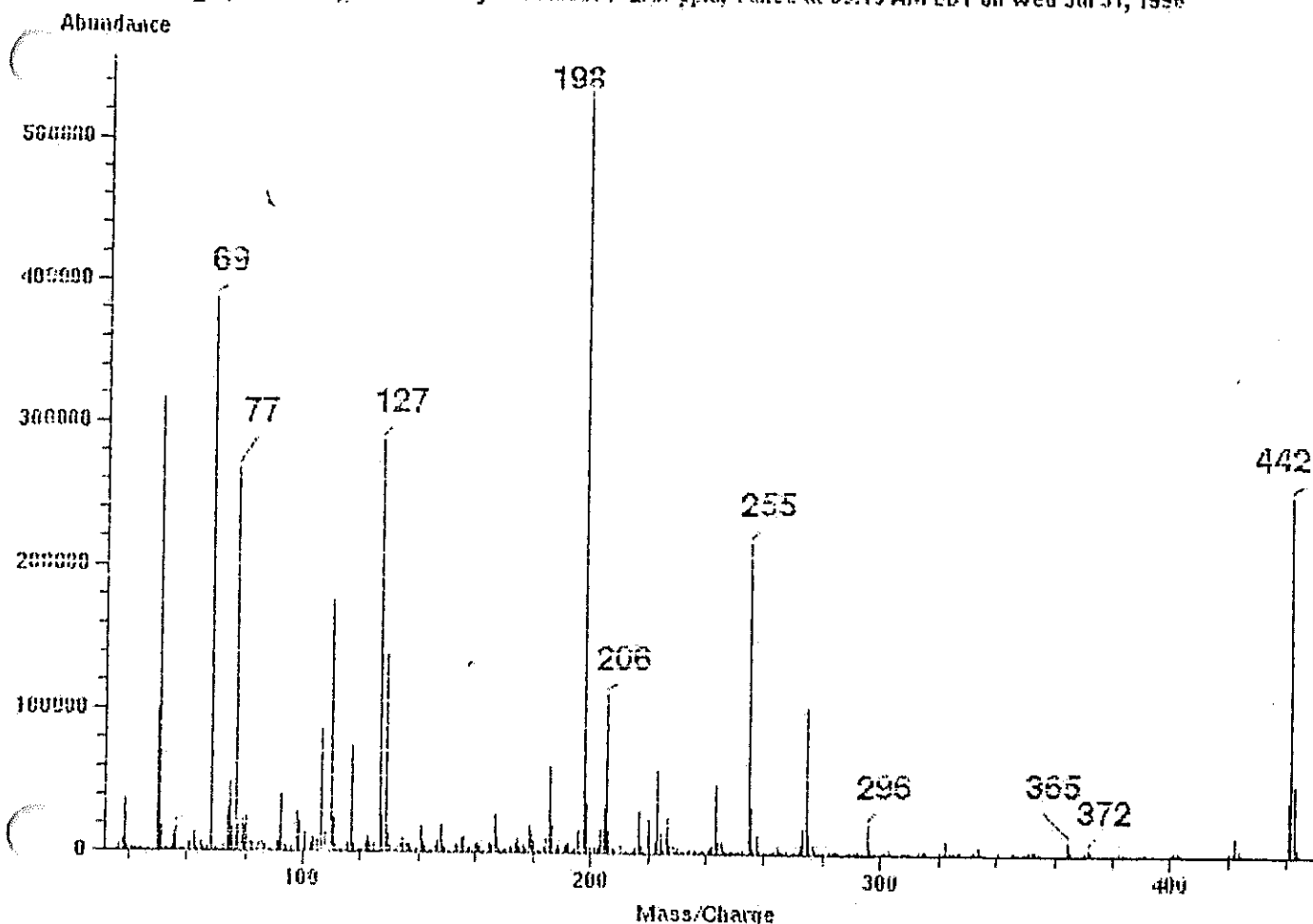
Spectrum: Scan 395-397 (7.916 min) Subtraction Scan 392

Base Peak: 193.00

Number of mass peaks: 300

| Mass   | Abund | Mass   | Abund | Mass   | Abund | Mass   | Abund |
|--------|-------|--------|-------|--------|-------|--------|-------|
| 111.00 | 15369 | 190.00 | 595   | 274.00 | 11528 | 444.00 | 3773  |
| 112.00 | 2017  | 191.00 | 1398  | 275.00 | 66512 | 445.00 | 195   |
| 113.00 | 498   | 192.00 | 3678  | 276.00 | 8638  |        |       |
| 115.00 | 21    | 193.00 | 3363  | 277.00 | 4541  |        |       |
| 116.00 | 4052  | 194.00 | 858   | 278.00 | 745   |        |       |
| 117.00 | 44301 | 195.00 | 671   | 279.00 | 302   |        |       |

Scan 396 (7.916 min) of DF1PP066196.d  
 msd\_2 (ms5971-2); /chem/config/dvc/ms5971-2/dlGpp.u; Tuned at 09:13 AM EDT on Wed Jul 31, 1996



| assl | Ion abundance criteria             | %relative abundance |
|------|------------------------------------|---------------------|
| 51   | 30.0 - 60.0% of mass 198           | 56.9                |
| 68   | Less than 2.0% of mass 69          | 0.0                 |
| 69   | Mass 69 relative abundance is      | 69.2                |
| 70   | Less than 2.0% of mass 69          | 0.5                 |
| 27   | 40.0 to 60.0% of mass 198          | 51.6                |
| 97   | Less than 1.0% of mass 198         | 0.0                 |
| 98   | Base peak, 100% relative abundance | 100.0               |
| 99   | 5.0 to 9.0% of mass 198            | 6.1                 |
| 25   | 10.0 - 30.0% of mass 198           | 18.3                |
| 65   | Greater than 1% of mass 198        | 1.5                 |
| 41   | Present, but less than mass 443    | 77.0                |
| 42   | Greater than 40.0% of mass 198     | 45.2                |
| 43   | 17.0 - 23.0% of mass 442           | 19.7                |

Ecosys, Inc.

BASE NEUTRAL QUANT AND RATIO REPORT

ata file : /chem/msd\_2.i/2-080196.b/BNA0101001.d  
 Lab. Id. :  
 Acq Date : 01-AUG-1996 07:47 Autotune Date: 31-Jul-96 09:13:5  
 Operator : GORDON Inst ID: msd\_2.i  
 Amp Info : BNA-80-32  
 Disc Info : CONTINUE CALIBRATION  
 Comment :  
 Method : /chem/msd\_2.i/2-080196.b/MA-BNA.m  
 Meth Date : 01-Aug-1996 08:49 target  
 Cal Date : 01-AUG-96 07:47 Cal File: BNA0101001.d  
 Is bottle: 1 Continuing Calibration Sample  
 Dil Factor: 1.000 Target Version: Target 2.20  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Type: WATER

| Compounds                       | QUANT SIG<br>MASS | RT (REL RT)   | RESPONSE | CONCENTRATIONS       |                 |
|---------------------------------|-------------------|---------------|----------|----------------------|-----------------|
|                                 |                   |               |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/L) |
| Fluorephenol                    | 112.00            | 9.555(0.717)  | 1651748  | 73.5                 | 73.5            |
| Aniline                         | 93.00             | 12.459(0.934) | 1746518  | 77.7                 | 77.7            |
| 3 Phenol-d5                     | 99.00             | 12.578(0.943) | 1795468  | 83.7                 | 83.7            |
| 4 Phenol **                     | 94.00             | 12.610(0.946) | 1818654  | 83.0                 | 83.0            |
| 5 Bis(2-chloroethyl) ether      | 93.00             | 12.740(0.955) | 1940730  | 80.0                 | 80.0            |
| 6 2-Chlorophenol                | 128.00            | 12.783(0.959) | 2053187  | 79.2                 | 79.2            |
| 7 1,3-Dichlorobenzene           | 146.00            | 13.161(0.987) | 2483700  | 81.4                 | 81.4            |
| 8 1,4-Dichlorobenzene-d4        | 152.00            | 13.334(1.000) | 807916   | 40.0                 |                 |
| 9 1,4-Dichlorobenzene **        | 146.00            | 13.377(1.003) | 2577800  | 82.3                 | 82.3            |
| 10 1,2-Dichlorobenzene          | 146.00            | 13.776(1.033) | 2402426  | 81.5                 | 81.5            |
| 11 Benzyl alcohol               | 79.00             | 13.841(1.038) | 1590244  | 89.8                 | 89.8            |
| 12 2-Methylphenol               | 108.00            | 14.197(1.065) | 1571595  | 83.5                 | 83.5            |
| 13 Bis(2-chloroisopropyl) ether | 45.00             | 14.197(1.065) | 1760527  | 85.4                 | 85.4            |
| 14 N-Nitrosodimethylamine *     | 70.00             | 14.575(1.093) | 1252400  | 88.7                 | 88.7            |
| 15 4-Methylphenol               | 108.00            | 14.640(1.098) | 1631811  | 84.8                 | 84.8            |
| 16 Hexachloroethane             | 117.00            | 14.662(1.100) | 1129494  | 83.3                 | 83.3            |
| 17 Nitrobenzene-d5              | 82.00             | 14.878(0.889) | 2174381  | 79.7                 | 79.7            |
| 18 Nitrobenzene                 | 77.00             | 14.932(0.892) | 2049589  | 80.1                 | 80.1            |
| 19 Isophorone                   | 92.00             | 15.601(0.932) | 3780771  | 86.2                 | 86.2            |
| 20 2-Nitrophenol **             | 139.00            | 15.763(0.942) | 1384086  | 81.2                 | 81.2            |
| 21 2,4-Dimethylphenol           | 107.00            | 16.001(0.956) | 2000729  | 83.9                 | 83.9            |
| 22 Bis(2-chloroethoxy)methane   | 93.00             | 16.228(0.970) | 2090028  | 86.5                 | 86.5            |
| 23 2,4-Dichlorophenol **        | 162.00            | 16.444(0.983) | 1693659  | 84.2                 | 84.2            |
| 24 Benzoic acid                 | 105.00            | 16.531(0.988) | 987722   | 70.5                 | 70.5(M)         |
| 26 Naphthalene-d8               | 136.00            | 16.737(1.000) | 2569586  | 40.0                 |                 |
| 25 2,4-Trichlorobenzene         | 180.00            | 16.607(0.992) | 1971384  | 79.7                 | 79.7            |
| 1 Naphthalene                   | 128.00            | 16.791(1.003) | 5998216  | 81.4                 | 81.4            |
| 28 4-Chloroaniline              | 127.00            | 17.008(1.016) | 1568326  | 72.2                 | 72.2(M)         |
| 29 Hexachlorobutadiene **       | 224.30            | 17.148(1.025) | 1125491  | 78.3                 | 78.3            |
| 30 4-Chloro-3-methylphenol **   | 107.00            | 18.346(1.096) | 1798180  | 80.0                 | 80.0            |
| 31 2-Methylnaphthalene          | 142.00            | 19.627(1.113) | 3841457  | 80.3                 | 80.3            |

| Compounds                      | QUANT SIG<br>MASS | RT (REL RT)   | RESPONSE | CONCENTRATIONS       |                 |
|--------------------------------|-------------------|---------------|----------|----------------------|-----------------|
|                                |                   |               |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/L) |
| 32 Hexachlorocyclopentadiene * | 237.00            | 19.027(0.892) | 904645   | 88.0                 | 88.0            |
| 33 2,4,6-Trichlorophenol **    | 196.00            | 19.405(0.910) | 1029650  | 80.8                 | 80.8            |
| 34 2,4,5-Trichlorophenol       | 196.00            | 19.502(0.915) | 1180323  | 82.4                 | 82.4            |
| 35 2-Fluorobiphenyl            | 172.00            | 19.622(0.920) | 4650916  | 81.1                 | 81.1            |
| 36 2-Chloronaphthalene         | 162.00            | 19.893(0.933) | 3873693  | 81.3                 | 81.3            |
| 37 2-Nitroaniline              | 65.00             | 20.228(0.949) | 927199   | 74.3                 | 74.3            |
| 38 Dimethyl phthalate          | 163.00            | 20.735(0.973) | 4834713  | 81.0                 | 81.0            |
| 39 2,6-Dinitrotoluene          | 165.00            | 20.876(0.979) | 1063830  | 85.9                 | 85.9            |
| 42 Acenaphthylene              | 152.00            | 20.963(0.983) | 5980653  | 81.5                 | 81.5            |
| 41 3-Nitroaniline              | 138.00            | 21.363(1.002) | 546145   | 80.8                 | 80.8(M)         |
| 40 Acenaphthene-d10            | 164.00            | 21.319(1.000) | 1586067  | 40.0                 |                 |
| 43 Acenaphthene **             | 153.00            | 21.417(1.005) | 3877446  | 80.2                 | 80.2            |
| 44 2,4-Dinitrophenol *         | 184.00            | 21.590(0.000) | 369294   | 83.5                 | 83.5(M)         |
| 47 2,4-Dinitrotoluene          | 165.00            | 21.915(1.028) | 1239581  | 78.7                 | 78.7            |
| 45 4-Nitrophenol *             | 65.00             | 21.904(1.027) | 482409   | 90.7                 | 90.7(M)         |
| 46 Dibenzofuran                | 168.00            | 21.871(1.026) | 5200007  | 79.8                 | 79.8            |
| 48 Diethyl phthalate           | 149.00            | 22.564(1.058) | 5012254  | 82.2                 | 82.2            |
| 50 Fluorene                    | 166.00            | 22.770(1.068) | 3981821  | 78.2                 | 78.2            |
| 49 4-Chlorophenyl phenyl ether | 204.00            | 22.803(1.070) | 1973162  | 78.3                 | 78.3            |
| 52 4-Nitroaniline              | 138.00            | 23.063(0.000) | 480031   | 92.2                 | 92.2(M)         |
| 51 6-Dinitro-2-methylphenol    | 198.00            | 22.965(0.912) | 542772   | 95.4                 | 95.4(M)         |
| 53 4-Nitrosodiphenylamine **   | 169.00            | 23.128(0.918) | 1735037  | 80.2                 | 80.2            |
| 54 1,2-Diphenylhydrazine       | 77.00             | 23.225(0.922) | 8112551  | 75.8                 | 75.8            |
| 55 2,4,6-Tribromophenol        | 329.70            | 23.399(0.929) | 558656   | 79.5                 | 79.5            |
| 56 4-Bromophenyl phenyl ether  | 248.00            | 24.058(0.955) | 1176574  | 76.7                 | 76.7            |
| 57 Hexachlorobenzene           | 283.30            | 24.178(0.960) | 1331586  | 77.9                 | 77.9            |
| 58 Pentachlorophenol **        | 265.75            | 24.718(0.981) | 537220   | 85.2                 | 85.2            |
| 59 Phenanthrene-d10            | 189.00            | 25.185(1.000) | 2047185  | 40.0                 |                 |
| 60 Phenanthrene                | 178.00            | 25.250(1.003) | 5458854  | 79.3                 | 79.3            |
| 61 Anthracene                  | 178.00            | 25.391(1.008) | 4810733  | 75.6                 | 75.6            |
| 62 Carbazole                   | 167.00            | 25.888(1.028) | 2303017  | 70.7                 | 70.7(M)         |
| 63 Di-n-butyl phthalate        | 149.00            | 26.806(1.064) | 7853330  | 76.5                 | 76.5            |
| 64 Fluoranthene **             | 202.00            | 28.337(1.125) | 4624349  | 78.9                 | 78.9            |
| 65 Pyrene                      | 202.00            | 28.919(0.902) | 4590693  | 81.5                 | 81.5            |
| 66 Terphenyl-d14               | 244.00            | 29.362(0.916) | 2805733  | 74.9                 | 74.9            |
| 67 Butyl benzyl phthalate      | 149.00            | 30.666(0.957) | 2765630  | 78.0                 | 78.0            |
| 68 Di(2-ethylhexyl) adipate    | 129.00            | 30.893(0.964) | 2397516  | 78.3                 | 78.3            |
| 69 3,3'-Dichlorobenzidine      | 252.00            | 32.036(1.000) | 269220   | 73.1                 | 73.1(M)         |
| 71 Benz(a)anthracene           | 228.00            | 32.025(0.999) | 2525330  | 78.1                 | 78.1            |
| 72 Chrysene-d12                | 240.00            | 32.047(1.000) | 1034224  | 40.0                 |                 |
| 70 Bis(2-ethylhexyl) phthalate | 149.00            | 32.156(1.003) | 4250605  | 77.6                 | 77.6            |
| 73 Chrysene                    | 228.00            | 32.123(1.002) | 2453437  | 81.7                 | 81.7            |
| 74 Di-n-octyl phthalate **     | 149.00            | 33.784(1.000) | 5738464  | 69.0                 | 69.0            |
| 75 Benzo(b)fluoranthene        | 252.00            | 34.861(1.000) | 1791949  | 73.9                 | 73.9            |
| 76 Benzo(k)fluoranthene        | 252.00            | 34.948(0.000) | 2290991  | 83.6                 | 83.6(M)         |
| 77 Benzo(a)pyrene **           | 252.00            | 35.896(1.000) | 1563534  | 78.6                 | 78.6            |
| 78 Pyrene-d12                  | 264.00            | 36.080(1.000) | 557551   | 40.0                 | (M)             |
| 79 Indeno(1,2,3-cd)pyrene      | 276.00            | 40.502(0.000) | 1335862  | 89.2                 | 89.2(M)         |
| 80 Dibenz(a,h)anthracene       | 278.00            | 40.665(0.000) | 1026655  | 79.5                 | 79.5(M)         |
| 81 Benzo(g,h,i)perylene        | 276.00            | 41.893(0.000) | 1134860  | 80.7                 | 80.7(M)         |

Tag Legend

- Compound response manually integrated.

Report Date: 01-Aug-1996 08:50

Ecosys, Inc.

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd\_2.i Injection Date: 01-AUG-1996 07:47  
 Lab File ID: BNA0101001.d Init. Calibration Date(s): 05/28/93 07/31/96  
 Analysis Type: WATER Init. Calibration Times: 15:51 13:17  
 Lab Sample ID: Method File: /chem/msd\_2.i/2-080196.b/MA-BNA.m

| COMPOUND                     | RRF   | RF90  | MIN   | MAX   |
|------------------------------|-------|-------|-------|-------|
| =====                        | ===== | ===== | ===== | ===== |
| 12-Fluorophenol              | 1.112 | 1.022 | 0.050 | 8.1   |
| Aniline                      | 1.113 | 1.081 | 0.050 | 2.9   |
| Phenol-d5                    | 1.062 | 1.111 | 0.050 | 4.6   |
| Phenol **                    | 1.085 | 1.126 | 0.050 | 3.7   |
| Bis(2-chloroethyl) ether     | 1.202 | 1.201 | 0.050 | 0.0   |
| 2-Chlorophenol               | 1.283 | 1.271 | 0.050 | 0.9   |
| 1,3-Dichlorobenzene          | 1.511 | 1.537 | 0.050 | 1.7   |
| 1,4-Dichlorobenzene **       | 1.551 | 1.595 | 0.050 | 2.9   |
| 1,2-Dichlorobenzene          | 1.460 | 1.487 | 0.050 | 1.8   |
| Benzyl alcohol               | 0.876 | 0.984 | 0.050 | 12.3  |
| 2-Methylphenol               | 0.932 | 0.973 | 0.050 | 4.4   |
| Bis(2-chloroisopropyl) ether | 1.021 | 1.090 | 0.050 | 6.7   |
| N-Nitrosodi-n-propylamine *  | 0.699 | 0.775 | 0.050 | 10.9  |
| 4-Methylphenol               | 0.953 | 1.010 | 0.050 | 6.0   |
| Hexachloroethane             | 0.671 | 0.699 | 0.050 | 4.2   |
| Nitrobenzene-d5              | 0.424 | 0.423 | 0.050 | 0.3   |
| Nitrobenzene                 | 0.398 | 0.399 | 0.050 | 0.2   |
| Isophorone                   | 0.683 | 0.736 | 0.050 | 7.7   |
| 2-Nitrophenol **             | 0.265 | 0.269 | 0.050 | 1.5   |
| 2,4-Dimethylphenol           | 0.371 | 0.389 | 0.050 | 4.8   |
| Bis(2-chloroethoxy)methane   | 0.376 | 0.407 | 0.050 | 8.1   |
| 2,4-Dichlorophenol **        | 0.313 | 0.330 | 0.050 | 5.3   |
| Benzoic acid                 | 0.218 | 0.192 | 0.050 | 11.9  |
| 1,2,4-Trichlorobenzene       | 0.385 | 0.384 | 0.050 | 0.4   |
| Naphthalene                  | 1.148 | 1.167 | 0.050 | 1.7   |
| 4-Chloroaniline              | 0.338 | 0.305 | 0.050 | 9.7   |
| Hexachlorobutadiene **       | 0.224 | 0.219 | 0.050 | 2.1   |
| 4-Chloro-3-methylphenol **   | 0.350 | 0.350 | 0.050 | 0.0   |
| 2-Methylnaphthalene          | 0.745 | 0.747 | 0.050 | 0.4   |
| Hexachlorocyclopentadiene *  | 0.259 | 0.285 | 0.050 | 10.0  |
| 2,4,6-Trichlorophenol **     | 0.322 | 0.325 | 0.050 | 0.9   |
| 2,4,5-Trichlorophenol        | 0.361 | 0.372 | 0.050 | 3.0   |
| 2-Fluorobiphenyl             | 1.446 | 1.466 | 0.050 | 1.4   |
| 2-Chloronaphthalene          | 1.202 | 1.221 | 0.050 | 1.6   |
| 2-Nitroaniline               | 0.315 | 0.292 | 0.050 | 7.1   |
| Dimethyl phthalate           | 1.506 | 1.524 | 0.050 | 1.2   |
| 2,6-Dinitrotoluene           | 0.312 | 0.335 | 0.050 | 7.4   |
| Acenaphthylene               | 1.850 | 1.985 | 0.050 | 1.9   |
| 3-Nitroaniline               | 0.170 | 0.172 | 0.050 | 1.1   |
| Acenaphthene **              | 1.219 | 1.222 | 0.050 | 0.3   |
| 2,4-Dinitrophenol *          | 0.112 | 0.116 | 0.050 | 4.4   |
| 2,4-Dinitrotoluene           | 0.397 | 0.391 | 0.050 | 1.6   |
| 4-Nitrophenol *              | 0.134 | 0.152 | 0.050 | 13.4  |
| Dibenzofuran                 | 1.643 | 1.639 | 0.050 | 0.3   |
| 1,2,3-Trichlorobenzene       | 1.537 | 1.590 | 0.050 | 2.8   |

Ecosys, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd\_2.i Injection Date: 01-AUG-1996 07:47  
 Lab File ID: BNA0101001.d Init. Calibration Date(s): 05/28/93 07/31/96  
 Analysis Type: WATER Init. Calibration Times: 15:51 13:17  
 Lab Sample ID: Method File: /chem/msd\_2.i/2-080196.b/MA-BNA.m

| COMPOUND                    | RRF   | RF80  | MIN   | MAX  |
|-----------------------------|-------|-------|-------|------|
| Fluorene                    | 1.284 | 1.255 | 0.050 | 2.3  |
| 4-Chlorophenyl phenyl ether | 0.635 | 0.622 | 0.050 | 2.1  |
| 4-Nitroaniline              | 0.131 | 0.151 | 0.050 | 15.3 |
| 4,6-Dinitro-2-methylphenol  | 0.111 | 0.133 | 0.050 | 19.3 |
| N-Nitrosodiphenylamine **   | 0.423 | 0.424 | 0.050 | 0.2  |
| 1,2-Diphenylhydrazine       | 2.092 | 1.981 | 0.050 | 5.3  |
| 2,4,6-Tribromophenol        | 0.137 | 0.136 | 0.050 | 0.7  |
| 4-Bromophenyl phenyl ether  | 0.300 | 0.287 | 0.050 | 4.1  |
| Hexachlorobenzene           | 0.334 | 0.325 | 0.050 | 2.6  |
| Pentachlorophenol **        | 0.123 | 0.131 | 0.050 | 6.4  |
| Phenanthrene                | 1.345 | 1.333 | 0.050 | 0.9  |
| Anthracene                  | 1.243 | 1.175 | 0.050 | 5.5  |
| Carbazole                   | 0.636 | 0.562 | 0.050 | 11.6 |
| Di-n-butyl phthalate        | 2.005 | 1.918 | 0.050 | 4.3  |
| Fluoranthene **             | 1.145 | 1.129 | 0.050 | 1.4  |
| Pyrene                      | 2.175 | 2.215 | 0.050 | 1.8  |
| Terphenyl-d14               | 1.448 | 1.356 | 0.050 | 6.3  |
| Butyl benzyl phthalate      | 1.372 | 1.337 | 0.050 | 2.5  |
| Di(2-ethylhexyl) adipate    | 1.185 | 1.159 | 0.050 | 2.2  |
| 3,3'-Dichlorobenzidine      | 0.143 | 0.130 | 0.050 | 8.7  |
| Benz(a)anthracene           | 1.250 | 1.221 | 0.050 | 2.3  |
| Bis(2-ethylhexyl) phthalate | 2.119 | 2.055 | 0.050 | 3.0  |
| Chrysene                    | 1.162 | 1.186 | 0.050 | 2.1  |
| Di-n-octyl phthalate **     | 5.966 | 5.146 | 0.050 | 13.7 |
| Benzo(b)fluoranthene        | 1.739 | 1.607 | 0.050 | 7.6  |
| Benzo(k)fluoranthene        | 1.966 | 2.055 | 0.050 | 4.5  |
| Benzo(a)pyrene **           | 1.428 | 1.402 | 0.050 | 1.8  |
| Indeno(1,2,3-cd)pyrene      | 1.075 | 1.198 | 0.050 | 11.5 |
| Dibenz(a,h)anthracene       | 0.926 | 0.921 | 0.050 | 0.6  |
| Benzo(g,h,i)perylene        | 1.008 | 1.018 | 0.050 | 0.9  |

Ecosys, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: msd\_2.1  
 Lab File ID: BNA0101001.d  
 Lab Sample ID:  
 Analysis Type: OTHER  
 Method File: /chem/msd\_2.1/2-080196.b/MA-BNA.m  
 Misc Info: CONTINUE CALIBRATION

Calibration Date: 08/01/96  
 Calibration Time: 0833  
 Sample Type: WATER  
 Level: LOW

| COMPOUND               | STANDARD | AREA LIMIT |         | SAMPLE  | % DIFF |
|------------------------|----------|------------|---------|---------|--------|
|                        |          | LOWER      | UPPER   |         |        |
| 8 1,4-Dichlorobenzene- | 807916   | 403958     | 1615832 | 807916  | 0.00   |
| 26 Naphthalene-d8      | 2569586  | 1284793    | 5139172 | 2569586 | 0.00   |
| 40 Acenaphthene-d10    | 1586067  | 793033     | 3172134 | 1586067 | 0.00   |
| 59 Phenanthrene-d10    | 2047185  | 1023592    | 4094370 | 2047185 | 0.00   |
| 72 Chrysene-d12        | 1034224  | 517112     | 2068448 | 1034224 | 0.00   |
| 78 Perylene-d12        | 557551   | 278775     | 1115102 | 557551  | 0.00   |

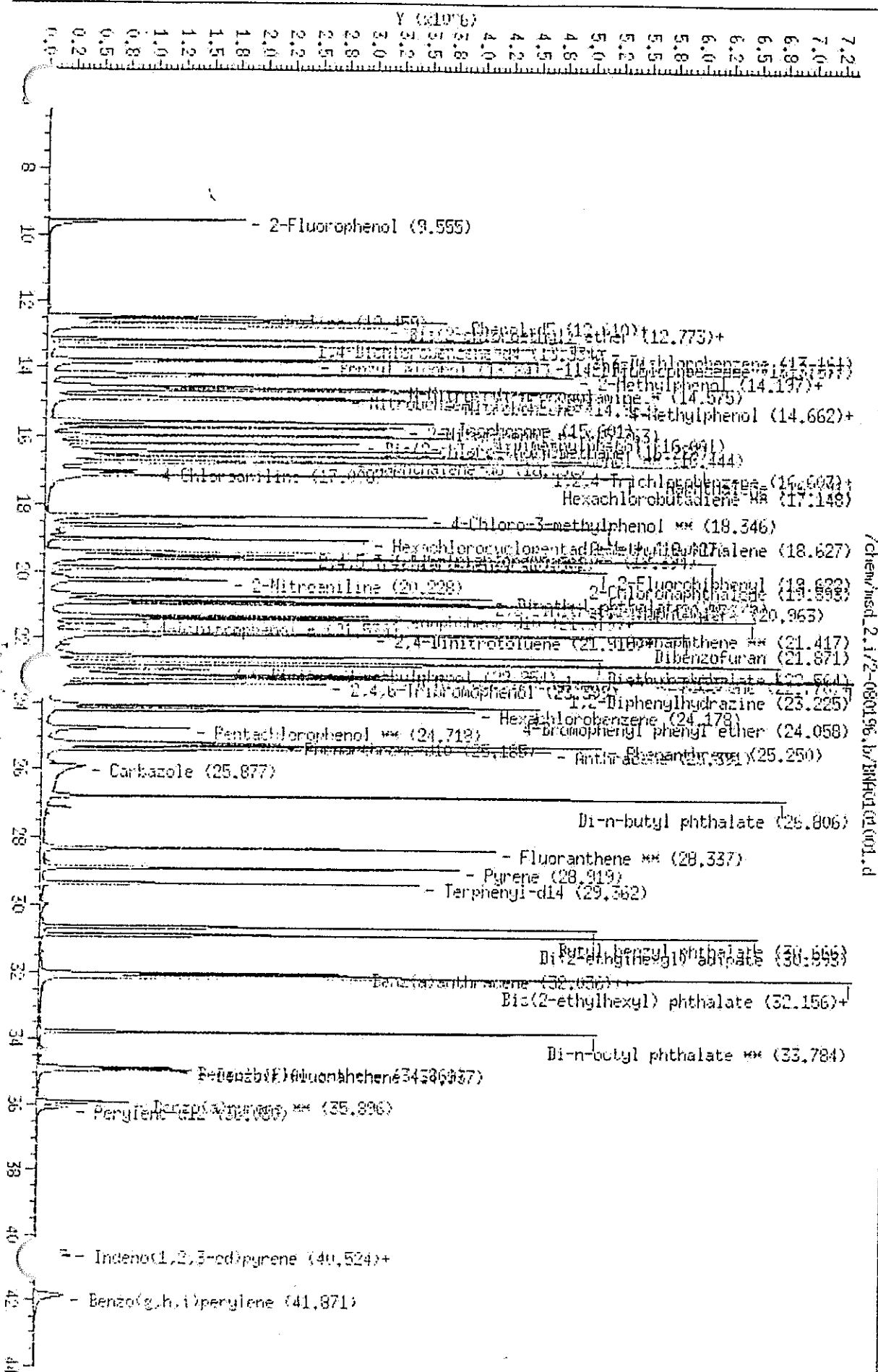
| COMPOUND               | STANDARD | RT LIMIT |       | SAMPLE | % DIFF |
|------------------------|----------|----------|-------|--------|--------|
|                        |          | LOWER    | UPPER |        |        |
| 8 1,4-Dichlorobenzene- | 13.33    | 12.83    | 13.83 | 13.33  | 0.00   |
| 26 Naphthalene-d8      | 16.74    | 16.24    | 17.24 | 16.74  | 0.00   |
| 40 Acenaphthene-d10    | 21.32    | 20.82    | 21.82 | 21.32  | 0.00   |
| 59 Phenanthrene-d10    | 25.18    | 24.68    | 25.68 | 25.18  | 0.00   |
| 72 Chrysene-d12        | 32.05    | 31.55    | 32.55 | 32.05  | 0.00   |
| 78 Perylene-d12        | 36.08    | 35.58    | 36.58 | 36.08  | 0.00   |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

```
Instrument : msd_2.1
Sample ID :
Column phase :
Volume Injected (uL) : 1.0
```

Column diameter : 2.00

OF



## SemiVolatiles DFTPP

Lab Name: EcoSys, Inc.Client: ACE-SADLedger No: 107920DFTPP Injection Date: 8/2/96Lab File ID: DFTPP080296DFTPP Injection Time: 6:47Instrument ID: MSD-2Batch Number: 0801960004

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 51  | 30.0 - 60.0% of mass 198           | 53.4                 |
| 68  | Less than 2.0% of mass 69          | 0.0                  |
| 69  | Mass 69 relative abundance         | 63.1 (1)             |
| 70  | Less than 2.0% of mass 69          | 0.1                  |
| 127 | 40.0 - 60.0% of mass 198           | 49.2                 |
| 197 | Less than 1.0% of mass 198         | 0.0 (1)              |
| 198 | Base Peak, 100% relative abundance | 100.0                |
| 199 | 5.0 to 9.0% of mass 198            | 6.8                  |
| 275 | 10.0 - 30.0% of mass 198           | 19.5                 |
| 365 | Greater than 1% of mass 198        | 1.7                  |
| 441 | Present, but less than mass 443    | 80.4                 |
| 442 | Greater than 40% of mass 198       | 58.6                 |
| 443 | 17.0 - 23.0% of mass 442           | 19.3 (2)             |

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

|  | CLIENT<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|--|----------------------|------------------|----------------|------------------|------------------|
|  | 01 NA                | CCV              | BNA0101001     | 08/02/96         | 7:15 AM          |
|  | 02 NA                | AB36646 LCS      | BNA0201002     | 08/02/96         | 8:18 AM          |
|  | 03 NA                | AB36647 LCSD     | BNA0301003     | 08/02/96         | 9:06 AM          |
|  | 04 #45-T1-GW         | AB35820          | BNA0401004     | 08/02/96         | 10:00 AM         |
|  | 05                   |                  |                |                  |                  |
|  | 06                   |                  |                |                  |                  |
|  | 07                   |                  |                |                  |                  |
|  | 08                   |                  |                |                  |                  |

NA: Not Applicable

Comments:

QA/QC OFFICER

Data File: /chem/msd\_2.1/2-080296.b/DFTPP080296.d  
 Report Date: 02-Aug-1996 07:05

Ecosys, Inc.

Data file : /chem/msd\_2.1/2-080296.b/DFTPP080296.d  
 Lab. Id. : DFTPP02  
 Inj Date : 02-AUG-96 06:47  
 Operator : GORDON  
 Smp Info : 50MG of dft-05-39  
 Misc Info : TUNE FOR INSTRUMENT msd2.1  
 Comment :  
 Method : /chem/msd\_2.1/2-080296.b/dftpp288.m  
 Meth Date : 02-Aug-1996 06:29  
 Cal Date :  
 Als bottle: 1  
 Dil Factor: 1.000  
 Integrator: HP RTE  
 Sample Type: WATER

Autotune Date: 31-Jul-96 09:13:5  
 Inst ID: msd\_2.1

Cal File:  
 QC Sample: DFTPP  
 Target Version: Target 2.20  
 Compound Sublist: all.sub

| RT (REL RT) MASS | RESPONSE | CONCENTRATIONS |       | TARGET RANGE     | RATIO     |
|------------------|----------|----------------|-------|------------------|-----------|
|                  |          | ON-COL         | FINAL |                  |           |
|                  | ( ug/L ) | ( ug/L )       |       |                  |           |
| 1 dftpp          |          |                |       | CAS #: 5074-71-5 | 100.00(Q) |
| 7.917(0.000)     | 198      | 412757         |       | 0.00- 0.00       | 53.16     |
| 7.917(0.000)     | 51       | 219412         |       | 0.00- 0.00       | 0.00      |
| 7.917(0.000)     | 68       | 0              |       | 0.00- 0.00       | 63.00     |
| 7.917(0.000)     | 69       | 260025         |       | 0.00- 0.00       | 0.00      |
| 7.917(0.000)     | 70       | 240            |       | 0.00- 0.00       | 49.16     |
| 7.917(0.000)     | 127      | 202892         |       | 0.00- 0.00       | 0.00      |
| 7.917(0.000)     | 197      | 0              |       | 0.00- 0.00       | 6.80      |
| 7.917(0.000)     | 199      | 28084          |       | 0.00- 0.00       | 19.50     |
| 7.917(0.000)     | 275      | 80504          |       | 0.00- 0.00       | 1.74      |
| 7.917(0.000)     | 365      | 7166           |       | 0.00- 0.00       | 80.37     |
| 7.917(0.000)     | 441      | 37525          |       | 0.00- 0.00       | 58.55     |
| 7.917(0.000)     | 442      | 241680         |       | 0.00- 0.00       | 19.32     |
| 7.917(0.000)     | 443      | 46690          |       |                  |           |

#### QC Flag Legend

- Qualifier signal failed the ratio test.

EcoSys, Inc.

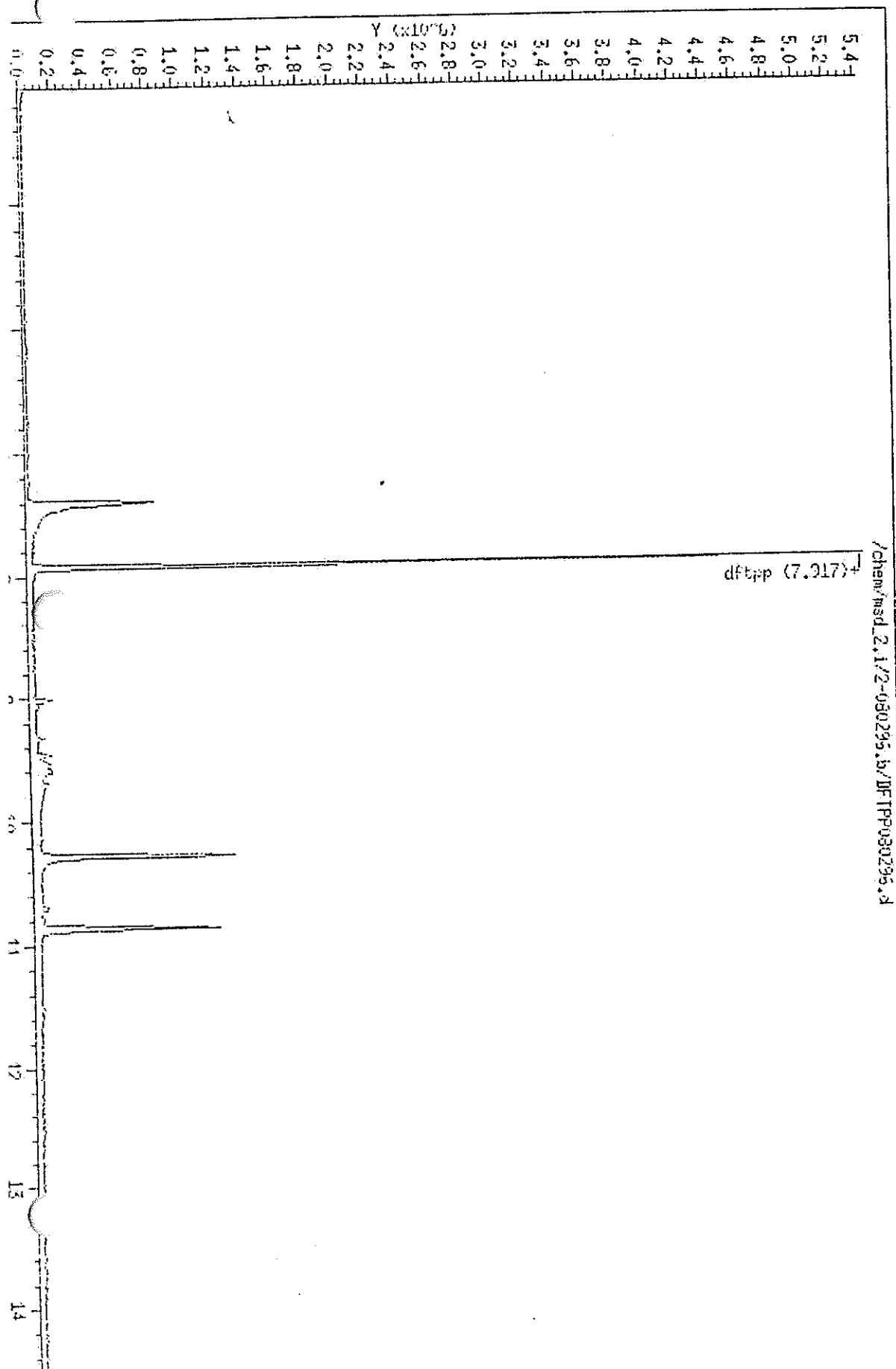
TARGET COMPOUNDS

|                                       |                        |
|---------------------------------------|------------------------|
| Client Name:                          | Client SDG: 2-080296.b |
| Client Sample ID: DFTPP02             | Sample Date:           |
| Sample Location:                      | Sample Point:          |
| Lab Sample ID: DFTPP02                | Date Received:         |
| Sample Type: WATER                    |                        |
| Analysis Type: SU                     | Level: LOW             |
| Data Type: MS DATA                    | Column Number: 1       |
| Misc Info: TUNE FOR INSTRUMENT msd2.i |                        |

| CAS NO.             | COMPOUND | CONCENTRATION UNITS: |       |
|---------------------|----------|----------------------|-------|
|                     |          | (ug/L or ug/KG) ug/L | Q     |
| 5074-71-5-----dftpp |          | 0.01                 |       |
| =====               | =====    | =====                | ===== |
|                     |          |                      |       |

Data File: /chem/msd\_2.1/2-080295.b/DFTFPU030295.d  
Date: 02-AUG-96 06:47  
Instrument: MSD-2.1  
Sample ID: DFTFPG2  
Column Phase:  
Volume Injected (ul): 1.0

Column diameter: 2.00



Data File: /chem/msd\_2.1/2-000296.b/DFTPP000296.d

Page 4

Date : 02-AUG-96 06:47

Experiment : msd\_2.1

Sample ID : DFTPP02

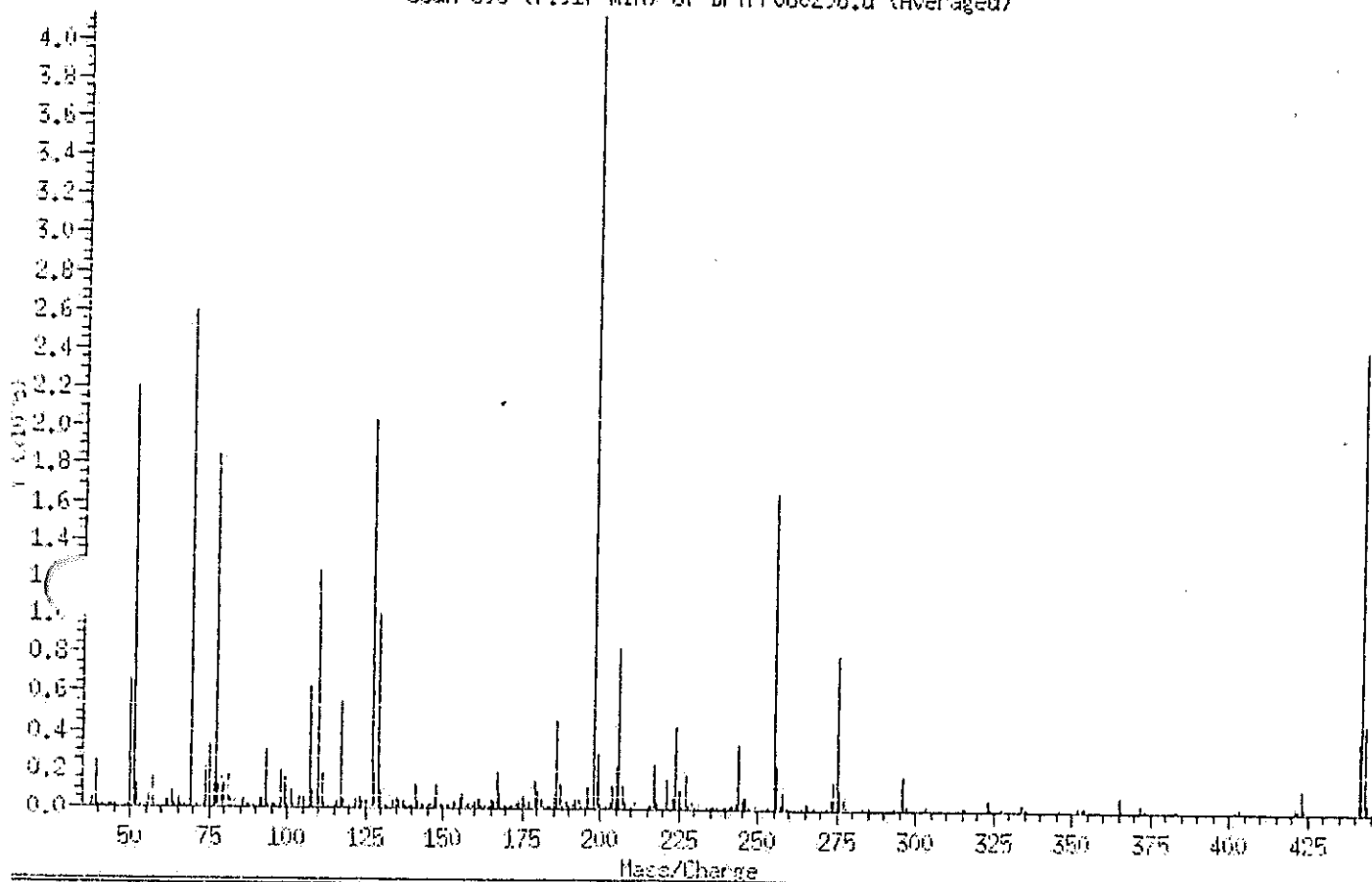
Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

1 dfpp

Scan 395 (7.917 min) of DF(PPO000296.d (Averaged)



| m/z | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 199 | Base Peak, 100% relative abundance | 100.0                |
| 51  | Mass 51 relative abundance         | 53.2                 |
| 66  | Mass 66 relative abundance         | 0.0                  |
| 69  | Mass 69 relative abundance         | 63.0                 |
| 70  | Mass 70 relative abundance         | 0.1                  |
| 127 | Mass 127 relative abundance        | 49.2                 |
| 197 | Mass 197 relative abundance        | 0.0                  |
| 199 | Mass 199 relative abundance        | 6.8                  |
| 275 | Mass 275 relative abundance        | 19.5                 |
| 365 | Mass 365 relative abundance        | 1.7                  |
| 441 | Mass 441 relative abundance        | 80.4                 |
| 442 | Mass 442 relative abundance        | 58.6                 |
| 443 | Mass 443 relative abundance        | 19.3                 |

Date : 02-AUG-96 06:47

Instrument : msd\_2.1

Sample ID : BFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scan 395-397 (7.917 min) Subtraction Scan 392  
 Base Peak: 198.00  
 Number of mass peaks: 301

| Mass  | Abund  | Mass   | Abund  | Mass   | Abund | Mass   | Abund |
|-------|--------|--------|--------|--------|-------|--------|-------|
| 37.00 | 1130   | 124.00 | 3444   | 202.00 | 658   | 285.00 | 982   |
| 38.00 | 4679   | 125.00 | 2942   | 203.00 | 2806  | 286.00 | 83    |
| 39.00 | 22796  | 127.00 | 202932 | 204.00 | 11719 | 289.00 | 142   |
| 40.00 | 1107   | 128.00 | 17747  | 205.00 | 21067 | 290.00 | 133   |
| 41.00 | 578    | 129.00 | 100052 | 206.00 | 84184 | 291.00 | 196   |
| 44.00 | 149    | 130.00 | 8034   | 207.00 | 11272 | 292.00 | 361   |
| 45.00 | 1114   | 131.00 | 1568   | 208.00 | 2887  | 293.00 | 904   |
| 47.00 | 293    | 132.00 | 834    | 209.00 | 939   | 294.00 | 452   |
| 49.00 | 449    | 133.00 | 165    | 210.00 | 656   | 296.00 | 17278 |
| 50.00 | 65906  | 134.00 | 2931   | 211.00 | 3057  | 297.00 | 1981  |
| 51.00 | 219412 | 135.00 | 7009   | 212.00 | 281   | 298.00 | 87    |
| 52.00 | 11784  | 136.00 | 2798   | 213.00 | 297   | 301.00 | 280   |
| 53.00 | 303    | 137.00 | 3620   | 215.00 | 1061  | 302.00 | 309   |
| 54.00 | 223    | 138.00 | 932    | 216.00 | 1938  | 303.00 | 1944  |
| 55.00 | 1375   | 139.00 | 359    | 217.00 | 23322 | 304.00 | 540   |
| 56.00 | 6641   | 140.00 | 1356   | 218.00 | 3045  | 308.00 | 283   |
| 57.00 | 15208  | 141.00 | 11726  | 219.00 | 297   | 309.00 | 159   |
| 58.00 | 692    | 142.00 | 3284   | 221.00 | 15003 | 310.00 | 183   |
| 59.00 | 153    | 143.00 | 1905   | 223.00 | 5474  | 312.00 | 85    |
| 61.00 | 2873   | 144.00 | 824    | 224.00 | 42878 | 313.00 | 92    |
| 62.00 | 2757   | 145.00 | 659    | 225.00 | 10389 | 314.00 | 795   |
| 63.00 | 8162   | 146.00 | 1817   | 226.00 | 1246  | 315.00 | 1817  |
| 64.00 | 1068   | 147.00 | 5254   | 227.00 | 17951 | 316.00 | 823   |
| 65.00 | 3387   | 148.00 | 12509  | 228.00 | 2695  | 317.00 | 179   |
| 66.00 | 737    | 149.00 | 2349   | 229.00 | 3818  | 321.00 | 452   |
| 67.00 | 958    | 150.00 | 757    | 230.00 | 997   | 322.00 | 280   |
| 69.00 | 260025 | 151.00 | 1232   | 231.00 | 1812  | 323.00 | 5607  |
| 70.00 | 240    | 152.00 | 453    | 232.00 | 47    | 324.00 | 1059  |
| 71.00 | 74     | 153.00 | 3113   | 233.00 | 315   | 326.00 | 125   |
| 72.00 | 267    | 154.00 | 2701   | 234.00 | 1206  | 327.00 | 1040  |
| 73.00 | 1953   | 155.00 | 5564   | 235.00 | 1229  | 329.00 | 557   |
| 74.00 | 20919  | 156.00 | 7992   | 236.00 | 1024  | 329.00 | 118   |
| 75.00 | 33077  | 157.00 | 1535   | 237.00 | 1330  | 332.00 | 295   |
| 76.00 | 12030  | 158.00 | 2049   | 238.00 | 223   | 333.00 | 537   |
| 77.00 | 184133 | 159.00 | 1474   | 239.00 | 656   | 334.00 | 3590  |

: 02-AUG-96 06:47

Document : msd\_2.i

Sample ID : BFTPP02

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 1.0

Spectrum: Scan 395-397 (7.917 min) Subtraction Scan 332

Base Peak: 198.00

Number of mass peaks: 301

| Mass   | Abund  | Mass   | Abund | Mass   | Abund  | Mass   | Abund  |
|--------|--------|--------|-------|--------|--------|--------|--------|
| 78.00  | 12023  | 160.00 | 3165  | 240.00 | 722    | 335.00 | 962    |
| 79.00  | 15085  | 161.00 | 4336  | 241.00 | 978    | 340.00 | 70     |
| 80.00  | 11238  | 162.00 | 1382  | 242.00 | 2319   | 341.00 | 502    |
| 81.00  | 16321  | 163.00 | 572   | 243.00 | 2930   | 346.00 | 910    |
| 82.00  | 3765   | 164.00 | 714   | 244.00 | 33916  | 347.00 | 66     |
| 83.00  | 2942   | 165.00 | 3608  | 245.00 | 4374   | 351.00 | 74     |
| 84.00  | 324    | 166.00 | 3259  | 246.00 | 6704   | 352.00 | 1997   |
| 85.00  | 2424   | 167.00 | 18262 | 247.00 | 1317   | 353.00 | 1307   |
| 86.00  | 4437   | 168.00 | 7501  | 248.00 | 250    | 354.00 | 1063   |
| 87.00  | 2013   | 169.00 | 1074  | 249.00 | 1357   | 355.00 | 366    |
| 88.00  | 935    | 170.00 | 623   | 250.00 | 244    | 356.00 | 74     |
| 89.00  | 662    | 171.00 | 1155  | 251.00 | 457    | 365.00 | 7166   |
| 91.00  | 4060   | 172.00 | 2090  | 252.00 | 183    | 366.00 | 1177   |
| 92.00  | 4444   | 173.00 | 2102  | 253.00 | 797    | 367.00 | 85     |
| 95.00  | 29066  | 174.00 | 3678  | 255.00 | 166010 | 370.00 | 215    |
| 94.00  | 1848   | 175.00 | 6845  | 256.00 | 23412  | 371.00 | 329    |
| 95.00  | 337    | 176.00 | 2139  | 257.00 | 1963   | 372.00 | 3063   |
| 96.00  | 894    | 177.00 | 3428  | 258.00 | 9089   | 373.00 | 785    |
| 98.00  | 17944  | 178.00 | 502   | 259.00 | 1335   | 374.00 | 79     |
| 99.00  | 15172  | 179.00 | 14275 | 260.00 | 94     | 383.00 | 814    |
| 100.00 | 1352   | 180.00 | 9130  | 261.00 | 271    | 384.00 | 85     |
| 101.00 | 8718   | 181.00 | 4809  | 262.00 | 173    | 390.00 | 301    |
| 102.00 | 568    | 182.00 | 767   | 264.00 | 446    | 391.00 | 373    |
| 103.00 | 2572   | 183.00 | 620   | 265.00 | 3426   | 392.00 | 301    |
| 104.00 | 6511   | 184.00 | 1456  | 266.00 | 89     | 401.00 | 259    |
| 105.00 | 5560   | 185.00 | 7265  | 267.00 | 68     | 402.00 | 1147   |
| 107.00 | 62517  | 186.00 | 46141 | 268.00 | 143    | 403.00 | 1743   |
| 108.00 | 9117   | 187.00 | 12978 | 270.00 | 531    | 404.00 | 479    |
| 110.00 | 122752 | 188.00 | 1383  | 271.00 | 306    | 421.00 | 1702   |
| 111.00 | 17937  | 189.00 | 3466  | 272.00 | 711    | 422.00 | 1615   |
| 112.00 | 2072   | 190.00 | 597   | 273.00 | 5305   | 423.00 | 11938  |
| 113.00 | 664    | 191.00 | 1840  | 274.00 | 14575  | 424.00 | 2567   |
| 115.00 | 479    | 192.00 | 4441  | 275.00 | 80504  | 425.00 | 216    |
| 116.00 | 3326   | 193.00 | 4369  | 276.00 | 10404  | 441.00 | 37525  |
| 117.00 | 54508  | 194.00 | 1002  | 277.00 | 5723   | 442.00 | 241680 |

Date: 02-AUG-96 06:47

Instrument: msd\_2.1

Sample ID: DFTPP02

Column phase:

Column diameter: 2.00

Volume Injected (uL): 1.0

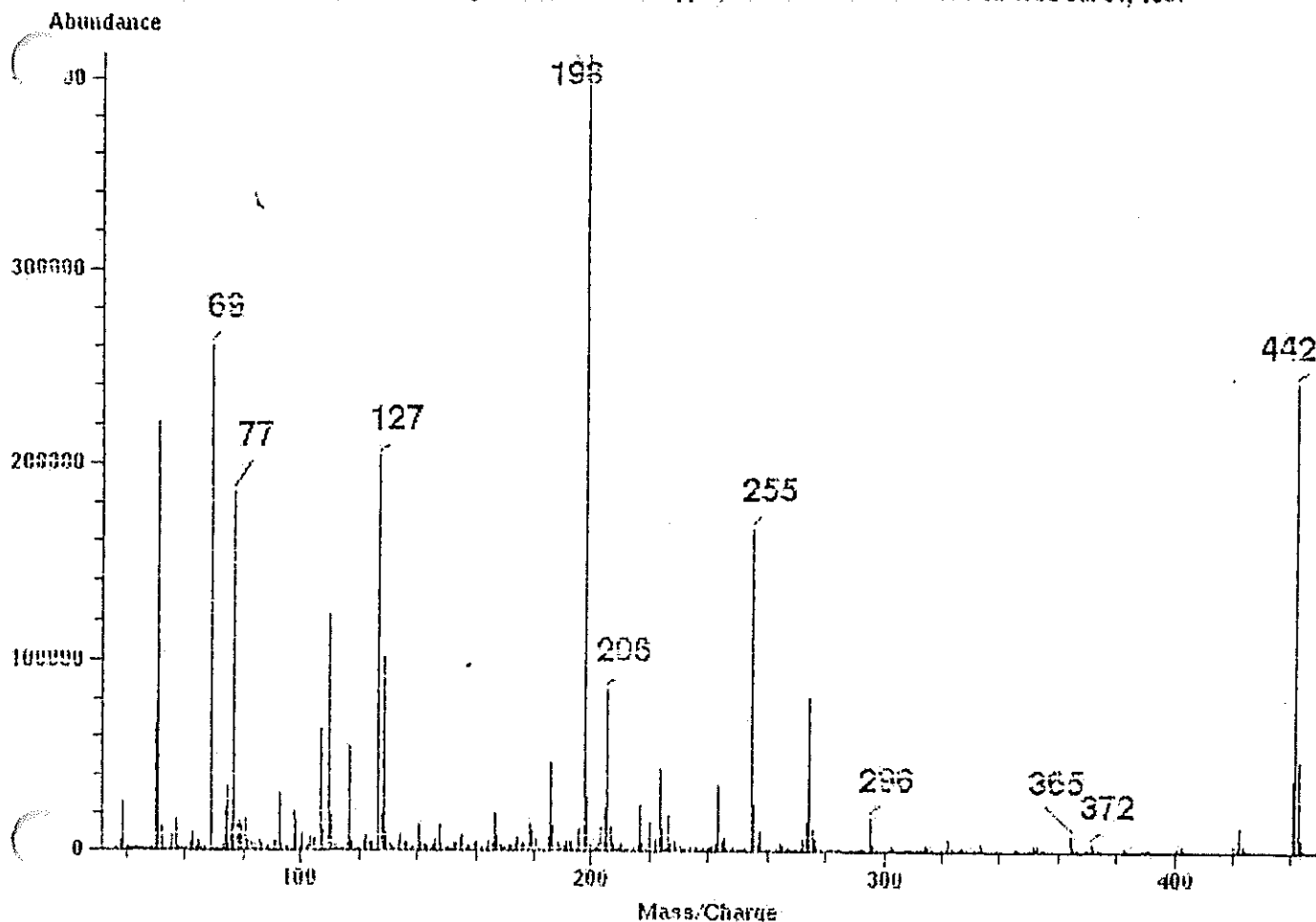
Spectrum: Scan 395-397 (7.917 min) Subtraction Scan 392

Base Peak: 198.00

Number of mass peaks: 301

| Mass   | Abund | Mass   | Abund  | Mass   | Abund | Mass   | Abund |
|--------|-------|--------|--------|--------|-------|--------|-------|
| 118.00 | 4037  | 195.00 | 659    | 278.00 | 1017  | 443.00 | 46690 |
| 119.00 | 273   | 196.00 | 10940  | 279.00 | 16    | 444.00 | 4902  |
| 120.00 | 790   | 198.00 | 412757 | 281.00 | 75    | 445.00 | 251   |
| 121.00 | 340   | 199.00 | 28004  | 282.00 | 95    |        |       |
| 122.00 | 4432  | 200.00 | 2169   | 285.00 | 596   |        |       |
| 123.00 | 6976  | 201.00 | 1515   | 284.00 | 491   |        |       |

Average of 7.907 to 7.927 min. from DFTPP000296.d  
msd\_2 (ms5971-2); /chem/config/doc/ms5971-2.d/typ.u; Tuned at 09:13 AM EDT on Wed Jul 31, 1996



| mass | Ion abundance criteria             | %relative abundance |
|------|------------------------------------|---------------------|
| 51   | 30.0 - 60.0% of mass 198           | 53.4                |
| 68   | Less than 2.0% of mass 69          | 0.0                 |
| 69   | Mass 69 relative abundance is      | 63.1                |
| 70   | Less than 2.0% of mass 69          | 0.1                 |
| 127  | 40.0 to 60.0% of mass 198          | 49.2                |
| 197  | Less than 1.0% of mass 198         | 0.0                 |
| 198  | Base peak, 100% relative abundance | 100.0               |
| 199  | 5.0 to 9.0% of mass 198            | 6.8                 |
| 255  | 10.0 - 30.0% of mass 198           | 19.5                |
| 365  | Greater than 1% of mass 198        | 1.7                 |
| 441  | Present, but less than mass 443    | 80.4                |
| 442  | Greater than 40.0% of mass 198     | 58.6                |
| 443  | 17.0 - 23.0% of mass 442           | 19.3                |

EcoSys, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 28-MAY-93 15:51  
 End Cal Date : 31-JUL-1996 13:17  
 Start Method : ISTD  
 Curve Type : Averaged  
 Target Version : Target 2.20  
 Integrator : HP RTE  
 Method File : \chem\msd\_2.1\2-073196.b\MA-ENA.m  
 Date : 01-Aug-1996 06:42 target

## Calibration File Names:

Level 2: \chem\msd\_2.1\2-073196.b\ENA0201002.d  
 Level 3: \chem\msd\_2.1\2-073196.b\ENA0301003.d  
 Level 4: \chem\msd\_2.1\2-073196.b\ENA0401004.d  
 Level 5: \chem\msd\_2.1\2-073196.b\ENA0501005.d  
 Level 6: \chem\msd\_2.1\2-073196.b\ENA0601006.d

| Compound                        | Level 2  | Level 3  | Level 4  | Level 5  | Level 6  | RRF      | % RSD/R <sup>2</sup> |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------------------|
| 2 Ethylene                      | 0.664671 | 1.065651 | 1.005731 | 1.451251 | 1.378491 | 1.113161 | 29.3951              |
| 4 Ethanol **                    | 0.927431 | 1.022611 | 1.114321 | 1.166211 | 1.196291 | 1.085371 | 10.1511              |
| 5 Bis(2-chloroethyl) ether      | 1.361831 | 1.081181 | 1.219101 | 1.179901 | 1.226251 | 1.201651 | 6.7011               |
| 6 2-Chlorophenol                | 1.161731 | 1.220241 | 1.256661 | 1.455971 | 1.319281 | 1.292271 | 8.7651               |
| 7 1,3-Dichlorobenzene           | 1.460411 | 1.470161 | 1.537751 | 1.542121 | 1.546831 | 1.511471 | 2.8061               |
| 9 1,4-Dichlorobenzene **        | 1.462661 | 1.501791 | 1.562821 | 1.590461 | 1.635921 | 1.550731 | 4.4601               |
| 10 1,2-Dichlorobenzene          | 1.388791 | 1.400591 | 1.467531 | 1.497261 | 1.545621 | 1.459961 | 4.5141               |
| 11 Benzyl alcohol               | 0.779781 | 0.920021 | 0.933841 | 0.906451 | 0.941791 | 0.876391 | 7.3591               |
| 12 2-Methylphenol               | 0.811761 | 0.868211 | 0.908541 | 1.079491 | 0.991011 | 0.931801 | 11.2961              |
| 13 Bis(2-chloroisopropyl) ether | 0.907761 | 0.918531 | 0.979681 | 1.168411 | 1.129561 | 1.020791 | 11.8521              |
| 14 N-Nitrosodi-n-propylamine *  | 0.707711 | 0.693371 | 0.714801 | 0.687871 | 0.691551 | 0.699061 | 1.6571               |
| 15 4-Methylphenol               | 0.767991 | 0.877731 | 0.950131 | 1.119571 | 1.049091 | 0.952701 | 14.5201              |
| 16 Hexachloroethane             | 0.639691 | 0.643931 | 0.668621 | 0.685811 | 0.716991 | 0.670991 | 4.7391               |
| 18 Nitrobenzene                 | 0.353901 | 0.391791 | 0.408171 | 0.421601 | 0.415131 | 0.399121 | 6.8071               |
| 19 Isophorone                   | 0.673251 | 0.695821 | 0.727051 | 0.610491 | 0.708921 | 0.683111 | 6.5991               |
| 20 2-Nitrophenol **             | 0.228711 | 0.257521 | 0.271431 | 0.273291 | 0.295281 | 0.265251 | 9.2341               |
| 21 2,4-Dimethylphenol           | 0.327251 | 0.385641 | 0.415781 | 0.341821 | 0.386451 | 0.371391 | 9.7301               |
| 22 Bis(2-chloroethoxy)methane   | 0.359891 | 0.376011 | 0.403601 | 0.348131 | 0.393701 | 0.376271 | 6.1051               |
| 23 2,4-Dichlorophenol **        | 0.284751 | 0.336551 | 0.337171 | 0.307191 | 0.299661 | 0.313061 | 7.4021               |
| 24 Benzoic acid                 | 0.220301 | 0.182361 | 0.194241 | 0.254531 | 0.239561 | 0.218201 | 13.8231              |
| 25 1,2,4-Trichlorobenzene       | 0.368121 | 0.383521 | 0.394181 | 0.381811 | 0.397161 | 0.384961 | 2.9891               |
| 27 Naphthalene                  | 1.094111 | 1.130781 | 1.187251 | 1.167541 | 1.157971 | 1.147531 | 3.1481               |
| 29 4-Chloroaniline              | 0.260201 | 0.314191 | 0.332181 | 0.407791 | 0.375521 | 0.337981 | 16.8231              |
| 29 Hexachlorobutadiene **       | 0.227201 | 0.222301 | 0.225181 | 0.219911 | 0.224101 | 0.223721 | 1.2591               |
| 30 4-Chloro-3-methylphenol **   | 0.326261 | 0.343101 | 0.366661 | 0.367811 | 0.345211 | 0.349811 | 5.0111               |
| 31 2-Methylnaphthalene          | 0.731581 | 0.745511 | 0.769391 | 0.724671 | 0.752421 | 0.744721 | 2.3671               |
| 32 1-chlorocyclopentadiene *    | 0.203491 | 0.254601 | 0.255471 | 0.284061 | 0.299141 | 0.259151 | 14.0101              |
| 33 2,4,6-Trichlorophenol **     | 0.259441 | 0.303611 | 0.332131 | 0.361731 | 0.350821 | 0.321561 | 12.7891              |
| 34 2,4,5-Trichlorophenol        | 0.333081 | 0.356231 | 0.374891 | 0.395291 | 0.347411 | 0.361381 | 6.7141               |

Ecosys, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 28-MAY-93 15:51  
 End Cal Date : 31-JUL-1996 13:17  
 Start Method : ISTD  
 Cal Curve Type : Averaged  
 Target Version : Target 2.20  
 Integrator : HP RTE  
 Method File : /chem/msd\_2.1/2-073196.b/MA-BNA.m  
 Cal Date : 01-Aug-1996 06:42 target

## Calibration File Names:

Level 2: /chem/msd\_2.1/2-073196.b/BNA0201002.d  
 Level 3: /chem/msd\_2.1/2-073196.b/BNA0301003.d  
 Level 4: /chem/msd\_2.1/2-073196.b/BNA0401004.d  
 Level 5: /chem/msd\_2.1/2-073196.b/BNA0501005.d  
 Level 6: /chem/msd\_2.1/2-073196.b/BNA0601006.d

| Compound                       | Level 2  | Level 3  | Level 4  | Level 5  | Level 6  | RRF      | % RSD/R02 |
|--------------------------------|----------|----------|----------|----------|----------|----------|-----------|
| 37 Chloronaphthalene           | 1.124791 | 1.191161 | 1.235481 | 1.216941 | 1.249831 | 1.201641 | 4.1661    |
| 37 Nitroaniline                | 0.315321 | 0.313741 | 0.320141 | 0.326461 | 0.297721 | 0.314681 | 3.3991    |
| 39 Dimethyl phthalate          | 1.534431 | 1.392111 | 1.530441 | 1.549001 | 1.524361 | 1.506071 | 4.2721    |
| 39 2,4-Dinitrotoluene          | 0.324001 | 0.336011 | 0.304891 | 0.285651 | 0.311311 | 0.312371 | 6.1291    |
| 40 Acenaphthylene              | 1.706801 | 1.939761 | 1.996271 | 1.980861 | 1.925121 | 1.949561 | 4.6331    |
| 41 3-Nitroaniline              | 0.201631 | 0.102921 | 0.154931 | 0.228541 | 0.163931 | 0.170351 | 29.1301   |
| 43 Acenaphthene **             | 1.176901 | 1.299771 | 1.295931 | 1.242951 | 1.257791 | 1.219671 | 2.6291    |
| 44 2,4-Dinitrophenol *         | +++++    | 0.074691 | 0.110861 | 0.130151 | 0.130431 | 0.111531 | 23.5031   |
| 47 2,4-Dinitrotoluene          | 0.359101 | 0.391771 | 0.420811 | 0.389991 | 0.423621 | 0.397061 | 6.6591    |
| 45 4-Nitrophenol *             | 0.115791 | 0.122011 | 0.161671 | 0.147511 | 0.123351 | 0.134071 | 14.6211   |
| 46 Dibenzofuran                | 1.542991 | 1.605701 | 1.660291 | 1.689591 | 1.718741 | 1.643461 | 4.2591    |
| 48 Diethyl phthalate           | 1.571391 | 1.478491 | 1.613891 | 1.531641 | 1.488341 | 1.536751 | 3.6991    |
| 50 Fluorene                    | 1.154001 | 1.250101 | 1.288551 | 1.342471 | 1.387961 | 1.284441 | 6.9751    |
| 49 4-Chlorophenyl phenyl ether | 0.692381 | 0.614641 | 0.629561 | 0.652791 | 0.676511 | 0.635181 | 4.6881    |
| 52 4-Nitroaniline              | 0.117181 | 0.127111 | 0.131261 | 0.136471 | 0.144221 | 0.131251 | 7.7201    |
| 51 4,6-Dinitro-2-methylphenol  | 0.077891 | 0.099021 | 0.114281 | 0.135401 | 0.133921 | 0.111111 | 23.2831   |
| 53 N-Nitrosodiphenylamine **   | 0.472091 | 0.443301 | 0.406171 | 0.414861 | 0.377111 | 0.422711 | 8.5921    |
| 54 1,2-Diphenylhydrazine       | 2.123931 | 2.097481 | 2.041611 | 2.025111 | 2.171411 | 2.091911 | 2.8651    |
| 56 4-Bromophenyl phenyl ether  | 0.295731 | 0.303231 | 0.288021 | 0.313051 | 0.298341 | 0.299671 | 3.0991    |
| 57 Hexachlorobenzene           | 0.337811 | 0.336081 | 0.322861 | 0.333141 | 0.339271 | 0.333831 | 1.9611    |
| 58 Pentachlorophenol **        | 0.107901 | 0.108031 | 0.125651 | 0.145511 | 0.129211 | 0.123261 | 12.8541   |
| 60 Phenanthrene                | 1.210681 | 1.231951 | 1.363821 | 1.465021 | 1.455171 | 1.345331 | 8.9291    |
| 61 Anthracene                  | 1.185141 | 1.205301 | 1.236751 | 1.297401 | 1.291471 | 1.243211 | 4.0451    |
| 62 Carbazole                   | 0.752831 | 0.562021 | 0.557381 | 0.720861 | 0.589091 | 0.636431 | 14.6351   |
| 63 Di-n-butyl phthalate        | 2.043941 | 2.007851 | 1.966481 | 2.134751 | 1.871781 | 2.004961 | 4.8351    |
| 64 Chloranthene **             | 1.016211 | 1.038981 | 1.227561 | 1.221071 | 1.221421 | 1.145051 | 9.3931    |
| 65 Benzene                     | 2.397291 | 2.405991 | 1.998771 | 2.019451 | 2.051391 | 2.174561 | 9.5711    |
| 67 Butyl benzyl phthalate      | 1.527481 | 1.457771 | 1.268941 | 1.368051 | 1.236041 | 1.371661 | 8.9771    |
| 68 Di(2-ethylhexyl) adipate    | 1.258411 | 1.283241 | 1.063301 | 1.204811 | 1.114291 | 1.184811 | 7.9221    |

## Ecosys, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 28-MAY-93 15:51  
 End Cal Date : 31-JUL-1996 13:17  
 Quant Method : ISTD  
 Cal Curve Type : Averaged  
 Target Version : Target 2.20  
 Integrator : HP RTE  
 Method File : \chem\msd\_2.i\2-073196.b\MA-BNA.m  
 Cal Date : 01-Aug-1996 06:42 target

## Calibration File Names:

Level 2: \chem\msd\_2.i\2-073196.b\BNA0201002.d  
 Level 3: \chem\msd\_2.i\2-073196.b\BNA0301003.d  
 Level 4: \chem\msd\_2.i\2-073196.b\BNA0601006.d  
 Level 5: \chem\msd\_2.i\2-073196.b\BNA0401004.d  
 Level 6: \chem\msd\_2.i\2-073196.b\BNA0501005.d

| Compound                       | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | RRF     | % RSD/R^2 |
|--------------------------------|---------|---------|---------|---------|---------|---------|-----------|
| 3'-Dichlorobenzidine           | 0.17801 | 0.12933 | 0.13336 | 0.14203 | 0.12978 | 0.14250 | 14.380    |
| 71 Benz(a)anthracene           | 1.14772 | 1.23207 | 1.26699 | 1.29354 | 1.31019 | 1.25010 | 5.152     |
| 70 Bis(2-ethylhexyl) phthalate | 2.30514 | 2.18057 | 1.92232 | 2.30296 | 1.88546 | 2.11929 | 9.598     |
| 73 Chrysene                    | 1.17939 | 1.15770 | 1.15993 | 1.12971 | 1.12142 | 1.16163 | 1.798     |
| 74 Di-n-octyl phthalate **     | 5.96630 | 5.80127 | 6.04103 | 6.44683 | 5.57462 | 5.96601 | 5.413     |
| 75 Benzo(b)fluoranthene        | 1.46153 | 1.64385 | 1.72229 | 1.84736 | 2.01947 | 1.73890 | 12.083    |
| 76 Benzo(k)fluoranthene        | 2.05495 | 1.92860 | 2.15527 | 1.92126 | 1.76823 | 1.96566 | 7.479     |
| 77 Benzo(a)pyrene **           | 1.33555 | 1.42128 | 1.45451 | 1.44299 | 1.48508 | 1.42788 | 3.959     |
| 79 Indeno(1,2,3-cd)pyrene      | 1.00556 | 1.17424 | 1.10880 | 1.03513 | 1.05039 | 1.07482 | 6.243     |
| 80 Dibenz(a,h)anthracene       | 0.79569 | 0.92959 | 0.90776 | 0.98283 | 1.01363 | 0.92590 | 9.074     |
| 91 Benzo(g,h,i)perylene        | 0.91354 | 1.03065 | 1.05425 | 1.01117 | 1.03272 | 1.00847 | 5.475     |
| 1 2-Fluorophenol               | 1.07719 | 1.03327 | 1.06103 | 1.25352 | 1.13636 | 1.11227 | 7.367     |
| 3 Phenol-d5                    | 0.91115 | 1.04250 | 1.04072 | 1.12015 | 1.19510 | 1.06194 | 9.953     |
| 17 Nitrobenzene-d5             | 0.40403 | 0.41454 | 0.43224 | 0.43902 | 0.43262 | 0.42450 | 3.446     |
| 36 2-Fluorobiphenyl            | 1.39256 | 1.40234 | 1.44907 | 1.48808 | 1.49777 | 1.44597 | 3.321     |
| 55 2,4,6-Tribromophenol        | 0.12096 | 0.13033 | 0.14170 | 0.15114 | 0.14271 | 0.13737 | 8.580     |
| 66 Terphenyl-d14               | 1.48372 | 1.55202 | 1.37206 | 1.43639 | 1.39074 | 1.44799 | 5.082     |

Ecosys, Inc.

BASE NEUTRAL QUANT AND RATIO REPORT

Data File : /chem/msd\_2.1/2-080296.b/BNA0101001.d  
Lab. Id. :  
Inj Date : 02-AUG-1996 07:15 Autotune Date: 31-Jul-96 09:13:5  
Operator : GORDON Inst ID: msd\_2.1  
Emp Info : BNA-80-38  
Misc Info : CONTINUE CALIBRATION  
Comment :  
Method : /chem/msd\_2.1/2-080296.b/MA-BNA.m  
Meth Date : 02-Aug-1996 08:13 target  
Cal Date : 02-AUG-96 07:15 Cal File: BNA0101001.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.000 Target Version: Target 2.20  
Integrator: HP RTE Compound Sublist: all.sub  
Sample Type: WATER

| Compounds                       | QUANT<br>SIG<br>MASS | RT (REL RT)   | RESPONSE | CONCENTRATIONS       |                 |
|---------------------------------|----------------------|---------------|----------|----------------------|-----------------|
|                                 |                      |               |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/L) |
| 1 Fluorophenol                  | 112.00               | 9.675(0.000)  | 1716785  | 76.1                 | 76.1(H)         |
| 2 line                          | 93.00                | 12.494(0.937) | 1704568  | 75.5                 | 75.5            |
| 3 Phenol-d5                     | 99.00                | 12.720(0.000) | 1813935  | 84.2                 | 84.2(H)         |
| 4 Phenol **                     | 94.00                | 12.753(0.937) | 2131306  | 96.8                 | 96.8(H)         |
| 5 Bis(2-chloroethyl) ether      | 93.00                | 12.731(0.955) | 1908511  | 78.3                 | 78.3            |
| 6 2-Chlorophenol                | 128.00               | 12.850(0.964) | 2040462  | 78.4                 | 78.4            |
| 7 1,3-Dichlorobenzene           | 146.00               | 13.163(0.987) | 2506549  | 81.8                 | 81.8            |
| 8 1,4-Dichlorobenzene-d4        | 152.00               | 13.336(1.000) | 811352   | 40.0                 |                 |
| 9 1,4-Dichlorobenzene **        | 146.00               | 13.390(1.004) | 2589390  | 82.3                 | 82.3            |
| 10 1,2-Dichlorobenzene          | 146.00               | 13.778(1.033) | 2399878  | 81.0                 | 81.0            |
| 11 Benzyl alcohol               | 79.00                | 13.897(1.042) | 1606966  | 90.4                 | 90.4            |
| 12 2-Methylphenol               | 108.00               | 14.318(1.074) | 1440351  | 76.2                 | 76.2            |
| 13 Bis(2-chloroisopropyl) ether | 45.00                | 14.210(1.066) | 1725353  | 83.3                 | 83.3            |
| 14 N-Nitrosodi-n-propylamine *  | 70.00                | 14.588(1.094) | 1257208  | 88.7                 | 88.7            |
| 15 4-Methylphenol               | 108.00               | 14.761(1.107) | 1444941  | 74.8                 | 74.8            |
| 16 Hexachloroethane             | 117.00               | 14.664(1.100) | 1130702  | 83.1                 | 83.1            |
| 17 Nitrobenzene-d5              | 82.00                | 14.891(0.890) | 2169772  | 82.7                 | 82.7            |
| 18 Nitrobenzene                 | 77.00                | 14.945(0.893) | 1955276  | 79.5                 | 79.5            |
| 19 Isophorone                   | 82.00                | 15.625(0.933) | 3776574  | 89.5                 | 89.5            |
| 20 2-Nitrophenol **             | 139.00               | 15.787(0.943) | 1362162  | 83.1                 | 83.1            |
| 21 2,4-Dimethylphenol           | 107.00               | 16.078(0.961) | 1970291  | 85.9                 | 85.9            |
| 22 Bis(2-chloroethoxy)methane   | 93.00                | 16.240(0.970) | 1934686  | 83.2                 | 83.2            |
| 23 2,4-Dichlorophenol **        | 162.00               | 16.564(0.990) | 1686790  | 87.2                 | 87.2            |
| 24 Benzoic acid                 | 105.00               | 16.684(0.997) | 1135585  | 84.2                 | 84.2            |
| 26 Naphthalene-d8               | 136.00               | 16.738(1.000) | 2470959  | 40.0                 |                 |
| 25 2,4-Trichlorobenzene         | 180.00               | 16.619(0.993) | 2070060  | 87.0                 | 87.0            |
| 27 Nthalene                     | 128.00               | 16.803(1.004) | 5996036  | 84.6                 | 84.6            |
| 28 4-Chloroaniline              | 127.00               | 17.041(1.018) | 1705479  | 81.7                 | 81.7(H)         |
| 29 Hexachlorobutadiene **       | 224.30               | 17.149(1.025) | 1228445  | 88.9                 | 88.9            |
| 30 4-Chloro-3-methylphenol **   | 107.00               | 18.476(1.104) | 1601011  | 74.1                 | 74.1            |
| 31 2-Methylnaphthalene          | 142.00               | 18.627(1.113) | 3892608  | 84.6                 | 84.6            |

| Compounds                      | QUANT SIG<br>MASS | RT (REL RT)   | RESPONSE | CONCENTRATIONS       |                 |
|--------------------------------|-------------------|---------------|----------|----------------------|-----------------|
|                                |                   |               |          | ON-COLUMN<br>(ng/ul) | FINAL<br>(ug/L) |
| 32 Hexachlorocyclopentadiene * | 237.00            | 19.027(0.892) | 826330   | 81.3                 | 81.3            |
| 33 2,4,6-Trichlorophenol **    | 196.00            | 19.449(0.912) | 1056567  | 83.8                 | 83.8            |
| 34 2,4,5-Trichlorophenol       | 196.00            | 19.622(0.920) | 1230484  | 86.8                 | 86.8(H)         |
| * 35 2-Fluorobiphenyl          | 172.00            | 19.622(0.920) | 4768342  | 84.1                 | 84.1            |
| 36 2-Chloronaphthalene         | 162.00            | 19.904(0.933) | 3825423  | 81.2                 | 81.2            |
| 37 2-Nitroaniline              | 65.00             | 20.282(0.951) | 1901325  | 81.2                 | 81.2            |
| 38 Dimethyl phthalate          | 163.00            | 20.747(0.973) | 4508006  | 76.3                 | 76.3            |
| 39 2,6-Dinitrotoluene          | 165.00            | 20.898(0.980) | 983412   | 80.3                 | 80.3            |
| 42 Acenaphthylene              | 152.00            | 20.974(0.983) | 5796540  | 79.9                 | 79.9            |
| 41 3-Nitroaniline              | 138.00            | 21.428(1.005) | 516155   | 77.3                 | 77.3(M)         |
| * 40 Acenaphthene-d10          | 164.00            | 21.331(1.000) | 1568314  | 40.0                 |                 |
| 43 Acenaphthene **             | 153.00            | 21.428(1.005) | 3779764  | 79.1                 | 79.1            |
| 44 2,4-Dinitrophenol *         | 184.00            | 21.655(0.000) | 298757   | 68.3                 | 68.3(M)         |
| 47 2,4-Dinitrotoluene          | 165.00            | 21.937(1.028) | 1351071  | 86.8                 | 86.8            |
| 45 4-Nitrophenol *             | 65.00             | 21.915(1.026) | 373437   | 71.0                 | 71.0(M)         |
| 46 Dibenzofuran                | 168.00            | 21.883(1.026) | 5260527  | 81.6                 | 81.6            |
| 48 Diethyl phthalate           | 149.00            | 22.575(1.058) | 5098715  | 84.6                 | 84.6            |
| 50 Fluorene                    | 166.00            | 22.770(1.067) | 4275099  | 84.9                 | 84.9            |
| 49 4-Chlorophenyl phenyl ether | 204.00            | 22.803(1.069) | 2126205  | 85.4                 | 85.4            |
| 52 4-Nitroaniline              | 138.00            | 23.139(0.000) | 466357   | 90.6                 | 90.6(M)         |
| 4,6-Dinitro-2-methylphenol     | 198.00            | 22.987(0.912) | 438653   | 80.7                 | 80.7            |
| N-Nitrosodiphenylamine **      | 169.00            | 23.150(0.919) | 1892647  | 91.6                 | 91.6            |
| 54 1,2-Diphenylhydrazine       | 77.00             | 23.236(0.922) | 8270622  | 80.8                 | 80.8            |
| * 55 2,4,6-Tribromophenol      | 329.70            | 23.421(0.930) | 674316   | 100                  | 100             |
| 56 4-Bromophenyl phenyl ether  | 248.00            | 24.070(0.955) | 1289952  | 88.0                 | 88.0            |
| 57 Hexachlorobenzene           | 293.30            | 24.189(0.960) | 1503610  | 92.1                 | 92.1            |
| 58 Pentachlorophenol **        | 265.75            | 24.773(0.983) | 557329   | 92.5                 | 92.5            |
| * 59 Phenanthrene-d10          | 188.00            | 25.196(1.000) | 1956080  | 40.0                 |                 |
| 60 Phenanthrene                | 178.00            | 25.272(1.003) | 5837079  | 88.7                 | 88.7            |
| 61 Anthracene                  | 178.00            | 25.402(1.008) | 5219891  | 85.8                 | 85.8            |
| 62 Carbazole                   | 167.00            | 25.932(0.000) | 2815908  | 90.5                 | 90.5(M)         |
| 63 Di-n-butyl phthalate        | 149.00            | 26.818(1.064) | 8104823  | 82.7                 | 82.7            |
| 64 Fluoranthene **             | 202.00            | 28.349(1.125) | 5246171  | 93.7                 | 93.7            |
| 65 Pyrene                      | 202.00            | 28.931(0.902) | 5097253  | 73.5                 | 73.5            |
| * 66 Terphenyl-d14             | 244.00            | 29.374(0.916) | 3468657  | 75.1                 | 75.1            |
| 67 Butyl benzyl phthalate      | 149.00            | 30.678(0.957) | 3115801  | 71.2                 | 71.2            |
| 68 Di(2-ethylhexyl) adipate    | 129.00            | 30.895(0.963) | 2520770  | 66.7                 | 66.7            |
| 69 3,3'-Dichlorobenzidine      | 252.00            | 32.049(0.999) | 398483   | 87.6                 | 87.6(M)         |
| 71 Benz(a)anthracene           | 228.00            | 32.049(0.999) | 3291045  | 82.5                 | 82.5            |
| * 72 Chrysene-d12              | 240.00            | 32.070(1.000) | 1276331  | 40.0                 |                 |
| 70 Bis(2-ethylhexyl) phthalate | 149.00            | 32.158(1.003) | 4782300  | 70.7                 | 70.7            |
| 73 Chrysene                    | 228.00            | 32.136(1.002) | 2945049  | 79.4                 | 79.4            |
| 74 Di-n-octyl phthalate **     | 149.00            | 33.789(1.000) | 6988085  | 71.2                 | 71.2            |
| 75 Benzo(b)fluoranthene        | 252.00            | 34.890(1.000) | 2309965  | 80.8                 | 80.8            |
| 76 Benzo(k)fluoranthene        | 252.00            | 34.977(0.000) | 2554806  | 79.0                 | 79.0(M)         |
| Benzo(a)pyrene **              | 252.00            | 35.916(1.000) | 1879692  | 80.1                 | 80.1            |
| Perylene-d12                   | 264.00            | 36.101(1.000) | 657608   | 40.0                 | (M)             |
| 79 Indeno(1,2,3-cd)pyrene      | 276.00            | 40.565(0.000) | 1692851  | 95.8                 | 95.8(M)         |
| 80 Dibenz(a,h)anthracene       | 278.00            | 40.673(0.000) | 1356505  | 89.1                 | 89.1(M)         |
| 81 Benzo(g,h,i)perylene        | 276.00            | 41.935(0.000) | 1337377  | 80.7                 | 80.7(M)         |

IC Flag Legend

- I - Compound response manually integrated.
- I - Operator selected an alternate compound hit.

Ecosys, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd\_2.i Injection Date: 02-AUG-1996 07:15  
 Lab File ID: BNA0101001.d Init. Calibration Date(s): 05/28/93 07/31/96  
 Analysis Type: WATER Init. Calibration Times: 15:51 13:17  
 Lab Sample ID: Method File: /chem/msd\_2.i/2-080296.b/MA-BNA.m

| COMPOUND                     | RRF   | RF80  | MIN    | RRF  | %D   | MAX |
|------------------------------|-------|-------|--------|------|------|-----|
| 12-Fluorophenol              | 1.112 | 1.058 | 10.050 | 4.9  | 30.0 |     |
| Aniline                      | 1.113 | 1.050 | 10.050 | 5.6  | 30.0 |     |
| Phenol-d5                    | 1.062 | 1.112 | 10.050 | 5.3  | 30.0 |     |
| Phenol **                    | 1.085 | 1.313 | 10.050 | 21.0 | 30.0 |     |
| Bis(2-chloroethyl) ether     | 1.202 | 1.176 | 10.050 | 2.1  | 30.0 |     |
| 2-Chlorophenol               | 1.283 | 1.257 | 10.050 | 2.0  | 30.0 |     |
| 1,3-Dichlorobenzene          | 1.511 | 1.545 | 10.050 | 2.2  | 30.0 |     |
| 1,4-Dichlorobenzene **       | 1.551 | 1.596 | 10.050 | 2.9  | 30.0 |     |
| 1,2-Dichlorobenzene          | 1.460 | 1.479 | 10.050 | 1.3  | 30.0 |     |
| Benzyl alcohol               | 0.876 | 0.990 | 10.050 | 13.0 | 30.0 |     |
| 2-Methylphenol               | 0.932 | 0.888 | 10.050 | 4.7  | 30.0 |     |
| Bis(2-chloroisopropyl) ether | 1.021 | 1.063 | 10.050 | 4.2  | 30.0 |     |
| N-Nitrosodi-n-propylamine *  | 0.699 | 0.775 | 10.050 | 10.8 | 30.0 |     |
| 4-Methylphenol               | 0.953 | 0.890 | 10.050 | 6.5  | 30.0 |     |
| Hexachloroethane             | 0.671 | 0.697 | 10.050 | 3.8  | 30.0 |     |
| Nitrobenzene-d5              | 0.424 | 0.439 | 10.050 | 3.4  | 30.0 |     |
| Nitrobenzene                 | 0.398 | 0.396 | 10.050 | 0.6  | 30.0 |     |
| Isophorone                   | 0.683 | 0.764 | 10.050 | 11.9 | 30.0 |     |
| 2-Nitrophenol **             | 0.265 | 0.276 | 10.050 | 3.9  | 30.0 |     |
| 2,4-Dimethylphenol           | 0.371 | 0.399 | 10.050 | 7.4  | 30.0 |     |
| Bis(2-chloroethoxy)methane   | 0.376 | 0.391 | 10.050 | 4.0  | 30.0 |     |
| 2,4-Dichlorophenol **        | 0.313 | 0.341 | 10.050 | 9.0  | 30.0 |     |
| Benzoic acid                 | 0.218 | 0.230 | 10.050 | 5.3  | 30.0 |     |
| 1,2,4-Trichlorobenzene       | 0.385 | 0.419 | 10.050 | 8.8  | 30.0 |     |
| Naphthalene                  | 1.148 | 1.213 | 10.050 | 5.7  | 30.0 |     |
| 4-Chloroaniline              | 0.338 | 0.345 | 10.050 | 2.1  | 30.0 |     |
| Hexachlorobutadiene **       | 0.224 | 0.249 | 10.050 | 11.1 | 30.0 |     |
| 4-Chloro-3-methylphenol **   | 0.350 | 0.324 | 10.050 | 7.4  | 30.0 |     |
| 2-Methylnaphthalene          | 0.745 | 0.788 | 10.050 | 5.8  | 30.0 |     |
| Hexachlorocyclopentadiene *  | 0.259 | 0.263 | 10.050 | 1.7  | 30.0 |     |
| 2,4,6-Trichlorophenol **     | 0.322 | 0.337 | 10.050 | 4.8  | 30.0 |     |
| 2,4,5-Trichlorophenol        | 0.361 | 0.392 | 10.050 | 8.6  | 30.0 |     |
| 2-Fluorobiphenyl             | 1.446 | 1.520 | 10.050 | 5.1  | 30.0 |     |
| 2-Chloronaphthalene          | 1.202 | 1.220 | 10.050 | 1.5  | 30.0 |     |
| 2-Nitroaniline               | 0.315 | 0.319 | 10.050 | 1.4  | 30.0 |     |
| Dimethyl phthalate           | 1.506 | 1.437 | 10.050 | 4.6  | 30.0 |     |
| 2,6-Dinitrotoluene           | 0.312 | 0.314 | 10.050 | 0.4  | 30.0 |     |
| Acenaphthylene               | 1.850 | 1.848 | 10.050 | 0.1  | 30.0 |     |
| 3-Nitroaniline               | 0.170 | 0.165 | 10.050 | 3.4  | 30.0 |     |
| Acenaphthene **              | 1.219 | 1.205 | 10.050 | 1.1  | 30.0 |     |
| 2,4-Dinitrophenol *          | 0.112 | 0.095 | 10.050 | 14.6 | 30.0 |     |
| 2,4-Dinitrotoluene           | 0.397 | 0.431 | 10.050 | 8.5  | 30.0 |     |
| 4-Nitrophenol *              | 0.134 | 0.119 | 10.050 | 11.2 | 30.0 |     |
| Dibenzofuran                 | 1.643 | 1.677 | 10.050 | 2.0  | 30.0 |     |

Ecosys, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mad\_2.i Injection Date: 02-AUG-1996 07:15  
 Lab File ID: BNA0101001.d Init. Calibration Date(s): 05/28/93, 07/31/96  
 Analysis Type: WATER Init. Calibration Times: 15:51 13:17  
 Lab Sample ID: Method File: /chem/msd\_2.i/2-080296.b/MA-BNA.m

| COMPOUND                    | RRF   | RF80  | MIN   | MAX  |
|-----------------------------|-------|-------|-------|------|
| Fluorene                    | 1.284 | 1.363 | 0.050 | 30.0 |
| 4-Chlorophenyl phenyl ether | 0.635 | 0.678 | 0.050 | 30.0 |
| 4-Nitroaniline              | 0.131 | 0.149 | 0.050 | 30.0 |
| 4,6-Dinitro-2-methylphenol  | 0.111 | 0.112 | 0.050 | 30.0 |
| N-Nitrosodiphenylamine **   | 0.423 | 0.484 | 0.050 | 30.0 |
| 1,2-Diphenylhydrazine       | 2.092 | 2.114 | 0.050 | 30.0 |
| 2,4,6-Tribromophenol        | 0.137 | 0.172 | 0.050 | 30.0 |
| 4-Bromophenyl phenyl ether  | 0.300 | 0.330 | 0.050 | 30.0 |
| Hexachlorobenzene           | 0.334 | 0.384 | 0.050 | 30.0 |
| Pentachlorophenol **        | 0.123 | 0.142 | 0.050 | 30.0 |
| Phenanthrene                | 1.345 | 1.492 | 0.050 | 30.0 |
| Anthracene                  | 1.243 | 1.334 | 0.050 | 30.0 |
| Carbazole                   | 0.636 | 0.720 | 0.050 | 30.0 |
| n-butyl phthalate           | 2.005 | 2.072 | 0.050 | 30.0 |
| Fluoranthene **             | 1.145 | 1.341 | 0.050 | 30.0 |
| Pyrene                      | 2.175 | 1.997 | 0.050 | 30.0 |
| Terphenyl-d14               | 1.448 | 1.359 | 0.050 | 30.0 |
| Butyl benzyl phthalate      | 1.372 | 1.221 | 0.050 | 30.0 |
| Di(2-ethylhexyl) adipate    | 1.185 | 0.988 | 0.050 | 30.0 |
| 3,3'-Dichlorobenzidine      | 0.143 | 0.156 | 0.050 | 30.0 |
| Benz(a)anthracene           | 1.250 | 1.289 | 0.050 | 30.0 |
| Bis(2-ethylhexyl) phthalate | 2.119 | 1.873 | 0.050 | 30.0 |
| Chrysene                    | 1.162 | 1.154 | 0.050 | 30.0 |
| Di-n-octyl phthalate **     | 5.966 | 5.313 | 0.050 | 30.0 |
| Benzo(b)fluoranthene        | 1.739 | 1.756 | 0.050 | 30.0 |
| Benzo(k)fluoranthene        | 1.966 | 1.942 | 0.050 | 30.0 |
| Benzo(a)pyrene **           | 1.428 | 1.429 | 0.050 | 30.0 |
| Indeno(1,2,3-cd)pyrene      | 1.075 | 1.287 | 0.050 | 30.0 |
| Dibenz(a,h)anthracene       | 0.926 | 1.031 | 0.050 | 30.0 |
| Benzo(g,h,i)perylene        | 1.008 | 1.017 | 0.050 | 30.0 |

Ecosys, Inc.

INTERNAL STANDARD COMPOUNDS  
 AREA AND RT SUMMARY

Instrument ID: msd\_2.i  
 Lab File ID: BNA0101001.d  
 Lab Sample ID:  
 Analysis Type: OTHER  
 Method File: /chem/msd\_2.i/2-080296.b/MA-BNA.m  
 Misc Info: CONTINUE CALIBRATION

Calibration Date: 08/02/96  
 Calibration Time: 0802  
 Sample Type: WATER  
 Level: LOW

| COMPOUND               | STANDARD | AREA LIMIT |         | SAMPLE  | % DIFF |
|------------------------|----------|------------|---------|---------|--------|
|                        |          | LOWER      | UPPER   |         |        |
| 8 1,4-Dichlorobenzene- | 811352   | 405676     | 1622704 | 811352  | 0.00   |
| 26 Naphthalene-d8      | 2470959  | 1235479    | 4941918 | 2470959 | 0.00   |
| 40 Acenaphthene-d10    | 1568314  | 784157     | 3136628 | 1568314 | 0.00   |
| 59 Phenanthrene-d10    | 1956080  | 978040     | 3912160 | 1956080 | 0.00   |
| 72 Chrysene-d12        | 1276331  | 638165     | 2552662 | 1276331 | 0.00   |
| 78 Perylene-d12        | 657608   | 328804     | 1315216 | 657608  | 0.00   |

| COMPOUND               | STANDARD | RT LIMIT |       | SAMPLE | % DIFF |
|------------------------|----------|----------|-------|--------|--------|
|                        |          | LOWER    | UPPER |        |        |
| 8 1,4-Dichlorobenzene- | 13.34    | 12.84    | 13.84 | 13.34  | 0.00   |
| 26 Naphthalene-d8      | 16.74    | 16.24    | 17.24 | 16.74  | 0.00   |
| 40 Acenaphthene-d10    | 21.33    | 20.83    | 21.83 | 21.33  | 0.00   |
| 59 Phenanthrene-d10    | 25.20    | 24.70    | 25.70 | 25.20  | 0.00   |
| 72 Chrysene-d12        | 32.07    | 31.57    | 32.57 | 32.07  | 0.00   |
| 78 Perylene-d12        | 36.10    | 35.60    | 36.60 | 36.10  | 0.00   |

AREA UPPER LIMIT = +100% of internal standard area.  
 AREA LOWER LIMIT = - 50% of internal standard area.  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT.  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Instrument : msd\_2.i  
Sample ID :  
Column phase :  
Volume Injected (uL) : 1.0

/chem/msd\_2.1/2-090296.b/DH0101001.c

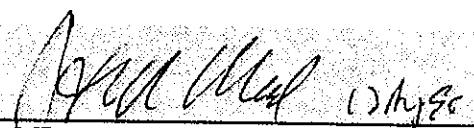


## SemiVolatile Method Blank Summary

|                         |                             |
|-------------------------|-----------------------------|
| Lab Name: EcoSys, Inc.  | Client: ACESAD              |
| Ledger No(s): 107920    | Extraction Method No.: 3510 |
| Batch No(s): 0801960004 | Date Extracted: 8/1/96      |
| Lab File ID: BNA0801008 | Date Analyzed: 8/1/96       |
| Lab Sample ID: AB35823  | Time Analyzed: 15:26        |
| Cleanup Method: NA      | Level: Low                  |
| Instrument ID: MSD-2    | Matrix: Water               |

*This method blank applies to the following samples, LCS and LCSD.*

|    | Client<br>Sample No. | Lab<br>Sample ID | Lab<br>File ID | Date<br>Analyzed |
|----|----------------------|------------------|----------------|------------------|
| 1  | NA                   | AB36646 LCS      | BNA0201002     | 8/2/96           |
| 2  | NA                   | AB36647 LCSD     | BNA0301003     | 8/2/96           |
| 3  | #45-T1-GW            | AB35820          | BNA0401004     | 8/2/96           |
| 4  |                      |                  |                |                  |
| 5  |                      |                  |                |                  |
| 6  |                      |                  |                |                  |
| 7  |                      |                  |                |                  |
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| 21 |                      |                  |                |                  |
| 22 |                      |                  |                |                  |
| 23 |                      |                  |                |                  |
| 24 |                      |                  |                |                  |

  
QA/QC Officer

Comments:

## SemiVolatile LCS/LCSD Recovery

Lab Name: EcoSys, Inc.

Client: ACE SAD

Ledger No(s): 107920

Matrix Spike/MS Dup: AB36646 LCS

Batch No(s): 0801960004

AB36647 LCSD

Lab File ID: BNA0201002/BNA0301003

| Compound                   | Spike Added<br>(ug/L) | Sample<br>Conc<br>(ug/L) | LCS<br>Conc<br>(ug/L) | LCS%<br>Recovery | # | QC Limits<br>Recovery |
|----------------------------|-----------------------|--------------------------|-----------------------|------------------|---|-----------------------|
| Phenol                     | 100                   | NR                       | 66                    | 66               |   | 12-110                |
| 2-Chlorophenol             | 100                   | NR                       | 72                    | 72               |   | 27-123                |
| 1,4-Dichlorobenzene        | 50                    | NR                       | 37                    | 74               |   | 36-97                 |
| N-Nitroso-di-n-propylamine | 50                    | NR                       | 41                    | 83               |   | 41-116                |
| 1,2,4-Trichlorobenzene     | 50                    | NR                       | 38                    | 76               |   | 39-98                 |
| 4-Chloro-3-methylphenol    | 100                   | NR                       | 90                    | 90               |   | 23-97                 |
| Acenaphthene               | 50                    | NR                       | 43                    | 85               |   | 46-118                |
| 4-Nitrophenol              | 100                   | NR                       | 72                    | 72               |   | 10-80                 |
| 2,4-Dinitrotoluene         | 50                    | NR                       | 41                    | 82               |   | 24-96                 |
| Pentachlorophenol          | 100                   | NR                       | 71                    | 71               |   | 9-103                 |
| Pyrene                     | 50                    | NR                       | 55                    | 110              |   | 26-127                |

| Compound                   | Spike Added<br>(ug/L) | LCSD<br>Conc<br>(ug/L) | LCSD%<br>Recovery | # | % RPD | # | QC Limits<br>RPD | Recovery |
|----------------------------|-----------------------|------------------------|-------------------|---|-------|---|------------------|----------|
| Phenol                     | 100                   | 64                     | 64                |   | 4     |   | 42               | 12-110   |
| 2-Chlorophenol             | 100                   | 71                     | 71                |   | 1     |   | 40               | 27-123   |
| 1,4-Dichlorobenzene        | 50                    | 37                     | 74                |   | 0     |   | 28               | 36-97    |
| N-Nitroso-di-n-propylamine | 50                    | 41                     | 81                |   | 2     |   | 38               | 41-116   |
| 1,2,4-Trichlorobenzene     | 50                    | 39                     | 77                |   | 2     |   | 28               | 39-98    |
| 4-Chloro-3-methylphenol    | 100                   | 91                     | 91                |   | 1     |   | 42               | 23-97    |
| Acenaphthene               | 50                    | 42                     | 83                |   | 2     |   | 31               | 46-118   |
| 4-Nitrophenol              | 100                   | 71                     | 71                |   | 1     |   | 50               | 10-80    |
| 2,4-Dinitrotoluene         | 50                    | 40                     | 80                |   | 3     |   | 38               | 24-96    |
| Pentachlorophenol          | 100                   | 68                     | 68                |   | 4     |   | 50               | 9-103    |
| Pyrene                     | 50                    | 55                     | 111               |   | 0     |   | 31               | 26-127   |

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

NR = Not Required

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

QA/QC Officer

Comments:

### SemiVolatile Surrogate Recovery (Water)

Lab Name: EcoSys, Inc.

Client: ACE-SAD

Ledger No(s).: 107920

**Level: Low**

Batch No.(s): 0801960004

[illegible]

# Column used to flag recovery values

\* = Values outside of required QC limits

ND = Not Detected

|                               | QC Limits |
|-------------------------------|-----------|
| S1 (2FP) 2-Fluorophenol       | 21-110    |
| S2 (PHL) Phenol-d5            | 10-110    |
| S3 (NBZ) Nitrobenzene-d5      | 35-114    |
| S4 (FBP) 2-Fluorobiphenyl     | 43-116    |
| S5 (TBP) 2,4,6-Tribromophenol | 10-123    |
| S6 (TPH) Terphenyl-d14        | 33-141    |

QA/QC Officer

**Comments:**

TAB 9

MANIFESTS

REYNOLDS CONSTRUCTION COMPANY

Highway 84 • P. O. Box 749

Ludowici, Georgia 31316

Office (912) 368-7488 • Plant (912) 876-8085

Date \_\_\_\_\_ 19 \_\_\_\_\_ Load No. 11  
Customer Triple "R" Mgmt. PCS Description \_\_\_\_\_  
Project Number RKR 104 \_\_\_\_\_  
Location Ft. Stewart County Liberty

43620 1b Net

23000 1b Tare

66620 1b+ Gross

12:23 PM AU 12 96

~~00 1b Net~~

~~66620 1b Tare~~

~~66620 1b+ Gross~~

~~12:22 PM AU 12 96~~

*Chub*  
Signature of Weigher

TONS:

21.81

TOTAL TONS:

222.80

TRUCKER

Hendrix  
Robert Small

TRUCK NO.

33

DRIVER

TICKET NO.

58829

|                                                                                                                                                                                  |  |                                      |  |                                              |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------|--|----------------------------------------------|------|
| <b>NON-HAZARDOUS WASTE MANIFEST</b>                                                                                                                                              |  | Manifest Document No. <b>80-91-3</b> |  | 1. Page 1 of                                 |      |
| 2. Generator's Name and Mailing Address<br>Ft. Stewart<br>Hinesville, GA 31313                                                                                                   |  |                                      |  |                                              |      |
| 3. Generator's Phone ( 912 ) 234-6579                                                                                                                                            |  |                                      |  |                                              |      |
| 4. Transporter 1 Company Name<br>Hendricks Hauling                                                                                                                               |  |                                      |  |                                              |      |
| 5. Transporter 2 Company Name                                                                                                                                                    |  |                                      |  |                                              |      |
| 6. Designated Facility Name and Site Address<br>Triple R Management, Inc.<br>c/o Reynolds Constr Co.<br>Rt. 84<br>Ludowici, GA 31316                                             |  |                                      |  | A. Transporter's Phone                       |      |
|                                                                                                                                                                                  |  |                                      |  | B. Transporter's Phone 912-427-6752          |      |
|                                                                                                                                                                                  |  |                                      |  | C. Facility's Phone 912-756-3655             |      |
| 7. Waste Shipping Name and Description                                                                                                                                           |  |                                      |  | 8. Containers                                |      |
|                                                                                                                                                                                  |  |                                      |  | No.                                          | Type |
| a. Petroleum Contaminated Soil                                                                                                                                                   |  |                                      |  | 1                                            | TT   |
|                                                                                                                                                                                  |  |                                      |  |                                              |      |
| b.                                                                                                                                                                               |  |                                      |  |                                              |      |
|                                                                                                                                                                                  |  |                                      |  |                                              |      |
| c.                                                                                                                                                                               |  |                                      |  |                                              |      |
|                                                                                                                                                                                  |  |                                      |  |                                              |      |
| d.                                                                                                                                                                               |  |                                      |  |                                              |      |
|                                                                                                                                                                                  |  |                                      |  |                                              |      |
| J. Additional Descriptions for Materials Listed Above                                                                                                                            |  |                                      |  | E. Handling Codes for Wastes Listed Above    |      |
| 11. Special Handling Instructions and Additional Information<br><br>8101<br><br>Tank # <u>45</u>                                                                                 |  |                                      |  |                                              |      |
|                                                                                                                                                                                  |  |                                      |  |                                              |      |
| 12. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste: |  |                                      |  |                                              |      |
| Printed/Typed Name <u>Tom C. Fry</u>                                                                                                                                             |  |                                      |  | Signature <u>Tom C. Fry</u>                  |      |
|                                                                                                                                                                                  |  |                                      |  | Month Day Year <u>08</u> <u>06</u> <u>96</u> |      |
| 13. Transporter 1 Acknowledgement of Receipt of Materials                                                                                                                        |  |                                      |  |                                              |      |
| Printed/Typed Name <u>ROBERT STOVALL</u>                                                                                                                                         |  |                                      |  | Signature <u>Robert Stovall</u>              |      |
|                                                                                                                                                                                  |  |                                      |  | Month Day Year                               |      |
| 14. Transporter 2 Acknowledgement of Receipt of Materials                                                                                                                        |  |                                      |  |                                              |      |
| Printed/Typed Name <u>Charles Pruitt</u>                                                                                                                                         |  |                                      |  | Signature <u>Charles Pruitt</u>              |      |
|                                                                                                                                                                                  |  |                                      |  | Month Day Year <u>08</u> <u>12</u> <u>96</u> |      |
| 15. Discrepancy Indication Space                                                                                                                                                 |  |                                      |  |                                              |      |
| 3. Facility Owner or Operator; Certification of receipt of waste materials covered by this manifest except as noted in Item 19.                                                  |  |                                      |  |                                              |      |
| Printed/Typed Name                                                                                                                                                               |  |                                      |  | Signature                                    |      |
|                                                                                                                                                                                  |  |                                      |  | Month Day Year <u>08</u> <u>12</u> <u>96</u> |      |

# REYNOLDS CONSTRUCTION COMPANY

Highway 84 P. O. Box 749

Ludowici, Georgia 31316

Office (912) 368-7488 • Plant (912) 876-8085

Date \_\_\_\_\_ 19\_\_\_\_ Load No. 12  
Triple "R" Mgmt. PCS  
Customer \_\_\_\_\_ Description \_\_\_\_\_  
RRR 104  
Project Number \_\_\_\_\_  
Ft. Stewart Liberty  
Location \_\_\_\_\_ County \_\_\_\_\_

43100 lb Net

20080 lb Tare

63180 lb+ Gross

12:27 PM AU 12 96

[Signature]  
Signature of Weigher

TONS:

21.55

TOTAL TONS:

244.35

Hendrix  
TRUCKER

[Signature]  
DRIVER

44  
TRUCK NO.

TICKET NO. 58831

# NON-HAZARDOUS WASTE MANIFEST

Manifest  
Document No.  
000-1-6

1. Page 1  
of 1

2. Generator's Name and Mailing Address

Ft. Stewart  
Hinesville, GA 31313

3. Generator's Phone ( 912 ) 234-6579

4. Transporter 1 Company Name

Hendricks Hauling

5. Transporter 2 Company Name

6. Designated Facility Name and Site Address

Triple R Management, Inc.  
Reynolds Constr Co.  
Rt. 84/0  
Ludowici, GA 31316

A. Transporter's Phone

B. Transporter's Phone 912-427-6758

C. Facility's Phone

912-756-3655

7. Waste Shipping Name and Description

8. Containers

No.

Type

9.  
Total  
Quantity

10.  
Unit  
Wt/Vol

a. Petroleum Contaminated Soil

1

TT

18.00

CY

b.

c.

d.

Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

11. Special Handling Instructions and Additional Information

8101

Tank # 45

12. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Tom C. Fry

Signature

Tom C. Fry

Month Day Year

08 06 96

13. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

RAYMOND G. BACA

Signature

Raymond G. Baca

Month Day Year

08 12 96

14. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Charles Pruitt

Signature

Charles Pruitt

Month Day Year

15. Discrepancy Indication Space

16. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

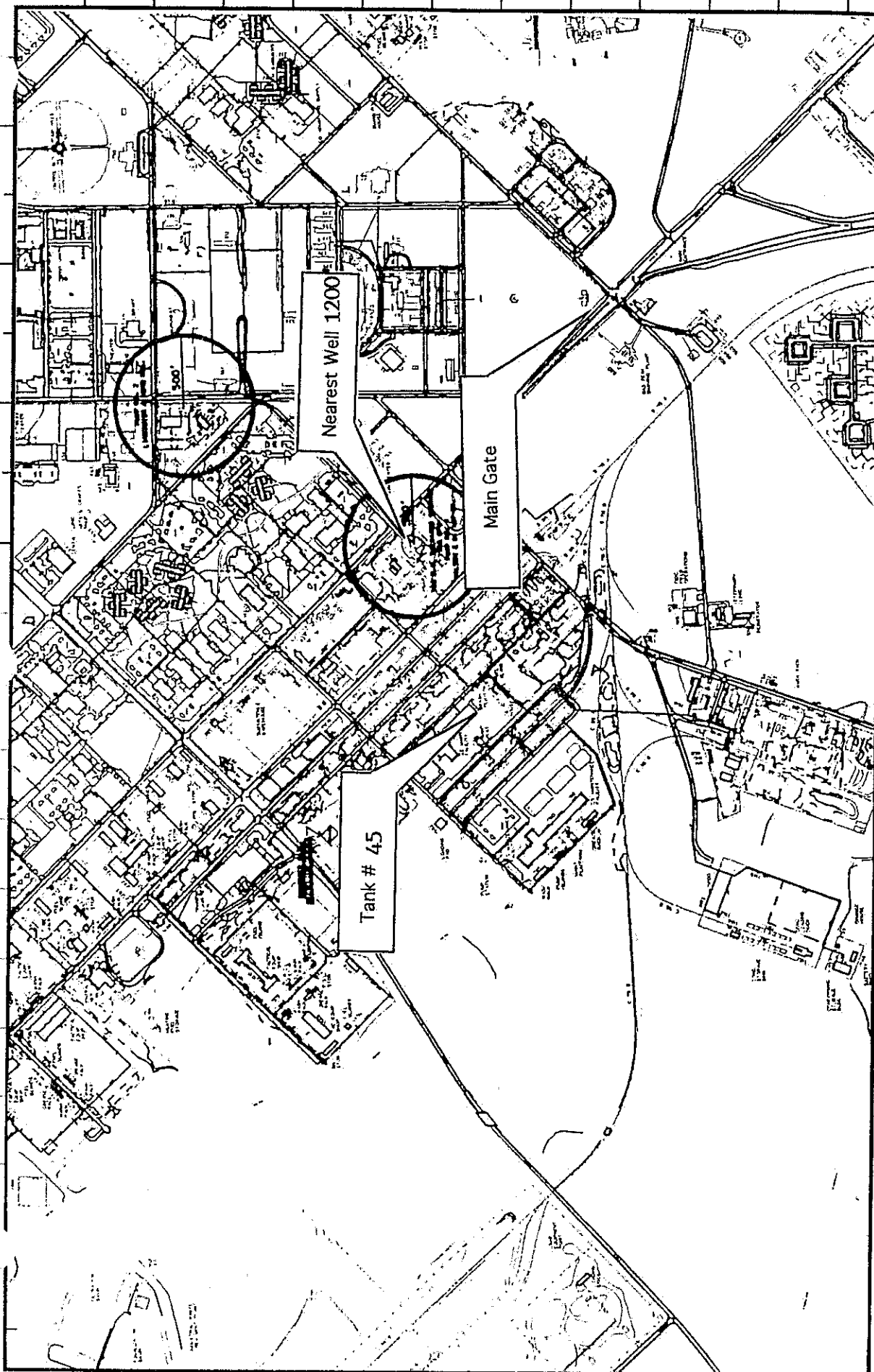
Month Day Year

08 12 96

ORIGINAL - RETURN TO GENERATOR

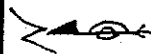
TAB 10

FORT STEWART AREA MAP



LEGEND/REF. DRWG'S

Base map of Fort Stewart.



ANDERSON COLUMBIA

ENVIRONMENTAL INC.  
P.O. BOX 1386 LAKE CITY, FLORIDA 32056 (904) 755-1196

DR. AJR CH'D SRC DR. APP. DFB

ENGR. ENGR'G DEPT.

DATE 9 Oct 96 SCALE 1"=1000'

Area Map for Tank # 45

Fort Stewart

Hinesville, Georgia

DRAWING NO.: FIGURE 1