UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: OCT 25 1994

Subject: Review of Region 5 Data for **ALCO STEEL SERVICES (940152)**

From: Charles T. Elly, Director Chuck Elly
Region 5 Central Regional Laboratory

To:

Attached are the results for: **Alco Steel Services (TFA301)**
CRL request number: **940152**
Analyzed for: **ABNs** Organics
Results are reported for sample designations: Seven water samples (94ZB19S01, -S02, -S03, -S05, -S06, -S08 and -R07)

Results Status:
(X) Acceptable for Use for all except bis(2-ethylhexyl)phthalate in all site samples, butylbenzylphthalate in samples Lab Blank (MB092394), 94ZB19S01, -S02, -S03, and -S05 and 2,4-dinitrophenol and 3,3'-dichlorobenzidine in samples 94ZB19S06, -R07 and -S08. (Please see below for details).

(X) Data Qualified, but Acceptable for use for bis(2-ethylhexyl)phthalate in all site samples, butylbenzylphthalate in samples Lab Blank (MB092394), 94ZB19S01, -S02, -S03, and -S05 and 2,4-dinitrophenol and 3,3'-dichlorobenzidine in samples 94ZB19S06, -R07 and -S08. (Please see below for details).

( ) Data Unacceptable for Use

(X) Sewer Disposal Criteria Met; Exceptions: None.
Comments on Data Quality by Reviewer:

- Bis(2-ethylhexyl)phthalate was detected at trace levels (1.0 μg/L) in the lab blank sample. Since this phthalate was also detected in the site samples at less than 10 times the level detected in the associated blank samples, the phthalate results for the site samples are flagged Found in Blank (UB).

- The laboratory did not meet the CRL calibration QC requirements on 10/01/94 for butylbenzylphthalate, and on 10/06/94 for 2,4-dinitrophenol and 3,3'-dichlorobenzidine. Since these compounds were not detected in the affected site samples, their quantitation limits are flagged estimated (UJ). Please see above for the affected samples.

- No other QA/QC problems were observed.

Comments by Laboratory Director or Quality Control Coordinator:

Review Record for **Alco Steel Services - 940152 (TFA301) ABN** Organics

Baba Parwehwa **10-18-94**

Team Leader Date (X) Reviewed ( ) Unreviewed

Chi Tang 10/25/94

Section Chief Date (✓) Reviewed ( ) Unreviewed

Charles T. Elly 10/25/94

QC Coordinator Date (X) Reviewed ( ) Unreviewed

Sylvia Griffin OCT 25 1994

Data Management Coordinator and Date Received

Date Transmitted OCT 25 1994

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
SL - 10C

Received by and Date

Comments:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB BLANK
MB092394

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: ------- RP 10-18-94

Matrix: (soil/water) WATER Lab Sample ID: MB092394

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0065

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB BLANK
MB092394

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: ------- BP 10-18-94

Matrix: (soil/water) WATER Lab Sample ID: MB092394

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0065

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19R07
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 06-OCT-94

BP 10-19-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	UJ
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19R07
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 06-OCT-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	UJ
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

OP 10-18-94

Analyzed by:
Team Leader:

EPA RLIMS CRL - REGION V
TENTATIVELY IDENTIFIED COMPOUNDS
REPORT PRODUCED ON: 14-OCT-94

SAMPLE ORGANIZATION: **B & V** SAMPLE BATCH ID: **940152**
SAMPLE REQUESTOR: **B & V** ACCOUNT NO: **TFA301**
LABORATORY: **ESAT** FACILITY: **ALCO STEEL**

A625SWLCS.0 (ABNs in low level SF Water samples by G

SAMPLE: **94ZB19R07** FIELD: **94ZB19R07** CONTROL TYPE: **SAM**

COLLECTED: **21-SEP-94** RECEIVED: **22-SEP-94** ANALYZED: ~~**29-SEP-94**~~ 06-OCT-94 10-18-94

COMPOUND	EST. CONC.	RT	Q	CAS NUMBER
2-HEXEN-1-OL, (Z) - (8CI9CI)	**43 J**	**2.53**		**928949**
UNKNOWN	**13 J**	**12.14**		
UNKNOWN	**8 J**	**18.17**		

ANALYZED BY: _____

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S01
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 01-OCT-94

BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	UJ

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S01
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 01-OCT-94

BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	8	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Analyzed by:
Team Leader:

NO TICs. BP 10-18-94

NO TICs. BP 10-18-94

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S02
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 01-OCT-94

BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	UJ

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S02
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 01-OCT-94 BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Analyzed by: [signature]
Team Leader: [signature]

NO TICS. BP 10-18-94

NO TICS. BP 10-18-94

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S03
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 01-OCT-94

BB 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	UJ

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S03
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 01-OCT-94

PP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	6	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Analyzed by:
Team Leader:

EPA RLIMS CRL - REGION V
TENTATIVELY IDENTIFIED COMPOUNDS
REPORT PRODUCED ON: 14-OCT-94

SAMPLE ORGANIZATION: **B & V** SAMPLE BATCH ID: **940152**
SAMPLE REQUESTOR: **B & V** ACCOUNT NO: **TFA301**
LABORATORY: **ESAT** FACILITY: **ALCO STEEL**

A625SWLCS.0 (ABNs in low level SF Water samples by G

SAMPLE: **94ZB19S03** FIELD: **94ZB19S03** CONTROL TYPE: **SAM**

COLLECTED: **21-SEP-94** RECEIVED: **22-SEP-94** ANALYZED: ~~**29-SEP-94**~~ 01-OCT-94 10-18-94

COMPOUND	EST. CONC.	RT	Q	CAS NUMBER
2-HEXENE-1-OL, (Z) (8CI9CI)	**15 J**	**2.58**		**928949**

ANALYZED BY:

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S05
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 01-OCT-94

60 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	UJ

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S05
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 01-OCT-94 BP 01-OCT-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Analyzed by: [signature]

Team Leader: [signature]

No TICs. BP 10-18-94

No TICs. BP 10-18-94

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S06
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 06-OCT-94

BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	UJ
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S06
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 06-OCT-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	UJ
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

11-18-94

Analyzed by:

Team Leader:

EPA RLIMS CRL - REGION V
TENTATIVELY IDENTIFIED COMPOUNDS
REPORT PRODUCED ON: 14-OCT-94

SAMPLE ORGANIZATION: **B & V** SAMPLE BATCH ID: **940152**
SAMPLE REQUESTOR: **B & V** ACCOUNT NO: **TFA301**
LABORATORY: **ESAT** FACILITY: **ALCO STEEL**

A625SWLCS.0 (ABNs in low level SF Water samples by G

SAMPLE: **94ZB19S06** FIELD: **94ZB19S06** CONTROL TYPE: **SAM**

COLLECTED: **21-SEP-94** RECEIVED: **22-SEP-94** ANALYZED: ~~**29-SEP-94**~~ 06-OCT-94 10-18-94

COMPOUND	EST. CONC.	RT	Q	CAS NUMBER
2-HEXEN-1-OL, (Z)- (8CI9CI)	**23 J**	**2.52**		**928949**

ANALYZED BY: _____

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S08
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:~~29-SEP-94~~ 06-OCT-94

BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	UJ
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	U

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S08
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed: ~~29-SEP-94~~ 06-OCT-94

BP 10-18-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	UJ
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Analyzed by:

Team Leader: Wilson

EPA RLIMS CRL - REGION V
TENTATIVELY IDENTIFIED COMPOUNDS
REPORT PRODUCED ON: 14-OCT-94

SAMPLE ORGANIZATION: **B & V** SAMPLE BATCH ID: **940152**
SAMPLE REQUESTOR: **B & V** ACCOUNT NO: **TFA301**
LABORATORY: **ESAT** FACILITY: **ALCO STEEL**

A625SWLCS.0 (ABNs in low level SF Water samples by G

SAMPLE: **94ZB19S08** FIELD: **94ZB19S08** CONTROL TYPE: **SAM**

COLLECTED: **21-SEP-94** RECEIVED: **22-SEP-94** ANALYZED: ~~**29-SEP-94**~~ 06-OCT-94 10-18-94

COMPOUND	EST. CONC.	RT	Q	CAS NUMBER
2-HEXEN-1-OL, (Z) - (8CI9CI)	**35 J**	**2.52**		**928949**

ANALYZED BY: _____

1 84

LOCKHEED ESAT CONTRACT
DATA SET CUSTODY TRANSFER FORM

DATA SET NUMBER 940152 CHARGE NUMBER 234-51-019

SITE NAME: ALCO Steel Service TID NUMBER 0594-1011

PARAMETER: ABN MATRIX: Water

SF DU/ACT NO: TFA 301 Y ____ /C ____

SAMPLE NUMBERS: 94ZB19S01, S02, S03, S05, S06, S08, R07

NUMBER OF SAMPLES: 7

ESAT APPROVALS:

Zujad A. Rizvi 10-12-94
Analyst Date

W. Ken Wilson 10-13-94
Task Group Leader Date

Lewis Kray 10/13/94
QA/QC Coordinator Date

Dennis Miller 10-13-94
ESAT Team Manager Date

COMMENTS:

The above identified data set was transferred from ESAT custody to the custody of the U.S. EPA Region V Central Regional Laboratory in its entirety on the indicated date relinquished.

Zujad Rizvi 10-14-94
Relinquished by Date

Babu Pokuchuri 10-14-94
Received by Date

Recd 10/14/94

EPA APPROVALS:

Babu Pokuchuri 10-18-94
EPA Task Monitor Date

[✓] Reviewed
[ ] Unreviewed
[✓] Accepted
[ ] Rejected
[ ] Returned: ____ Date

COMMENTS:

Chi Tang 10/25/94
Section Chief Date

[✓] Reviewed [ ] Unreviewed

ESAT DPO Date

Sylvia Griffin OCT 25 1994
DATA COORDINATOR/RECD/TRANSMTD

A COPY OF THIS CUSTODY TRANSFER FORM WITH A RECEIVED BY EPA SIGNATURE IS TO BE FILED WITH THE AOC IN THE TID FILE. THE ORIGINAL CUSTODY TRANSFER ACCOMPANIES THE DATA SET TO BE APPROVED BY THE EPA AND A COMPLETED COPY RETURNED TO ESAT.

To: Jay Thakkar, EPA RPO

For: Transmittal to: Babu Paruchuri, EPA Task Monitor

Thru: Dennis Miller, ESAT Team Manager

From: Ziyad Rajabi, ESAT Organic Group Leader

Copies: Ira Wilson, ESAT Organic Supervisor

Date: October 12, 1994

SUBJECT: Data Set 940152
Semivolatile Organic Analysis (SVOA) for the Alco Steel Services.

Method Number: Modified OLC01 SOW Site: Alco Steel Services.

Date Generated: October 12, 1994 Charge Number: 234-51-019

Author: Z. Rajabi TID Number: 05-94-10-11

CASE NARRATIVE

1. Case Description

Seven water samples from the Alco Steel Services were submitted as data set 940152. The samples were analyzed for semivolatile organic compounds (SVOA) by GC/MS utilizing a modified OLC01 (6-92) Statement of Work (SOW) and the EPA CRL Method 625NS.

Samples (94ZB19S01, S02, S03, S05, S06, R07, and S08) were collected on September 21, 1994; received at the CRL on September 22, 1994, and extracted on September 23, 1994. The associated monthly Performance Evaluation Sample (PES PT574), method blank, Laboratory Control Sample (LCS091594), and Laboratory Control Sample Duplicate (LCSD091594) were extracted on September 15, 1994. Results of the PES, LCS, and associated method blank are included with this data set.

The method blanks, labelled as "MB091594 and MB092394" were prepared using reagent water. The samples' pH values were adjusted to below 2.0, and allowed to stand for 10 minutes prior to extraction. Extractions were performed using the continuous liquid-liquid extraction technique. Samples were concentrated to 1.0 mL using a Kuderna-Danish (K-D) concentrator and nitrogen blow-down techniques, and the concentrated extracts were transferred to autosampler vials.

The internal standard solution (25 μL at 2000 μg/mL) was added to each of the concentrated extracts. The concentration of each internal standard in all samples was 50 ng/μL.

Prior to analysis, the injection port was disassembled, cleaned, and the septum was replaced. Also, approximately 10 cm of the GC column was cut off at the inlet side. Analyses were performed using the Hewlett-Packard (HP) 5987 GC/MS on September 29, 1994 (initial calibration, blank, and samples); October 1, 1994 (continuing calibration, blank, and samples); October 6, 1994 (initial calibration and samples). A 1-μL injection was used for the analysis of all standards and samples.

The general qualification of the data in this sample set was based on the National Functional Guidelines for Organic Data Review (June

1991). Surrogate recovery qualification was based on CRL Regional Data Qualification Guidelines.

2. Instrument Tuning

The DFTPP (50 ng) tune criteria from OLC01 (10/92 SOW) were met on September 29, 1994 (File >F0050); October 1, 1994 (File >F0062); and October 6, 1994 (File >F0107). The DFTPP mass spectra were produced in accordance with the procedure given in OLC01 (10/92 SOW). DFTPP spectra were generated by adding the peak apex scan to the scans immediately preceding and following the apex. Then, a single scan prior to the elution of DFTPP was subtracted from the average of these three spectra. The resulting spectra were evaluated based on the limits in the OLC01 10/92 SOW. (Form V)

3. Calibrations

a. Initial Calibration

A new set of ABN standards was prepared from Supelco and AccuStandard stocks in April 1994. These standards were used to analyze two initial calibrations of the ABN target compounds and surrogates at 5, 10, 25, 50, and 100 ng/µL concentrations on September 29, 1994 and October 6, 1994. Aniline and Benzoic acid were present in the calibration standards, but were not required analytes.

OK For September 29, 1994; All target compounds met the 30% requirement for percent relative standard deviation (%RSD).

For October 6, 1994; All target compounds met the 30% requirement for percent relative standard deviation (%RSD) except for 2,4-Dinitrophenol (%RSD 40.9) and 3,3'-Dichlorobenzidine (%RSD 30.2); therefore, results for 2,4-Dinitrophenol and 3,3'-Dichlorobenzidine in all effected samples will be flagged as estimated (J) if detected in the sample, while all non-detects will be flagged as estimated (UJ). Form VI

b. Continuing Calibration

One continuing calibration at 25 µg/L was analyzed on the HP 5987 on October 1, 1994 (file >F0064). All analytes met the requirements for percent deviation (%D < 25%) except for Butylbenzylphthalate (%D 25.4); therefore, results for Butylbenzylphthalate in all effected samples

will be flagged as estimated (J) if detected in the sample, while all non-detects will be flagged as estimated (UJ). Form VII

4. Quality Control

a. Extraction Summary

The samples, the LCS, the LCSD, and PES samples were extracted within the seven-day holding time.

b. Analysis Summary

All standards, samples, and a method blank were analyzed in a 12-hour period from the injection of the DFTPP standard (50 ng). All analyses were performed within the forty days holding time.

c. Surrogate Recovery Summary

Prior to extraction, the samples and the method blank were spiked with 0.75 mL of ABN surrogate spike at 100 µg/mL. All recoveries were within their QC limit except for high Phenol-d5 recoveries in the method blank (MB091594), PT574, LCS091594, and LCSD091594. One surrogate outlier is allowed per fraction; therefore, no data qualification is necessary.

Sample 94ZB19S03 reported 0% recovery for Phenol-d5. A review of the raw data indicated that the phenol-d5 primary ions (m/z 71 and 99) appeared at (m/z 68 and 96). This indicates a possible Deuterium-Hydrogen exchange (i.e. Phenol-d5 being converted to Phenol-d2) in the sample extract. The above conversion is normally induced by the presence of acid in the final extract. The extract were redried by adding 300 mg of sodium sulfate and the extracts were reanalyzed. The additional drying step did not improve phenol-d5 recovery; therefore, results from the original analysis will be used. One surrogate outlier is allowed per fraction; therefore, no data qualification is necessary.

Sample 94ZB19S05 reported high recoveries for 2-Fluorophenol and 2,4,6-Tribromophenol. The sample was reanalyzed to confirm these recoveries. Reanalysis results confirmed the original recoveries; therefore, results from the original analysis will be used. Two acid surrogate outliers were noted for this sample; therefore, results of the acid fraction for the above sample will be flagged estimated (J) if detected in the

sample, while all non-detects will not be flagged ~~as estimated~~ ~~(UJ)~~.

Sample 94ZB19R07 reported high recovery for 2,4,6-Tribromophenol. One surrogate outlier is allowed per fraction; therefore, no data qualification is necessary.

d. Performance Evaluation Sample (PES).

The PES sample (PT574) was extracted on September 15, 1994 and analyzed by GC/MS on September 29, 1994. The results (file >F0058) show all internal standards had acceptable areas and all surrogates had acceptable recoveries. Nine target analytes and two tentatively identified compound (TICs) were detected.

e. Laboratory Control (LCS) Samples.

Laboratory control samples were prepared by spiking reagent water with 750 μL of the ABN spike standard which contained all of the target analyts except for 2,4-Dinitrotoluene. The final concentration in the extracted sample was expected to be 75 μg/L for all target analyts. ESAT was informed by the task monitor to substitute 2,6-Dinitrotoluene for 2,4-Dinitrotoluene on form 3LCA.

For LCS091594, all recoveries were within their QC limit except for 4-Chloroaniline (100%), 2,4,6-Trichlorophenol (117%), Diethylphthalate (124%), N-Nitrosodiphenylamine (124%), Hexachlorobenzene (131%), and Benzo(a)pyrene (106%). Results of the above compounds will be flagged as estimated (J) if detected in the sample. Non-detects will not be qualified due to the fact that nonconforming recoveries were all biased high. (Form 3LCA).

For LCSD091594, all recoveries were within their QC limit except for N-nitroso-di-n-propylamine (111%), Hexachloroethane (118%), Isophrone (78%), 1,2,4-Trichlorobenzene (119%), 4-Chloroaniline (112%), 2,4,6-Trichlorophenol (126%), Diethylphthalate (122%), N-Nitrosodiphenylamine (125%), Hexachlorobenzene (128%), and Benzo(a)pyrene (102%). Results of the above compounds will be flagged as estimated (J) if detected in the sample. Non-detects will not be qualified due to the fact that nonconforming recoveries were all biased high. (Form 3LCA).

f. Internal Standard Area and Retention Time Summary

The 625NS CRL SOP requires that the retention time of each

internal standard must be within ±0.50 minutes of the corresponding retention time in the continuing calibration. Also, the areas of each internal standard must be within -50% to +100% of the corresponding area in the continuing calibration. All internal standard areas were within the Q.C. limits. See Form VIII

g. Field Duplicates

No field duplicates were included in this data set.

5. Sample Results

a. Method Blank Results

Two method blank were associated with this data set. Method blank MB091594 reported bis(2-Ethylhexyl)phthalate at 3 µg/L and no TICs. Method blank MB092394 reported bis(2-Ethylhexyl)phthalate at 1 µg/L and no TICs. Bis(2-Ethylhexyl)phthalate is a common laboratory contaminant. All positive result for bis(2-Ethylhexyl)phthalate at less than 10X the blank result is qualified nondetect (UB) in all of the associated samples.

b. Sample Results

The sample results are summarized in the table below.

Sample	# of TCL Compound	# of TICs
94ZB19S01	0	0
94ZB19S02	0	0
94ZB19S03	0	1
94ZB19S05	0	0
94ZB19S06	0	1
94ZB19R07	0	3
94ZB19S08	0	1

Table 2. Summary of Sample Results

6. Conclusions

The samples in this case were analyzed according to CRL Method 625NS which was modified to include lower calibration points. The samples were analyzed within their holding times and limits. All supporting data are included as part of the Q.C. section of this data package.

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 ( ) #	TOT OUT
01	MB091594	94	88	95	98 *	93	92		1
02	PT574	89	98	98	105 *	96	104		1
03	LCS091594	76	82	103	83	75	109		0
04	LCSD091594	101	92	110	105 *	95	106		1
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d5	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

FORM II SV-1 1/87 Rev

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 ( ) #	TOT OUT
01	MB092394	79	73	78	81	75	87		0
02	94ZB19S01	89	90	115	83	81	102		0
03	94ZB19S02	92	101	113	92	84	116		0
04	94ZB19S03	77	79	84	0	64	106		1
05	94ZB19S05	113	114	122	94	102 *	132 *		2
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d5	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

FORM II SV-1 1/87 Rev

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 ( ) #	TOT OUT
01	94ZB19S03RE	80	72	95	0	71	111		1
02	94ZB19S05RE	112	122 *	144 *	107 *	118 *	163 *		5
03	94ZB19S06	65	66	80	38	61	86		0
04	94ZB19R07	83	91	113	58	83	131 *		1
05	94ZB19S08	89	81	110	74	83	115		0
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d5	(10- 94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

FORM II SV-1 1/87 Rev

3LCA

LOW CONC. WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS091594

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: SEP.LCS SAS No.: ------ SDG No.: ---

Lab Sample ID: LAB SPIKE LCS Lot No.: ----------

Lab File ID: >F0059 Date Extracted: 09/15/94

LCS Aliquot: 1000 (uL) Date Analyzed : 09/29/94

Concentrated Extract volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1 (uL) PH: ---

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%Rec	#	QC Limits
Phenol	75.00	65.00	87		44-120
bis(2-Chloroethyl) ether	75.00	62.00	82		64-110
2-Chlorophenol	75.00	63.00	84		58-110
N-Nitroso-di-n-propylamine	75.00	75.00	100		34-102
Hexachloroethane	75.00	52.00	69		32- 77
Isophorone	75.00	73.00	97		49-110
1,2,4-Trichlorobenzene	75.00	59.00	79		44- 96
Napthalene	75.00	59.00	78		56-160
4-Chloroaniline	75.00	75.00	100	*	35- 98
2,4,6-Trichlorophenol	75.00	88.00	117	*	65-110
2,6-Dinitrotoluene	75.00	98.00	131		61-140
Diethylphthalate	75.00	93.00	124	*	76-104
N-Nirtosodiphenylamine	75.00	93.00	124	*	35-120
Hexachlorobenzene	75.00	98.00	131	*	30- 95
Benzo(a)pyrene	75.00	79.00	106	*	55- 92

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of qc limits

LCS Recovery: __6__ outside limits out of __15__ total.

COMMENTS: _____

3LCA

LOW CONC. WATER SEMIVOLATILE LAB CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCSD091594

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: SEP.LCS SAS No.: ------ SDG No.: ---

Lab Sample ID: LAB SPIKE LCS Lot No.: ----------

Lab File ID: >F0060 Date Extracted: 09/15/94

LCS Aliquot: 1000 (uL) Date Analyzed : 09/29/94

Concentrated Extract volume: 1000 (uL) Dilution Factor: 1.0

Injection Volume: 1 (uL) PH: ---

COMPOUND	AMOUNT ADDED (ng)	AMOUNT RECOVERED (ng)	%Rec	#	QC Limits
Phenol	75.00	86.00	115		44-120
bis(2-Chloroethyl) ether	75.00	77.00	103		64-110
2-Chlorophenol	75.00	83.00	111	*	58-110
N-Nitroso-di-n-propylamine	75.00	88.00	118	*	34-102
Hexachloroethane	75.00	58.00	78	*	32- 77
Isophorone	75.00	89.00	119	*	49-110
1,2,4-Trichlorobenzene	75.00	71.00	95		44- 96
Napthalene	75.00	67.00	89		56-160
4-Chloroaniline	75.00	84.00	112	*	35- 98
2,4,6-Trichlorophenol	75.00	94.00	126	*	65-110
2,6-Dinitrotoluene	75.00	97.00	130		61-140
Diethylphthalate	75.00	91.00	122	*	76-104
N-Nirtosodiphenylamine	75.00	94.00	125	*	35-120
Hexachlorobenzene	75.00	96.00	128	*	30- 95
Benzo(a)pyrene	75.00	77.00	102	*	55- 92

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of qc limits

LCS Recovery: _10__ outside limits out of __15__ total.

COMMENTS: _____

11B

SEMIVOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCS091594

Lab Name: REGION V Contract: LOCKHEED/ESA

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCS091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0059

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

COMPOUND	Conc	Spike	Recovery
Phenol	65	75	87
bis(2-Chloroethyl)ether	62	75	82
2-Chlorophenol	63	75	84
1,3-Dichlorobenzene	51	75	69
1,4-Dichlorobenzene	50	75	67
Benzyl alcohol	82	75	109
1,2-Dichlorobenzene	53	75	71
2-Methylphenol	67	75	90
bis(2-Chloroisopropyl)ether	59	75	78
4-Methylphenol	70	75	93
N-Nitroso-di-n-propylamine	75	75	100
Hexachloroethane	52	75	69
Nitrobenzene	59	75	79
Isophorone	73	75	97
2-Nitrophenol	65	75	86
2,4-Dimethylphenol	49	75	66
Benzoic acid	83	75	110
bis(2-Chloroethoxy)methane	67	75	90
2,4-Dichlorophenol	73	75	97
1,2,4-Trichlorobenzene	59	75	79
Naphthalene	59	75	78
4-Chloroaniline	75	75	100
Hexachlorobutadiene	55	75	73
4-Chloro-3-methylphenol	88	75	117
2-Methylnaphthalene	66	75	88
Hexachlorocyclopentadiene	22	75	29
2,4,6-Trichlorophenol	88	75	117
2,4,5-Trichlorophenol	84	75	112
2-Chloronaphthalene	74	75	98
2-Nitroaniline	88	75	118
Dimethylphthalate	88	75	117
Acenaphthylene	83	75	111
2,6-Dinitrotoluene	98	75	131

11C

SEMIVOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCS091594

Lab Name: REGION V Contract: LOCKHEED/ESA

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCS091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0059

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

COMPOUND	Conc	Spike	Recovery
3-Nitroaniline	93	75	124
Acenaphthene	82	75	109
2,4-Dinitrophenol	100	75	134
4-Nitrophenol	120	75	154
Dibenzofuran	84	75	112
2,4-Dinitrotoluene			
Diethylphthalate	93	75	124
4-Chlorophenyl-phenylether	84	75	112
Fluorene	90	75	120
4-Nitroaniline	85	75	113
4,6-Dinitro-2-methylphenol	103	75	137
N-Nitrosodiphenylamine	93	75	124
4-Bromophenyl-phenylether	98	75	131
Hexachlorobenzene	98	75	131
Pentachlorophenol	120	75	164
Phenanthrene	88	75	117
Anthracene	91	75	121
Di-n-butylphthalate	94	75	125
Fluoranthene	96	75	128
Pyrene	93	75	124
Butylbenzylphthalate	97	75	129
3,3'-Dichlorobenzidine	90	75	120
Benzo(a)anthracene	88	75	118
Chrysene	86	75	115
bis(2-Ethylhexyl)phthalate	107	75	143
Di-n-octylphthalate	94	75	125
Benzo(b)fluoranthene	82	75	110
Benzo(k)fluoranthene	82	75	109
Benzo(a)pyrene	79	75	106
Indeno(1,2,3-cd)pyrene	86	75	114
Dibenzo(a,h)anthracene	86	75	115
Benzo(g,h,i)perylene	78	75	104

11B

SEMIVOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCSD091694

Lab Name: REGION V Contract: LOCKHEED/ESA

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCSD091694

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0060

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: --/--/--

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

COMPOUND	Conc	Spike	Recovery
Phenol	86	75	115
bis(2-Chloroethyl)ether	77	75	103
2-Chlorophenol	83	75	111
1,3-Dichlorobenzene	57	75	76
1,4-Dichlorobenzene	61	75	82
Benzyl alcohol	85	75	114
1,2-Dichlorobenzene	61	75	81
2-Methylphenol	80	75	107
bis(2-Chloroisopropyl)ether	76	75	102
4-Methylphenol	83	75	111
N-Nitroso-di-n-propylamine	88	75	118
Hexachloroethane	58	75	78
Nitrobenzene	75	75	100
Isophorone	89	75	119
2-Nitrophenol	81	75	108
2,4-Dimethylphenol	57	75	76
Benzoic acid	95	75	126
bis(2-Chloroethoxy)methane	84	75	113
2,4-Dichlorophenol	87	75	116
1,2,4-Trichlorobenzene	71	75	95
Naphthalene	67	75	89
4-Chloroaniline	84	75	112
Hexachlorobutadiene	62	75	82
4-Chloro-3-methylphenol	87	75	116
2-Methylnaphthalene	75	75	100
Hexachlorocyclopentadiene	22	75	30
2,4,6-Trichlorophenol	94	75	126
2,4,5-Trichlorophenol	85	75	114
2-Chloronaphthalene	80	75	107
2-Nitroaniline	98	75	131
Dimethylphthalate	92	75	123
Acenaphthylene	89	75	119
2,6-Dinitrotoluene	97	75	130

11C

SEMIVOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCSD091694

Lab Name: REGION V Contract: LOCKHEED/ESA

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCSD091694

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0060

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: --/--/--

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

COMPOUND	Conc	Spike	Recovery
3-Nitroaniline	97	75	129
Acenaphthene	85	75	113
2,4-Dinitrophenol	94	75	126
4-Nitrophenol	110	75	151
Dibenzofuran	85	75	114
2,4-Dinitrotoluene			
Diethylphthalate	91	75	122
4-Chlorophenyl-phenylether	84	75	112
Fluorene	89	75	118
4-Nitroaniline	95	75	127
4,6-Dinitro-2-methylphenol	120	75	161
N-Nitrosodiphenylamine	94	75	125
4-Bromophenyl-phenylether	96	75	128
Hexachlorobenzene	96	75	128
Pentachlorophenol	120	75	160
Phenanthrene	91	75	121
Anthracene	92	75	123
Di-n-butylphthalate	98	75	130
Fluoranthene	98	75	131
Pyrene	98	75	131
Butylbenzylphthalate	102	75	135
3,3'-Dichlorobenzidine	89	75	119
Benzo(a)anthracene	97	75	130
Chrysene	89	75	119
bis(2-Ethylhexyl)phthalate	102	75	135
Di-n-octylphthalate	93	75	124
Benzo(b)fluoranthene	88	75	117
Benzo(k)fluoranthene	80	75	106
Benzo(a)pyrene	77	75	102
Indeno(1,2,3-cd)pyrene	88	75	117
Dibenzo(a,h)anthracene	89	75	118
Benzo(g,h,i)perylene	72	75	96

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID: >F0057 Lab Sample ID: MB091594

Date Extracted: 09/15/94 Extraction:(Sepf/Cont/Sonc) CONT

Date Analyzed: 09/29/94 Time Analyzed: 14:02

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: HP 5987

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	PT574	PT574	>F0058	09/29/94
2	LCS091594	LCS091594	>F0059	09/29/94
3	LCSD091594	LCSD091594	>F0060	09/29/94
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COMMENTS: _____

FORM IV SV 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID: >F0065 Lab Sample ID: MB092594

Date Extracted: 09/23/94 Extraction:(Sepf/Cont/Sonc) CONT

Date Analyzed: 10/01/94 Time Analyzed: 18:06

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: HP 5987

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	94ZB19S01	94ZB19S01	>F0066	10/01/94
2	94ZB19S02	94ZB19S02	>F0067	10/01/94
3	94ZB19S03	94ZB19S03	>F0068	10/01/94
4	94ZB19S05	94ZB19S05	>F0069	10/01/94
5	94ZB19S03RE	94ZB19S03RE	>F0115	10/06/94
6	94ZB19S05RE	94ZB19S05RE	>F0116	10/06/94
7	94ZB19S06	94ZB19S06	>F0117	10/06/94
8	94ZB19R07	94ZB19R07	>F0118	10/06/94
9	94ZB19S08	94ZB19S08	>F0119	10/07/94
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COMMENTS: _____

FORM IV SV 1/87 Rev.

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID: >F0050 DFTPP Injection Date: 9/29/94

Instrument ID: HP 5987 DFTPP Injection Time: 9:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	41.3
68	Less than 2.0% of mass 69	-.3 (-.6)1
69	Mass 69 relative abundance	45.4
70	Less then 2.0% of mass 69	.2 (.4)1
127	25.0 - 75.0% of mass 198	55.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	5.5
275	10.0 - 30.0% of mass 198	24.3
365	Greater than 0.75% of mass 198	3.4
441	Present, but less than mass 443	7.2
442	40.0 - 110.0% of mass 198	46.5
443	15.0 - 24.0% of mass 442	8.6 (18.6)2

1-Value is % of mass 69 2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ABNSTD05	ABNSTD05	>F0055	09/29/94	12:35
02	ABNSTD10	ABNSTD10	>F0054	09/29/94	11:51
03	ABNSTD25	ABNSTD25	>F0053	09/29/94	11:07
04	ABNSTD50	ABNSTD50	>F0052	09/29/94	10:24
05	ABNSTD100	ABNSTD100	>F0051	09/29/94	09:40
06	CALCHK25	CALCHK25	>F0056	09/29/94	13:18
07	MB091594	MB091594	>F0057	09/29/94	14:02
08	PT574	PT574	>F0058	09/29/94	14:45
09	LCS091594	LCS091594	>F0059	09/29/94	15:28
10	LCSD091594	LCSD091594	>F0060	09/29/94	16:12
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FORM V SV 1/87 Rev.

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID: >F0062 DFTPP Injection Date: 10/01/94

Instrument ID: HP 5987 DFTPP Injection Time: 15:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	46.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	50.6
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	59.6
197	Less than 1.0% of mass 198	.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.5
275	10.0 - 30.0% of mass 198	23.9
365	Greater than 0.75% of mass 198	3.5
441	Present, but less than mass 443	8.0
442	40.0 - 110.0% of mass 198	48.3
443	15.0 - 24.0% of mass 442	9.9 (20.5)2

1-Value is % of mass 69 2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ABNSTD25	ABNSTD25	>F0064	10/01/94	16:59
02	MB092394	MB092394	>F0065	10/01/94	18:06
03	94ZB19S01	94ZB19S01	>F0066	10/01/94	18:50
04	94ZB19S02	94ZB19S02	>F0067	10/01/94	19:33
05	94ZB19S03	94ZB19S03	>F0068	10/01/94	20:17
06	94ZB19S05	94ZB19S05	>F0069	10/01/94	21:01
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FORM V SV 1/87 Rev.

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID: >F0107 DFTPP Injection Date: 10/06/94

Instrument ID: HP 5987 DFTPP Injection Time: 14:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	32.7
68	Less than 2.0% of mass 69	-0.8 (-2.3)1
69	Mass 69 relative abundance	32.6
70	Less then 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	48.8
197	Less than 1.0% of mass 198	.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% mass 198	6.5
275	10.0 - 30.0% of mass 198	24.7
365	Greater than 0.75% of mass 198	3.8
441	Present, but less than mass 443	8.1
442	40.0 - 110.0% of mass 198	48.9
443	15.0 - 24.0% of mass 442	8.7 (17.7)2

1-Value is % of mass 69 2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ABNSTD05	ABNSTD05	>F0113	10/06/94	20:00
02	ABNSTD10	ABNSTD10	>F0112	10/06/94	19:16
03	ABNSTD25	ABNSTD25	>F0111	10/06/94	18:32
04	ABNSTD50	ABNSTD50	>F0110	10/06/94	17:48
05	ABNSTD100	ABNSTD100	>F0109	10/06/94	17:04
06	CALCHK25	CALCHK25	>F0114	10/06/94	20:43
07	94ZB19S03RE	94ZB19S03RE	>F0115	10/06/94	21:27
08	94ZB19S05RE	94ZB19S05RE	>F0116	10/06/94	22:11
09	94ZB19S06	94ZB19S06	>F0117	10/06/94	22:55
10	94ZB19R07	94ZB19R07	>F0118	10/06/94	23:39
11	94ZB19S08	94ZB19S08	>F0119	10/07/94	00:23
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FORM V SV 1/87 Rev.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Instrument ID: HP 5987 Calibration Date(s): 09/29/94

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF005= >F0055 RRF010= >F0054
RRF025= >F0053 RRF050= >F0052 RRF100= >F0051

COMPOUND		RRF005	RRF010	RRF025	RRF050	RRF100	$\overline{RRF}$	RSD	
Phenol	*	.601	.613	.652	.639	.757	.652	9.5	*
bis(2-Chloroethyl)ether		.539	.469	.588	.566	.642	.561	11.4	
2-Chlorophenol		.958	.930	1.014	.991	1.120	1.002	7.3	
1,3-Dichlorobenzene		1.421	1.226	1.419	1.432	1.518	1.403	7.6	
1,4-Dichlorobenzene	*	1.408	1.607	1.483	1.556	1.727	1.556	7.8	*
Benzyl alcohol		.385	.341	.374	.387	.392	.376	5.5	
1,2-Dichlorobenzene		1.369	1.434	1.355	1.476	1.526	1.432	5.0	
2-Methylphenol		.481	.494	.573	.564	.615	.545	10.3	
bis(2-Chloroisopropyl)ether		.400	.309	.312	.221	.339	.316	20.4	
4-Methylphenol		.459	.529	.541	.621	.657	.562	14.0	
N-Nitroso-di-n-propylamine	#	.417	.362	.386	.381	.415	.392	5.9	#
Hexachloroethane		.614	.685	.678	.757	.817	.710	11.1	
Nitrobenzene		.441	.437	.469	.481	.473	.460	4.4	
Isophorone		1.416	1.358	1.143	1.221	1.254	1.279	8.5	
2-Nitrophenol	*	.554	.499	.610	.569	.595	.565	7.6	*
2,4-Dimethylphenol		.496	.585	.578	.584	.664	.581	10.2	
Benzoic acid		++++	.349	.580	.609	.640	.545	24.3	
bis(2-Chloroethoxy)methane		.612	.609	.579	.560	.583	.589	3.7	
2,4-Dichlorophenol		.959	.907	1.021	1.038	1.073	1.000	6.6	
1,2,4-Trichlorobenzene		1.240	1.338	1.257	1.289	1.313	1.287	3.1	
Naphthalene		.846	.846	.922	.903	.920	.887	4.3	
4-Chloroaniline		.302	.310	.348	.299	.297	.311	6.8	
Hexachlorobutadiene	*	.363	.410	.412	.402	.404	.398	5.0	*
4-Chloro-3-methylphenol	*	.266	.338	.331	.327	.336	.319	9.5	*
2-Methylnaphthalene		.642	.667	.700	.694	.713	.683	4.2	
Hexachlorocyclopentadiene	#	.284	.293	.324	.333	.341	.315	8.0	#
2,4,6-Trichlorophenol	*	.243	.241	.265	.271	.273	.259	6.0	*
2,4,5-Trichlorophenol		.224	.242	.326	.305	.320	.284	16.6	
2-Chloronaphthalene		.619	.728	.696	.708	.732	.697	6.6	
2-Nitroaniline		.164	.181	.213	.211	.213	.196	11.5	
Dimethylphthalate		1.000	1.106	1.073	1.050	1.041	1.054	3.7	
Acenaphthylene		.978	.977	1.051	1.094	1.151	1.050	7.2	
2,6-Dinitrotoluene		.392	.371	.380	.383	.284	.362	12.1	
3-Nitroaniline		++++	.229	.306	.318	.304	.289	14.1	
Acenaphthene	*	1.071	1.144	1.208	1.217	1.279	1.184	6.7	*
2,4-Dinitrophenol	#	++++	++++	.185	.198	.207	.197	5.7	#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Instrument ID: HP 5987 Calibration Date(s): 09/29/94

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF005= >F0055 RRF010= >F0054
RRF025= >F0053 RRF050= >F0052 RRF100= >F0051

COMPOUND		RRF005	RRF010	RRF025	RRF050	RRF100	$\overline{RRF}$	RSD	
4-Nitrophenol	#	.338	.409	.538	.573	.548	.482	21.2	#
Dibenzofuran		1.512	1.592	1.584	1.637	1.705	1.606	4.4	
2,4-Dinitrotoluene		.458	.458	.504	.526	.481	.486	6.1	
Diethylphthalate		1.835	1.879	1.828	1.839	1.922	1.861	2.1	
4-Chlorophenyl-phenylether		.752	.841	.775	.790	.784	.789	4.1	
Fluorene		1.163	1.181	1.215	1.278	1.355	1.238	6.4	
4-Nitroaniline		.152	.191	.277	.272	.220	.222	23.9	
4,6-Dinitro-2-methylphenol		.149	.185	.217	.258	.203	.202	19.9	
N-Nitrosodiphenylamine	*	.827	.871	.841	.887	.960	.877	5.9	*
4-Bromophenyl-phenylether		.367	.503	.474	.543	.557	.489	15.4	
Hexachlorobenzene		.493	.507	.522	.560	.564	.529	6.0	
Pentachlorophenol	*	.128	.196	.255	.271	.302	.230	30.0	*
Phenanthrene		1.044	1.034	1.015	1.083	1.076	1.051	2.7	
Anthracene		.993	1.134	1.017	1.073	1.054	1.054	5.1	
Di-n-butylphthalate		1.302	1.436	1.366	1.403	1.442	1.390	4.1	
Fluoranthene	*	.830	.970	1.024	1.056	1.088	.994	10.2	*
Pyrene		.831	1.021	1.025	1.064	1.118	1.012	10.7	
Butylbenzylphthalate		.409	.584	.536	.577	.580	.537	13.9	
3,3'-Dichlorobenzidine		.222	.330	.322	.394	.396	.333	21.3	
Benzo(a)anthracene		.749	.837	.776	.894	.915	.834	8.7	
Chrysene		1.043	1.009	1.072	1.076	1.054	1.051	2.6	
bis(2-Ethylhexyl)phthalate		.587	.692	.700	.792	.792	.713	11.9	
Di-n-octylphthalate	*	1.074	1.209	1.453	1.466	1.540	1.348	14.7	*
Benzo(b)fluoranthene		.899	.917	.950	.984	.977	.945	3.9	
Benzo(k)fluoranthene		.882	.965	1.021	.992	1.000	.972	5.6	
Benzo(a)pyrene	*	.745	.817	.847	.918	.877	.841	7.8	*
Indeno(1,2,3-cd)pyrene		.722	.712	.829	.793	.785	.768	6.5	
Dibenzo(a,h)anthracene		.652	.685	.770	.850	.794	.750	10.8	
Benzo(g,h,i)perylene		.800	.759	.863	.818	.789	.806	4.8	
Nitrobenzene-d5		1.041	1.132	1.015	1.069	1.041	1.060	4.2	
2-Fluorobiphenyl		.890	.922	.929	.915	.954	.922	2.5	
Terphenyl-d14		.707	.792	.788	.868	.821	.795	7.4	
Phenol-d5		.576	.548	.612	.664	.724	.625	11.3	
2-Fluorophenol		.628	.759	.710	.711	.822	.726	9.9	
2,4,6-Tribromophenol		.264	.284	.306	.300	.324	.296	7.7	

6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Instrument ID: HP 5987 Calibration Date(s): 10/06/94

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF005= >F0113 RRF010= >F0112
RRF025= >F0111 RRF050= >F0110 RRF100= >F0109

COMPOUND		RRF005	RRF010	RRF025	RRF050	RRF100	$\overline{RRF}$	RSD
Phenol	*	.256	.421	.451	.470	.480	.415	22.2*
bis(2-Chloroethyl)ether		.419	.333	.330	.396	.494	.394	17.2
2-Chlorophenol		.726	.770	.872	.848	.884	.820	8.4
1,3-Dichlorobenzene		1.044	1.210	1.296	1.317	1.348	1.243	9.9
1,4-Dichlorobenzene	*	1.281	1.495	1.420	1.511	1.616	1.465	8.5*
Benzyl alcohol		.209	.295	.287	.284	.253	.265	13.4
1,2-Dichlorobenzene		1.151	1.181	1.332	1.399	1.444	1.301	10.0
2-Methylphenol		.259	.407	.395	.406	.437	.381	18.3
bis(2-Chloroisopropyl)ether		.177	.201	.278	.252	.263	.234	18.4
4-Methylphenol		.409	.359	.450	.476	.521	.443	14.0
N-Nitroso-di-n-propylamine	#	.260	.262	.252	.315	.329	.284	12.6#
Hexachloroethane		.586	.849	.819	.845	1.019	.824	18.8
Nitrobenzene		.260	.341	.423	.413	.404	.368	18.6
Isophorone		.906	.876	.872	.878	.818	.870	3.7
2-Nitrophenol	*	.264	.427	.506	.495	.488	.436	23.2*
2,4-Dimethylphenol		.537	.505	.525	.518	.497	.517	3.1
Benzoic acid		++++	.268	.381	.454	.484	.397	24.3
bis(2-Chloroethoxy)methane		.307	.392	.399	.395	.420	.383	11.4
2,4-Dichlorophenol		.705	.882	1.078	1.017	1.093	.955	17.0
1,2,4-Trichlorobenzene		1.110	1.177	1.366	1.361	1.445	1.292	11.0
Naphthalene		.730	.733	.813	.854	1.026	.831	14.5
4-Chloroaniline		.219	.205	.282	.285	.298	.258	16.5
Hexachlorobutadiene	*	.469	.515	.533	.546	.569	.526	7.1*
4-Chloro-3-methylphenol	*	.260	.318	.322	.354	.371	.325	13.1*
2-Methylnaphthalene		.619	.612	.675	.726	.789	.684	10.9
Hexachlorocyclopentadiene	#	.289	.343	.447	.484	.531	.419	24.0#
2,4,6-Trichlorophenol	*	.202	.298	.294	.330	.338	.292	18.5*
2,4,5-Trichlorophenol		.172	.280	.341	.347	.391	.306	27.7
2-Chloronaphthalene		.691	.609	.800	.779	.892	.754	14.3
2-Nitroaniline		++++	.166	.165	.201	.204	.184	11.6
Dimethylphthalate		1.050	1.054	1.185	1.216	1.395	1.180	12.0
Acenaphthylene		.937	1.021	1.099	1.173	1.484	1.143	18.4
2,6-Dinitrotoluene		.210	.362	.366	.350	.291	.316	21.0
3-Nitroaniline		++++	.181	.246	.245	.313	.246	21.9
Acenaphthene	*	.871	.927	1.033	1.143	1.430	1.081	20.5*
2,4-Dinitrophenol	#	++++	.074	.131	.166	.216	.147	40.9#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Instrument ID: HP 5987 Calibration Date(s): 10/06/94

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF005= >F0113 RRF010= >F0112
RRF025= >F0111 RRF050= >F0110 RRF100= >F0109

COMPOUND		RRF005	RRF010	RRF025	RRF050	RRF100	$\overline{RRF}$	RSD	
4-Nitrophenol	#	++++	.297	.505	.538	.634	.493	28.8	#
Dibenzofuran		1.245	1.321	1.536	1.594	1.800	1.499	14.8	
2,4-Dinitrotoluene		.311	.464	.534	.514	.570	.479	21.2	
Diethylphthalate		1.912	1.836	1.964	1.949	2.182	1.969	6.6	
4-Chlorophenyl-phenylether		.679	.675	.758	.838	.936	.777	14.3	
Fluorene		.970	1.063	1.188	1.298	1.520	1.208	17.7	
4-Nitroaniline		++++	.143	.209	.221	.181	.189	18.3	
4,6-Dinitro-2-methylphenol		++++	.151	.213	.232	.209	.201	17.3	
N-Nitrosodiphenylamine	*	.758	.729	.845	.894	1.011	.847	13.3	*
4-Bromophenyl-phenylether		.453	.515	.538	.622	.739	.573	19.3	
Hexachlorobenzene		.501	.585	.641	.735	.793	.651	17.9	
Pentachlorophenol	*	++++	.181	.229	.276	.332	.255	25.3	*
Phenanthrene		.888	.921	1.068	1.108	1.252	1.047	14.1	
Anthracene		.902	.928	1.036	1.153	1.269	1.058	14.6	
Di-n-butylphthalate		1.258	1.291	1.400	1.477	1.358	1.357	6.4	
Fluoranthene	*	.864	.941	1.050	1.115	1.215	1.037	13.4	*
Pyrene		.870	.990	1.048	1.167	1.309	1.077	15.6	
Butylbenzylphthalate		.472	.524	.544	.570	.575	.537	7.8	
3,3'-Dichlorobenzidine		.235	.252	.361	.388	.488	.345	30.2	
Benzo(a)anthracene		.778	.840	.890	.879	.976	.873	8.3	
Chrysene		.971	.942	1.102	1.119	1.219	1.071	10.6	
bis(2-Ethylhexyl)phthalate		.627	.619	.663	.703	.768	.676	9.1	
Di-n-octylphthalate	*	1.277	1.239	1.386	1.230	1.327	1.292	5.1	*
Benzo(b)fluoranthene		.646	.792	.876	.797	.878	.798	11.8	
Benzo(k)fluoranthene		.786	.867	.926	.905	.936	.884	6.9	
Benzo(a)pyrene	*	.348	.760	.777	.761	.786	.686	27.6	*
Indeno(1,2,3-cd)pyrene		.402	.691	.779	.794	.897	.712	26.5	
Dibenzo(a,h)anthracene		.607	.605	.783	.807	.870	.735	16.5	
Benzo(g,h,i)perylene		.819	.684	.867	.857	.894	.824	10.1	
Nitrobenzene-d5		.817	.843	.844	.722	.772	.800	6.5	
2-Fluorobiphenyl		.948	.956	1.029	1.089	1.275	1.060	12.6	
Terphenyl-d14		.647	.782	.872	.971	1.001	.854	16.9	
Phenol-d5		.216	.423	.490	.501	.519	.430	29.1	
2-Fluorophenol		.447	.580	.557	.546	.551	.536	9.6	
2,4,6-Tribromophenol		.208	.260	.327	.307	.374	.295	21.6	

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Instrument ID: HP 5987 Calibration Date: 10/01/94 Time: 16:59

Lab File ID: >F0064 Init. Calib. Date(s): 09/29/94

Min RRF025 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF025	%D
Phenol	*	.652	.570	12.6*
bis(2-Chloroethyl)ether		.561	.559	.3
2-Chlorophenol		1.002	.947	5.5
1,3-Dichlorobenzene		1.403	1.336	4.8
1,4-Dichlorobenzene	*	1.556	1.566	.6*
Benzyl alcohol		.376	.357	5.2
1,2-Dichlorobenzene		1.432	1.384	3.4
2-Methylphenol		.545	.463	15.1
bis(2-Chloroisopropyl)ether		.316	.295	6.8
4-Methylphenol		.562	.474	15.6
N-Nitroso-di-n-propylamine	#	.392	.384	2.1#
Hexachloroethane		.710	.691	2.7
Nitrobenzene		.460	.446	3.0
Isophorone		1.279	1.276	.2
2-Nitrophenol	*	.565	.509	9.9*
2,4-Dimethylphenol		.581	.605	4.1
Benzoic acid		.545	.533	2.2
bis(2-Chloroethoxy)methane		.589	.573	2.6
2,4-Dichlorophenol		1.000	1.013	1.4
1,2,4-Trichlorobenzene		1.287	1.286	.1
Naphthalene		.887	.839	5.5
4-Chloroaniline		.311	.337	8.4
Hexachlorobutadiene	*	.398	.425	6.6*
4-Chloro-3-methylphenol	*	.319	.324	1.5*
2-Methylnaphthalene		.683	.674	1.3
Hexachlorocyclopentadiene	#	.315	.315	.2#
2,4,6-Trichlorophenol	*	.259	.272	5.0*
2,4,5-Trichlorophenol		.284	.279	1.6
2-Chloronaphthalene		.697	.708	1.7
2-Nitroaniline		.196	.201	2.5
Dimethylphthalate		1.054	1.049	.5
Acenaphthylene		1.050	1.000	4.8
2,6-Dinitrotoluene		.362	.388	7.1
3-Nitroaniline		.289	.277	4.1
Acenaphthene	*	1.184	1.183	.0*
2,4-Dinitrophenol	#	.197	.170	13.8#
4-Nitrophenol	#	.482	.564	17.2#

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab Code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Instrument ID: HP 5987 Calibration Date: 10/01/94 Time: 16:59

Lab File ID: >F0064 Init. Calib. Date(s): 09/29/94

Min RRF025 for SPCC(#) = 0.050 Max %D for CCC(*) = 25%

COMPOUND		$\overline{RRF}$	RRF025	%D
Dibenzofuran		1.606	1.662	3.5
2,4-Dinitrotoluene		.486	.521	7.4
Diethylphthalate		1.861	2.043	9.8
4-Chlorophenyl-phenylether		.789	.773	1.9
Fluorene		1.238	1.305	5.4
4-Nitroaniline		.222	.253	13.9
4,6-Dinitro-2-methylphenol		.202	.237	16.9
N-Nitrosodiphenylamine	*	.877	.954	8.7*
4-Bromophenyl-phenylether		.489	.515	5.4
Hexachlorobenzene		.529	.635	19.9
Pentachlorophenol	*	.230	.277	20.5*
Phenanthrene		1.051	1.103	5.0
Anthracene		1.054	1.097	4.1
Di-n-butylphthalate		1.390	1.567	12.8
Fluoranthene	*	.994	1.150	15.7*
Pyrene		1.012	1.173	15.9
Butylbenzylphthalate		.537	.674	25.4
3,3'-Dichlorobenzidine		.333	.403	20.9
Benzo(a)anthracene		.834	.966	15.9
Chrysene		1.051	1.119	6.4
bis(2-Ethylhexyl)phthalate		.713	.870	22.1
Di-n-octylphthalate	*	1.348	1.435	6.4*
Benzo(b)fluoranthene		.945	.928	1.9
Benzo(k)fluoranthene		.972	1.031	6.1
Benzo(a)pyrene	*	.841	.843	.2*
Indeno(1,2,3-cd)pyrene		.768	.776	1.1
Dibenzo(a,h)anthracene		.750	.777	3.6
Benzo(g,h,i)perylene		.806	.811	.7
Nitrobenzene-d5		1.060	1.024	3.4
2-Fluorobiphenyl		.922	.904	2.0
Terphenyl-d14		.795	.953	19.8
Phenol-d5		.625	.629	.7
2-Fluorophenol		.726	.731	.6
2,4,6-Tribromophenol		.296	.295	.1

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID (Standard): >F0053 Date Analyzed: 09/29/94

Instrument ID: HP 5987 Time Analyzed: 11:07

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	66687	4.19	181865	7.07	108810	12.14
	UPPER LIMIT	133374	4.69	363730	7.57	217620	12.64
	LOWER LIMIT	33344	3.69	90933	6.57	54405	11.64
	EPA SAMPLE NO.						
1	MB091594	54822	4.19	172815	7.07	97291	12.15
2	PT574	60285	4.19	162224	7.07	95323	12.14
3	LCS091594	59976	4.20	170478	7.08	98078	12.16
4	LCSD091594	37462	4.20	113204	7.08	68582	12.15
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID (Standard): >F0053 Date Analyzed: 09/29/94

Instrument ID: HP 5987 Time Analyzed: 11:07

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	165583	16.69	118890	24.90	95787	28.98
	UPPER LIMIT	331166	17.19	237780	25.40	191574	29.48
	LOWER LIMIT	82792	16.19	59445	24.40	47894	28.48
	EPA SAMPLE NO.						
1	MB091594	144843	16.69	105337	24.90	91872	28.99
2	PT574	153486	16.68	108115	24.89	98764	28.98
3	LCS091594	170435	16.71	141619	24.95	115967	29.01
4	LCSD091594	112161	16.70	95135	24.92	75246	29.00
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev

found in laboratory method blank.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID (Standard): >F0064 Date Analyzed: 10/01/94

Instrument ID: HP 5987 Time Analyzed: 16:59

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	51683	4.18	149668	7.08	86732	12.15
	UPPER LIMIT	103366	4.68	299336	7.58	173464	12.65
	LOWER LIMIT	25841	3.68	74834	6.58	43366	11.65
	EPA SAMPLE NO.						
1	MB092394	47345	4.20	131926	7.07	76304	12.15
2	94ZB19S01	33193	4.18	98138	7.05	56434	12.15
3	94ZB19S02	47669	4.18	125460	7.06	75914	12.14
4	94ZB19S03	44604	4.18	124271	7.06	76887	12.14
5	94ZB19S05	42842	4.18	115633	7.06	73800	12.14
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID (Standard): >F0064 Date Analyzed: 10/01/94

Instrument ID: HP 5987 Time Analyzed: 16:59

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	141062	16.69	127888	24.92	109139	28.99
	UPPER LIMIT	282124	17.19	255776	25.42	218278	29.49
	LOWER LIMIT	70531	16.19	63944	24.42	54570	28.49
	EPA SAMPLE NO.						
1	MB092394	111845	16.69	97759	24.91	90385	29.00
2	94ZB19S01	79387	16.67	76843	24.88	65676	28.98
3	94ZB19S02	112189	16.68	98177	24.90	88153	28.99
4	94ZB19S03	117942	16.67	102053	24.90	68809	28.98
5	94ZB19S05	112742	16.68	100018	24.90	83459	28.98
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID (Standard): >F0111 Date Analyzed: 10/06/94

Instrument ID: HP 5987 Time Analyzed: 18:32

		IS1(DCB) AREA #	RT	IS2(NAP) AREA #	RT	IS3(ACE) AREA #	RT
	12 HOUR STD	50418	4.10	135088	6.95	91357	12.01
	UPPER LIMIT	100836	4.60	270176	7.45	182714	12.51
	LOWER LIMIT	25209	3.60	67544	6.45	45679	11.51
	EPA SAMPLE NO.						
1	94ZB19S03RE	47629	4.09	128671	6.95	82601	12.01
2	94ZB19S05RE	56146	4.09	150259	6.95	102551	12.01
3	94ZB19S06	56217	4.09	142963	6.95	93370	12.01
4	94ZB19R07	52221	4.10	137929	6.95	93792	12.01
5	94ZB19S08	37511	4.09	98413	6.95	63960	12.01
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

Lab code: 5SCRL Case No.: 940152 SAS No.: SDG No.: ---

Lab File ID (Standard): >F0111 Date Analyzed: 10/06/94

Instrument ID: HP 5987 Time Analyzed: 18:32

		IS4(PHN) AREA #	RT	IS5(CHR) AREA #	RT	IS6(PER) AREA #	RT
	12 HOUR STD	146975	16.53	117057	24.72	95623	28.79
	UPPER LIMIT	293950	17.03	234114	25.22	191246	29.29
	LOWER LIMIT	73488	16.03	58529	24.22	47811	28.29
	EPA SAMPLE NO.						
1	94ZB19S03RE	124642	16.52	90252	24.71	84760	28.79
2	94ZB19S05RE	158548	16.52	120396	24.72	107055	28.80
3	94ZB19S06	142052	16.52	109168	24.73	91131	28.80
4	94ZB19R07	147964	16.54	110911	24.72	97469	28.80
5	94ZB19S08	98587	16.52	84115	24.72	74780	28.80
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IS4 (PHN) = Phenanthrene-d10
IS5 (CHR) = Chrysene-d12
IS6 (PER) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev

EPA SAMPLE NUMBER: PT574

Lab Name: REGION V CRL/ESAT Contract: ESAT
Lab Code: Case No: SAS No: SDG No:
Lab Sample ID: PT574 Date Received: 09/15/94
Lab File ID: >F0058 Date Analyzed: 09/29/94

TCL HITS

NAPHTHALENE	In Window	10.000
4-CHLORO-3-METHYLPHENOL	Warning High	13.000
HEXACHLOROCYCLOPENTADIENE	In Window	19.000
2-CHLORONAPHTHALENE	In Window	11.000
ACENAPHTHENE	Warning High	45.000
PHENANTHRENE	In Window	21.000
DI-N-BUTYLPHTHALATE	In Window	9.000
PYRENE	In Window	15.000
BENZO(B)FLUORANTHENE	In Window	14.000

TCL MISSES

TCL CONTAMINANTS

TIC HITS
ENDRIN
PARATHION

TIC MISSES

TIC CONTAMINANTS

940152

ENVIRONMENTAL PROTECTION AGENCY TF-A301
FOR THE TEAM: PESTICIDES AND PCB'S

DIVISION/BRANCH SUPERFUND SAMPLE DATE 9/21/94 LAB ARRIVAL DATE 9/22/94 DUE DATE 10/13/94

DU NUMBER TFA DATA SET NUMBER 940152 STUDY ALCO STEEL SERVICE PRIORITY N CONTRACTOR BLACK + VEATCH

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER TRIHALOMETHANES UG/L PES17414	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES 17134	WATER HERBICIDES UG/L PES 17424	WATER OIL AND GREASE MG/L PES 17439
942B19S01	AS-RW01-001 5022959		X	X		
942B19S02	AS-RW02-001 5022960		X	X		
942B19S03	AS-RW04-001 5022978		X	X		
942B19S05	AS-RW05-001 5022989		X	X		
942B19S06	AS-RW06-001 5022990		X	X		
942B19R07	AS-FB01-201 5022996		X	X		
942B19S08	AS-RW02-701 5022966		X	X		

9-26-94

LOCKHEED ENGINEERING & SCIENCES COMPANY

SEMIVOLATILE ORGANIC DELIVERABLES CHECK-OFF LIST

DATA SET NUMBER: 940152 CHARGE NUMBER: 234-51-019

PRESENT	NOT REQD	ITEM
		REPORTING INFORMATION
[✓]	[ ]	SAMPLE REPORT LOG
[✓]	[ ]	DATA SET CUSTODY TRANSFER FORM
[✓]	[ ]	NARRATIVE
[✓]	[ ]	RUN SEQUENCE
[✓]	[ ]	ABN BENCH SHEET
		AQC
[✓]	[ ]	SURROGATE RECOVERY (FORM II)
[✓]	[ ]	MATRIX SPIKE/DUP (FORM III)
[✓]	[ ]	~~MS/MSD~~ LCS/LCSD RAW DATA
[✓]	[ ]	METHOD BLANK (FORM VI)
[✓]	[ ]	MASS CAL/TUNING (FORM V)
[✓]	[ ]	MASS CAL RAW DATA
[ ]	[✓]	MDL RESULTS

PRESENT	NOT REQD	ITEM
		CALIBRATION DATA
[✓]	[ ]	INITIAL CAL RRF (FORM VI)
[✓]	[ ]	ICV RAW DATA
[✓]	[ ]	CONT CAL VERIFI (FORM VII)
[✓]	[ ]	CCV RAW DATA
[✓]	[ ]	INT STD AREA & RT (FORM VIII)
		SAMPLE DATA
[✓]	[ ]	ID FILE (SHORT) (HP ONLY)
[✓]	[ ]	TCL RESULTS (FORM I)
[✓]	[ ]	TIC RESULTS (FORM I-TIC)
[✓]	[ ]	SAMPLE RAW DATA
[ ]	[✓]	SAMPLE TAGS
[✓]	[ ]	ARCHIVE REFERENCE
[✓]	[ ]	QC SUMMARY PACKAGE (FORMS 2-8)

SEMI-VOLATILE EXTRACTION

DATA SET(S) 940152 DATE EXTRACTED 9-23-94

SAMPLE TYPE(S) Water DATE CONCENTRATED 9-24-94

EXTRACTION SYSTEM Liquid/liquid DATE COMPLETED 9-25-94

SOLVENT SYSTEM Mech VOLUMES USED 500mL

SAMPLE NUMBER	SAMPLE AMOUNT	SURROGATE VOLUME	MS VOL	pH 1ST	pH 2ND	pH 3RD	FINAL VOLUME	INTRNL STD ADDED
Method Blank	1L	750ul	NA	<2			1mL	25ul
94ZB19S01	↓	↓	↓	↓			↓	↓
S02								
S03								
S05								
S06								
R07								
S08								

SAMPLE DESCRIPTION	CONCENTRATION OF SOLUTION	VOLUME OF SPIKE	PREPARATION DATE	COMMENTS
SURROGATE SPIKE SOLN	100	750ul		—
MATRIX SPIKE SOLUTION	NA	NA	NA	—
INTERNAL STANDARD	2,000	25ul		—

PREP. CHEMIST KM & ST ANALYST ZAR

DATE 9-25-94 DATE 9-26-94

SEMI-VOLATILE EXTRACTION

DATA SET(S) Sept PE/LCS DATE EXTRACTED 09-15-94

SAMPLE TYPE(S) Ampule DATE CONCENTRATED 09-16-94

EXTRACTION SYSTEM Cont Liquid/L DATE COMPLETED 09-16-94

SOLVENT SYSTEM CH_2Cl_2 VOLUMES USED 1L

SAMPLE NUMBER	SAMPLE AMOUNT	SURROGATE VOLUME	MS VOL	pH 1ST	pH 2ND	pH 3RD	FINAL VOLUME	INTRNL STD ADDED
MB091594	1L	750ul	NA	<2			1mL	25ul
PT574	1L	↓	NA	↓			↓	↓
LCS091594	1L		750ul					
LCSD091594	1L		750ul					

SAMPLE DESCRIPTION	CONCENTRATION OF SOLUTION	VOLUME OF SPIKE	PREPARATION DATE	COMMENTS
SURROGATE SPIKE SOLN	100	750 ul		—
MATRIX SPIKE SOLUTION	100	750 ul		—
INTERNAL STANDARD	2000	25ul		—

PREP. CHEMIST KM & ST ANALYST ZR

DATE 09-15-94 DATE 09-16-94

LOCKHEED ENGINEERING AND SCIENCE COMPANY
REGION 5
ESAT PROJECT
536 SOUTH CLARK STREET
CHICAGO, IL 60605

RAW DATA ARCHIVING AND DATA SET RECONSTRUCTION FORM

DISK OR TAPE NUMBER: Tape

RUN DATE(S): 9-29-94, 10-1-94, 10-6-94
INSTRUMENT NO: HP5987
ANALYST(S): Z. A. Rajabi

SAMPLE SUMMARY MATRIX

DATA SET NUMBER:	940152				
TASK NUMBER:	234-51-019				
DU/ACTIVITY NUMBER:	TFA301				
PARAMETER:	ABN				
MATRIX:	Water				
NUMBER OF SAMPLES:	7				
DATE RECEIVED:	9-22-94				
DATE EXTRACTED:	9-23-94				
NOTEBOOK/PAGE NO:	—				
DATE ASSAYED:	—				

FILE IDENTIFICATION SUMMARY

TUNING FILE:	>F0050	>F0062	>F0107		
BLANK FILE:	>F0057	>F0065			

PRIMARY COLUMN

INITIAL CALIBRATION FILE: >F0055-51, >F0109->F0113
CONTINUING CALIBRATION FILES: >F0064
STANDARDS FILES: 1DF005, 1DF006, 1DF008
SAMPLE FILES: >F0058-60, >F0066-69, >F0115-119

ID/METHOD FILES: 1DF005, 1DF006, 1DF008

SECONDARY COLUMN

INITIAL CALIBRATION FILE:
CONTINUING CALIBRATION FILES:
STANDARDS FILES:
SAMPLE FILES:

ID/METHOD FILES:

NA

ESAT Work Unit Document (WUD)

REQUESTOR:	CRL	DATE:	09/23/94
SITE NAME:	ALCO STEEL SERVICE		
SUPERFUND ACCOUNT NUMBER:	940152		
TASK AREA:	ABN ANALYSIS		

To be completed by Task Monitor

TASK DESCRIPTION:

RESIDENTIAL WELL SAMPLES

DELIVERABLES:

START DATE:	10/1/94	COMPLETION DATE:	10-7-94
ESTIMATED HOURS:	9HR PER SAMPLE (8 SAMPLES) 68		

To be completed by PO/RPO

WORK UNIT NUMBER:	234-51-019	TID NUMBER:	0594-1011
PO/RPO APPROVAL:	Gary Thornton	DATE:	9·23·94

To be completed by ESAT

COI CHECK COMPLETED?:	Yes	ESAT CONTACT: (ETM or Group	print job configuration
ETM ACKNOWLEDGEMENT OF RECEIPT:	Fernia Miller		
COMPLETION DATE:		HOURS	

To be completed by PO/RPO/TM

EVALUATION	RECIEVED		
TECHNICAL:	ACCEPTED		DATE:
TIMELINESS:	RETURN		DATE:
BUDGET:	Please attach a separate page for		

REGION SPECIFIC INFORMATION

PROJECT NO:

QUANT REPORT

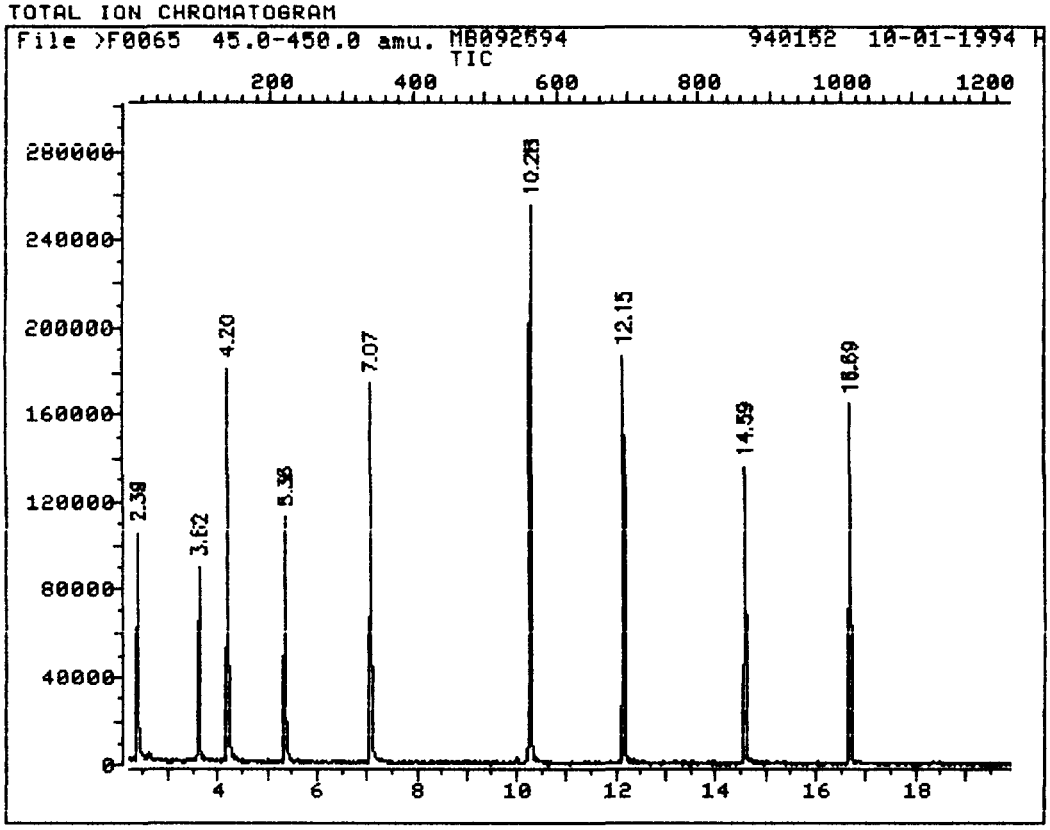
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:44
Output File: ^F0065::QT Injected at: 941001 18:06
Data File: >F0065::D2 Dilution Factor: 1.00000
Name: ~~MB092594~~ MB092394 wd 10/7/94 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 4

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.20	152.0	47345	50.00	NG/UL	93
2)	2-Fluorophenol	2.39	112.0	39116	56.54	NG/UL	95
3)	Phenol-d5	3.62	99.0	36316M	60.96	NG/UL	
17)	Nitrobenzene-d5	5.36	82.0	57297	59.10	NG/UL	86
26)	*Naphthalene-d8	7.07	136.0	131926	50.00	NG/UL	75
36)	2-Fluorobiphenyl	10.28	172.0	130070	54.55	NG/UL	94
40)	*Acenaphthene-d10	12.15	164.0	76304	50.00	NG/UL	94
54)	2,4,6-Tribromophenol	14.59	329.9	29525	65.55	NG/UL	95
58)	*Phenanthrene-d10	16.69	188.0	111845	50.00	NG/UL	99
65)	Terphenyl-d14	21.88	244.0	124443	58.39	NG/UL	98
69)	bis(2-Ethylhexyl)phthalate	25.58	149.0	2674	1.37	NG/UL	94
70)	*Chrysene-d12	24.91	240.0	97759	50.00	NG/UL	96
76)	*Perylene-d12	29.00	264.0	90385	50.00	NG/UL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

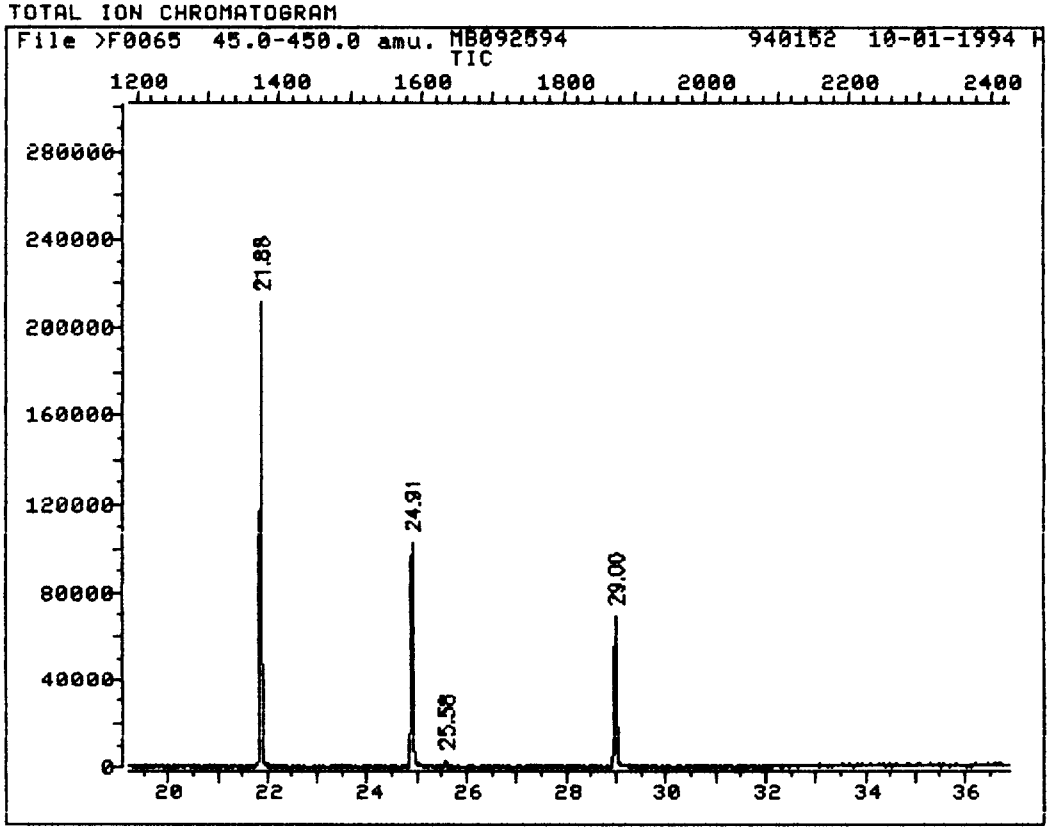


Data File: >F0065::D2 Quant Output File: ^F0065::QT
Name: MB092594 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 4

Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:44
Injected at: 941001 18:06

TOTAL ION CHROMATOGRAM

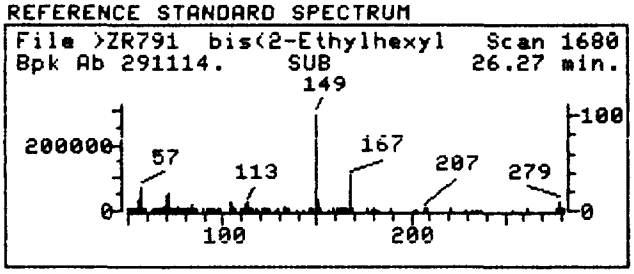


Data File: >F0065::D2 Quant Output File: ^F0065::QT
Name: MB092594 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 4

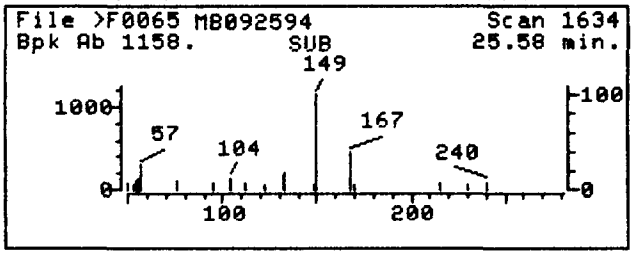
Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:44
Injected at: 941001 18:06

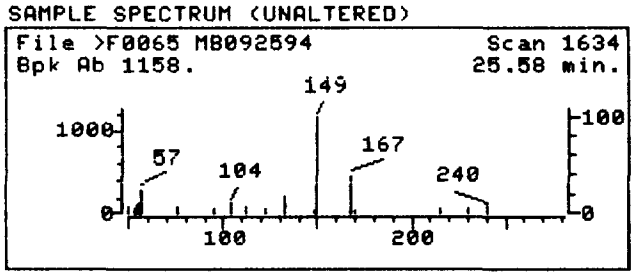
REFERENCE STANDARD SPECTRUM

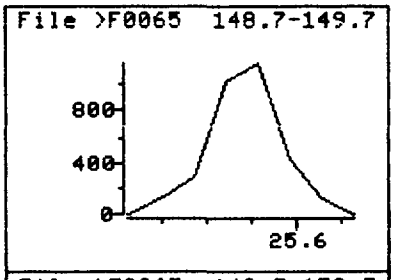


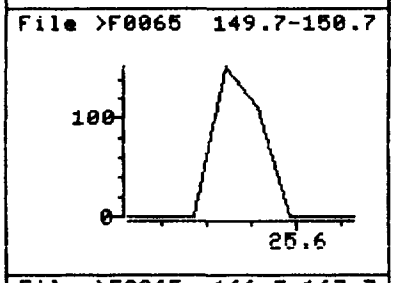
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

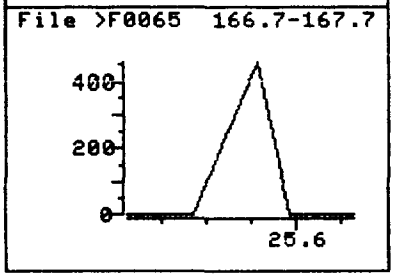


SAMPLE SPECTRUM (UNALTERED)









Data File: >F0065::D2
Name: MB092594
Misc: 940152 10-01-1994 HP5987
Quant Time: 941003 10:44
Injected at: 941001 18:06
Last Qcal Time: 941001 16:59

Quant Output File: ^F0065::QT
Instrument ID: 5985
BTL# 4
Quant ID File: IDF006::D6
Last Calibration: 940901 09:50

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1634
Retention Time: 25.58 min.
Quant Ion : 149.0
Area : 2674
Concentration : 1.37 NG/UL
q-value : 94

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S01

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S01

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0066

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S01

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S01

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0066

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0066::QT
Data File: >F0066::D2
Name: 94ZB19S01
Misc: 940152 10-01-1994 HP5987

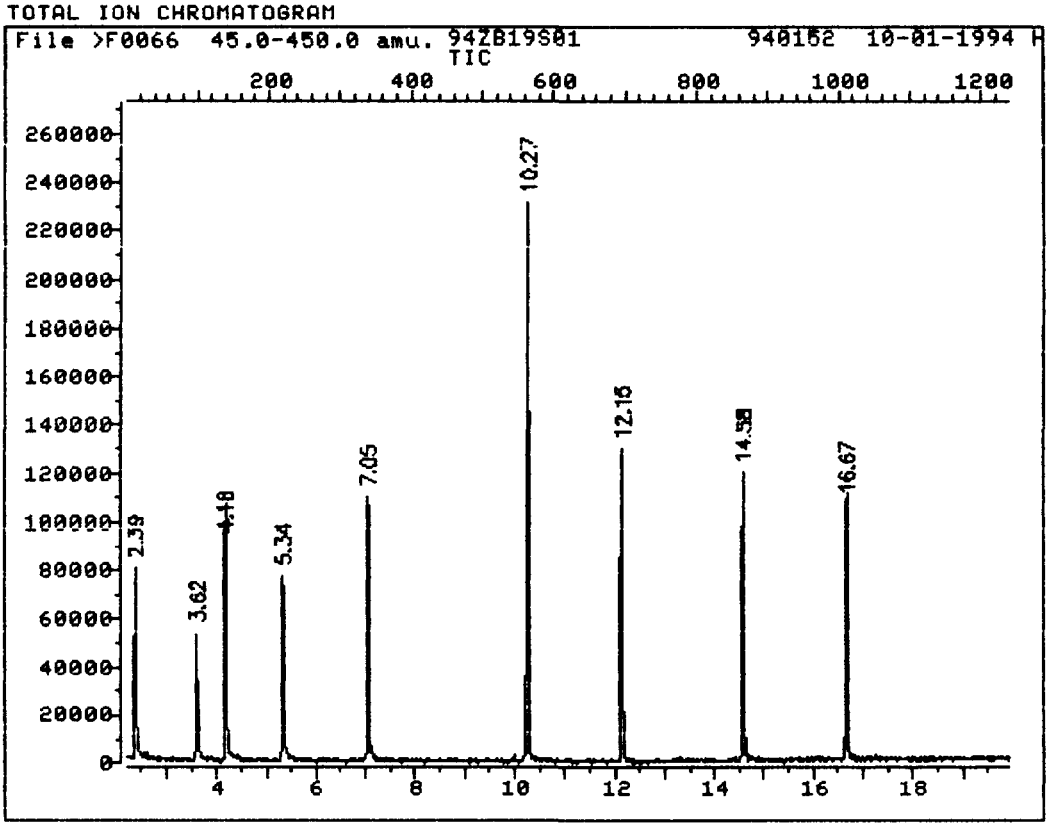
Quant Rev: 7
Quant Time: 941003 10:46
Injected at: 941001 18:50
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 5

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941001 16:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.18	152.0	33193	50.00	NG/UL	95
2)	2-Fluorophenol	2.39	112.0	29574	60.97	NG/UL	99
3)	Phenol-d5	3.62	99.0	25848M	61.89	NG/UL	
17)	Nitrobenzene-d5	5.34	82.0	45415	66.82	NG/UL	95
26)	*Naphthalene-d8	7.05	136.0	98138	50.00	NG/UL	81
36)	2-Fluorobiphenyl	10.27	172.0	119740	67.51	NG/UL	95
40)	*Acenaphthene-d10	12.15	164.0	56434	50.00	NG/UL	97
54)	2,4,6-Tribromophenol	14.58	329.9	25554	76.71	NG/UL	93
58)	*Phenanthrene-d10	16.67	188.0	79387	50.00	NG/UL	99
65)	Terphenyl-d14	21.86	244.0	130420	86.21	NG/UL	94
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	10458	7.57	NG/UL	88
70)	*Chrysene-d12	24.88	240.0	76843	50.00	NG/UL	87
76)	*Perylene-d12	28.98	264.0	65676	50.00	NG/UL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

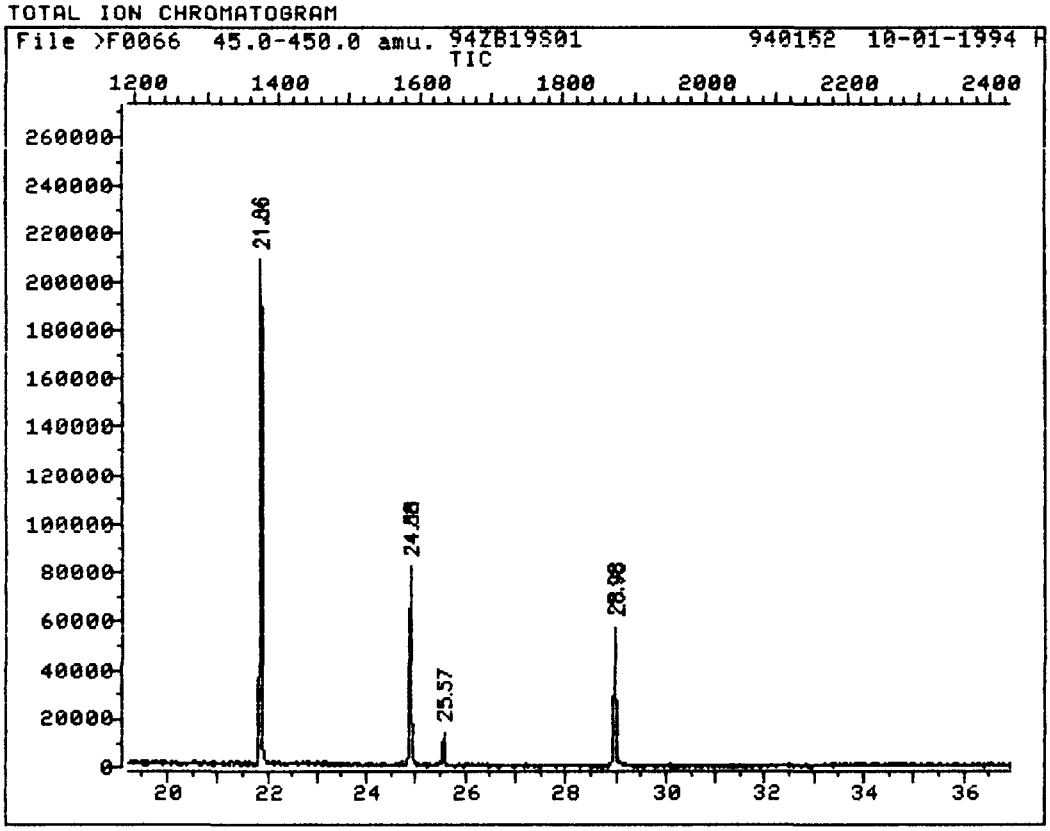


Data File: >F0066::D2 Quant Output File: ^F0066::QT
Name: 94ZB19S01 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 5

Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:46
Injected at: 941001 18:50

TOTAL ION CHROMATOGRAM

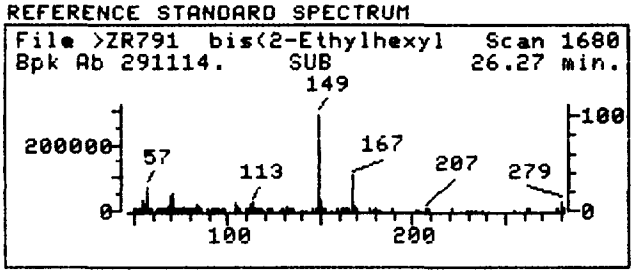


Data File: >F0066::D2 Quant Output File: ^F0066::QT
Name: 94ZB19S01 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 5

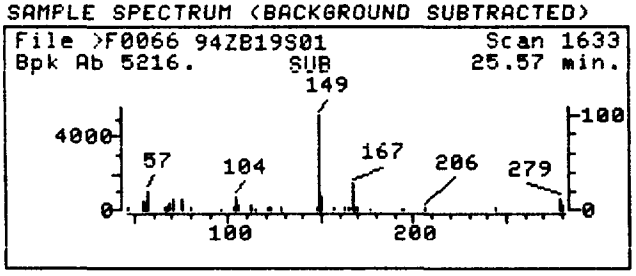
Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:46
Injected at: 941001 18:50

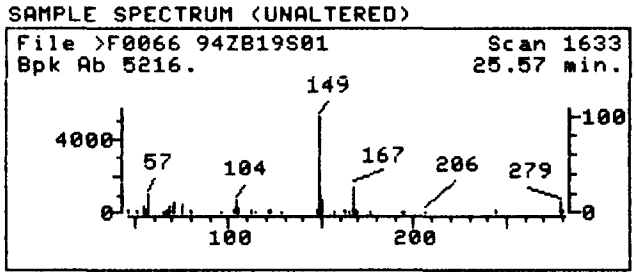
REFERENCE STANDARD SPECTRUM

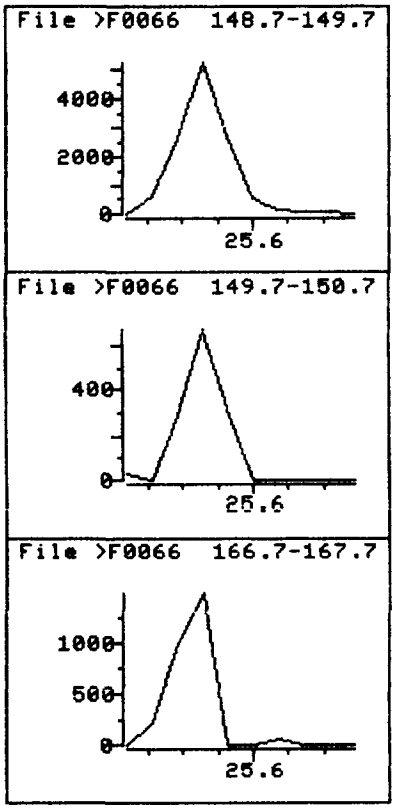


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >F0066::D2
Name: 94ZB19S01
Misc: 940152 10-01-1994 HP5987
Quant Time: 941003 10:46
Injected at: 941001 18:50
Last Qcal Time: 941001 16:59

Quant Output File: ^F0066::QT
Instrument ID: 5985
BTL# 5
Quant ID File: IDF006::D6
Last Calibration: 940901 09:50

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1633
Retention Time: 25.57 min.
Quant Ion : 149.0
Area : 10458
Concentration : 7.57 NG/UL
q-value : 88

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S02

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S02

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0067

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S02

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S02

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0067

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

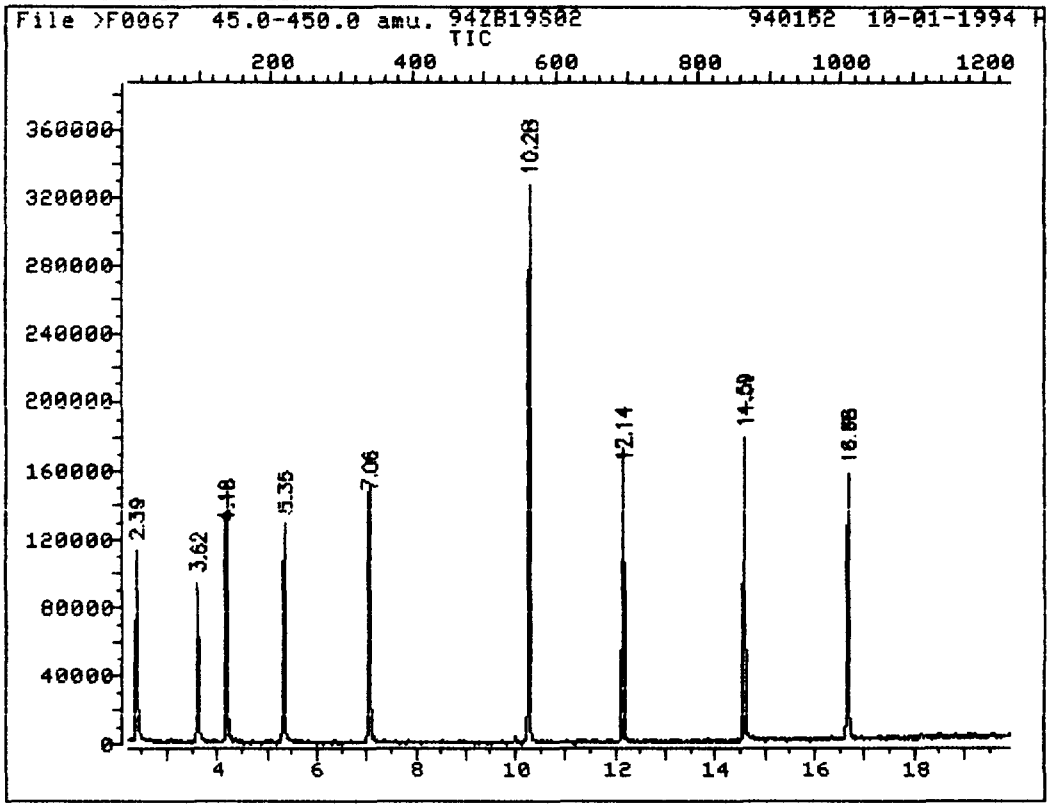
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:49
Output File: ^F0067::QT Injected at: 941001 19:33
Data File: >F0067::D2 Dilution Factor: 1.00000
Name: 94ZB19S02 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 6

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

	Compound	R.T.	Q ion	Area	Conc	Units	η
1)	*1,4-Dichlorobenzene-d4	4.18	152.0	47669	50.00	NG/UL	91
2)	2-Fluorophenol	2.39	112.0	43772	62.83	NG/UL	97
3)	Phenol-d5	3.62	99.0	41609M	69.37	NG/UL	
17)	Nitrobenzene-d5	5.35	82.0	67447	69.10	NG/UL	94
26)	*Naphthalene-d8	7.06	136.0	125460	50.00	NG/UL	84
36)	2-Fluorobiphenyl	10.28	172.0	171336	75.56	NG/UL	94
40)	*Acenaphthene-d10	12.14	164.0	75914	50.00	NG/UL	88
54)	2,4,6-Tribromophenol	14.59	329.9	38822	86.64	NG/UL	96
58)	*Phenanthrene-d10	16.68	188.0	112189	50.00	NG/UL	99
65)	Terphenyl-d14	21.87	244.0	181673	84.98	NG/UL	98
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	3541	1.81	NG/UL	83
70)	*Chrysene-d12	24.90	240.0	98177	50.00	NG/UL	99
76)	*Perylene-d12	28.99	264.0	88153	50.00	NG/UL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

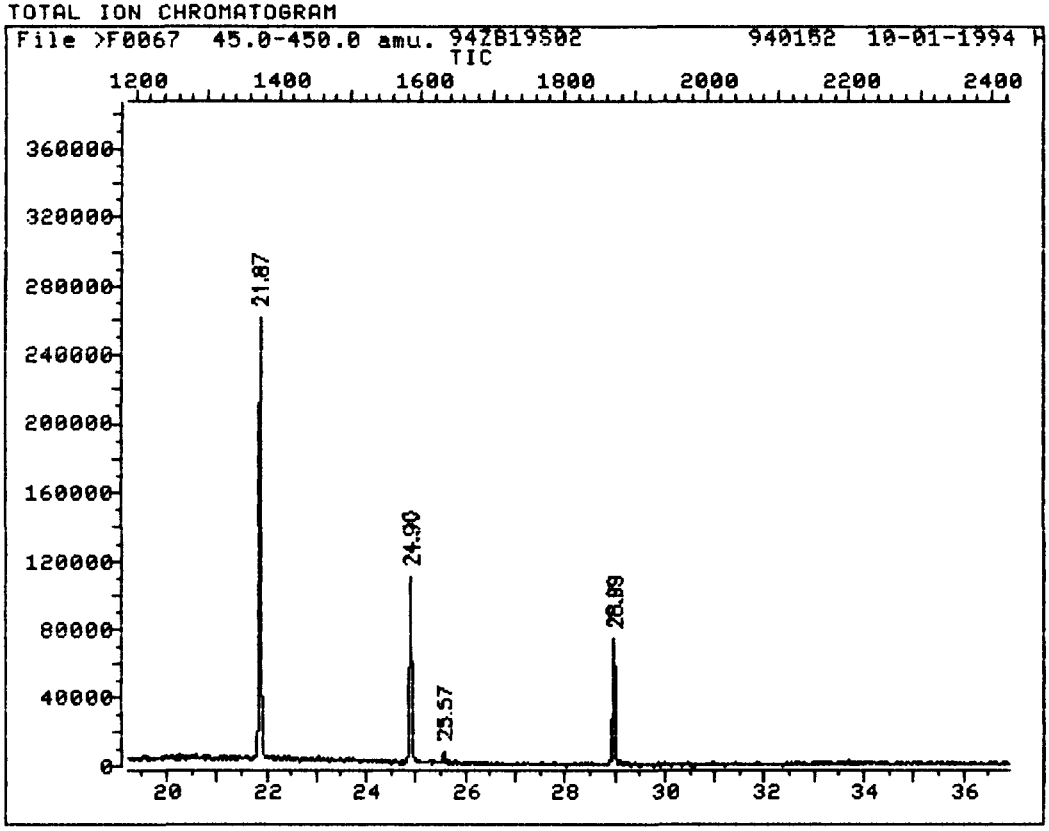


Data File: >F0067::D2 Quant Output File: ^F0067::QT
Name: 94ZB19S02 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 6

Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:49
Injected at: 941001 19:33

TOTAL ION CHROMATOGRAM

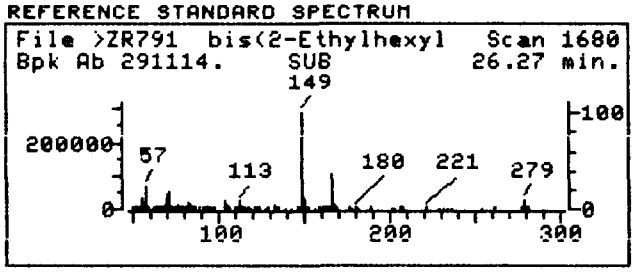


Data File: >F0067::D2 Quant Output File: ^F0067::QT
Name: 94ZB19S02 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 6

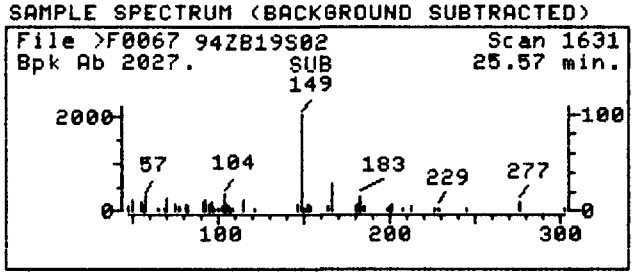
Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:49
Injected at: 941001 19:33

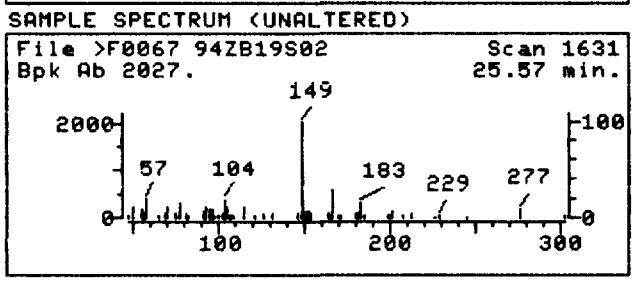
REFERENCE STANDARD SPECTRUM

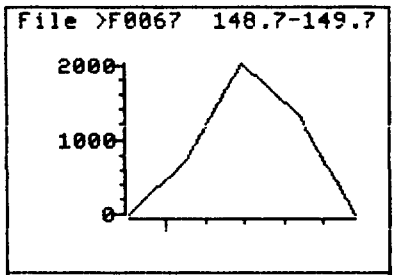


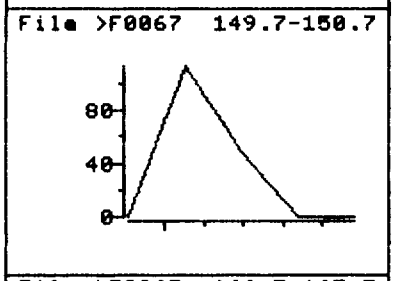
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

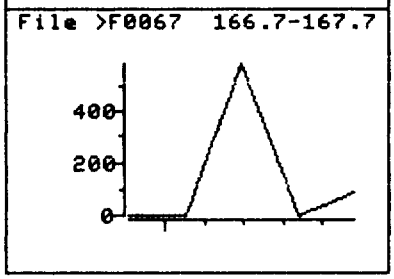


SAMPLE SPECTRUM (UNALTERED)









Data File: >F0067::D2
Name: 94ZB19S02
Misc: 940152 10-01-1994 HP5987
Quant Time: 941003 10:49
Injected at: 941001 19:33
Last Qcal Time: 941001 16:59

Quant Output File: ^F0067::QT
Instrument ID: 5985
BTL# 6
Quant ID File: IDF006::D6
Last Calibration: 940901 09:50

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1631
Retention Time: 25.57 min.
Quant Ion : 149.0
Area : 3541
Concentration : 1.81 NG/UL
q-value : 83

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S03

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S03

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0068

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [X] NO [ ]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S03

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S03

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0068

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

94ZB19S03

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S03

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >F0068

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec.---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

GPC Cleanup: (Y/N) Y pH: NA Dilution Factor: 1.00000

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	928949	2-Hexen-1-ol, (Z)- (8CI9CI)	2.58	15.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

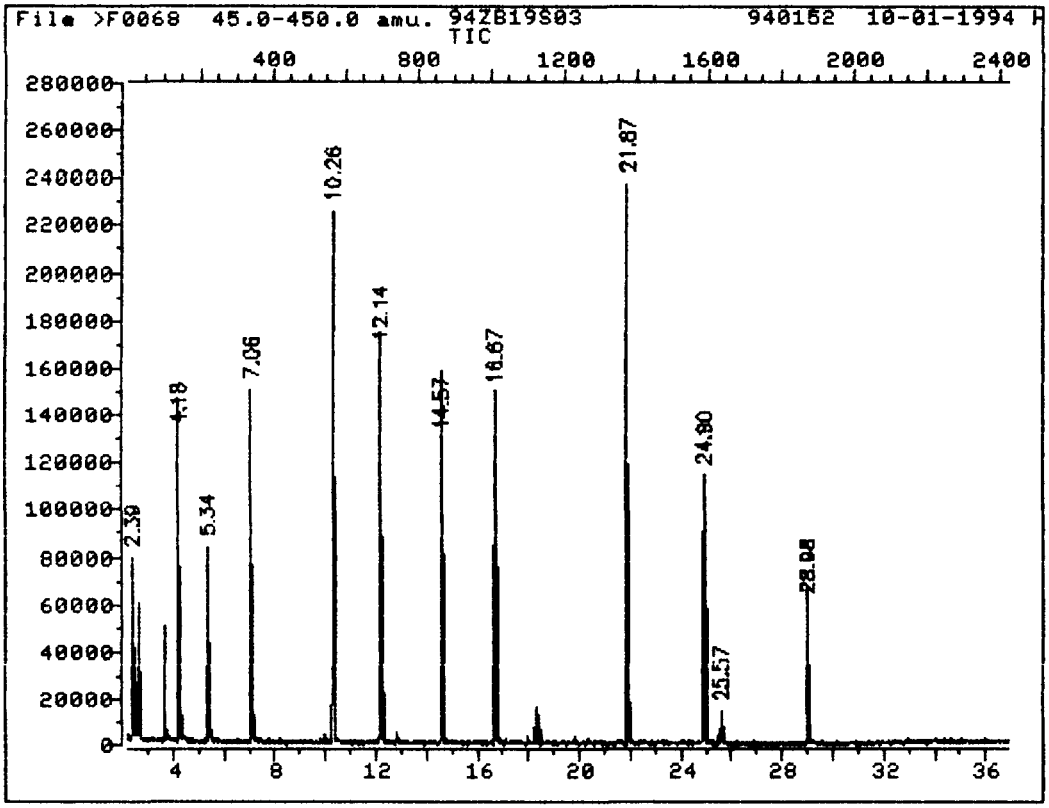
Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941003 10:52
Output File: ^F0068::QT
Injected at: 941001 20:17
Data File: >F0068::D2
Dilution Factor: 1.00000
Name: 94ZB19S03
Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987
BTL# 7

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941001 16:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.18	152.0	44604	50.00	NG/UL	92
2)	2-Fluorophenol	2.39	112.0	31390	48.16	NG/UL	99
17)	Nitrobenzene-d5	5.34	82.0	52698	57.70	NG/UL	90
26)	*Naphthalene-d8	7.06	136.0	124271	50.00	NG/UL	82
36)	2-Fluorobiphenyl	10.26	172.0	132412	58.95	NG/UL	95
40)	*Acenaphthene-d10	12.14	164.0	76887	50.00	NG/UL	87
54)	2,4,6-Tribromophenol	14.57	329.9	35971	79.26	NG/UL	94
58)	*Phenanthrene-d10	16.67	188.0	117942	50.00	NG/UL	97
65)	Terphenyl-d14	21.87	244.0	141644	63.03	NG/UL	97
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	11364	5.54	NG/UL	89
70)	*Chrysene-d12	24.90	240.0	102053	50.00	NG/UL	98
76)	*Perylene-d12	28.98	264.0	68809	50.00	NG/UL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

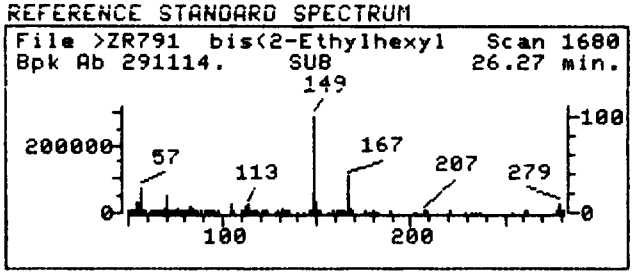


Data File: >F0068::D2 Quant Output File: ^F0068::QT
Name: 94ZB19S03 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 7

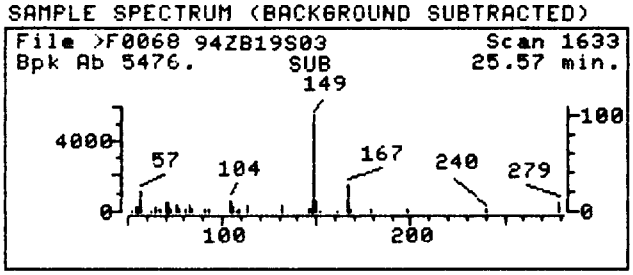
Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:52
Injected at: 941001 20:17

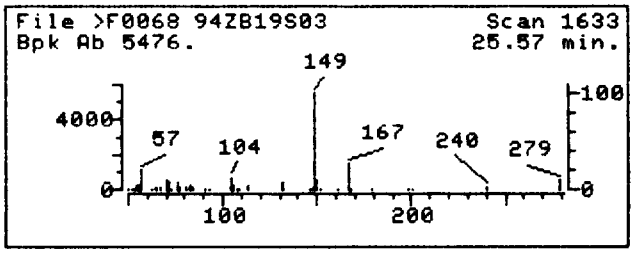
REFERENCE STANDARD SPECTRUM

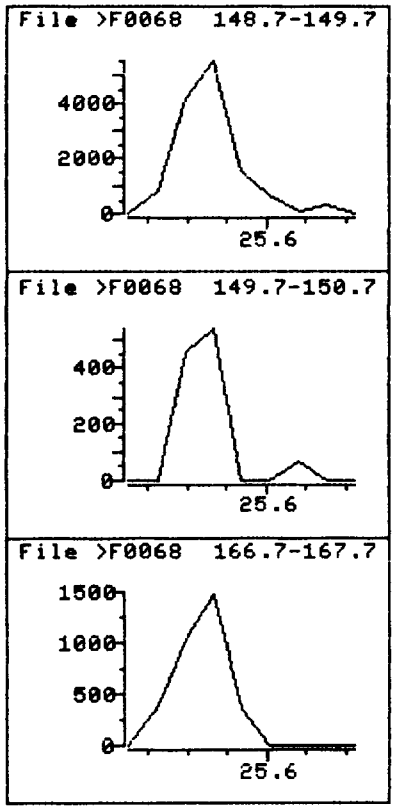


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >F0068::D2
Name: 94ZB19S03
Misc: 940152 10-01-1994 HP5987
Quant Time: 941003 10:52
Injected at: 941001 20:17
Last Qcal Time: 941001 16:59

Quant Output File: ^F0068::QT
Instrument ID: 5985
BTL# 7
Quant ID File: IDF006::D6
Last Calibration: 940901 09:50

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1633
Retention Time: 25.57 min.
Quant Ion : 149.0
Area : 11364
Concentration : 5.54 NG/UL
q-value : 89

MS data file header from : >F0068::D2

Sample: 94ZB19S03 Operator: ZIYAD SUPER GRP. 10/01/94 20:17
Misc : 940152 10-01-1994 HP5987 BTL# 7
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 7 Equip ID: 5985
Method file: TOXIC6 Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	65.	320.	0.	0.	0.
Chromatographic times, min. :	1.0	60.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0068 94ZB19S03 940152 10-01-1994 HP5987
45.01 450.0 CLP TIC
Upslope: .2000 Area Reject: 21356. Max Peaks: 3 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IF0068 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.58	20	26	36	57753	143126	109084	100.00	46.475
2	3.62	95	99	105	48611	108284	92573	84.86	39.441
3	18.31	1122	1125	1129	15217	38689	33057	30.30	14.084

Sum of corrected areas: 234714.

Summary of Unknowns PBM Library Search and Quantitation

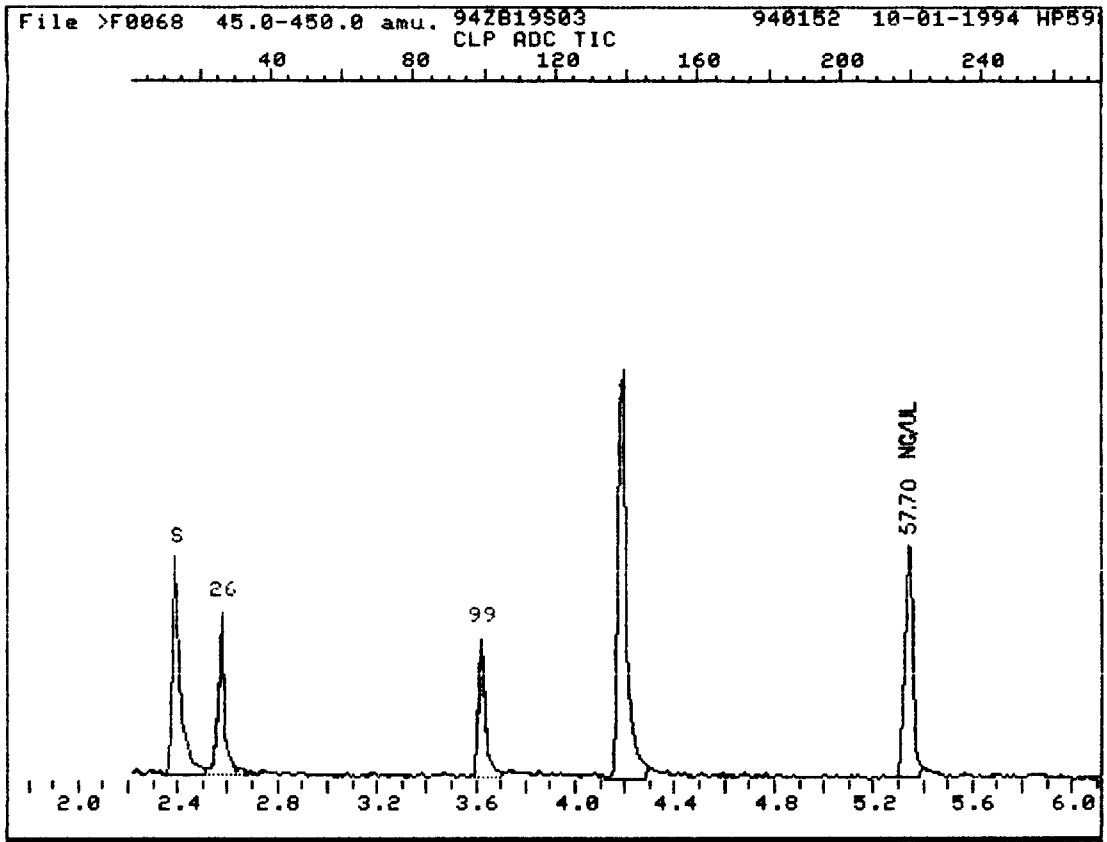
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	366033.	4.18	2.22 - 5.62
2	50.0	360843.	7.06	5.62 - 9.60
3	50.0	473814.	12.14	9.60 - 14.41
4	50.0	409078.	16.67	14.41 - 20.79
5	50.0	315154.	24.90	20.79 - 26.94
6	50.0	213559.	28.98	26.94 - 36.91

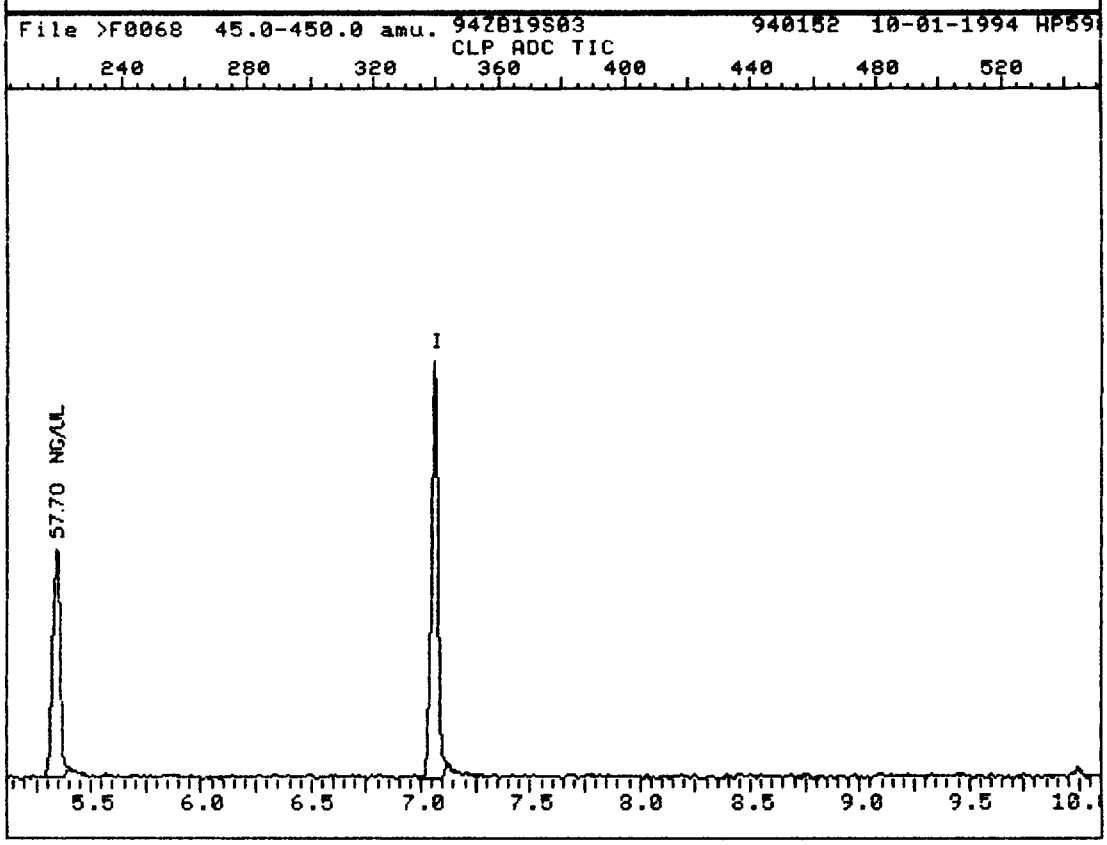
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

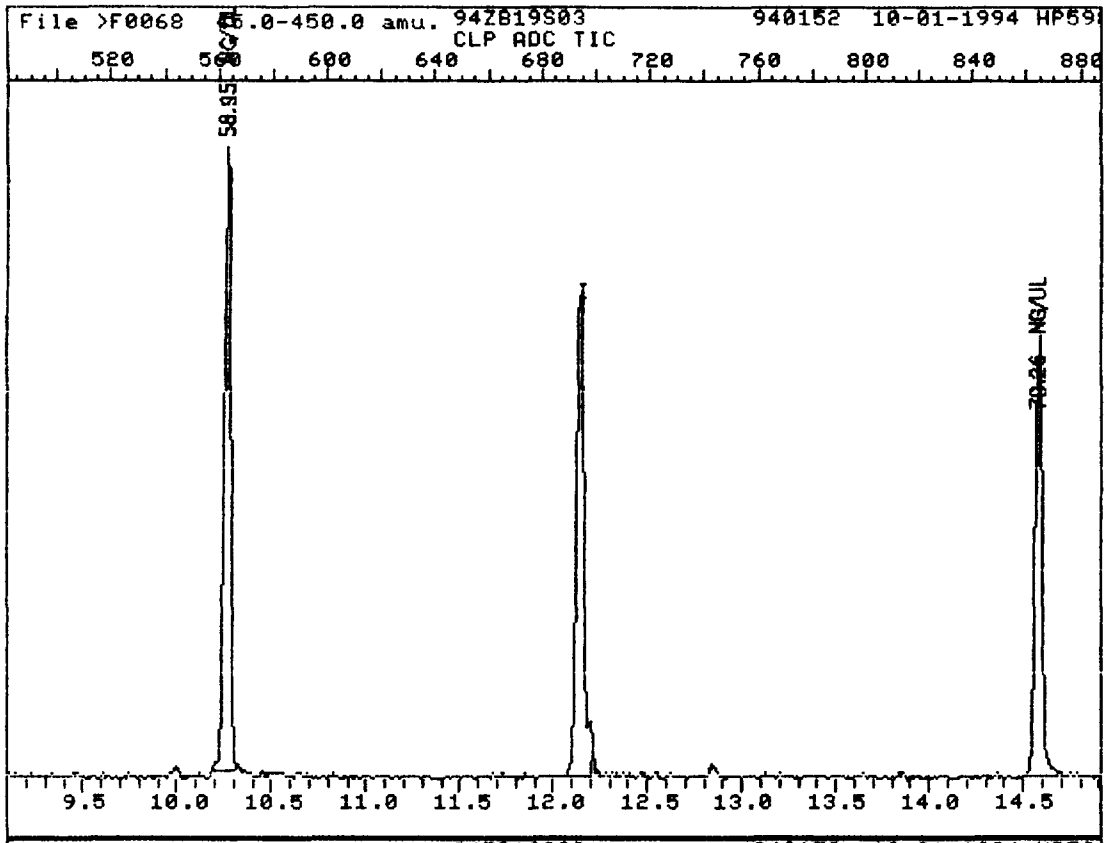
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

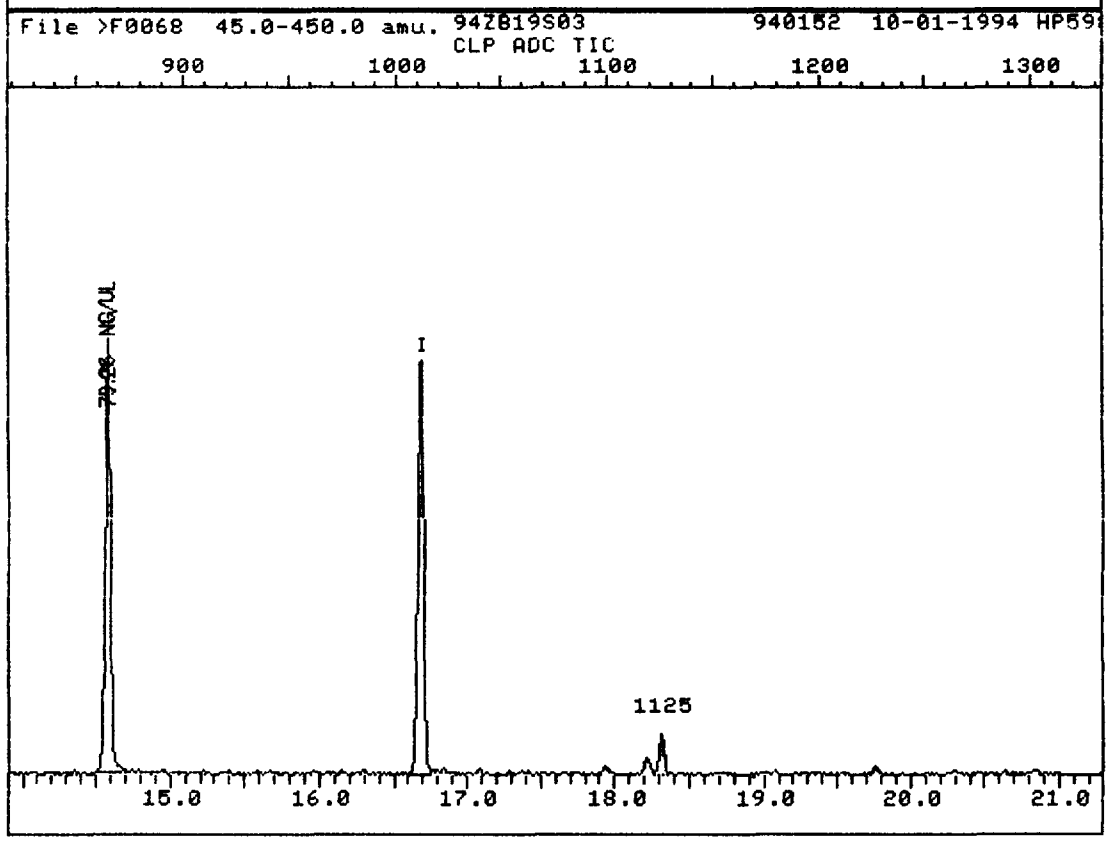
10:53 AM WED., 12 OCT., 1994



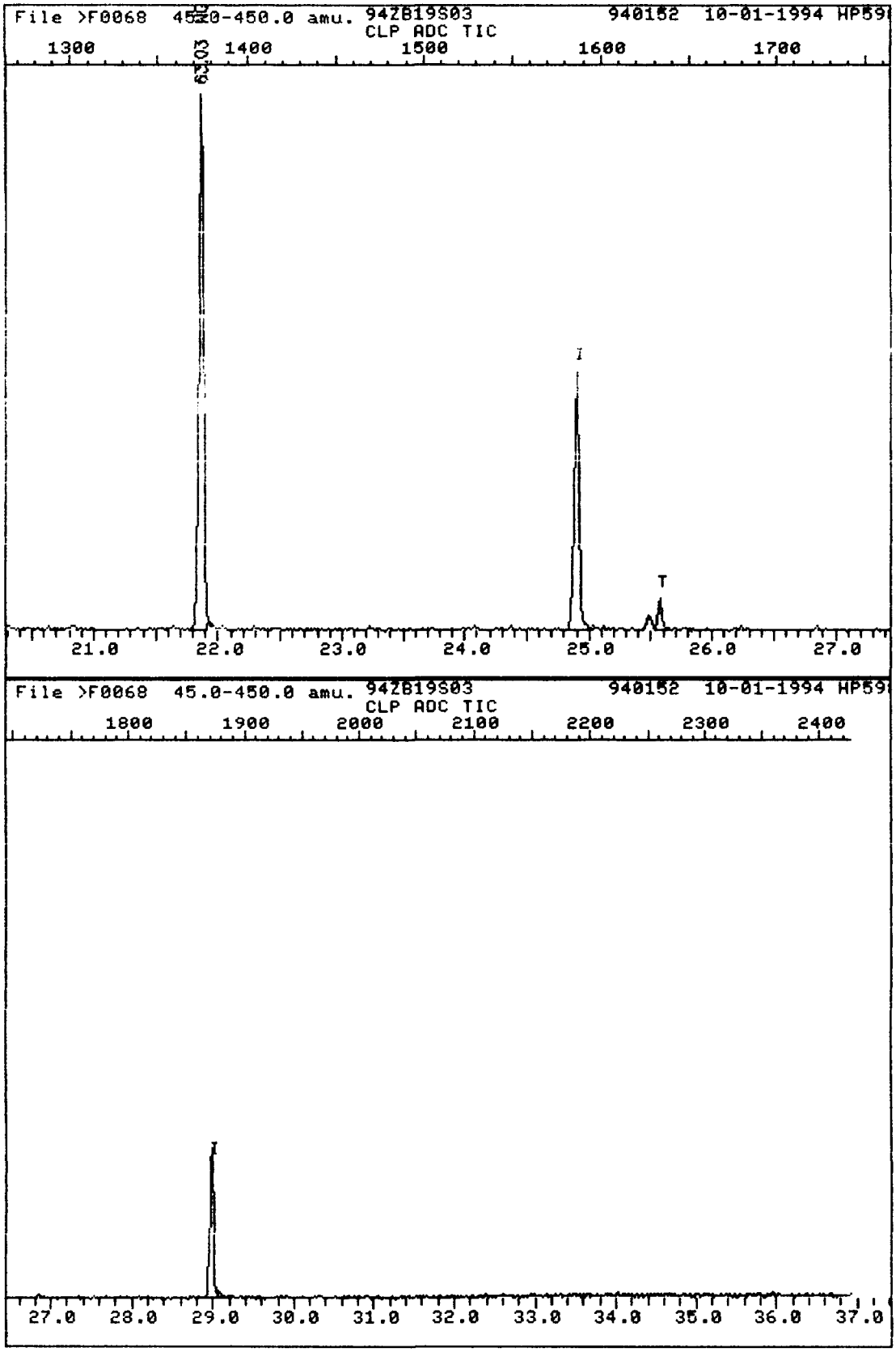


Instrument ID: 5985 Analyzed on: 10/01/94 20:17

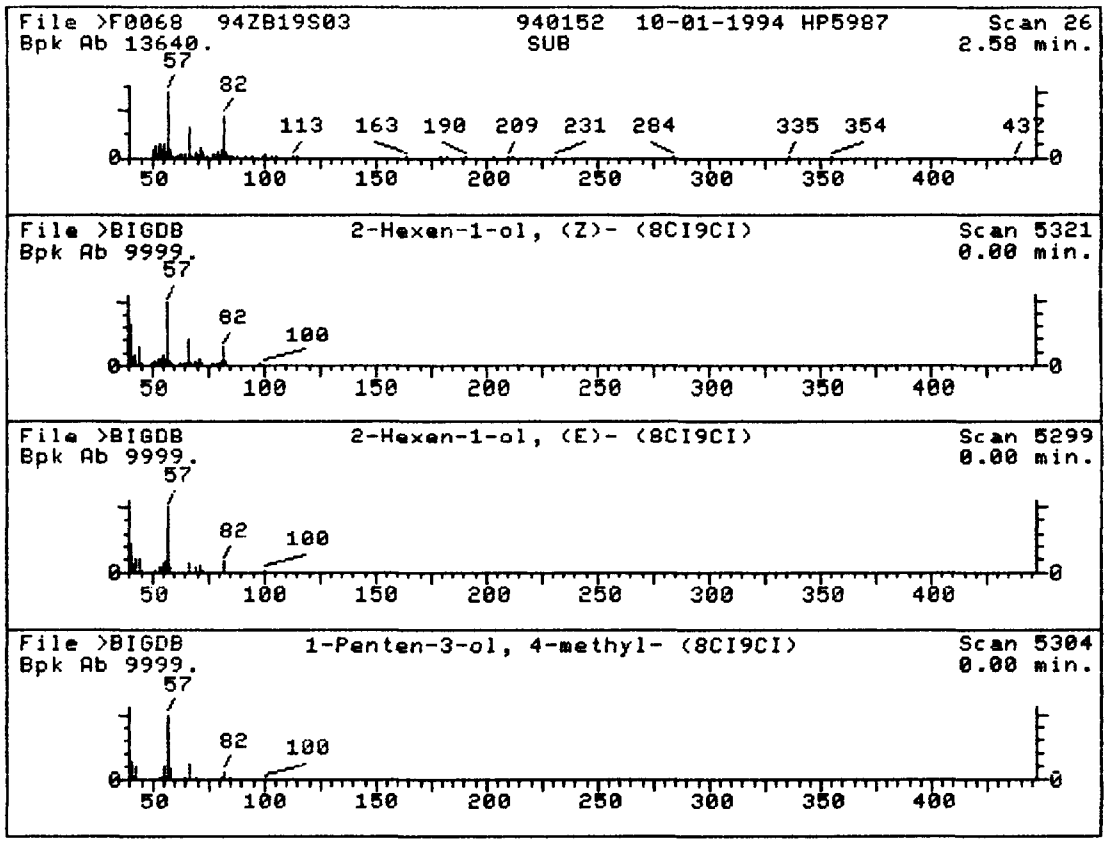




Instrument ID: 5985 Analyzed on: 10/01/94 20:17



Instrument ID: 5985 Analyzed on: 10/01/94 20:17

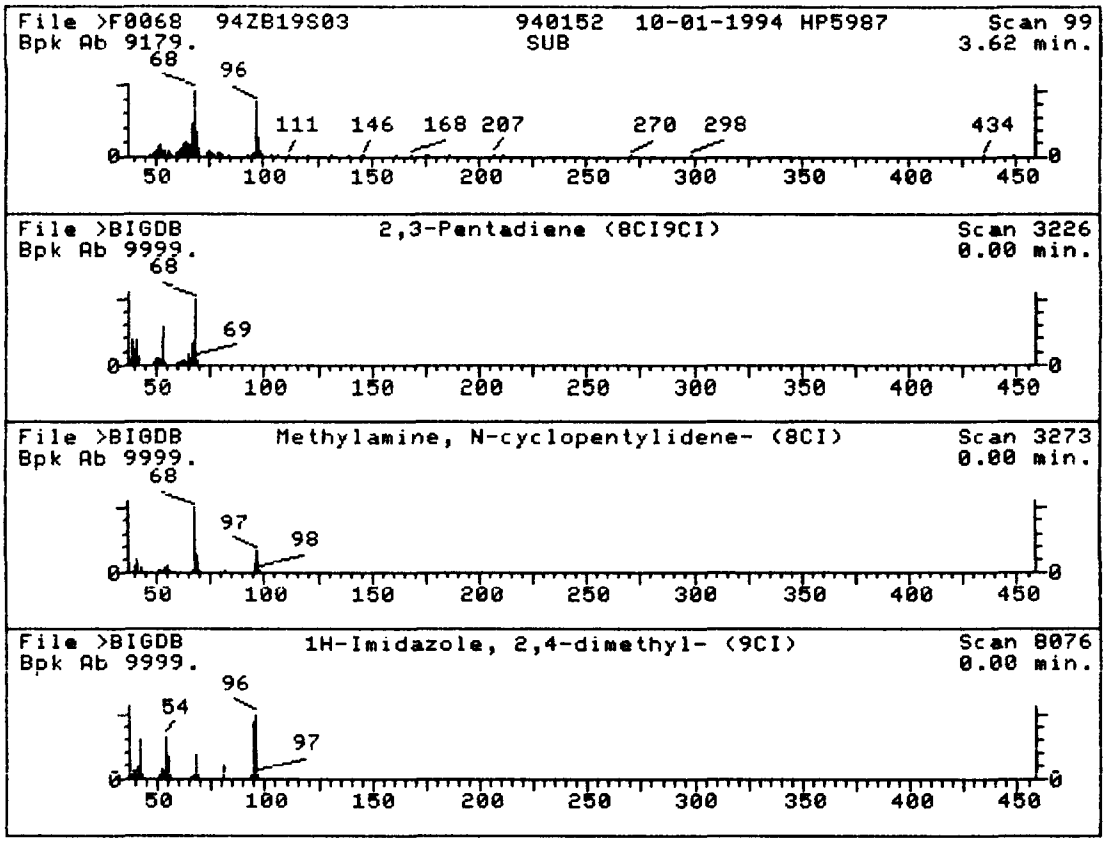


Instrument ID: 5985 Analyzed on: 10/01/94 20:17
Result 1 in PBM results file: LF0068
Retention Time: 2.58 Area: 109084 Tentative Conc: 15.00
The unknown area is 29.80% of the nearest internal standard

1. 2-Hexen-1-ol, (Z)- (8CI9CI) 100 C6H12O
2. 2-Hexen-1-ol, (E)- (8CI9CI) 100 C6H12O
3. 1-Penten-3-ol, 4-methyl- (8CI9CI) 100 C6H12O
4. Cyclopentanol, 2-methyl- (8CI9CI) 100 C6H12O

Sample file: >F0068 Spectrum #: 26
Search speed: 1 Tilting option: S No. of ion ranges searched: 54

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52*	928949	5321	"BIGDB	37	61	1	0	100	20	20	19
2.	29*	928950	5299	"BIGDB	32	61	1	0	100	41	8	17
3.	25*	4798452	5304	"BIGDB	27	57	1	0	72	47	7	15
4.	11*	24070777	5359	"BIGDB	25	75	1	0	55	62	2	14



phenol d-5
Breakdown
ZR 10-2-94

Instrument ID: 5985 Analyzed on: 10/01/94 20:17
Result 2 in PBM results file: LF0068
Retention Time: 3.62 Area: 92573 Tentative Conc: 13.00
The unknown area is 25.29% of the nearest internal standard

1.	2,3-Pentadiene (8CI9CI)	68	C5H8
2.	Methylamine, N-cyclopentylidene- (8CI)	97	C6H11N
3.	1H-Imidazole, 2,4-dimethyl- (9CI)	96	C5H8N2
4.	1,2-Pentadiene (8CI9CI)	68	C5H8
5.	4H-Pyran-4-one (8CI9CI)	96	C5H4O2
6.	1H-Pyrazole, 1,3-dimethyl- (9CI)	96	C5H8N2

Sample file: >F0068 Spectrum #: 99
Search speed: 1 Tilting option: S No. of ion ranges searched: 51

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	30*	591968	3226	"BIGDB	47	56	1	0	100	47	10	24
2.	15*	10599834	3273	"BIGDB	21	57	2	0	84	57	3	13
3.	15*	930621	8076	"BIGDB	26	78	3	0	82	57	3	13
4.	11*	591957	3225	"BIGDB	48	66	2	0	97	62	2	19
5.	11*	108974	8066	"BIGDB	26	62	3	0	72	62	2	13
6.	11*	694484	8073	"BIGDB	26	68	2	0	75	63	2	14

Instrument ID: 5985 Analyzed on: 10/01/94 20:17

Retention Time: 18.31 Area: 33057 Tentative Conc: 4.00

The unknown area is 8.08% of the nearest internal standard

This peak is less than 10% of the nearest internal standard.

No library search has been performed on this peak.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S05

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S05

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0069

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	UJ
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	UJ
95-48-7	2-Methylphenol	5	UJ
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	UJ
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	UJ
105-67-9	2,4-Dimethylphenol	5	UJ
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	UJ
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	UJ
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	UJ
95-95-4	2,4,5-Trichlorophenol	20	UJ
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

BP 10-18-94

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S05

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S05

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0069

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

BP 10-18-94

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S05

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S05

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0069

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S05

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S05

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0069

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/01/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S05
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:29-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
108-95-2	Phenol	5	UJ
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	UJ
95-48-7	2-Methylphenol	5	UJ
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	UJ
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	UJ
105-67-9	2,4-Dimethylphenol	5	UJ
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	UJ
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	UJ
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	UJ
95-95-4	2,4,5-Trichlorophenol	20	UJ
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5	U
51-28-5	2,4-Dinitrophenol	20	UJ
100-02-7	4-Nitrophenol	20	UJ
132-64-9	Dibenzofuran	5	U
606-20-2	2,6-Dinitrotoluene	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	UJ
85-01-8	Phenanthrene	5	U
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	5	U
85-68-7	Butylbenzylphthalate	5	UJ

EPA RLIMS CRL - REGION V
FINAL RESULTS REPORT
Parameter:ABN

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING

Method:A625SWLCS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19S05
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:23-SEP-94

Date Received:22-SEP-94
Date Analyzed:29-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Analyzed by: _____

Team Leader: _____

Balu
10-18-94
VJ is not necessary for acid cmpds.

QUANT REPORT

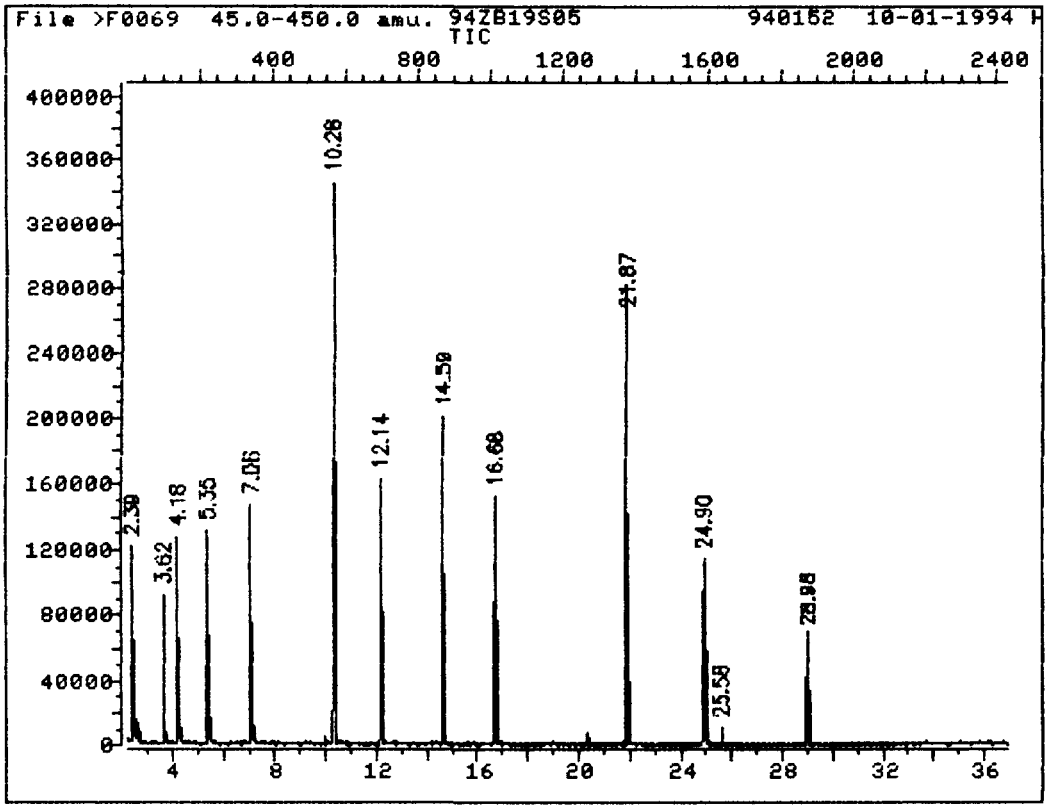
Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941003 10:54
Output File: ^F0069::QT
Injected at: 941001 21:01
Data File: >F0069::D3
Dilution Factor: 1.00000
Name: 94ZB19S05
Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987
BTL# 8

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941001 16:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.18	152.0	42842	50.00	NG/UL	98
2)	2-Fluorophenol	2.39	112.0	47905	76.52	NG/UL	98
3)	Phenol-d5	3.62	99.0	37960M	70.42	NG/UL	
17)	Nitrobenzene-d5	5.35	82.0	74473	84.89	NG/UL	85
26)	*Naphthalene-d8	7.06	136.0	115633	50.00	NG/UL	78
36)	2-Fluorobiphenyl	10.28	172.0	179084	85.69	NG/UL	93
40)	*Acenaphthene-d10	12.14	164.0	73800	50.00	NG/UL	96
54)	2,4,6-Tribromophenol	14.59	329.9	42976	98.65	NG/UL	98
58)	*Phenanthrene-d10	16.68	188.0	112742	50.00	NG/UL	98
65)	Terphenyl-d14	21.87	244.0	195943	91.21	NG/UL	96
69)	bis(2-Ethylhexyl)phthalate	25.58	149.0	8823	4.50	NG/UL	87
70)	*Chrysene-d12	24.90	240.0	100018	50.00	NG/UL	90
76)	*Perylene-d12	28.98	264.0	83459	50.00	NG/UL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

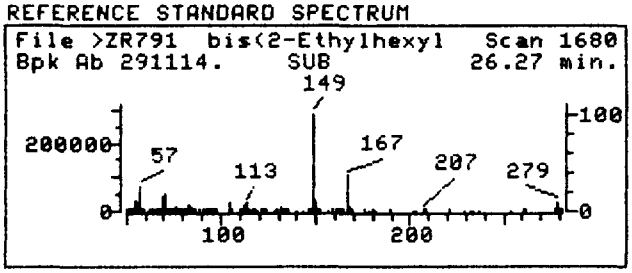


Data File: >F0069::D3 Quant Output File: ^F0069::QT
Name: 94ZB19S05 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 8

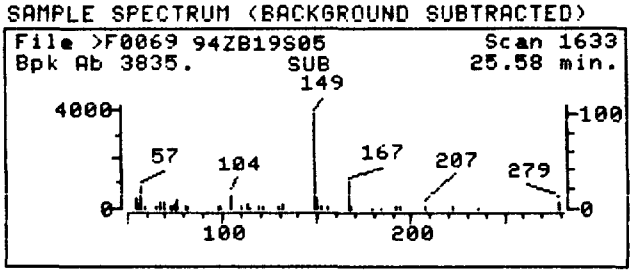
Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941001 16:59

Operator ID: ZIYAD
Quant Time : 941003 10:54
Injected at: 941001 21:01

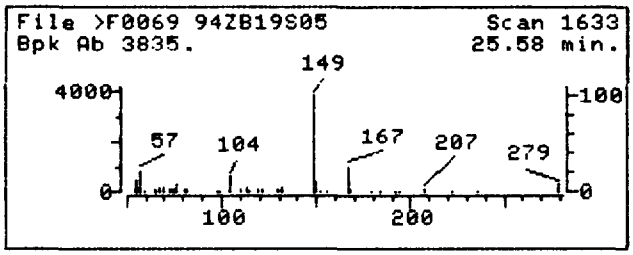
REFERENCE STANDARD SPECTRUM

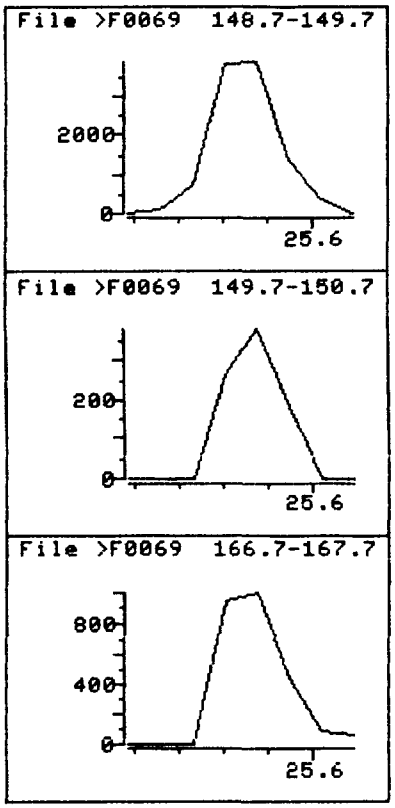


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >F0069::D3 Quant Output File: ^F0069::QT
Name: 94ZB19S05 Instrument ID: 5985
Misc: 940152 10-01-1994 HP5987 BTL# 8
Quant Time: 941003 10:54 Quant ID File: IDF006::D6
Injected at: 941001 21:01 Last Calibration: 940901 09:50
Last Qcal Time: 941001 16:59

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1633
Retention Time: 25.58 min.
Quant Ion : 149.0
Area : 8823
Concentration : 4.50 NG/UL
q-value : 87

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S06

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S06

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0117

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [X] NO [ ]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S06

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S06

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0117

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

94ZB19S06

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S06

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >F0117

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec.---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

GPC Cleanup: (Y/N) Y pH: NA Dilution Factor: 1.00000

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	928949	2-Hexen-1-ol, (Z)- (8CI9CI)	2.52	23.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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30.					

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0117::QT
Data File: >F0117::D3
Name: 94ZB19S06
Misc: 10-06-1994 HP5987

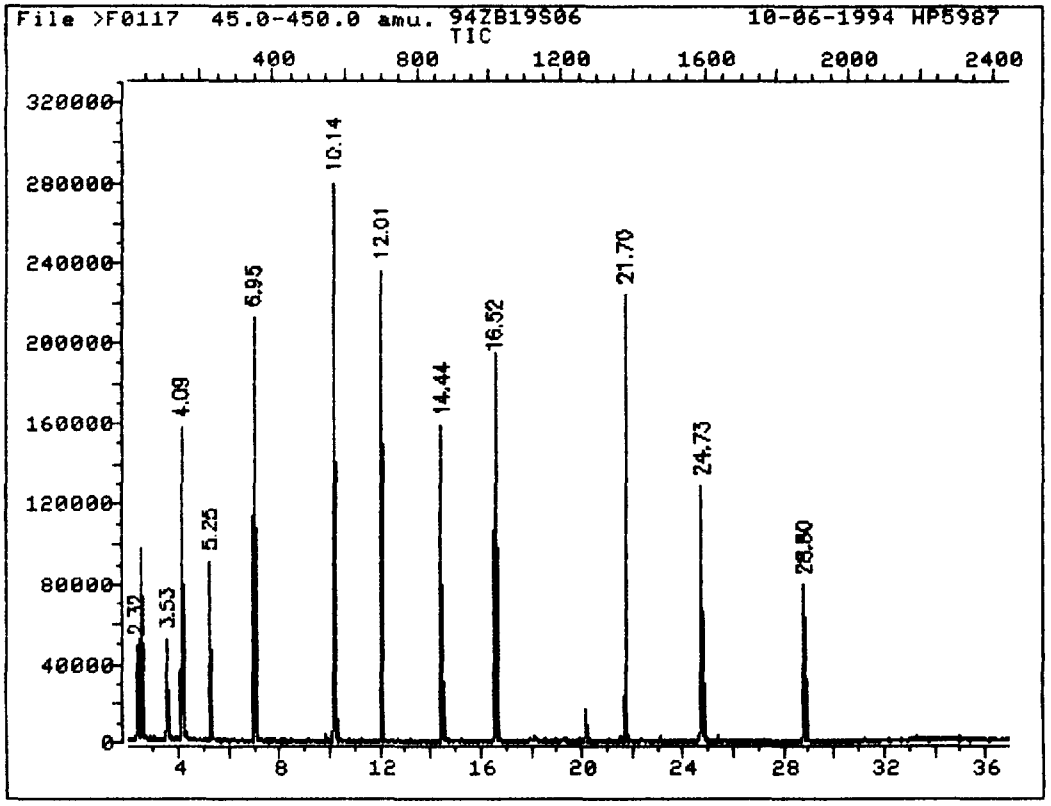
Quant Rev: 7
Quant Time: 941007 12:52
Injected at: 941006 22:55
Dilution Factor: 1.00000
Instrument ID: 5985
BTL#10

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.09	152.0	56217	50.00	NG/UL	92
2)	2-Fluorophenol	2.32	112.0	27801	46.11	NG/UL	46
3)	Phenol-d5	3.53	99.0	13911	28.80	NG/UL	83
17)	Nitrobenzene-d5	5.25	82.0	43823	48.75	NG/UL	97
26)	*Naphthalene-d8	6.95	136.0	142963	50.00	NG/UL	75
36)	2-Fluorobiphenyl	10.14	172.0	148995	49.18	NG/UL	95
40)	*Acenaphthene-d10	12.01	164.0	93370	50.00	NG/UL	82
54)	2,4,6-Tribromophenol	14.44	329.9	35407	64.20	NG/UL	95
58)	*Phenanthrene-d10	16.52	188.0	142052	50.00	NG/UL	99
65)	Terphenyl-d14	21.70	244.0	146207	60.23	NG/UL	96
70)	*Chrysene-d12	24.73	240.0	109168	50.00	NG/UL	96
76)	*Perylene-d12	28.80	264.0	91131	50.00	NG/UL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F0117::D3 Quant Output File: ^F0117::QT
Name: 94ZB19S06 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL#10

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941007 12:52
Injected at: 941006 22:55

MS data file header from : >F0117::D3

Sample: 94ZB19S06 Operator: ZIYAD SUPER GRP. 10/06/94 22:55
Misc : 10-06-1994 HP5987 BTL#10
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 10 Equip ID: 5985
Method file: TOXIC6 Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	65.	320.	0.	0.	0.
Chromatographic times, min. :	1.0	60.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0117 94ZB19S06 10-06-1994 HP5987
45.01 450.0 CLP TIC
Upslope: .2000 Area Reject: 22554. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IF0117 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.52	31	36	48	96583	214447	186056	100.00	79.488
2	20.13	1262	1268	1275	16518	51446	48013	25.81	20.512

Sum of corrected areas: 234069.

Summary of Unknowns PBM Library Search and Quantitation

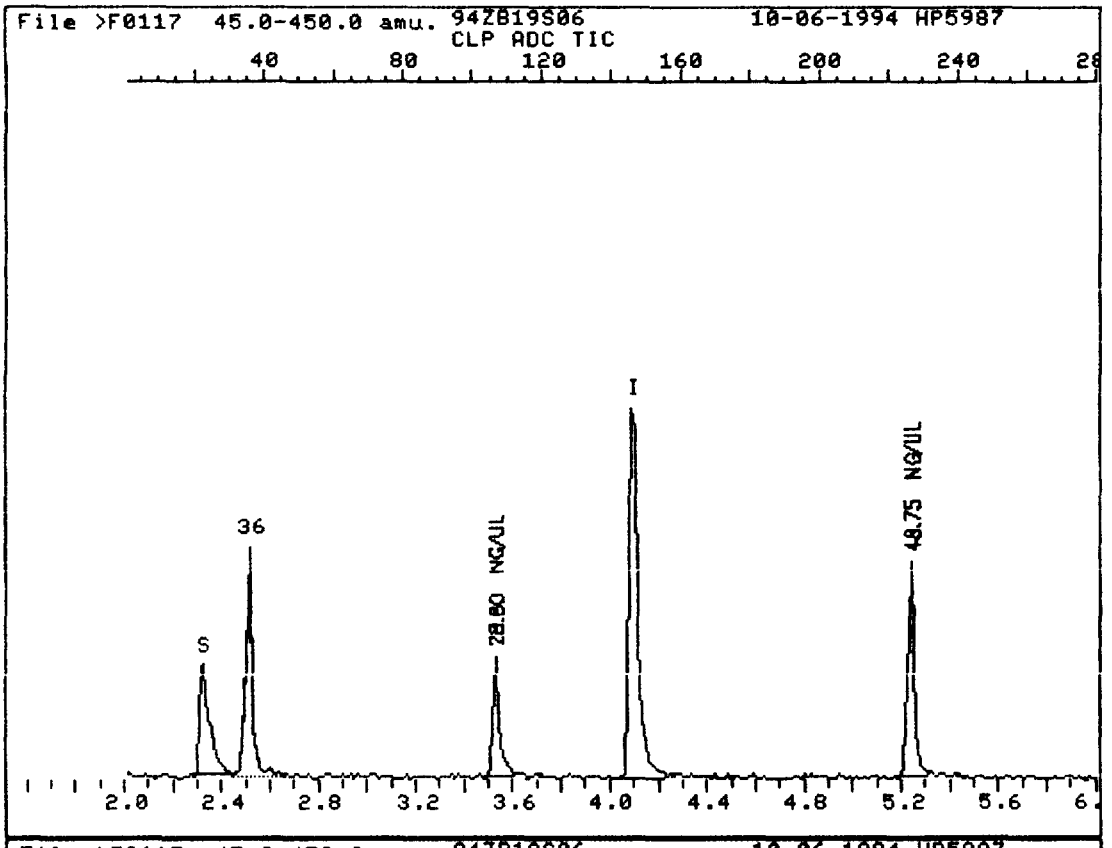
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	405107.	4.09	2.02 - 5.52
2	50.0	416544.	6.95	5.52 - 9.48
3	50.0	535791.	12.01	9.48 - 14.27
4	50.0	507320.	16.52	14.27 - 20.63
5	50.0	340745.	24.73	20.63 - 26.76
6	50.0	225545.	28.80	26.76 - 36.93

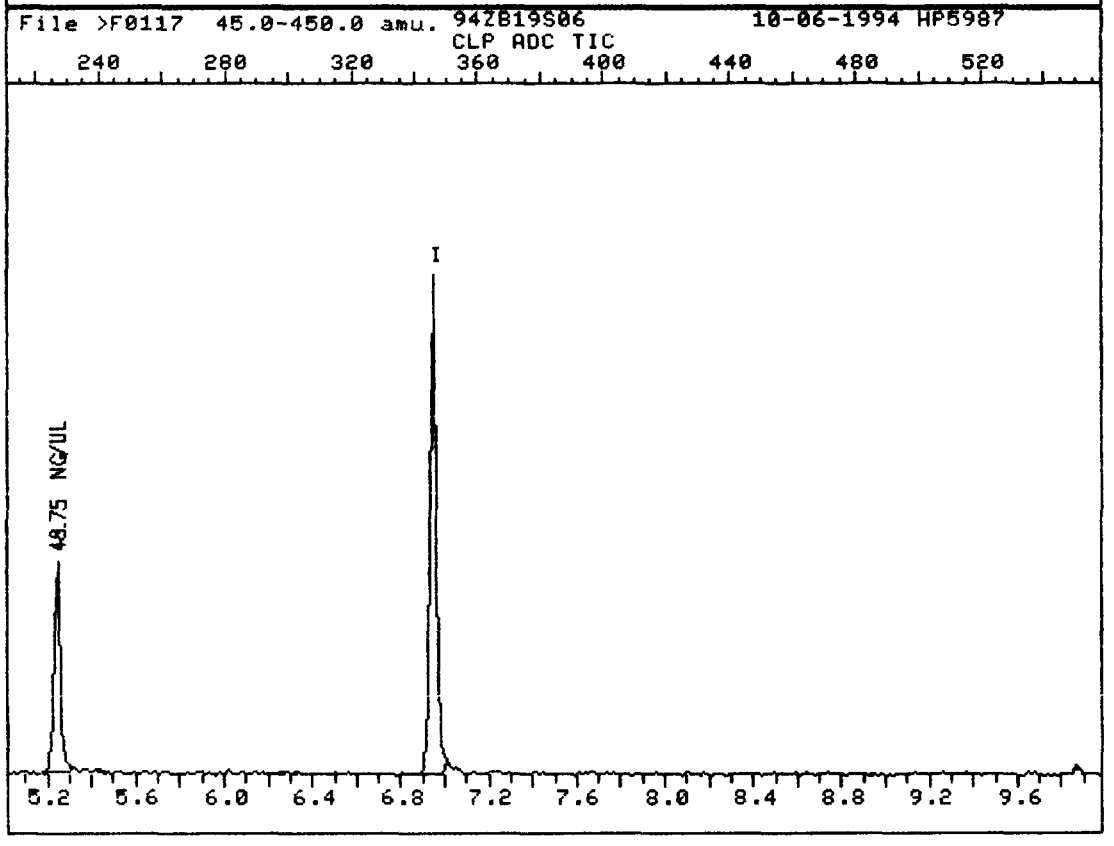
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

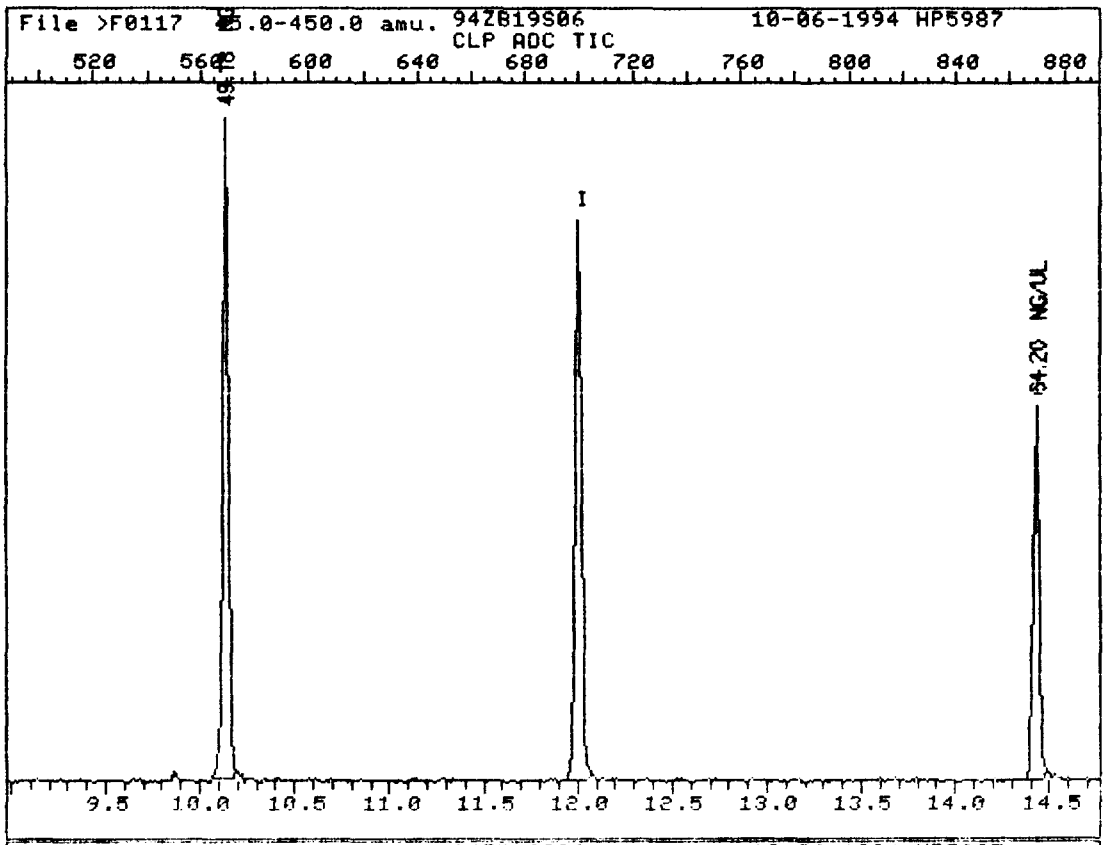
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

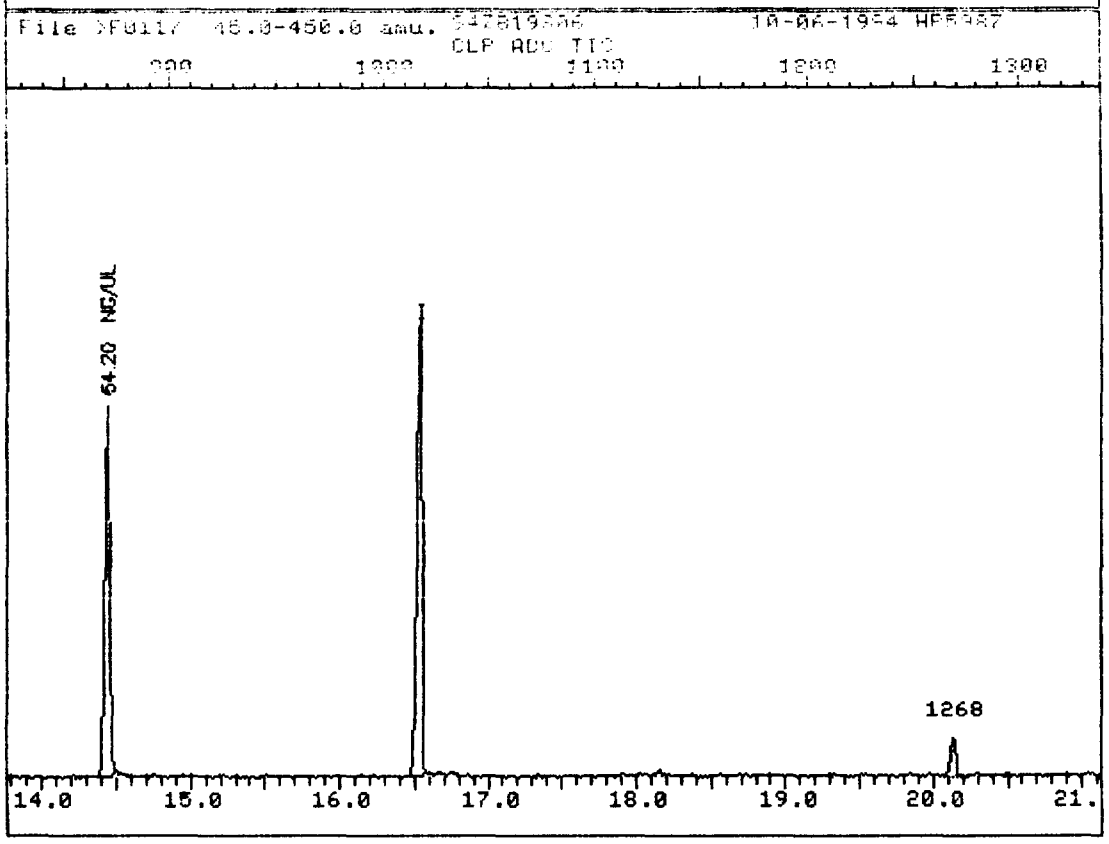
11:31 AM WED., 12 OCT., 1994



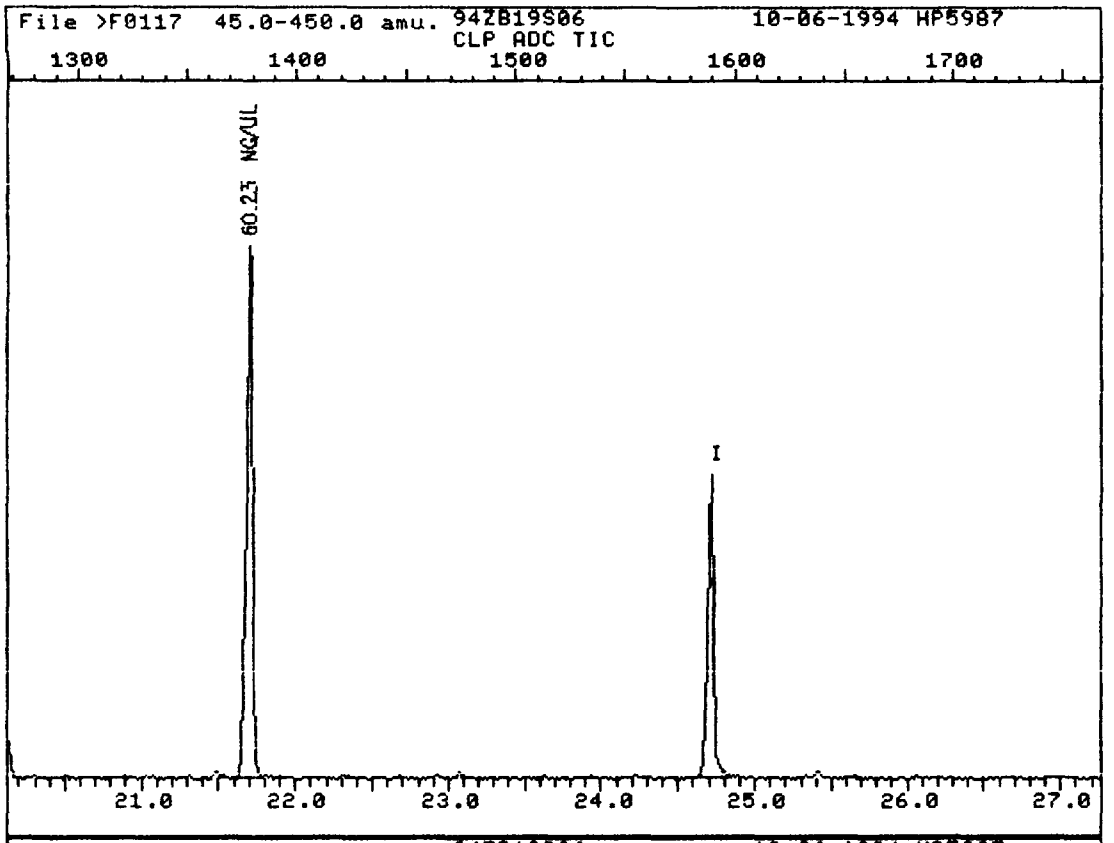


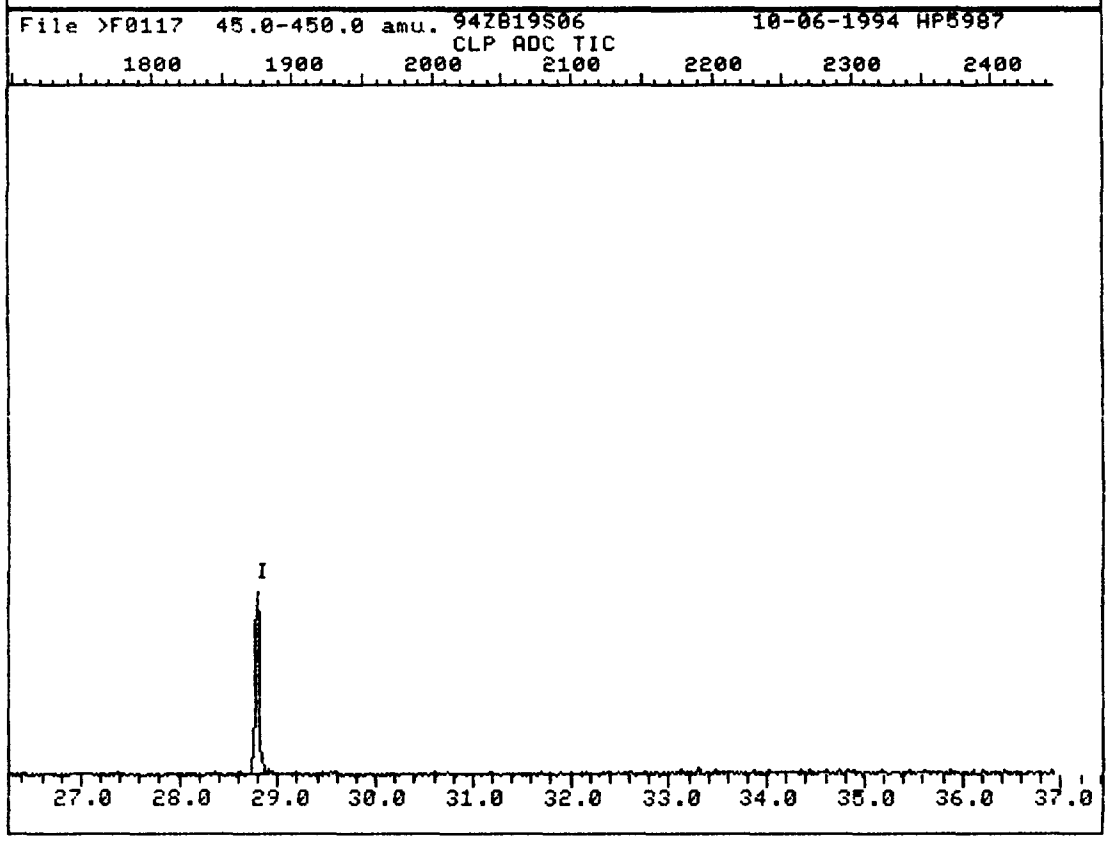
Instrument ID: 5985 Analyzed on: 10/06/94 22:55



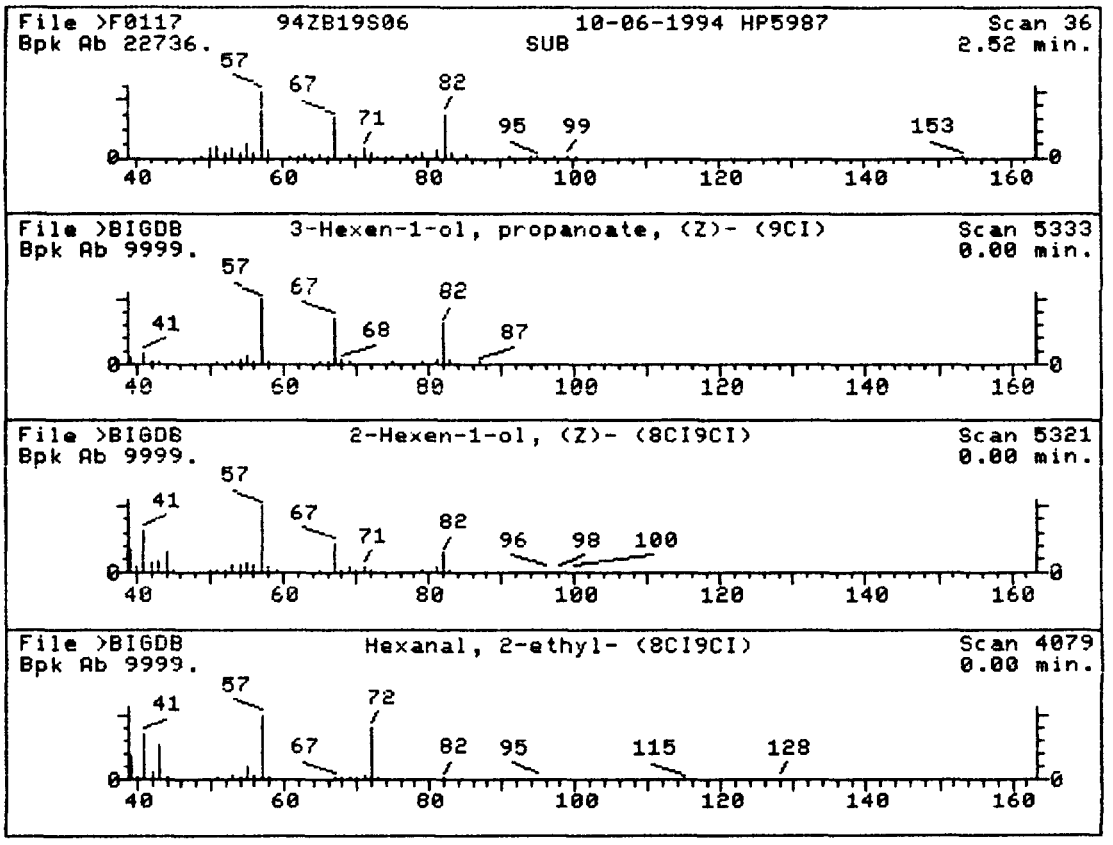


Instrument ID: 5985 Analyzed on: 10/06/94 22:55





Instrument ID: 5985 Analyzed on: 10/06/94 22:55



Instrument ID: 5985 Analyzed on: 10/06/94 22:55
Result 1 in PBM results file: LF0117
Retention Time: 2.52 Area: 186056 Tentative Conc: 23.00
The unknown area is 45.93% of the nearest internal standard

1.	3-Hexen-1-ol, propanoate, (Z)- (9CI)	156	C9H16O2
2.	2-Hexen-1-ol, (Z)- (8CI9CI)	100	C6H12O
3.	Hexanal, 2-ethyl- (8CI9CI)	128	C8H16O
4.	Cyclopentanol, 2-methyl- (8CI9CI)	100	C6H12O
5.	Cyclohexanol (ACN)(8CI9CI)	100	C6H12O
6.	1,3-Pentadiene, 2-methyl- (8CI9CI)	82	C6H10

Sample file: >F0117 Spectrum #: 36
Search speed: 1 Tilting option: S No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60	33467742	5333	"BIGDB	38	47	2	0	85	14	30	13
2.	33*	928949	5321	"BIGDB	23	75	0	0	71	33	12	16
3.	25	123057	4079	"BIGDB	36	49	2	0	100	48	7	12
4.	15*	24070777	5359	"BIGDB	20	65	1	0	41	60	3	14
5.	15*	108930	5295	"BIGDB	20	80	0	0	54	60	3	15
6.	12*	1118587	5300	"BIGDB	31	60	0	0	41	64	2	24

Instrument ID: 5985 Analyzed on: 10/06/94 22:55

Retention Time: 20.13 Area: 48013 Tentative Conc: 5.00

The unknown area is 9.46% of the nearest internal standard

This peak is less than 10% of the nearest internal standard.

No library search has been performed on this peak.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19R07

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19R07

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0118

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [X] NO [ ]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19R07

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19R07

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0118

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

94ZB19R07

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESA

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19R07

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >F0118

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec.---- dec. ---- Date Extracted: --/--/--

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 1.00000

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	928949	2-Hexen-1-ol, (Z)- (8CI9CI)	2.53	43.	
2.		Unknown	12.14	13.	
3.		Unknown Cyclohexane	18.17	8.	
4.					
5.					
6.					
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QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0118::QT
Data File: >F0118::D3
Name: 94ZB19R07
Misc: 10-06-1994 HP5987

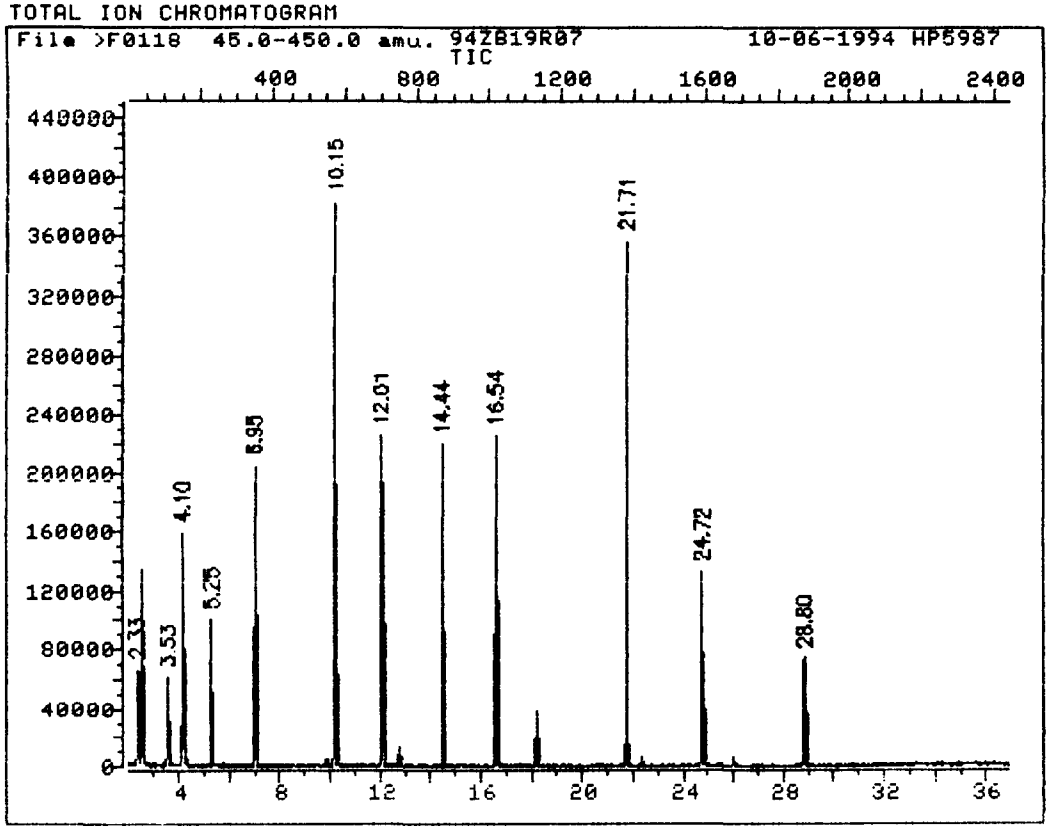
Quant Rev: 7
Quant Time: 941007 12:56
Injected at: 941006 23:39
Dilution Factor: 1.00000
Instrument ID: 5985
BTL#11

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.10	152.0	52221	50.00	NG/UL	82
2)	2-Fluorophenol	2.33	112.0	34755	62.05	NG/UL	39
3)	Phenol-d5	3.53	99.0	19431	43.31	NG/UL	90
17)	Nitrobenzene-d5	5.25	82.0	51933	62.19	NG/UL	87
26)	*Naphthalene-d8	6.95	136.0	137929	50.00	NG/UL	71
36)	2-Fluorobiphenyl	10.15	172.0	199675	68.32	NG/UL	97
40)	*Acenaphthene-d10	12.01	164.0	93792	50.00	NG/UL	84
54)	2,4,6-Tribromophenol	14.44	329.9	54521	98.41	NG/UL	97
58)	*Phenanthrene-d10	16.54	188.0	147964	50.00	NG/UL	99
65)	Terphenyl-d14	21.71	244.0	214571	84.86	NG/UL	95
70)	*Chrysene-d12	24.72	240.0	110911	50.00	NG/UL	92
76)	*Perylene-d12	28.80	264.0	97469	50.00	NG/UL	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F0118::D3 Quant Output File: ^F0118::QT
Name: 94ZB19R07 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL#11

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941007 12:56
Injected at: 941006 23:39

MS data file header from : >F0118::D3

Sample: 94ZB19R07 Operator: ZIYAD SUPER GRP. 10/06/94 23:39
Misc : 10-06-1994 HP5987 BTL#11
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 11 Equip ID: 5985
Method file: TOXIC6 Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	65.	320.	0.	0.	0.
Chromatographic times, min. :	1.0	60.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0118 94ZB19R07 10-06-1994 HP5987
45.01 450.0 CLP TIC
Upslope: .2000 Area Reject: 22764. Max Peaks: 5 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IF0118 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.53	30	37	50	131581	364056	329703	100.00	51.425
2	12.14	702	709	713	39383	144010	140714	42.68	21.948
3	12.75	746	752	757	12803	45166	37722	11.44	5.884
4	18.08	1119	1125	1128	18456	52112	46990	14.25	7.329
5	18.17	1128	1131	1138	37580	90022	86009	26.09	13.415

Sum of corrected areas: 641138.

Summary of Unknowns PBM Library Search and Quantitation

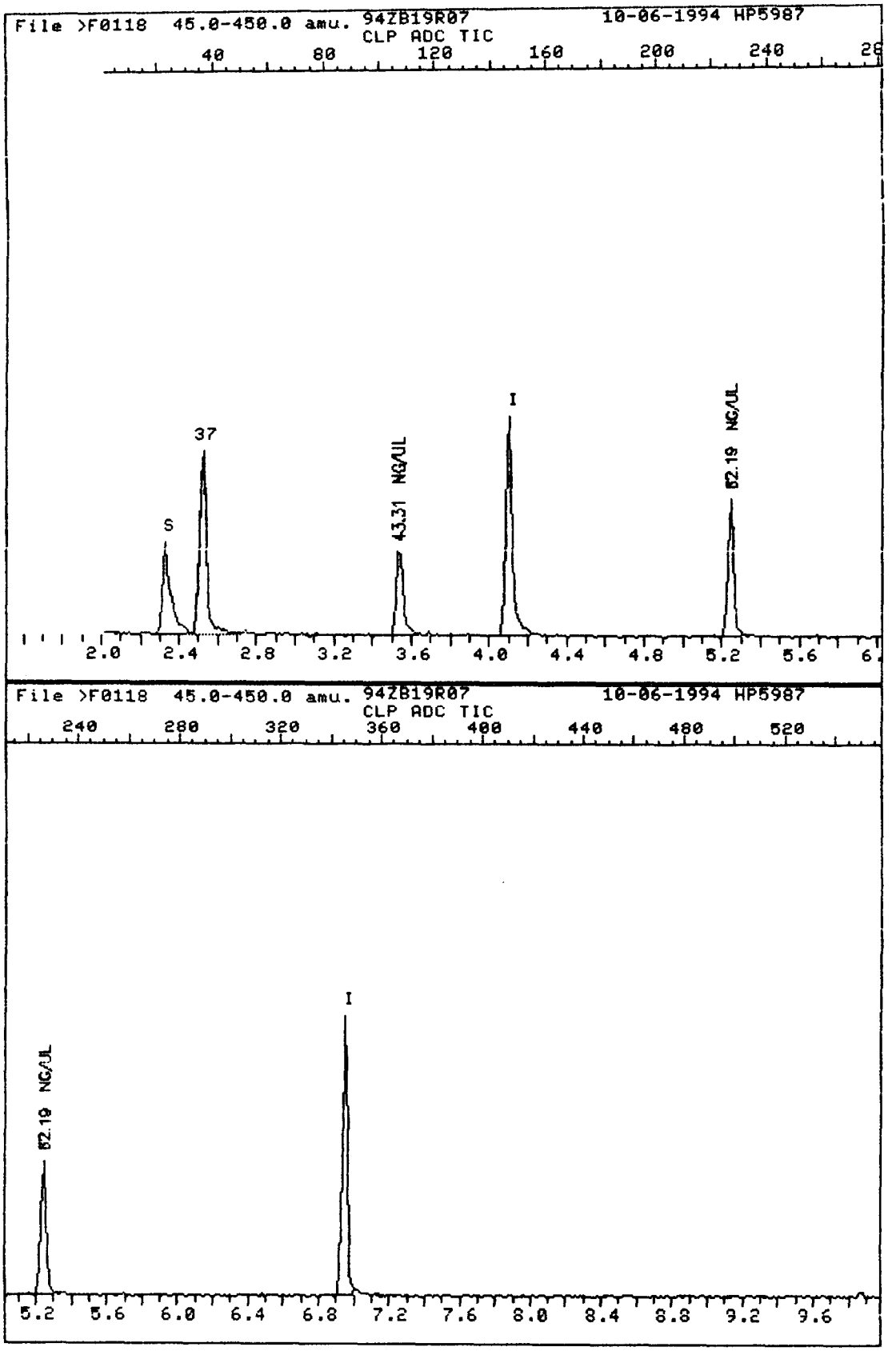
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	381223.	4.10	2.02 - 5.53
2	50.0	417109.	6.95	5.53 - 9.48
3	50.0	561836.	12.01	9.48 - 14.27
4	50.0	517948.	16.54	14.27 - 20.63
5	50.0	349747.	24.72	20.63 - 26.76
6	50.0	227635.	28.80	26.76 - 36.91

Dilution Factor = 1.00 This sample was 1000.00 g or mL

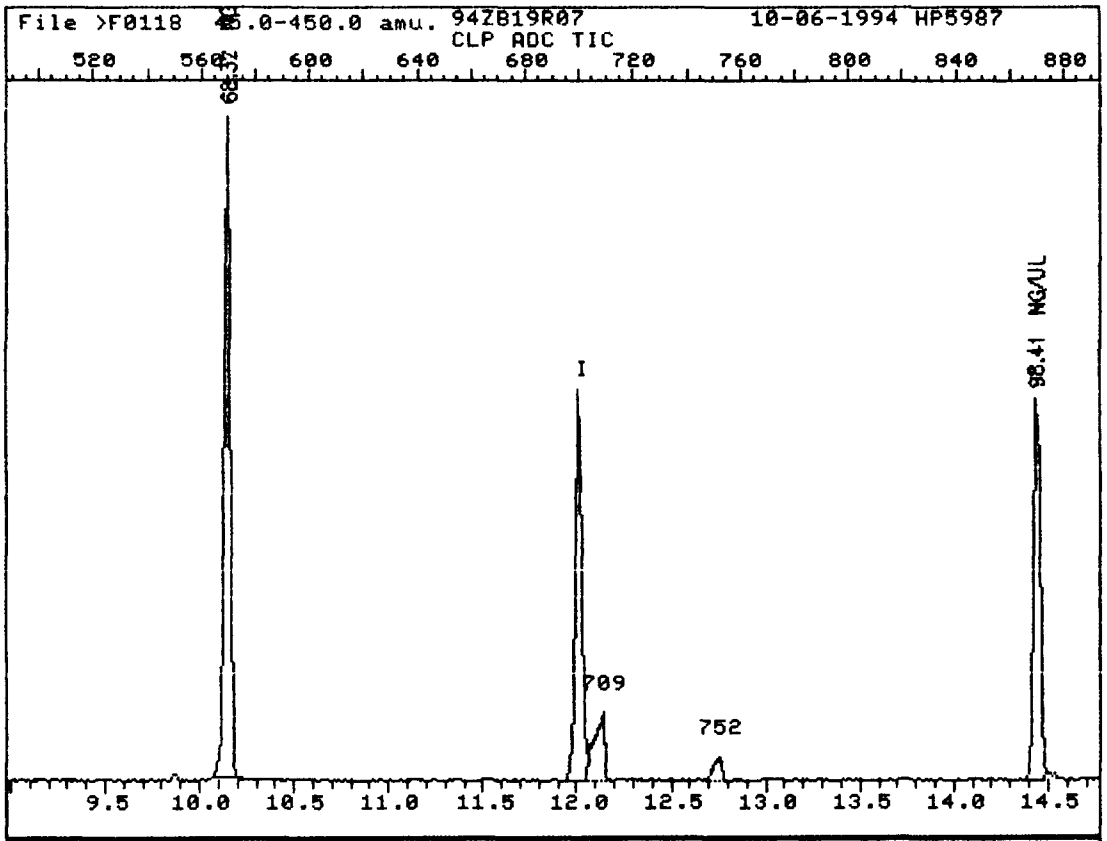
Correction Factor = 1.00

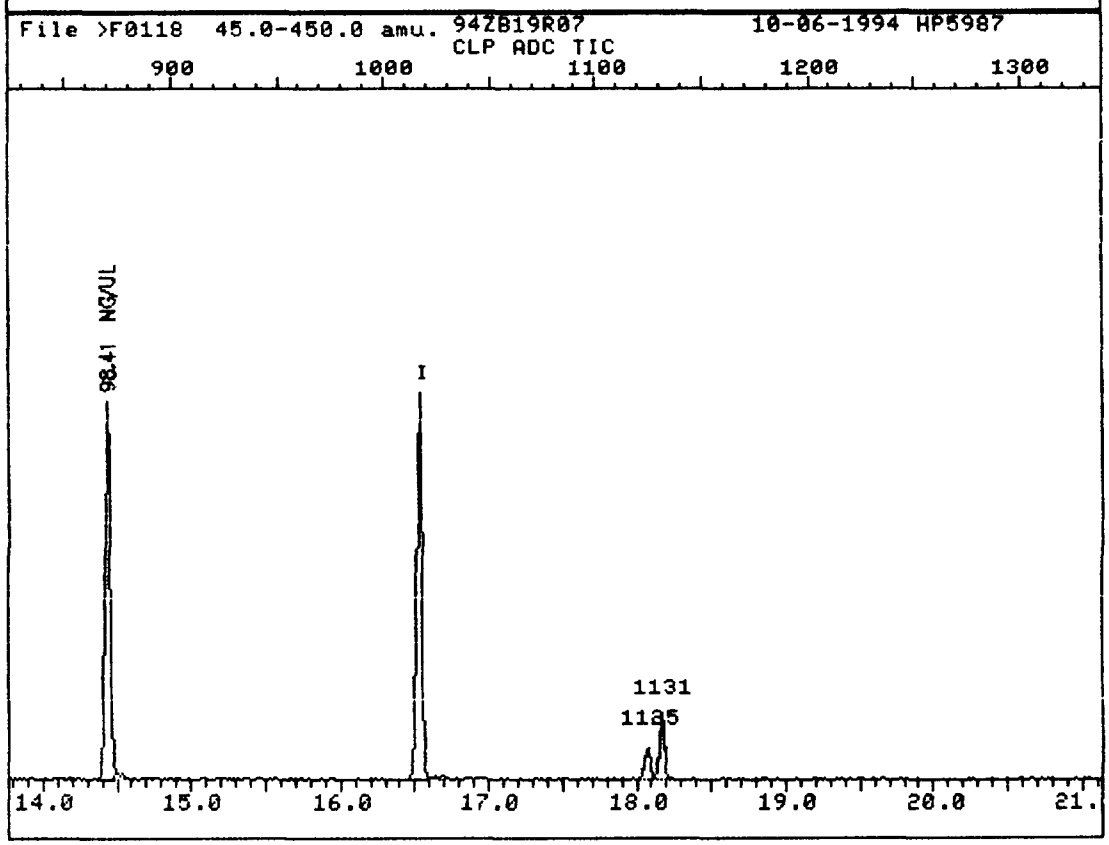
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

11:45 AM WED., 12 OCT., 1994

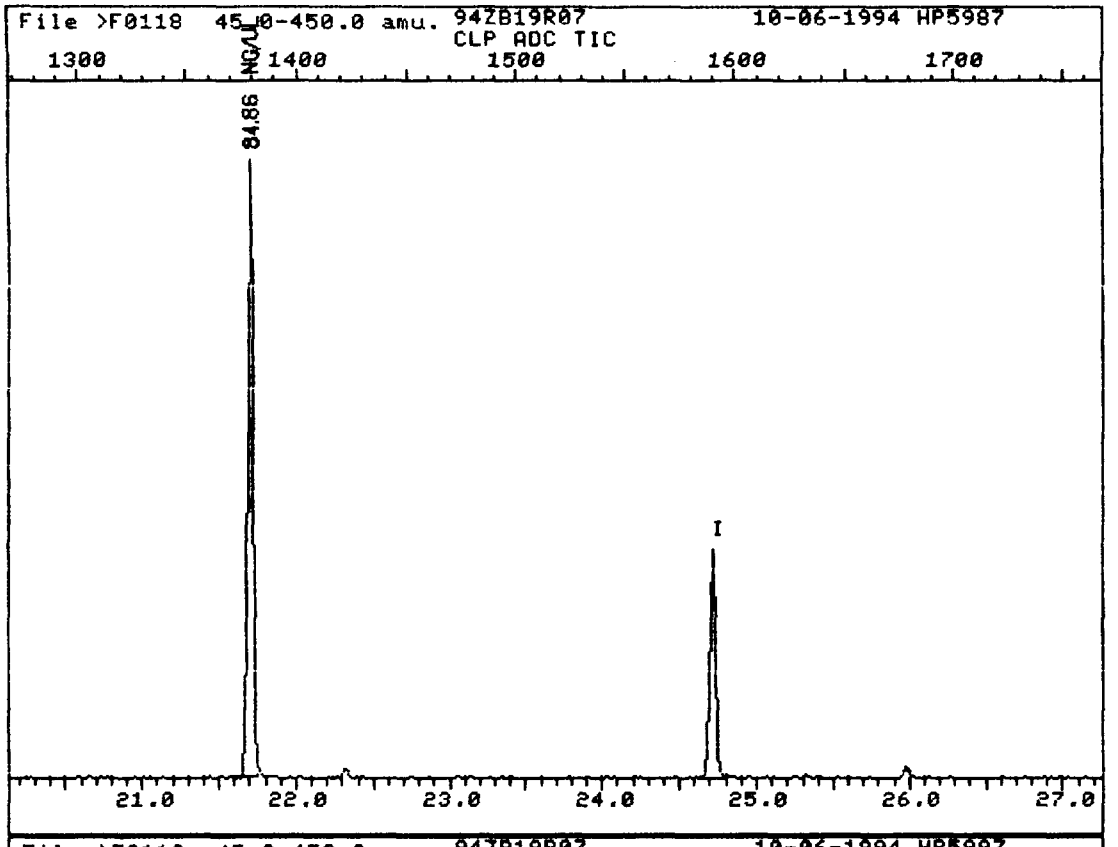


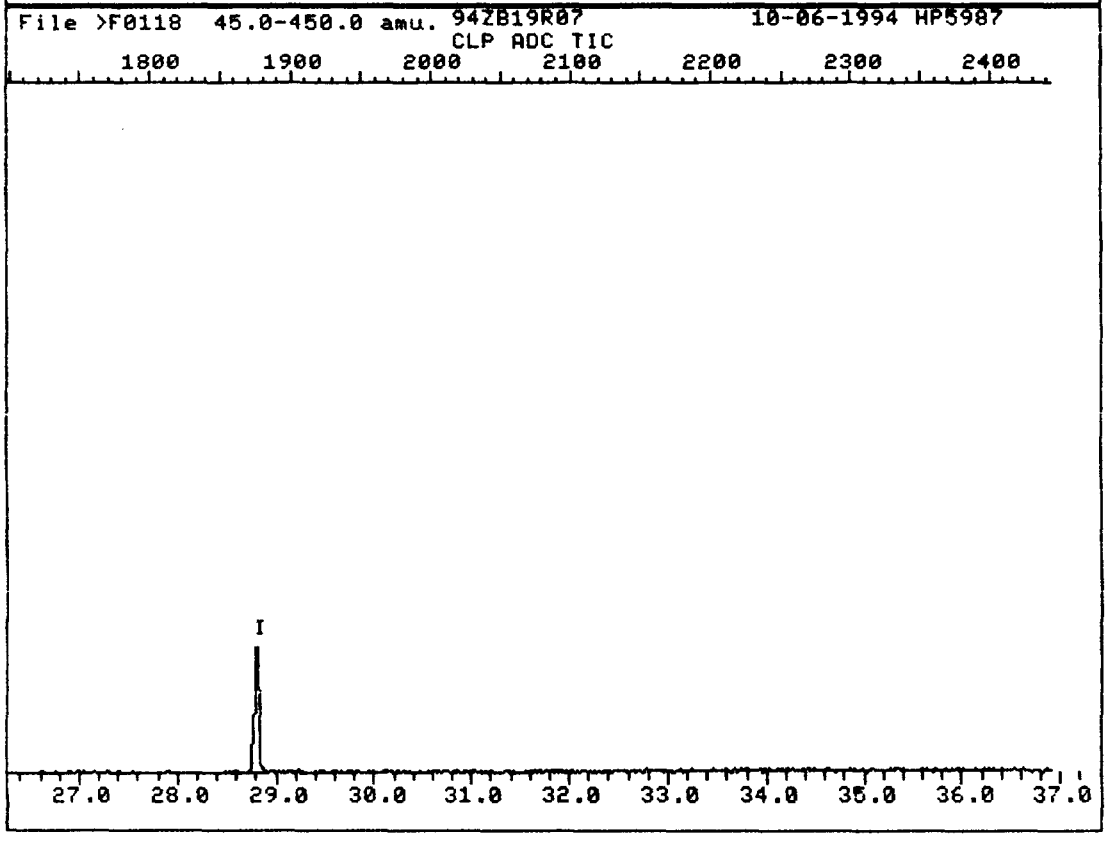
Instrument ID: 5985 Analyzed on: 10/06/94 23:39



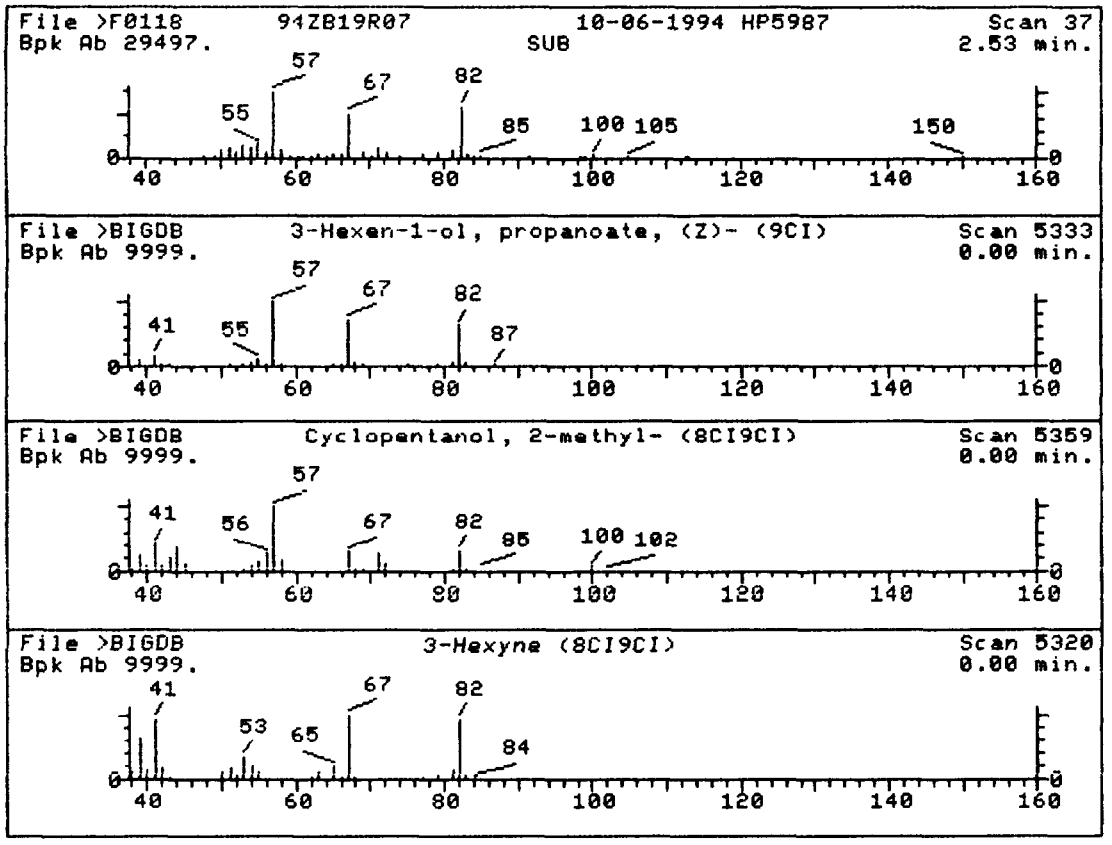


Instrument ID: 5985 Analyzed on: 10/06/94 23:39





Instrument ID: 5985 Analyzed on: 10/06/94 23:39

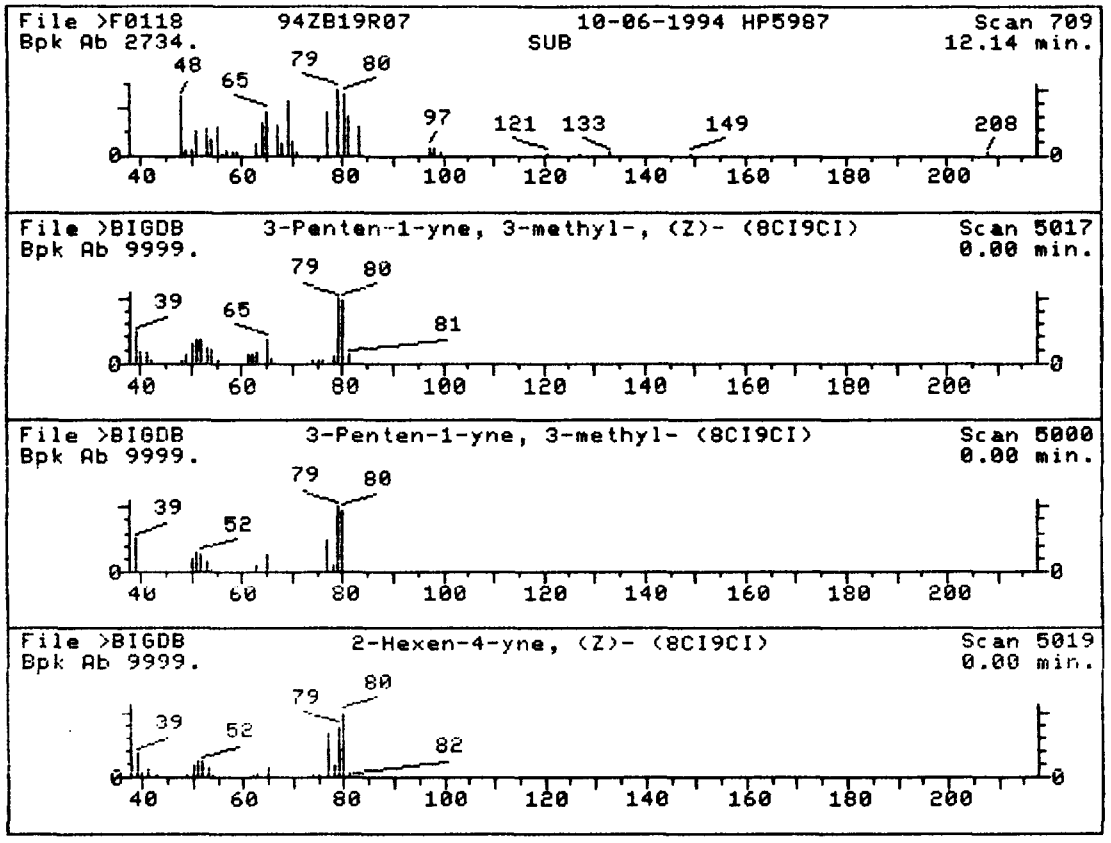


Instrument ID: 5985 Analyzed on: 10/06/94 23:39
Result 1 in PBM results file: LF0118
Retention Time: 2.53 Area: 329703 Tentative Conc: 43.00
The unknown area is 86.49% of the nearest internal standard

1.	3-Hexen-1-ol, propanoate, (Z)- (9CI)	156	C9H16O2
2.	Cyclopentanol, 2-methyl- (8CI9CI)	100	C6H12O
3.	3-Hexyne (8CI9CI)	82	C6H10
4.	1-Penten-3-ol, 4-methyl- (8CI9CI)	100	C6H12O
5.	Methanesulfinyl fluoride (9CI)	82	CH3FOS
6.	2-Hexen-1-ol, (Z)- (8CI9CI)	100	C6H12O

Sample file: >F0118 Spectrum #: 37
Search speed: 1 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60	33467742	5333	"BIGDB	38	47	2	0	92	13	30	13
2.	26*	24070777	5359	"BIGDB	25	75	2	0	67	41	8	14
3.	21*	928494	5320	"BIGDB	53	58	1	0	50	57	5	37
4.	20*	4798452	5304	"BIGDB	33	51	1	0	74	55	5	18
5.	20*	56755410	5310	"BIGDB	22	56	3	0	67	51	5	12
6.	15*	928949	5321	"BIGDB	42	56	2	0	136	60	3	17



Instrument ID: 5985 Analyzed on: 10/06/94 23:39
Result 2 in PBM results file: LF0118
Retention Time: 12.14 Area: 140714 Tentative Conc: 13.00
The unknown area is 25.05% of the nearest internal standard

1. 3-Penten-1-yne, 3-methyl-, (Z)- (8CI9CI) 80 C6H8
2. 3-Penten-1-yne, 3-methyl- (8CI9CI) 80 C6H8
3. 2-Hexen-4-yne, (Z)- (8CI9CI) 80 C6H8

Sample file: >F0118 Spectrum #: 709
Search speed: 1 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	14272812	5017	"BIGDB	35	88	3	0	95	58	3	13
2.	11*	1574330	5000	"BIGDB	28	66	2	0	97	62	2	14
3.	11*	30626483	5019	"BIGDB	20	90	2	0	93	63	2	13

Instrument ID: 5985 Analyzed on: 10/06/94 23:39

Retention Time: 12.75 Area: 37722 Tentative Conc: 3.00

The unknown area is 6.71% of the nearest internal standard

This peak is less than 10% of the nearest internal standard.

No library search has been performed on this peak.

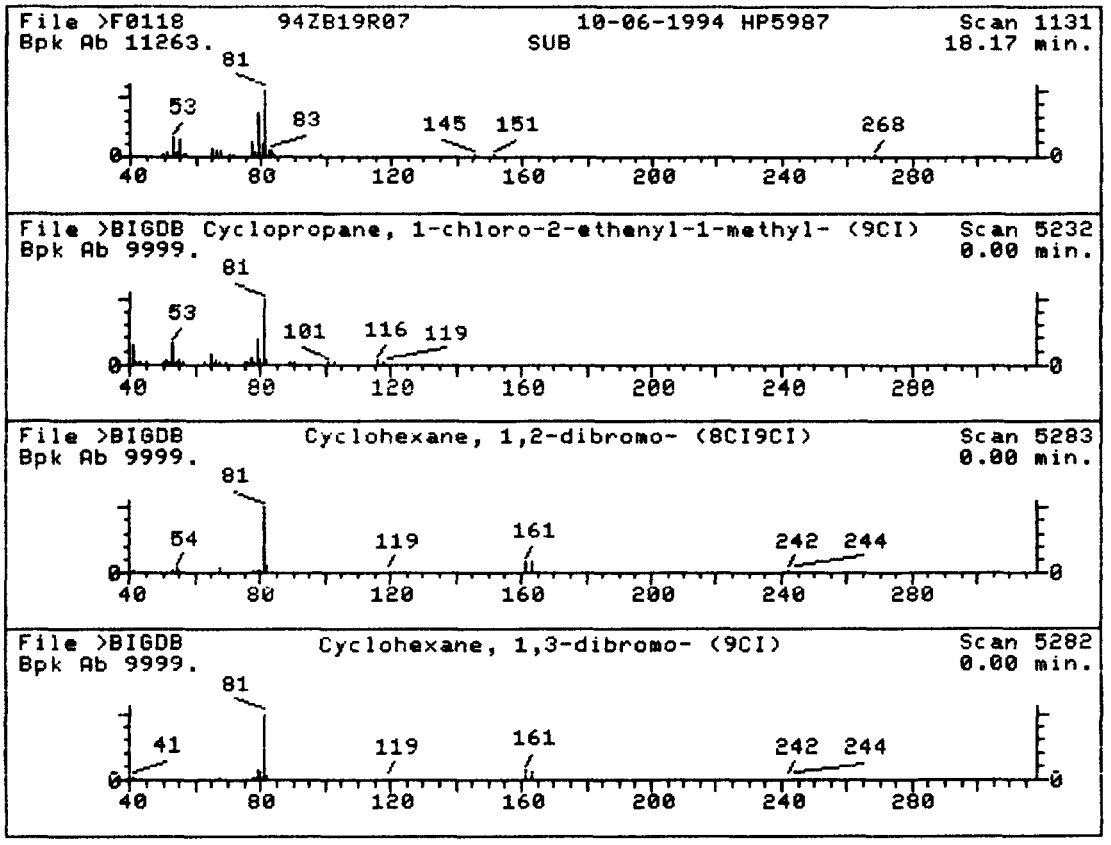
Instrument ID: 5985 Analyzed on: 10/06/94 23:39

Retention Time: 18.08 Area: 46990 Tentative Conc: 5.00

The unknown area is 9.07% of the nearest internal standard

This peak is less than 10% of the nearest internal standard.

No library search has been performed on this peak.



Instrument ID: 5985 Analyzed on: 10/06/94 23:39
Result 3 in PBM results file: LF0118
Retention Time: 18.17 Area: 86009 Tentative Conc: 8.00
The unknown area is 16.61% of the nearest internal standard

1.	Cyclopropane, 1-chloro-2-ethenyl-1-methyl- (9CI)	116	C6H9Cl
2.	Cyclohexane, 1,2-dibromo- (8CI9CI)	240	C6H10Br2
3.	Cyclohexane, 1,3-dibromo- (9CI)	240	C6H10Br2
4.	Epoxyheptachlor	386	C10H5Cl7O
5.	Cyclohexane, 1,3-dichloro-, trans- (8CI9CI)	152	C6H10Cl2
6.	Cyclohexane, 1,4-dichloro-, trans- (8CI9CI)	152	C6H10Cl2

Sample file: >F0118 Spectrum #: 1131
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	36	62337933	5232	"BIGDB	37	54	1	0	79	28	14	13
2.	34*	5401627	5283	"BIGDB	50	49	2	1	92	39	14	21
3.	30*	3725175	5282	"BIGDB	37	62	1	1	100	35	12	13
4.	29	402	102	PRIPOL	32	87	0	0	70	39	10	15
5.	28	24955622	5238	"BIGDB	41	44	1	0	84	39	10	14
6.	26	16890918	5231	"BIGDB	33	53	1	0	68	39	10	12

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S08

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S08

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0119

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/07/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [X] NO [ ]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S08

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S08

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0119

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/07/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

94ZB19S08

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S08

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >F0119

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec.---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

GPC Cleanup: (Y/N) Y pH: NA Dilution Factor: 1.00000

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	928949	2-Hexen-1-ol, (Z)- (8CI9CI)	2.52	35.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0119::QT
Data File: >F0119::D3
Name: 94ZB19S08
Misc: 10-06-1994 HP5987

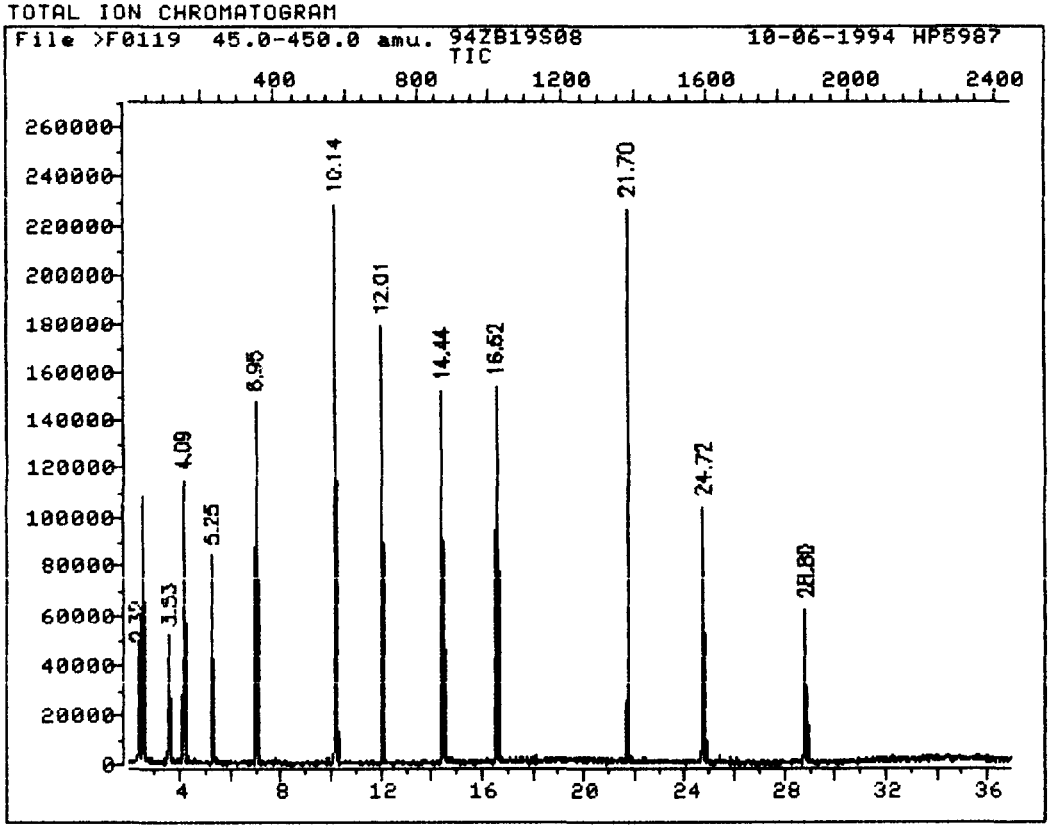
Quant Rev: 7
Quant Time: 941007 12:59
Injected at: 941007 00:23
Dilution Factor: 1.00000
Instrument ID: 5985
BTL#12

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.09	152.0	37511	50.00	NG/UL	80
2)	2-Fluorophenol	2.32	112.0	25090	62.36	NG/UL	63
3)	Phenol-d5	3.53	99.0	17874	55.46	NG/UL	77
17)	Nitrobenzene-d5	5.25	82.0	39844	66.43	NG/UL	91
26)	*Naphthalene-d8	6.95	136.0	98413	50.00	NG/UL	72
36)	2-Fluorobiphenyl	10.14	172.0	126942	60.87	NG/UL	94
40)	*Acenaphthene-d10	12.01	164.0	63960	50.00	NG/UL	81
54)	2,4,6-Tribromophenol	14.44	329.9	32709	86.57	NG/UL	95
58)	*Phenanthrene-d10	16.52	188.0	98587	50.00	NG/UL	95
65)	Terphenyl-d14	21.70	244.0	139102	82.57	NG/UL	94
70)	*Chrysene-d12	24.72	240.0	84115	50.00	NG/UL	93
76)	*Perylene-d12	28.80	264.0	74780	50.00	NG/UL	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F0119::D3 Quant Output File: ^F0119::QT
Name: 94ZB19S08 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL#12

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941007 12:59
Injected at: 941007 00:23

MS data file header from : >F0119::D3

Sample: 94ZB19S08 Operator: ZIYAD SUPER GRP. 10/07/94 0:23
Misc : 10-06-1994 HP5987 BTL#12
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 12 Equip ID: 5985
Method file: TOXIC6 Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	65.	320.	0.	0.	0.
Chromatographic times, min. :	1.0	60.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0119 94ZB19S08 10-06-1994 HP5987
45.01 450.0 CLP TIC
Upslope: .2000 Area Reject: 18985. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IF0119 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.52	30	36	42	107038	216094	192982	100.00	100.000

Sum of corrected areas: 192982.

Summary of Unknowns PBM Library Search and Quantitation

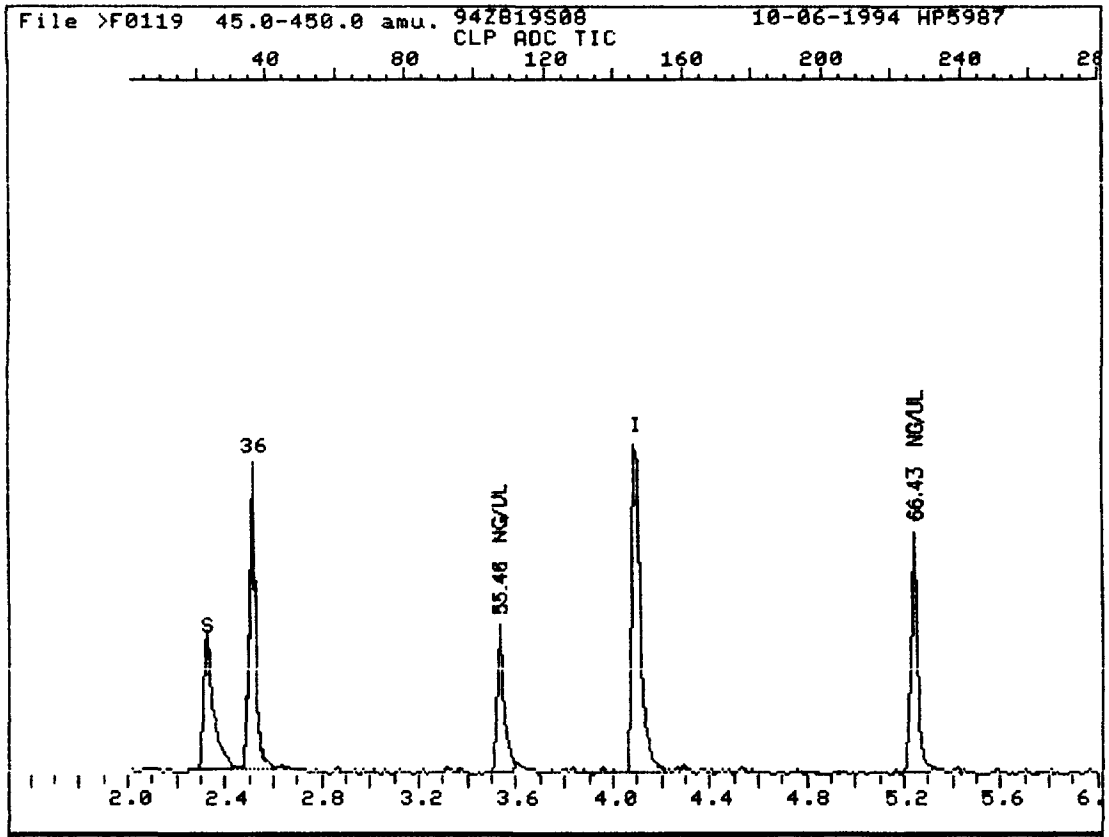
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	277959.	4.09	2.02 - 5.52
2	50.0	297388.	6.95	5.52 - 9.48
3	50.0	370114.	12.01	9.48 - 14.27
4	50.0	372351.	16.52	14.27 - 20.62
5	50.0	268167.	24.72	20.62 - 26.76
6	50.0	189852.	28.80	26.76 - 36.92

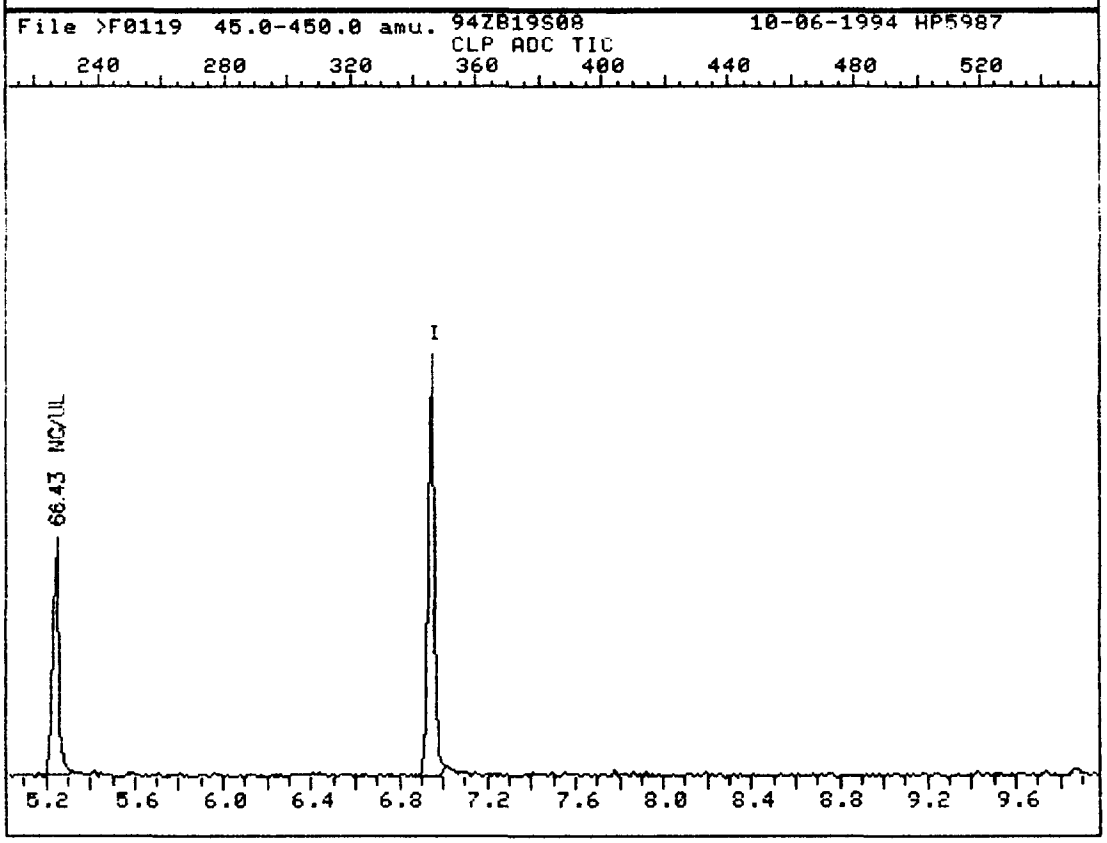
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

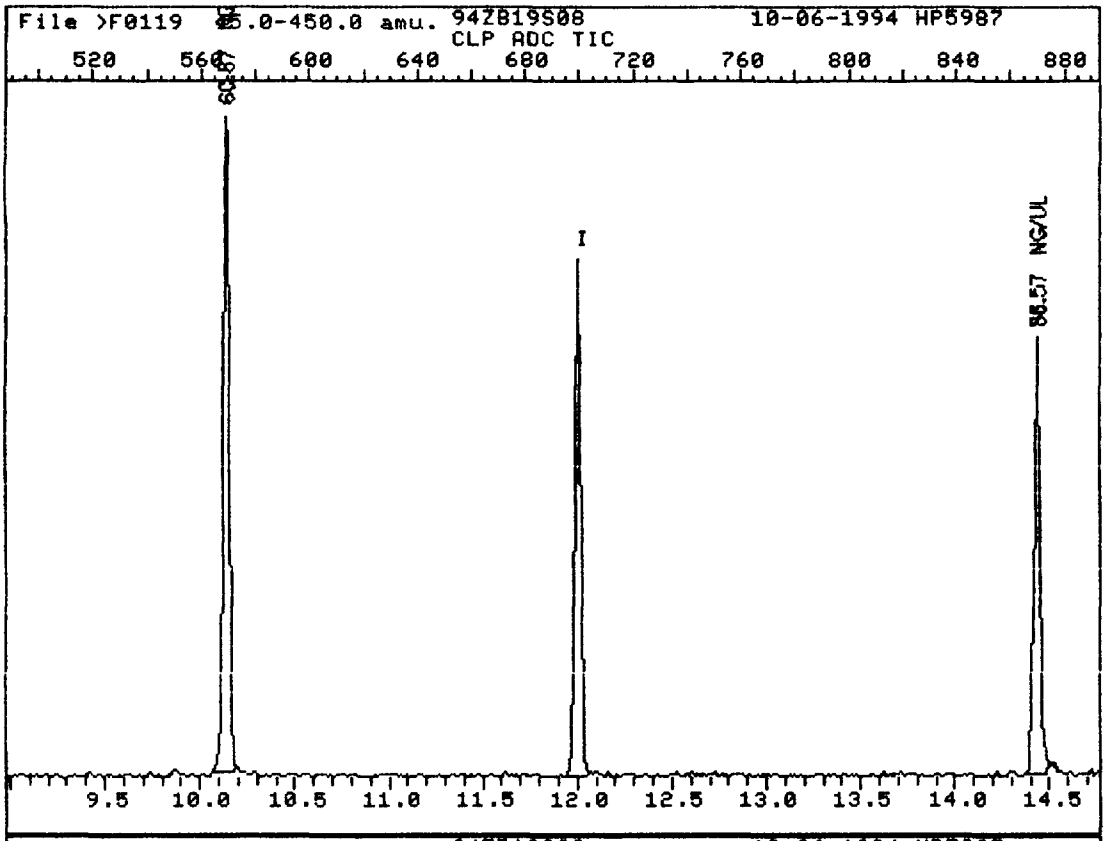
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

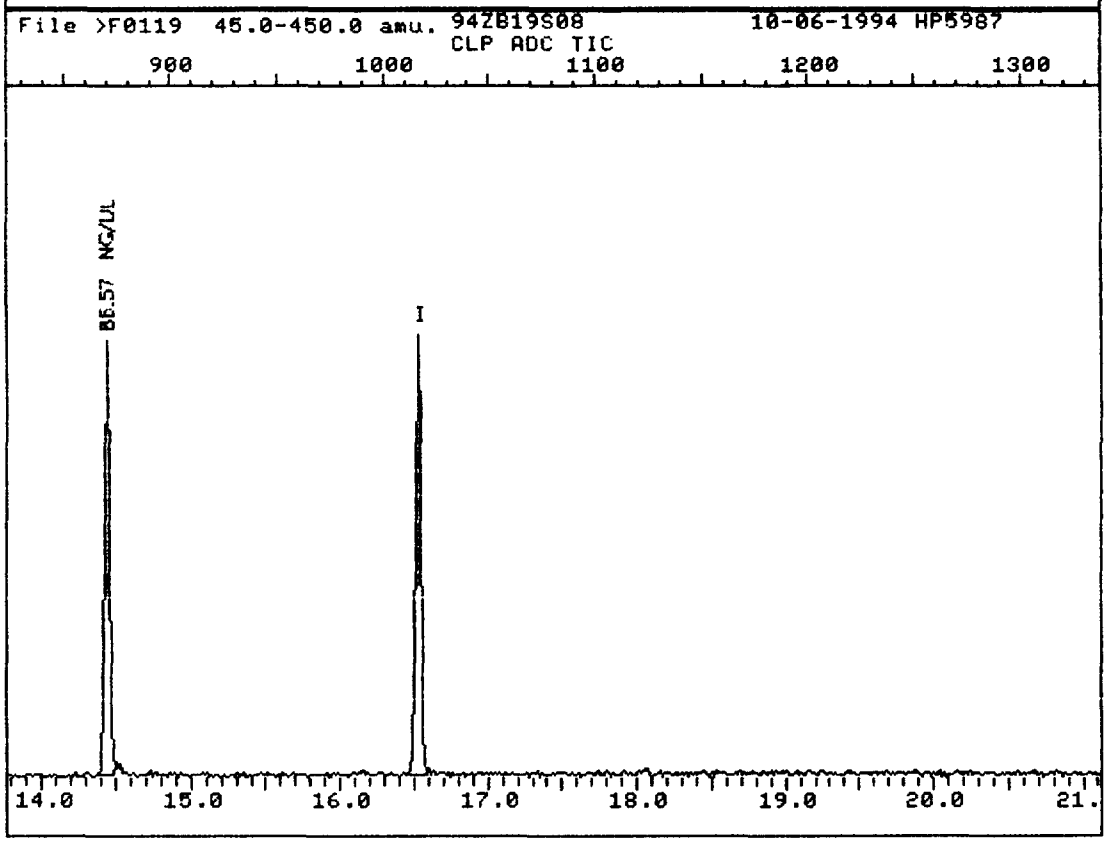
12:04 PM WED., 12 OCT., 1994



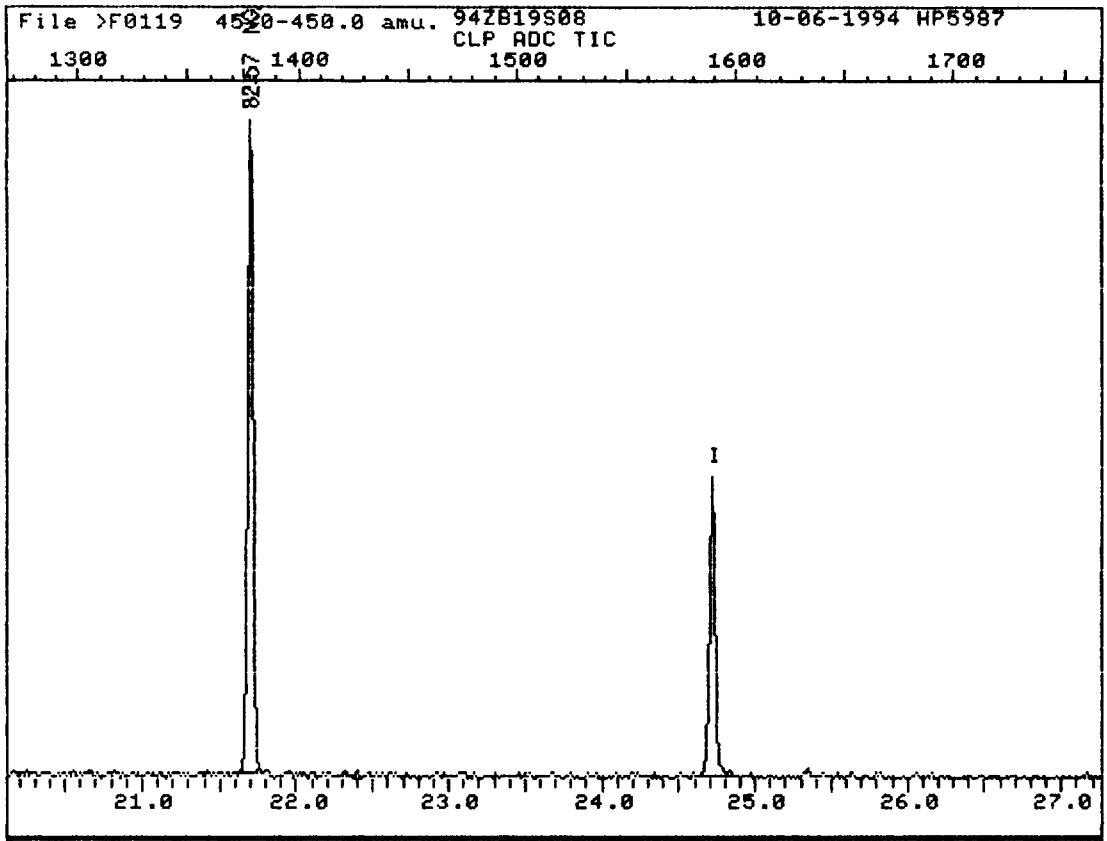


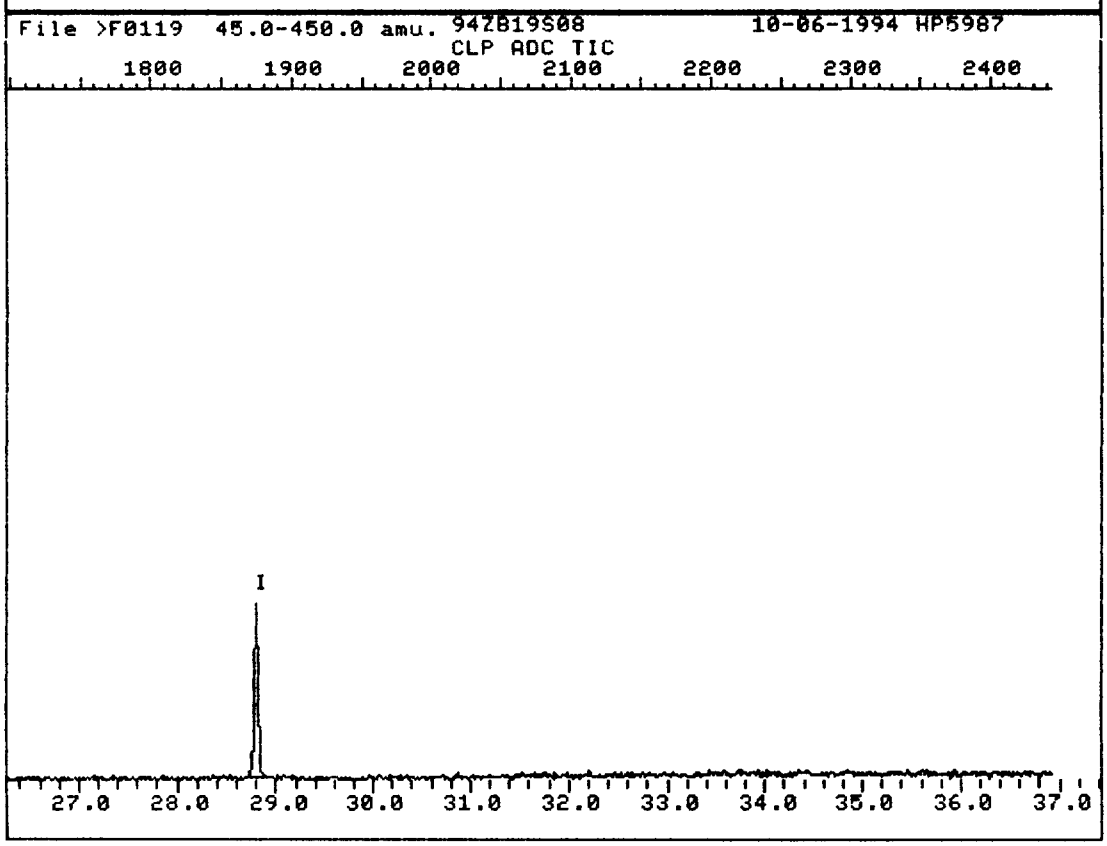
Instrument ID: 5985 Analyzed on: 10/07/94 0:23



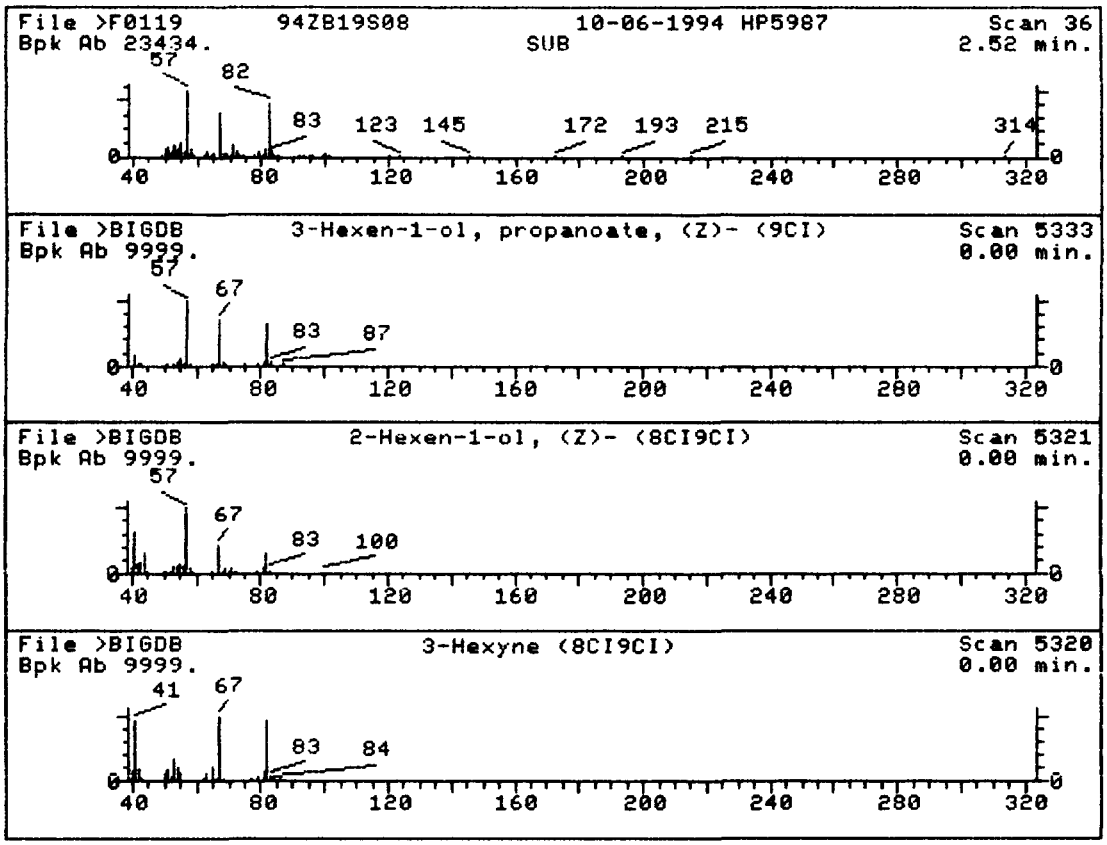


Instrument ID: 5985 Analyzed on: 10/07/94 0:23





Instrument ID: 5985 Analyzed on: 10/07/94 0:23



Instrument ID: 5985 Analyzed on: 10/07/94 0:23
Result 1 in PBM results file: LF0119
Retention Time: 2.52 Area: 192982 Tentative Conc: 35.00
The unknown area is 69.43% of the nearest internal standard

1.	3-Hexen-1-ol, propanoate, (Z)- (9CI)	156	C9H16O2
2.	2-Hexen-1-ol, (Z)- (8CI9CI)	100	C6H12O
3.	3-Hexyne (8CI9CI)	82	C6H10
4.	1-Penten-3-ol, 4-methyl- (8CI9CI)	100	C6H12O
5.	2-Hexen-1-ol, (E)- (8CI9CI)	100	C6H12O
6.	1H-Imidazole, 1-methyl- (9CI)	82	C4H6N2

Sample file: >F0119 Spectrum #: 36
Search speed: 1 Tilting option: S No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60	33467742	5333	"BIGDB	38	47	2	0	91	15	30	13
2.	25*	928949	5321	"BIGDB	22	76	0	0	79	46	7	16
3.	18*	928494	5320	"BIGDB	53	58	2	0	51	59	4	28
4.	15*	4798452	5304	"BIGDB	22	62	1	0	66	56	3	14
5.	15*	928950	5299	"BIGDB	20	73	1	0	100	57	3	14
6.	11*	616477	5316	"BIGDB	24	51	0	0	55	63	2	17

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB BLANK
MB091594

BP 10-18-94

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: MB091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0057

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LAB BLANK
MB091594

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: ------- AP 10-18-94

Matrix: (soil/water) WATER Lab Sample ID: MB091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0057

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

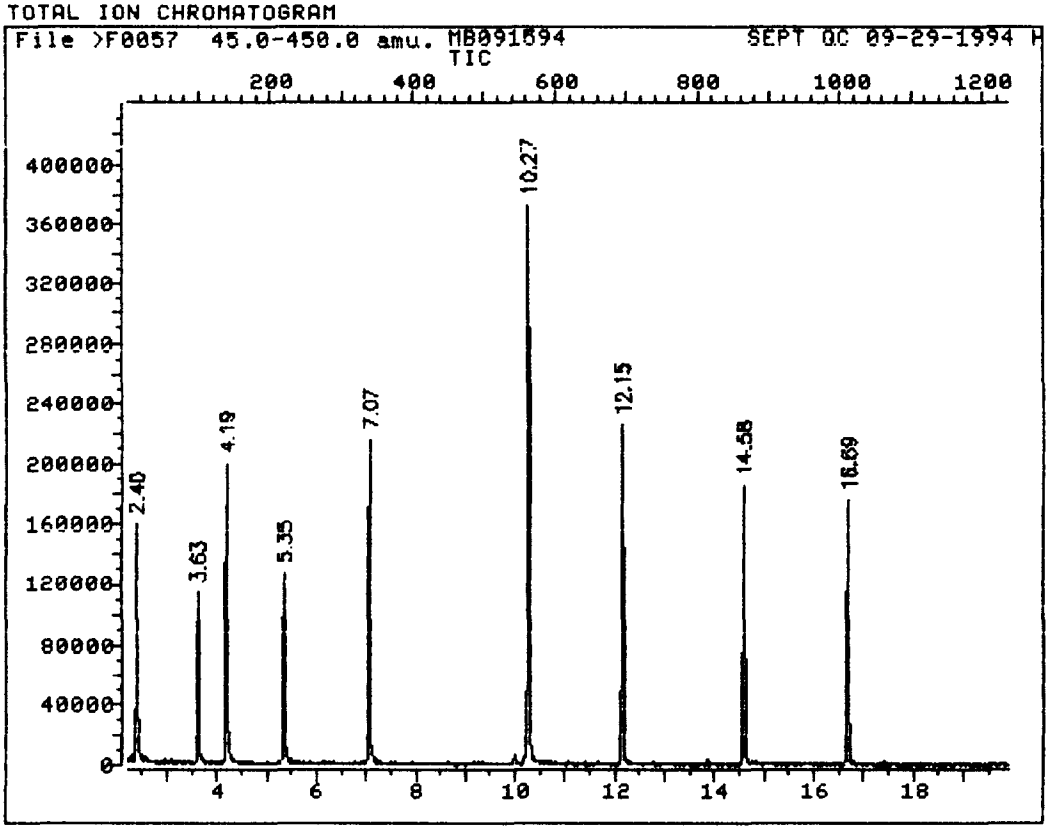
Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941003 10:08
Output File: ^F0057::QT
Injected at: 940929 14:02
Data File: >F0057::D2
Dilution Factor: 1.00000
Name: MB091594
Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987
BTL# 8

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.19	152.0	54822	50.00	NG/UL	94
2)	2-Fluorophenol	2.40	112.0	55758	70.04	NG/UL	93
3)	Phenol-d5	3.63	99.0	50370M	73.52	NG/UL	
17)	Nitrobenzene-d5	5.35	82.0	81563	70.21	NG/UL	98
26)	*Naphthalene-d8	7.07	136.0	172815	50.00	NG/UL	79
36)	2-Fluorobiphenyl	10.27	172.0	210202	65.97	NG/UL	95
40)	*Acenaphthene-d10	12.15	164.0	97291	50.00	NG/UL	91
54)	2,4,6-Tribromophenol	14.58	329.9	39643	68.93	NG/UL	94
58)	*Phenanthrene-d10	16.69	188.0	144843	50.00	NG/UL	96
65)	Terphenyl-d14	21.86	244.0	164964	71.62	NG/UL	99
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	6911	3.35	NG/UL	90
70)	*Chrysene-d12	24.90	240.0	105337	50.00	NG/UL	92
76)	*Perylene-d12	28.99	264.0	91872	50.00	NG/UL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

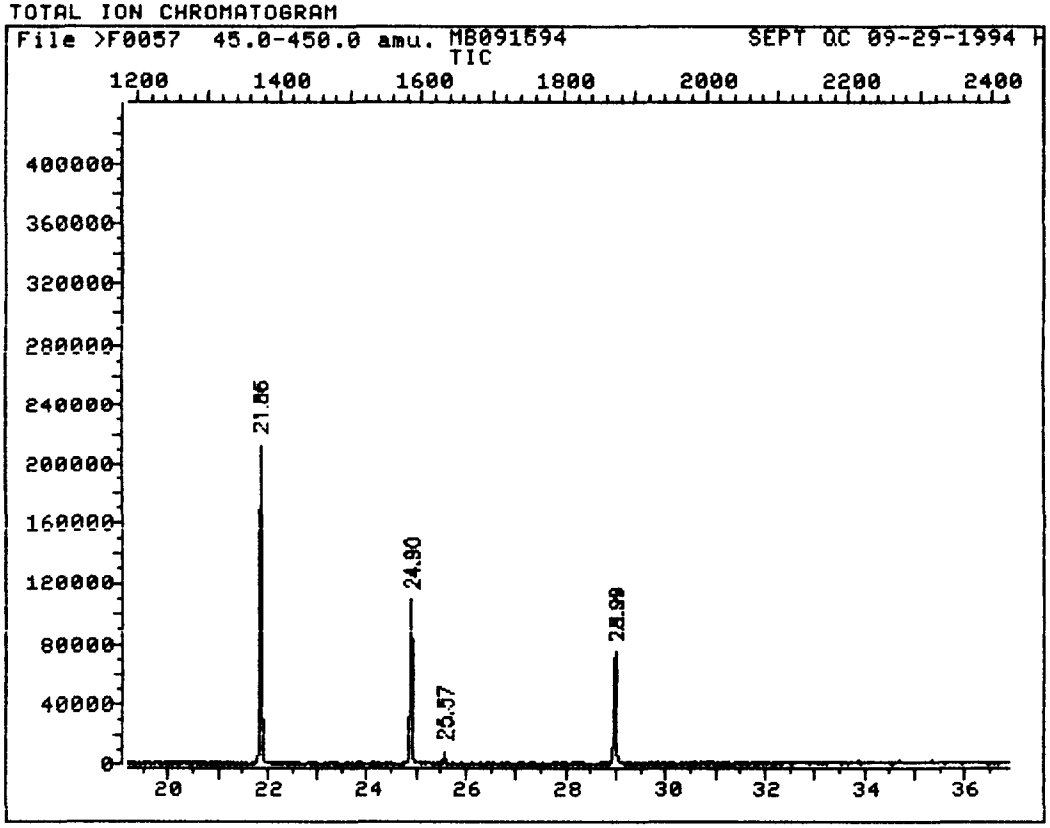


Data File: >F0057::D2 Quant Output File: ^F0057::QT
Name: MB091594 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL# 8

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:08
Injected at: 940929 14:02

TOTAL ION CHROMATOGRAM

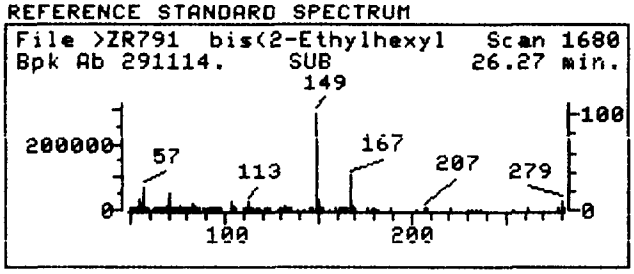


Data File: >F0057::D2 Quant Output File: ^F0057::QT
Name: MB091594 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL# 8

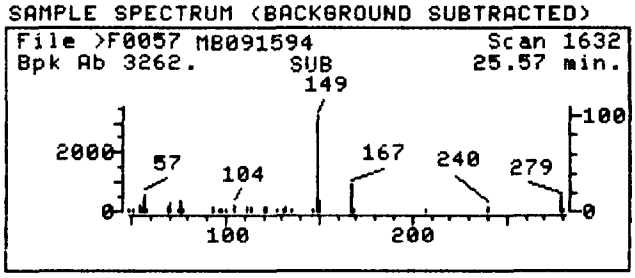
Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:08
Injected at: 940929 14:02

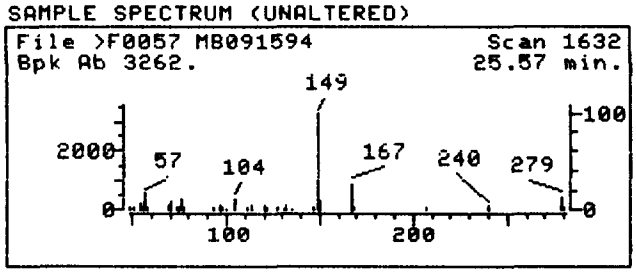
REFERENCE STANDARD SPECTRUM

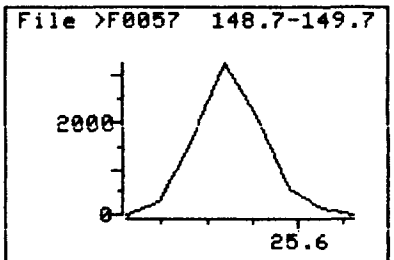


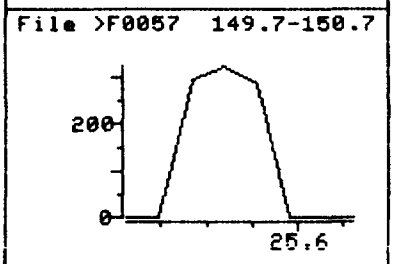
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

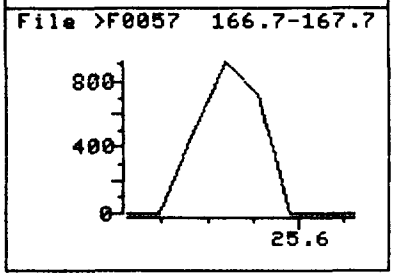


SAMPLE SPECTRUM (UNALTERED)









Data File: >F0057::D2
Name: MB091594
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:08
Injected at: 940929 14:02
Last Qcal Time: <none>

Quant Output File: ^F0057::QT
Instrument ID: 5985
BTL# 8
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1632
Retention Time: 25.57 min.
Quant Ion : 149.0
Area : 6911
Concentration : 3.35 NG/UL
q-value : 90

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS091594

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCS091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0059

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	65	
111-44-4	bis(2-Chloroethyl)ether	62	
95-57-8	2-Chlorophenol	63	
95-48-7	2-Methylphenol	67	
108-60-1	bis(2-Chloroisopropyl)ether	59	
106-44-5	4-Methylphenol	70	
621-64-7	N-Nitroso-di-n-propylamine	75	
67-72-1	Hexachloroethane	52	
98-95-3	Nitrobenzene	59	
78-59-1	Isophorone	73	
88-75-5	2-Nitrophenol	65	
105-67-9	2,4-Dimethylphenol	49	
111-91-1	bis(2-Chloroethoxy)methane	67	
120-83-2	2,4-Dichlorophenol	73	
120-82-1	1,2,4-Trichlorobenzene	59	
91-20-3	Naphthalene	59	
106-47-8	4-Chloroaniline	75	
87-68-3	Hexachlorobutadiene	55	
59-50-7	4-Chloro-3-methylphenol	88	
91-57-6	2-Methylnaphthalene	66	
77-47-4	Hexachlorocyclopentadiene	22	
88-06-2	2,4,6-Trichlorophenol	88	
95-95-4	2,4,5-Trichlorophenol	84	
91-58-7	2-Chloronaphthalene	74	
88-74-4	2-Nitroaniline	88	
131-11-3	Dimethylphthalate	88	
208-96-8	Acenaphthylene	83	
606-20-2	2,6-Dinitrotoluene	98	

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS091594

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCS091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0059

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	93	
83-32-9	Acenaphthene	82	
51-28-5	2,4-Dinitrophenol	1	J
100-02-7	4-Nitrophenol	120	E
132-64-9	Dibenzofuran	84	
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	93	
7005-72-3	4-Chlorophenyl-phenylether	84	
86-73-7	Fluorene	90	
100-01-6	4-Nitroaniline	85	
534-52-1	4,6-Dinitro-2-methylphenol	103	E
86-30-6	N-Nitrosodiphenylamine	93	
101-55-3	4-Bromophenyl-phenylether	98	
118-74-1	Hexachlorobenzene	98	
87-86-5	Pentachlorophenol	120	E
85-01-8	Phenanthrene	88	
120-12-7	Anthracene	91	
84-74-2	Di-n-butylphthalate	94	
206-44-0	Fluoranthene	96	
129-00-0	Pyrene	93	
85-68-7	Butylbenzylphthalate	97	
91-94-1	3,3'-Dichlorobenzidine	90	
56-55-3	Benzo(a)anthracene	88	
218-01-9	Chrysene	86	
117-81-7	bis(2-Ethylhexyl)phthalate	107	B E
117-84-0	Di-n-octylphthalate	94	
205-99-2	Benzo(b)fluoranthene	82	
207-08-9	Benzo(k)fluoranthene	82	
50-32-8	Benzo(a)pyrene	79	
193-39-5	Indeno(1,2,3-cd)pyrene	86	
53-70-3	Dibenzo(a,h)anthracene	86	
191-24-2	Benzo(g,h,i)perylene	78	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:13
Output File: ^F0059::QT Injected at: 940929 15:28
Data File: >F0059::D2 Dilution Factor: 1.00000
Name: LCS091594 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#10

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.20	152.0	59976	50.00	NG/UL	91
2)	2-Fluorophenol	2.39	112.0	48716	55.93	NG/UL	98
3)	Phenol-d5	3.64	99.0	46890M	62.56	NG/UL	
4)	Phenol	3.67	94.0	51109M	65.31	NG/UL	67
5)	Aniline	3.67	93.0	32105M	38.71	NG/UL	
6)	bis(2-Chloroethyl)ether	3.78	93.0	41584M	61.83	NG/UL	99
7)	2-Chlorophenol	3.84	128.0	75706	62.96	NG/UL	95
8)	1,3-Dichlorobenzene	4.09	146.0	86653	51.48	NG/UL	97
9)	1,4-Dichlorobenzene	4.23	146.0	94035	50.37	NG/UL	97
10)	Benzyl alcohol	4.53	108.0	36909	81.83	NG/UL	89
11)	1,2-Dichlorobenzene	4.50	146.0	91011	52.98	NG/UL	98
12)	2-Methylphenol	4.80	108.0	44111	67.44	NG/UL	97
13)	bis(2-Chloroisopropyl)ether	4.87	121.0	22227M	58.60	NG/UL	93
14)	4-Methylphenol	5.19	108.0	47065	69.87	NG/UL	98
15)	N-Nitroso-di-n-propylamine	5.15	70.0	35370	75.20	NG/UL	52
16)	Hexachloroethane	5.19	201.0	44086	51.75	NG/UL	94
17)	Nitrobenzene-d5	5.38	82.0	72143	56.76	NG/UL	97
18)	Nitrobenzene	5.42	123.0	32714	59.27	NG/UL	95
19)	Isophorone	6.04	82.0	112010	73.03	NG/UL	60
20)	2-Nitrophenol	6.17	139.0	43798M	64.59	NG/UL	
21)	2,4-Dimethylphenol	6.44	122.0	34417	49.35	NG/UL	74
22)	Benzoic acid	7.14	105.0	54015M	82.69	NG/UL	66
23)	bis(2-Chloroethoxy)methane	6.67	93.0	47520	67.30	NG/UL	99
24)	2,4-Dichlorophenol	6.81	162.0	87276	72.78	NG/UL	91
25)	1,2,4-Trichlorobenzene	6.97	180.0	91729	59.40	NG/UL	92
26)	*Naphthalene-d8	7.08	136.0	170478	50.00	NG/UL	83
27)	Naphthalene	7.14	128.0	177190	58.57	NG/UL	84
28)	4-Chloroaniline	7.40	127.0	79227	74.66	NG/UL	92
29)	Hexachlorobutadiene	7.56	225.0	74231	54.66	NG/UL	91
30)	4-Chloro-3-methylphenol	8.96	107.0	95436	87.62	NG/UL	75
31)	2-Methylnaphthalene	9.09	142.0	154076M	66.12	NG/UL	
32)	Hexachlorocyclopentadiene	9.58	237.0	23471	21.85	NG/UL	97
33)	2,4,6-Trichlorophenol	10.02	196.0	77526	87.88	NG/UL	90
34)	2,4,5-Trichlorophenol	10.12	196.0	80996	83.79	NG/UL	94
35)	2-Chloronaphthalene	10.51	162.0	175185	73.75	NG/UL	83
36)	2-Fluorobiphenyl	10.28	172.0	192590	61.27	NG/UL	95
37)	2-Nitroaniline	10.97	138.0	59056	88.17	NG/UL	91
38)	Dimethylphthalate	11.72	163.0	316259	88.02	NG/UL	98
39)	Acenaphthylene	11.72	152.0	297969	83.19	NG/UL	97
40)	*Acenaphthene-d10	12.16	164.0	98078	50.00	NG/UL	95

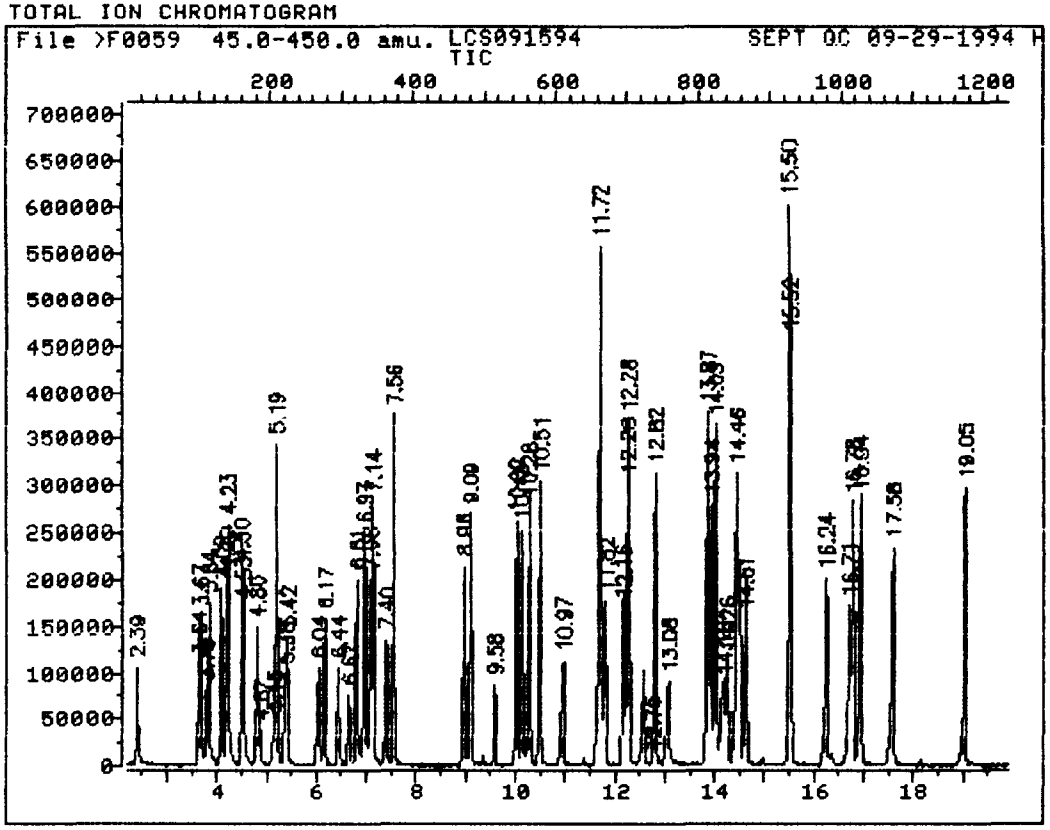
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:13
Output File: ^F0059::QT Injected at: 940929 15:28
Data File: >F0059::D2 Dilution Factor: 1.00000
Name: LCS091594 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#10

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.26	138.0	52593	92.73	NG/UL	87
42)	Acenaphthene	12.28	153.0	190511	82.04	NG/UL	97
43)	2,4-Dinitrophenol	12.58	184.0	38800M	100.47	NG/UL	52
44)	4-Nitrophenol	13.08	109.0	109274M	115.69	NG/UL	
45)	Dibenzofuran	12.82	168.0	264979	84.12	NG/UL	65
46)	2,6-Dinitrotoluene	11.82	165.0	69899	98.44	NG/UL	25
48)	Diethylphthalate	13.94	149.0	340277	93.23	NG/UL	89
49)	4-Chlorophenyl-phenylether	14.03	204.0	129482	83.72	NG/UL	97
50)	Fluorene	13.87	166.0	218774	90.07	NG/UL	93
51)	4-Nitroaniline	14.18	138.0	37045M	84.90	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.26	198.0	40856M	102.86	NG/UL	
53)	N-Nitrosodiphenylamine	14.46	169.0	160074	93.01	NG/UL	90
54)	2,4,6-Tribromophenol	14.61	329.9	47364	81.70	NG/UL	97
55)	4-Bromophenyl-phenylether	15.50	248.0	93939	97.97	NG/UL	86
56)	Hexachlorobenzene	15.52	283.9	101836	98.07	NG/UL	92
57)	Pentachlorophenol	16.24	265.8	55419	122.74	NG/UL	97
58)	*Phenanthrene-d10	16.71	188.0	170435	50.00	NG/UL	98
59)	Phenanthrene	16.78	178.0	315148	88.00	NG/UL	93
60)	Anthracene	16.94	178.0	325807	90.66	NG/UL	95
61)	Carbazole	17.58	167.0	263811	87.51	NG/UL	94
62)	Di-n-butylphthalate	19.05	149.0	444391	93.80	NG/UL	95
63)	Fluoranthene	20.46	202.0	323848	95.63	NG/UL	79
64)	Pyrene	21.12	202.0	320312	92.87	NG/UL	82
65)	Terphenyl-d14	21.88	244.0	209346	77.24	NG/UL	97
66)	Butylbenzylphthalate	23.64	149.0	177715	97.03	NG/UL	79
67)	Benzo(a)anthracene	24.90	228.0	251238	88.38	NG/UL	90
68)	3,3'-Dichlorobenzidine	25.03	252.0	102320	90.14	NG/UL	98
69)	bis(2-Ethylhexyl)phthalate	25.61	149.0	259981	107.04	NG/UL	90
70)	*Chrysene-d12	24.95	240.0	141619	50.00	NG/UL	96
71)	Chrysene	25.03	228.0	257355	86.46	NG/UL	89
72)	Di-n-octylphthalate	27.54	149.0	358551	93.89	NG/UL	86
73)	Benzo(b)fluoranthene	28.02	252.0	220300	82.27	NG/UL	85
74)	Benzo(k)fluoranthene	28.11	252.0	224656	81.61	NG/UL	86
75)	Benzo(a)pyrene	28.87	252.0	188775	79.27	NG/UL	85
76)	*Perylene-d12	29.01	264.0	115967	50.00	NG/UL	97
77)	Indeno(1,2,3-cd)pyrene	31.59	276.0	152873	85.83	NG/UL	66
78)	Dibenzo(a,h)anthracene	31.68	278.0	149832	86.12	NG/UL	91
79)	Benzo(g,h,i)perylene	32.15	276.0	146417	78.34	NG/UL	67

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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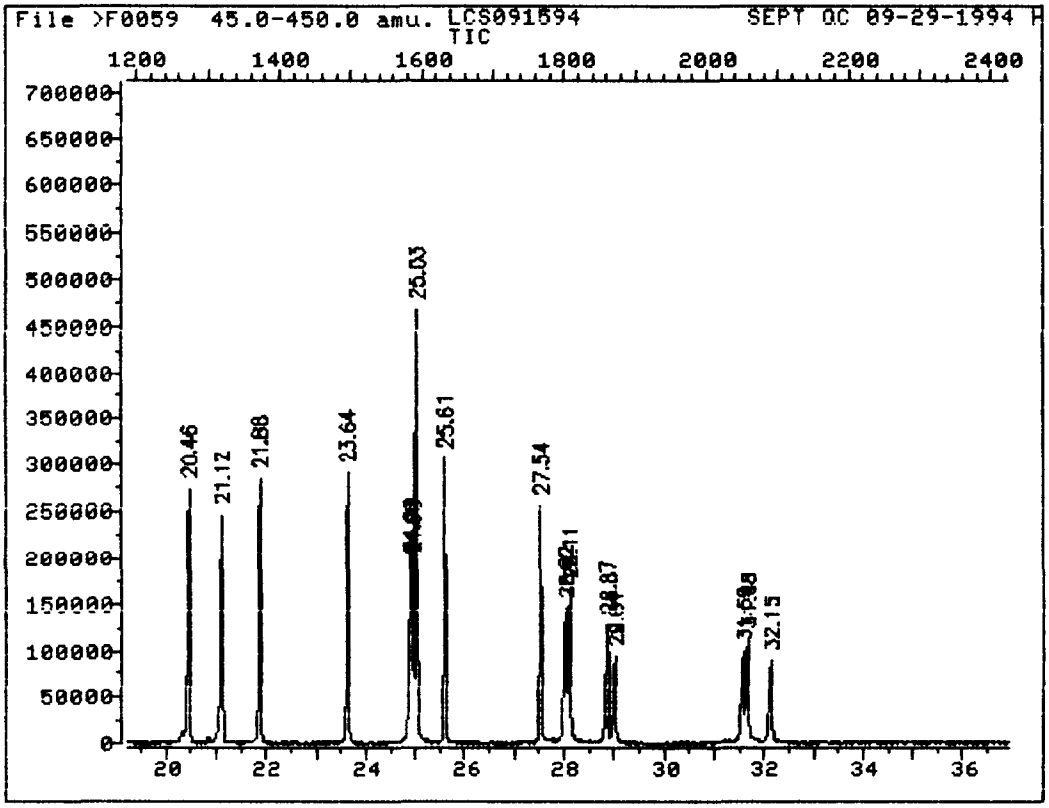
Name: LCS091594 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#10

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:13
Injected at: 940929 15:28

TOTAL ION CHROMATOGRAM



Data File: >F0059::D2 Quant Output File: ^F0059::QT
Name: LCS091594 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#10

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:13
Injected at: 940929 15:28

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD091594

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCSD091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0060

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	86	
111-44-4	bis(2-Chloroethyl)ether	77	
95-57-8	2-Chlorophenol	83	
95-48-7	2-Methylphenol	80	
108-60-1	bis(2-Chloroisopropyl)ether	76	
106-44-5	4-Methylphenol	83	
621-64-7	N-Nitroso-di-n-propylamine	88	
67-72-1	Hexachloroethane	58	
98-95-3	Nitrobenzene	75	
78-59-1	Isophorone	89	
88-75-5	2-Nitrophenol	81	
105-67-9	2,4-Dimethylphenol	57	
111-91-1	bis(2-Chloroethoxy)methane	84	
120-83-2	2,4-Dichlorophenol	87	
120-82-1	1,2,4-Trichlorobenzene	71	
91-20-3	Naphthalene	67	
106-47-8	4-Chloroaniline	84	
87-68-3	Hexachlorobutadiene	62	
59-50-7	4-Chloro-3-methylphenol	87	
91-57-6	2-Methylnaphthalene	75	
77-47-4	Hexachlorocyclopentadiene	22	
88-06-2	2,4,6-Trichlorophenol	94	
95-95-4	2,4,5-Trichlorophenol	85	
91-58-7	2-Chloronaphthalene	80	
88-74-4	2-Nitroaniline	98	
131-11-3	Dimethylphthalate	92	
208-96-8	Acenaphthylene	89	
606-20-2	2,6-Dinitrotoluene	97	

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD091594

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: LCSD091594

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0060

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	97	
83-32-9	Acenaphthene	85	
51-28-5	2,4-Dinitrophenol	94	
100-02-7	4-Nitrophenol	110	E
132-64-9	Dibenzofuran	85	
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	91	
7005-72-3	4-Chlorophenyl-phenylether	84	
86-73-7	Fluorene	89	
100-01-6	4-Nitroaniline	95	
534-52-1	4,6-Dinitro-2-methylphenol	120	E
86-30-6	N-Nitrosodiphenylamine	94	
101-55-3	4-Bromophenyl-phenylether	96	
118-74-1	Hexachlorobenzene	96	
87-86-5	Pentachlorophenol	120	E
85-01-8	Phenanthrene	91	
120-12-7	Anthracene	92	
84-74-2	Di-n-butylphthalate	98	
206-44-0	Fluoranthene	98	
129-00-0	Pyrene	98	
85-68-7	Butylbenzylphthalate	102	E
91-94-1	3,3'-Dichlorobenzidine	89	
56-55-3	Benzo(a)anthracene	97	
218-01-9	Chrysene	89	
117-81-7	bis(2-Ethylhexyl)phthalate	102	B E
117-84-0	Di-n-octylphthalate	93	
205-99-2	Benzo(b)fluoranthene	88	
207-08-9	Benzo(k)fluoranthene	80	
50-32-8	Benzo(a)pyrene	77	
193-39-5	Indeno(1,2,3-cd)pyrene	88	
53-70-3	Dibenzo(a,h)anthracene	89	
191-24-2	Benzo(g,h,i)perylene	72	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:15
Output File: ^F0060::QT Injected at: 940929 16:12
Data File: >F0060::D2 Dilution Factor: 1.00000
Name: ~~LCSD091694~~ LCSD091594 vg 10/7/94 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#11

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.20	152.0	37462	50.00	NG/UL	89
2)	2-Fluorophenol	2.39	112.0	38906	71.52	NG/UL	91
3)	Phenol-d5	3.64	99.0	36914M	78.85	NG/UL	
4)	Phenol	3.65	94.0	41993M	85.91	NG/UL	
5)	Aniline	3.67	93.0	17064M	32.94	NG/UL	
6)	bis(2-Chloroethyl)ether	3.78	93.0	32406M	77.14	NG/UL	98
7)	2-Chlorophenol	3.84	128.0	62555	83.28	NG/UL	94
8)	1,3-Dichlorobenzene	4.08	146.0	60040	57.11	NG/UL	96
9)	1,4-Dichlorobenzene	4.23	146.0	71274	61.13	NG/UL	99
10)	Benzyl alcohol	4.53	108.0	24006	85.21	NG/UL	84
11)	1,2-Dichlorobenzene	4.50	146.0	65247	60.81	NG/UL	96
12)	2-Methylphenol	4.80	108.0	32770	80.21	NG/UL	95
13)	bis(2-Chloroisopropyl)ether	4.83	121.0	18114M	76.46	NG/UL	92
14)	4-Methylphenol	5.17	108.0	34920	82.99	NG/UL	96
15)	N-Nitroso-di-n-propylamine	5.13	70.0	26000	88.50	NG/UL	34
16)	Hexachloroethane	5.19	201.0	31090	58.43	NG/UL	97
17)	Nitrobenzene-d5	5.37	82.0	60255	75.90	NG/UL	89
18)	Nitrobenzene	5.42	123.0	25933	75.22	NG/UL	96
19)	Isophorone	6.03	82.0	85655	89.41	NG/UL	59
20)	2-Nitrophenol	6.16	139.0	34446M	81.33	NG/UL	
21)	2,4-Dimethylphenol	6.43	122.0	24702	56.71	NG/UL	72
22)	Benzoic acid	7.06	105.0	38607M	94.62	NG/UL	93
23)	bis(2-Chloroethoxy)methane	6.66	93.0	37214	84.38	NG/UL	98
24)	2,4-Dichlorophenol	6.81	162.0	65385	87.29	NG/UL	92
25)	1,2,4-Trichlorobenzene	6.96	180.0	68647	71.17	NG/UL	91
26)	*Naphthalene-d8	7.08	136.0	113204	50.00	NG/UL	85
27)	Naphthalene	7.14	128.0	134477	66.94	NG/UL	83
28)	4-Chloroaniline	7.39	127.0	59063	83.82	NG/UL	94
29)	Hexachlorobutadiene	7.55	225.0	55673	61.73	NG/UL	89
30)	4-Chloro-3-methylphenol	8.96	107.0	62661	86.64	NG/UL	87
31)	2-Methylnaphthalene	9.08	142.0	116450	75.26	NG/UL	82
32)	Hexachlorocyclopentadiene	9.57	237.0	15912	22.31	NG/UL	95
33)	2,4,6-Trichlorophenol	10.02	196.0	55174	94.19	NG/UL	93
34)	2,4,5-Trichlorophenol	10.12	196.0	54750	85.30	NG/UL	99
35)	2-Chloronaphthalene	10.50	162.0	126432	80.16	NG/UL	85
36)	2-Fluorobiphenyl	10.29	172.0	144468	69.21	NG/UL	90
37)	2-Nitroaniline	10.95	138.0	43656	98.15	NG/UL	89
38)	Dimethylphthalate	11.69	163.0	220517	92.42	NG/UL	94
39)	Acenaphthylene	11.71	152.0	211678	89.00	NG/UL	98
40)	*Acenaphthene-d10	12.15	164.0	68582	50.00	NG/UL	98

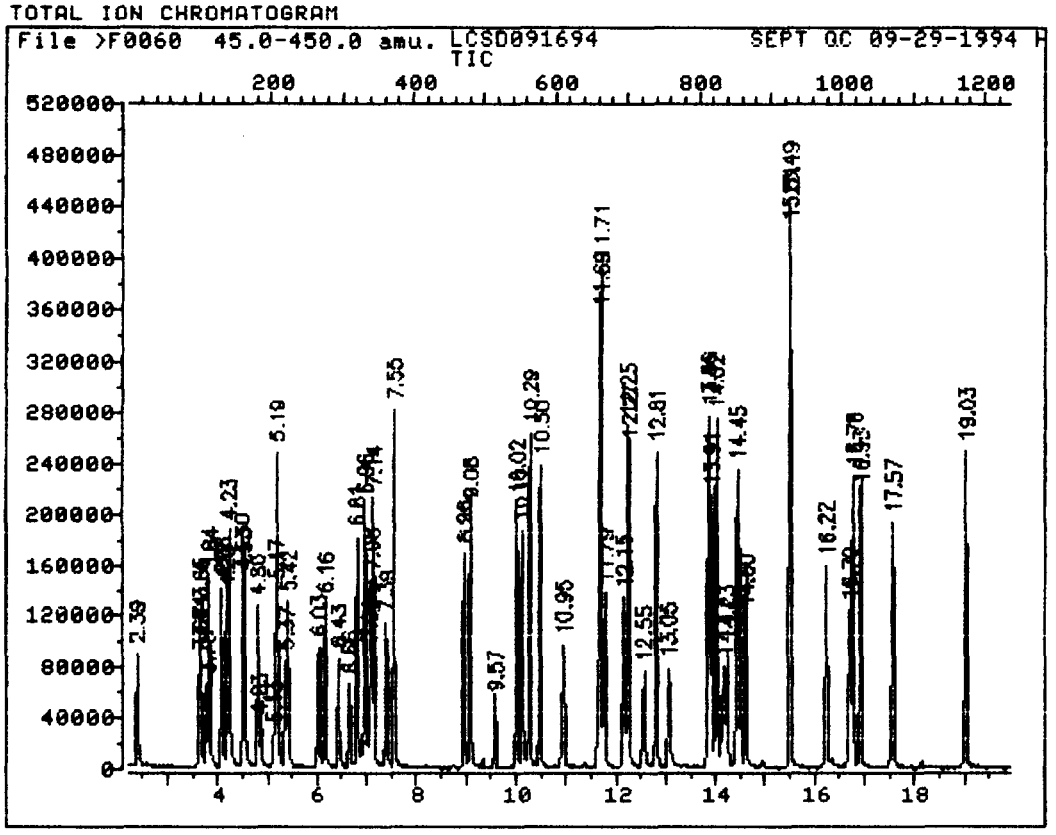
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:15
Output File: ^F0060::QT Injected at: 940929 16:12
Data File: >F0060::D2 Dilution Factor: 1.00000
Name: LCSD091694 ws 10/9/94 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#11

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.25	138.0	38301	96.57	NG/UL	73
42)	Acenaphthene	12.27	153.0	138024	85.00	NG/UL	93
43)	2,4-Dinitrophenol	12.55	184.0	25458M	94.28	NG/UL	
44)	4-Nitrophenol	13.05	109.0	74720M	113.13	NG/UL	
45)	Dibenzofuran	12.81	168.0	188259	85.47	NG/UL	61
46)	2,6-Dinitrotoluene	11.79	165.0	48286	97.25	NG/UL	28
48)	Diethylphthalate	13.91	149.0	233502	91.49	NG/UL	89
49)	4-Chlorophenyl-phenylether	14.02	204.0	90882	84.03	NG/UL	98
50)	Fluorene	13.86	166.0	150561	88.65	NG/UL	92
51)	4-Nitroaniline	14.17	138.0	29120M	95.44	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.23	198.0	33491M	120.59	NG/UL	
53)	N-Nitrosodiphenylamine	14.45	169.0	112671	93.63	NG/UL	93
54)	2,4,6-Tribromophenol	14.60	329.9	32324	79.74	NG/UL	92
55)	4-Bromophenyl-phenylether	15.49	248.0	64515	96.23	NG/UL	85
56)	Hexachlorobenzene	15.51	283.9	69932	96.31	NG/UL	98
57)	Pentachlorophenol	16.22	265.8	37954	120.21	NG/UL	94
58)	*Phenanthrene-d10	16.70	188.0	112161	50.00	NG/UL	97
59)	Phenanthrene	16.78	178.0	213881	90.76	NG/UL	89
60)	Anthracene	16.93	178.0	217574	92.00	NG/UL	97
61)	Carbazole	17.57	167.0	185032	93.27	NG/UL	93
62)	Di-n-butylphthalate	19.03	149.0	304351	97.62	NG/UL	98
63)	Fluoranthene	20.45	202.0	219350	98.42	NG/UL	79
64)	Pyrene	21.11	202.0	222806	98.16	NG/UL	82
65)	Terphenyl-d14	21.87	244.0	146714	82.25	NG/UL	97
66)	Butylbenzylphthalate	23.63	149.0	122353	101.52	NG/UL	83
67)	Benzo(a)anthracene	24.89	228.0	182129	97.35	NG/UL	88
68)	3,3'-Dichlorobenzidine	25.02	252.0	66850	89.49	NG/UL	97
69)	bis(2-Ethylhexyl)phthalate	25.59	149.0	162413	101.61	NG/UL	91
70)	*Chrysene-d12	24.92	240.0	95135	50.00	NG/UL	96
71)	Chrysene	25.00	228.0	178279	89.16	NG/UL	90
72)	Di-n-octylphthalate	27.52	149.0	238964	93.15	NG/UL	85
73)	Benzo(b)fluoranthene	28.01	252.0	158273	87.98	NG/UL	88
74)	Benzo(k)fluoranthene	28.10	252.0	147550	79.79	NG/UL	88
75)	Benzo(a)pyrene	28.85	252.0	122798	76.76	NG/UL	86
76)	*Perylene-d12	29.00	264.0	75246	50.00	NG/UL	97
77)	Indeno(1,2,3-cd)pyrene	31.57	276.0	101600	87.92	NG/UL	64
78)	Dibenzo(a,h)anthracene	31.66	278.0	100113	88.68	NG/UL	93
79)	Benzo(g,h,i)perylene	32.13	276.0	87527	72.18	NG/UL	67

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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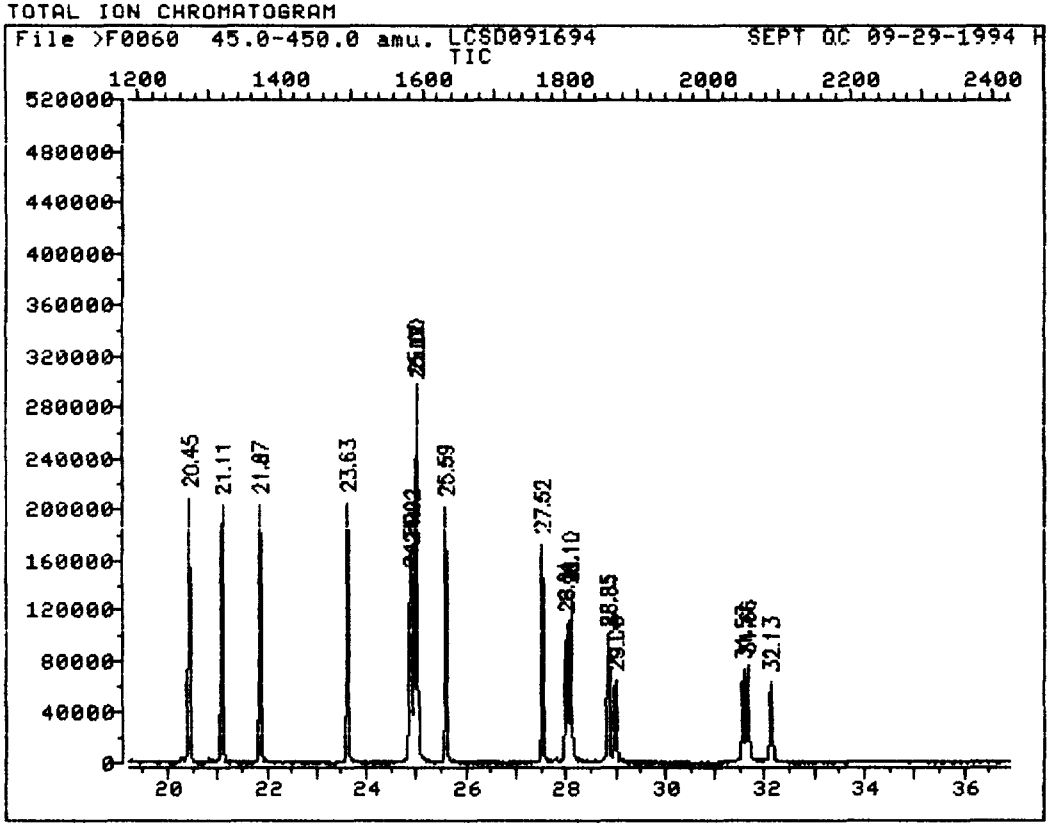
Name: LCSD091694 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#11

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:15
Injected at: 940929 16:12

TOTAL ION CHROMATOGRAM



Data File: >F0060::D2 Quant Output File: ^F0060::QT
Name: LCSD091694 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL#11

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:15
Injected at: 940929 16:12

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PT574

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: PT574

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0058

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	10	
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	13	
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	19	
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	11	
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [X] NO [ ]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PT574

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: PT574

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0058

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	45	
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5	U
121-14-2	2,4-Dinitrotoluene	5	U
84-66-2	Diethylphthalate	5	U
7005-72-3	4-Chlorophenyl-phenylether	5	U
86-73-7	Fluorene	5	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	5	U
101-55-3	4-Bromophenyl-phenylether	5	U
118-74-1	Hexachlorobenzene	5	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	21	
120-12-7	Anthracene	5	U
84-74-2	Di-n-butylphthalate	9	
206-44-0	Fluoranthene	5	U
129-00-0	Pyrene	15	
85-68-7	Butylbenzylphthalate	5	U
91-94-1	3,3'-Dichlorobenzidine	5	U
56-55-3	Benzo(a)anthracene	5	U
218-01-9	Chrysene	5	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	UB
117-84-0	Di-n-octylphthalate	5	U
205-99-2	Benzo(b)fluoranthene	14	
207-08-9	Benzo(k)fluoranthene	5	U
50-32-8	Benzo(a)pyrene	5	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	U
53-70-3	Dibenzo(a,h)anthracene	5	U
191-24-2	Benzo(g,h,i)perylene	5	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PT574

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: PT574

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >F0058

Level: (low/med) LOW Date Received: 09/15/94

% Moisture: not dec.---- dec. ---- Date Extracted: 09/15/94

Extraction: (Sepf/Cont/Sonc) Cont Date Analyzed: 09/29/94

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 1.00

Number TICs found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	56382	Parathion	19.43	11	J
2.	72208	Endrin	22.33	14	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

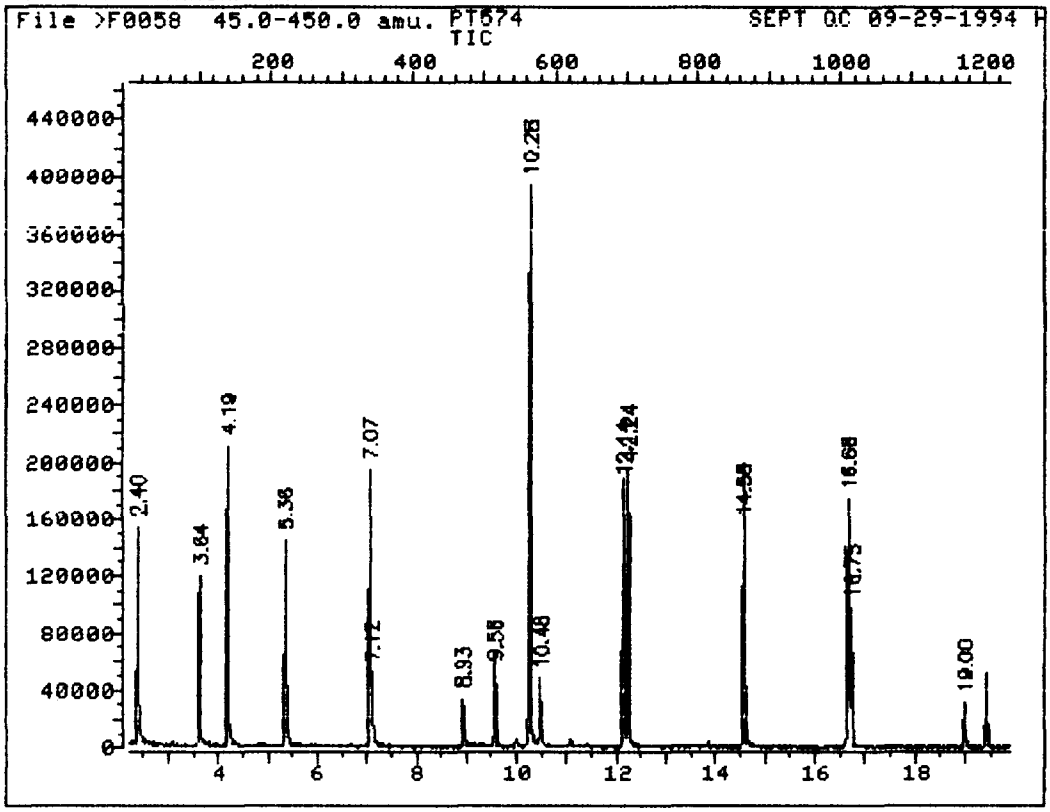
Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941003 10:11
Output File: ^F0058::QT
Injected at: 940929 14:45
Data File: >F0058::D2
Dilution Factor: 1.00000
Name: PT574
Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987
BTL# 9

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.19	152.0	60285	50.00	NG/UL	94
2)	2-Fluorophenol	2.40	112.0	62783	71.72	NG/UL	96
3)	Phenol-d5	3.64	99.0	59589M	79.10	NG/UL	
17)	Nitrobenzene-d5	5.36	82.0	84880	66.44	NG/UL	94
26)	*Naphthalene-d8	7.07	136.0	162224	50.00	NG/UL	75
27)	Naphthalene	7.12	128.0	28966	10.06	NG/UL	83
30)	4-Chloro-3-methylphenol	8.93	107.0	13788	13.30	NG/UL	78
32)	Hexachlorocyclopentadiene	9.56	237.0	18954	18.55	NG/UL	98
35)	2-Chloronaphthalene	10.48	162.0	23715	10.49	NG/UL	83
36)	2-Fluorobiphenyl	10.28	172.0	219090	73.24	NG/UL	95
40)	*Acenaphthene-d10	12.14	164.0	95323	50.00	NG/UL	89
42)	Acenaphthene	12.24	153.0	101199	44.84	NG/UL	95
54)	2,4,6-Tribromophenol	14.58	329.9	44138	78.33	NG/UL	98
58)	*Phenanthrene-d10	16.68	188.0	153486	50.00	NG/UL	95
59)	Phenanthrene	16.75	178.0	68326	21.19	NG/UL	93
62)	Di-n-butylphthalate	19.00	149.0	40303	9.45	NG/UL	99
64)	Pyrene	21.07	202.0	46146	14.86	NG/UL	80
65)	Terphenyl-d14	21.87	244.0	178709	73.21	NG/UL	96
69)	bis(2-Ethylhexyl)phthalate	25.58	149.0	7858	3.59	NG/UL	84
70)	*Chrysene-d12	24.89	240.0	108115	50.00	NG/UL	99
73)	Benzo(b)fluoranthene	27.96	252.0	29526	14.44	NG/UL	85
76)	*Perylene-d12	28.98	264.0	98764	50.00	NG/UL	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM

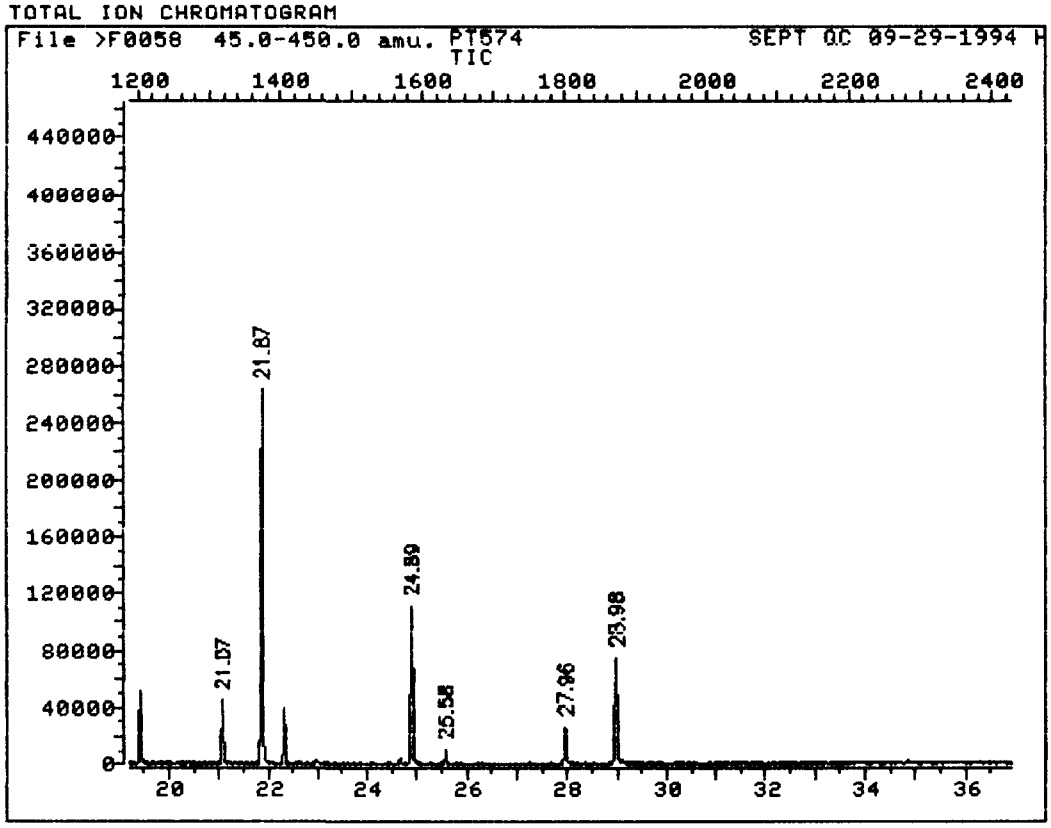


Data File: >F0058::D2 Quant Output File: ^F0058::QT
Name: PT574 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL# 9

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:11
Injected at: 940929 14:45

TOTAL ION CHROMATOGRAM

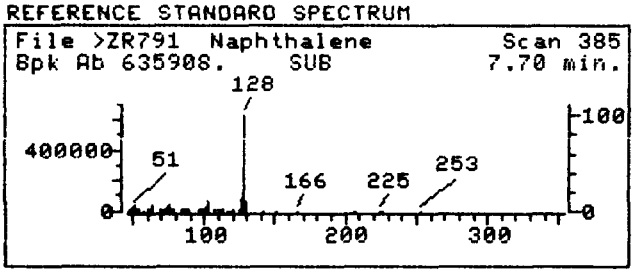


Data File: >F0058::D2 Quant Output File: ^F0058::QT
Name: PT574 Instrument ID: 5985
Misc: SEPT QC 09-29-1994 HP5987 BTL# 9

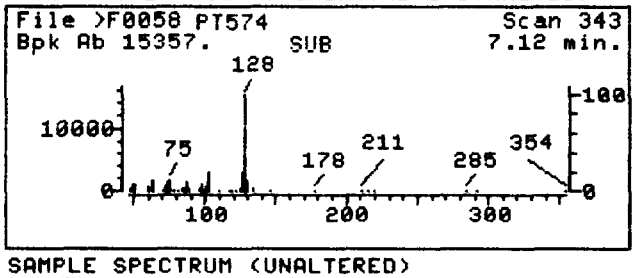
Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941003 10:11
Injected at: 940929 14:45

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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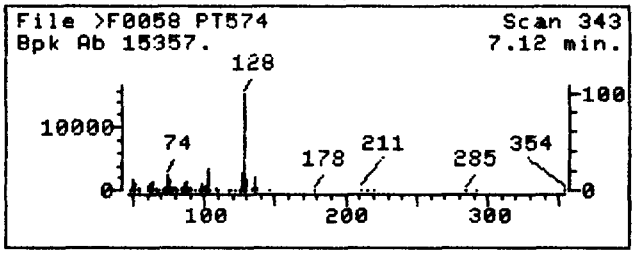
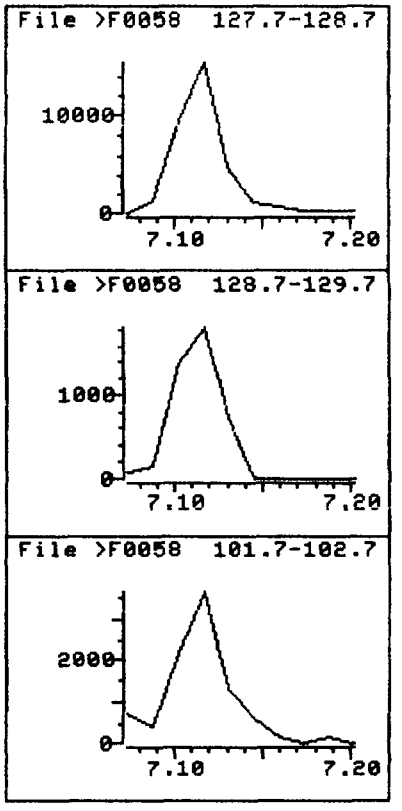


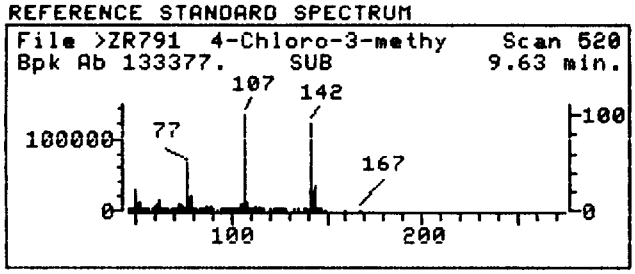


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

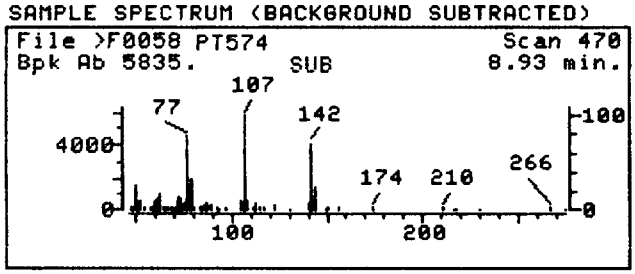
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 27
Compound Name : Naphthalene
Scan Number : 343
Retention Time: 7.12 min.
Quant Ion : 128.0
Area : 28966
Concentration : 10.06 NG/UL
q-value : 83

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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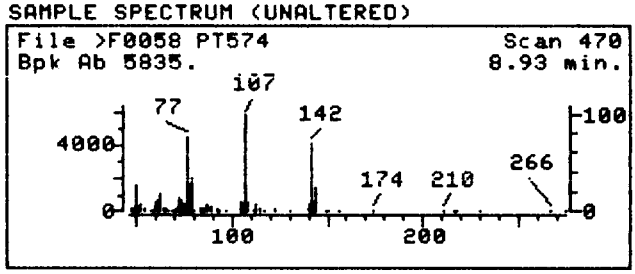
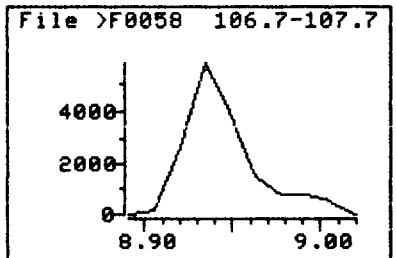
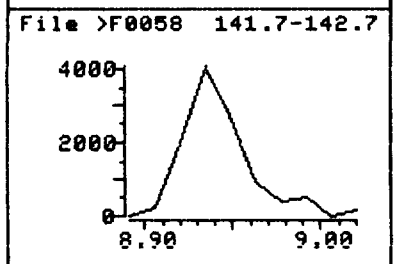
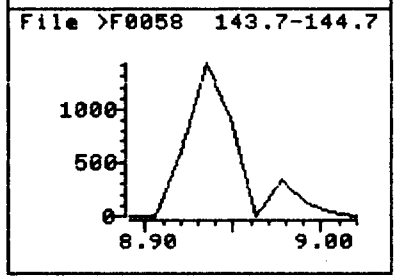






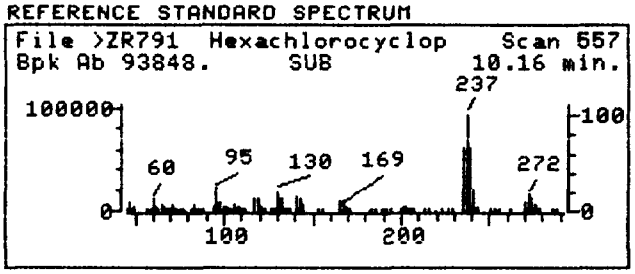


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

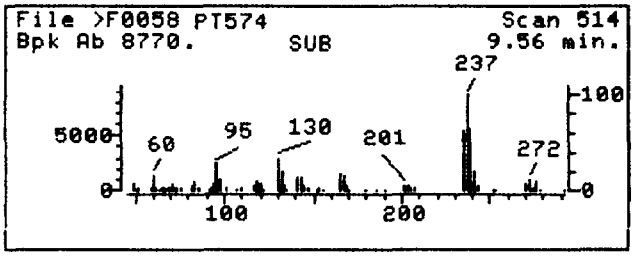
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 30
Compound Name : 4-Chloro-3-methylphenol
Scan Number : 470
Retention Time: 8.93 min.
Quant Ion : 107.0
Area : 13788
Concentration : 13.30 NG/UL
q-value : 78

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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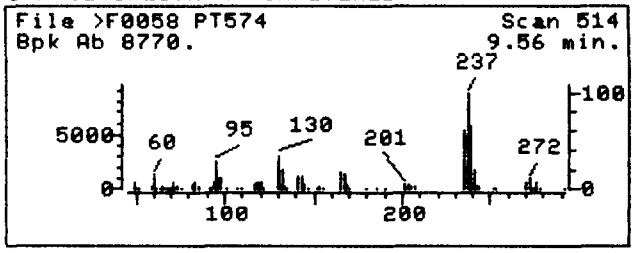
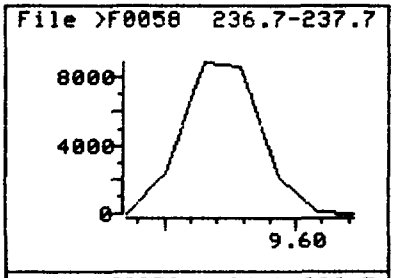
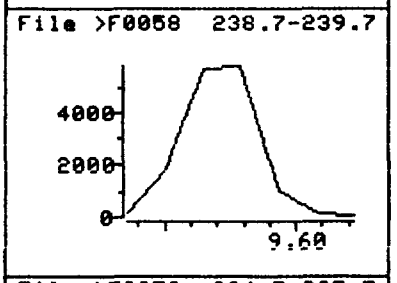
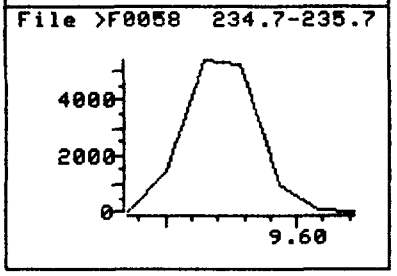






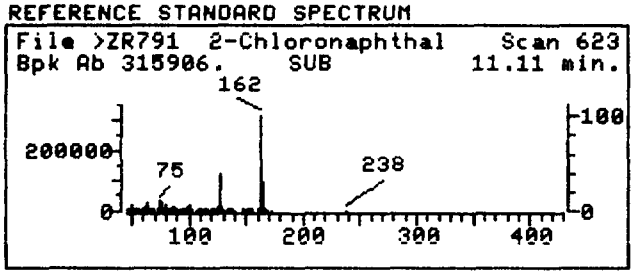


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

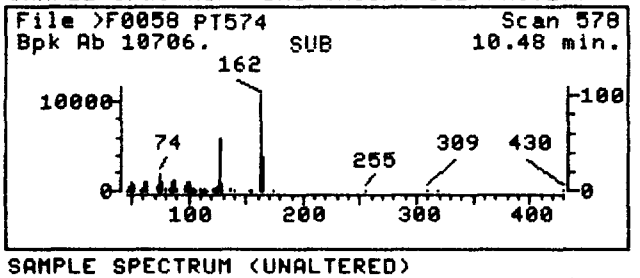
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 32
Compound Name : Hexachlorocyclopentadiene
Scan Number : 514
Retention Time: 9.56 min.
Quant Ion : 237.0
Area : 18954
Concentration : 18.55 NG/UL
q-value : 98

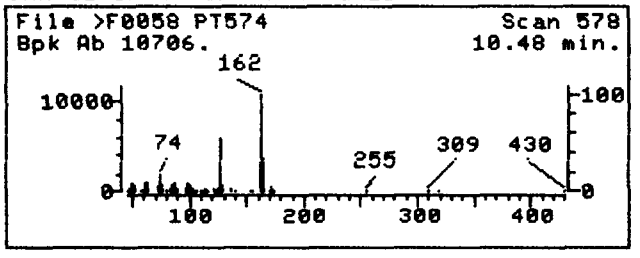
REFERENCE STANDARD SPECTRUM

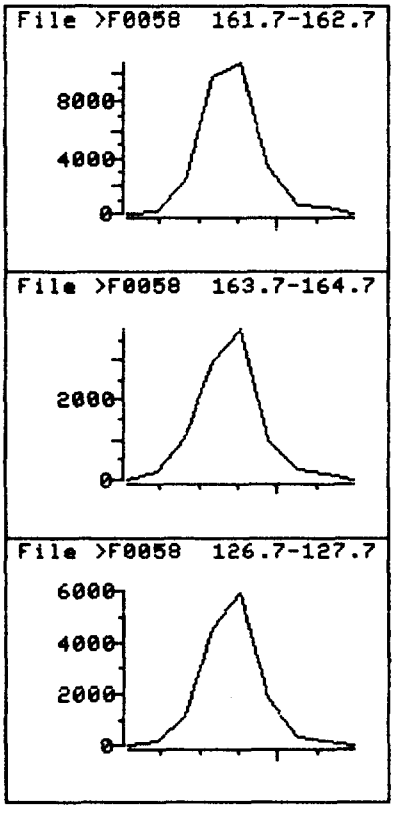


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



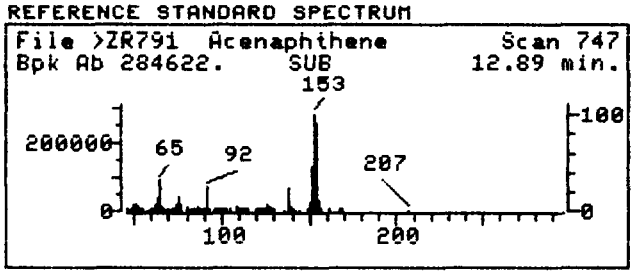


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

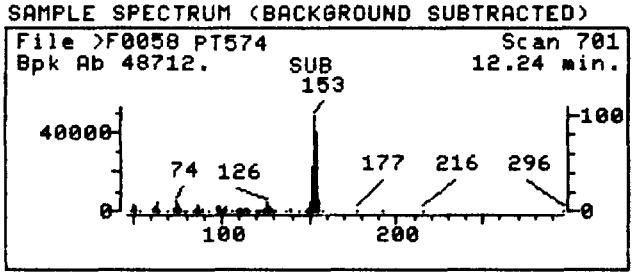
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 35
Compound Name : 2-Chloronaphthalene
Scan Number : 578
Retention Time: 10.48 min.
Quant Ion : 162.0
Area : 23715
Concentration : 10.49 NG/UL
q-value : 83

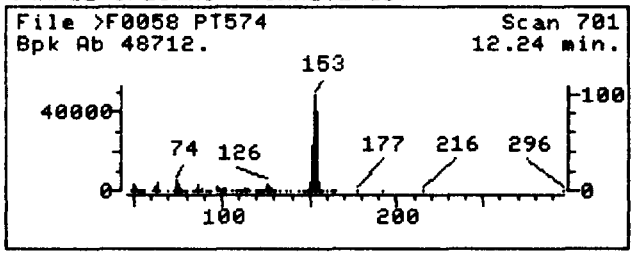
REFERENCE STANDARD SPECTRUM

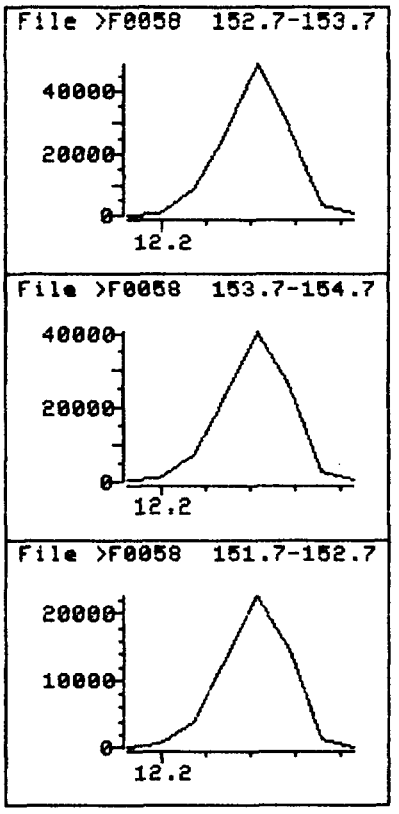


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



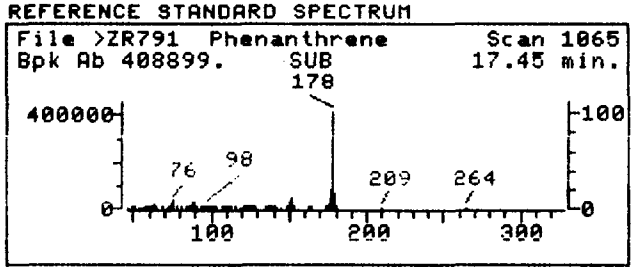


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

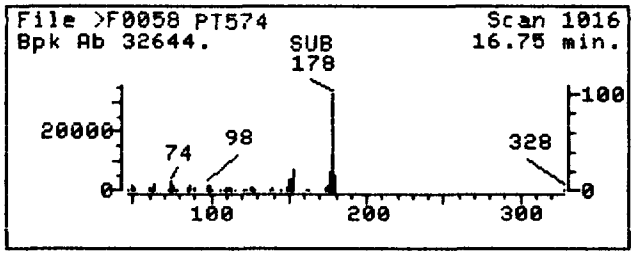
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 42
Compound Name : Acenaphthene
Scan Number : 701
Retention Time: 12.24 min.
Quant Ion : 153.0
Area : 101199
Concentration : 44.84 NG/UL
q-value : 95

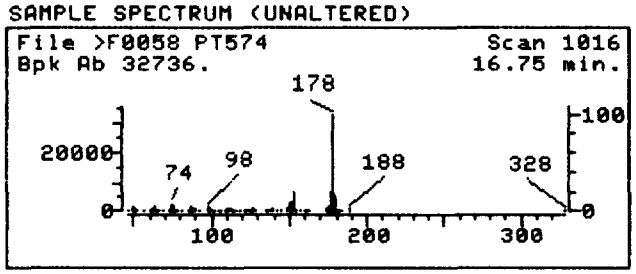
REFERENCE STANDARD SPECTRUM

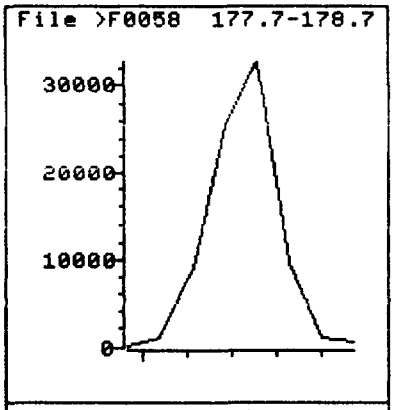


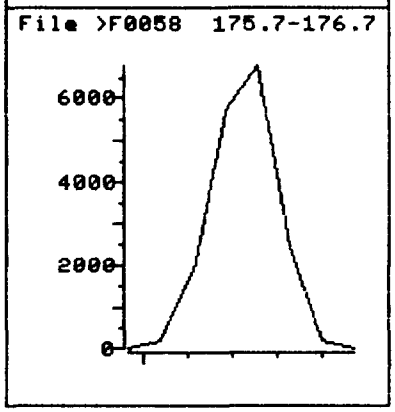
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





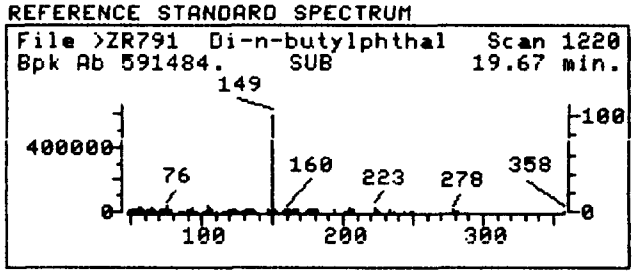


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

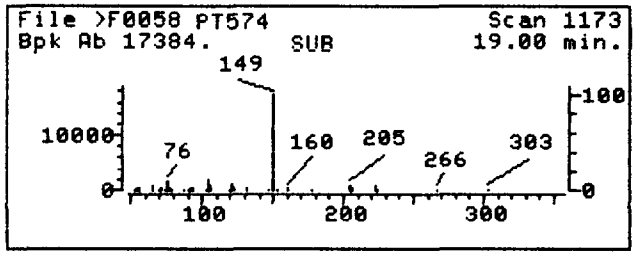
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 59
Compound Name : Phenanthrene
Scan Number : 1016
Retention Time: 16.75 min.
Quant Ion : 178.0
Area : 68326
Concentration : 21.19 NG/UL
q-value : 93

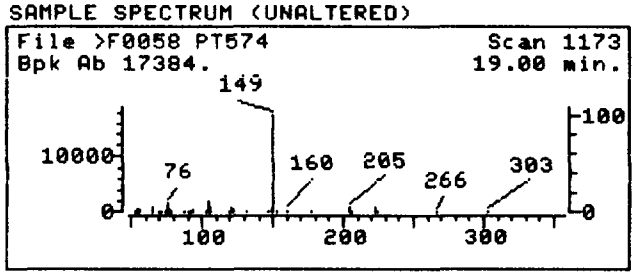
REFERENCE STANDARD SPECTRUM

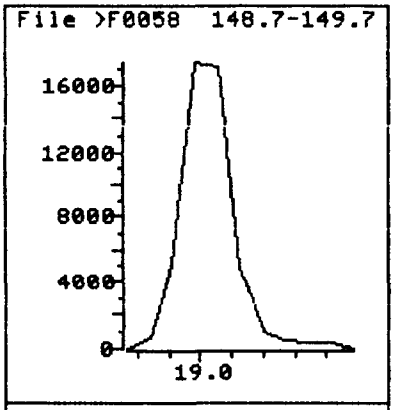


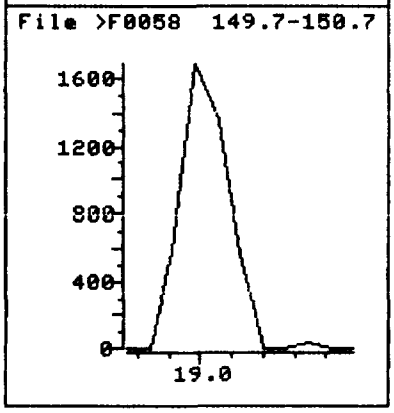
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





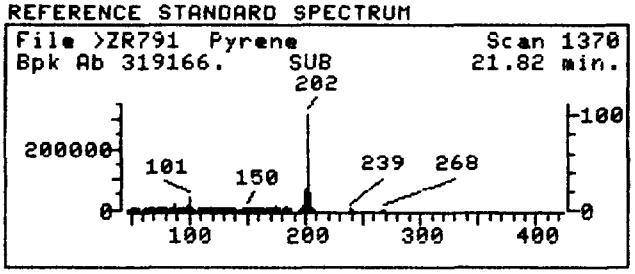


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

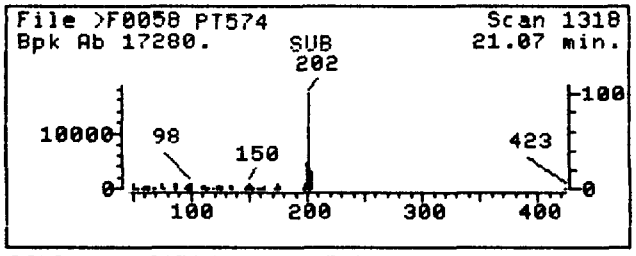
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 62
Compound Name : Di-n-butylphthalate
Scan Number : 1173
Retention Time: 19.00 min.
Quant Ion : 149.0
Area : 40303
Concentration : 9.45 NG/UL
q-value : 99

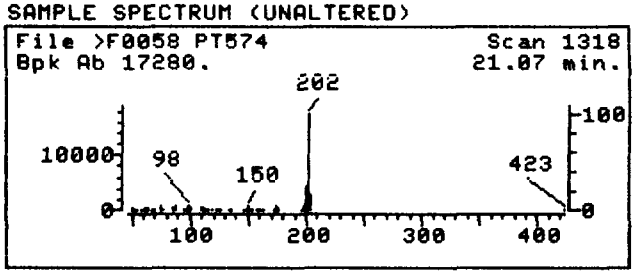
REFERENCE STANDARD SPECTRUM

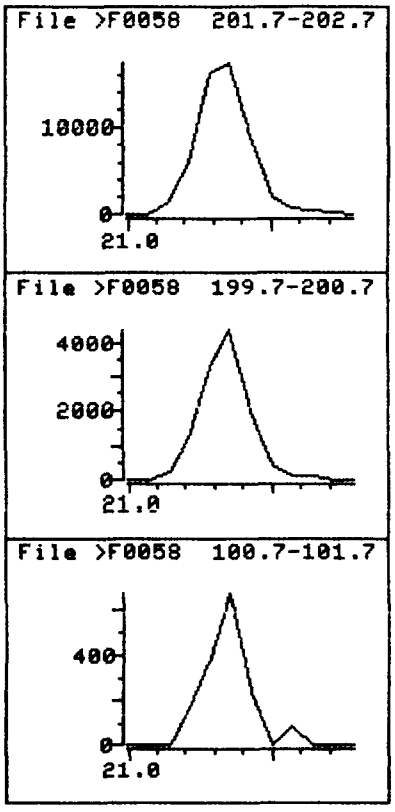


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



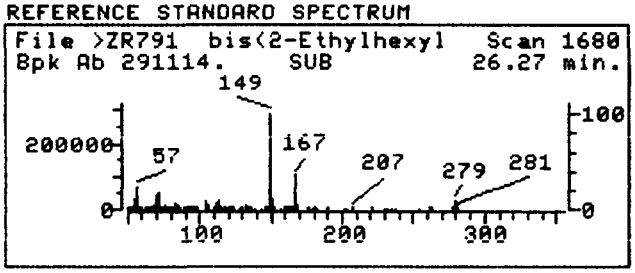


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

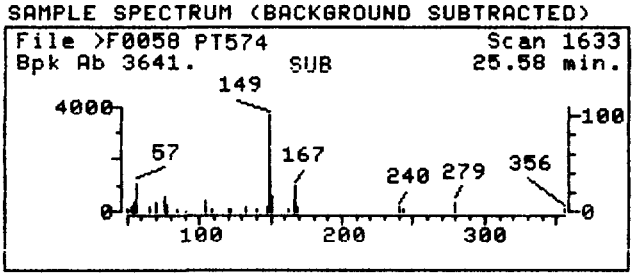
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 64
Compound Name : Pyrene
Scan Number : 1318
Retention Time: 21.07 min.
Quant Ion : 202.0
Area : 46146
Concentration : 14.86 NG/UL
q-value : 80

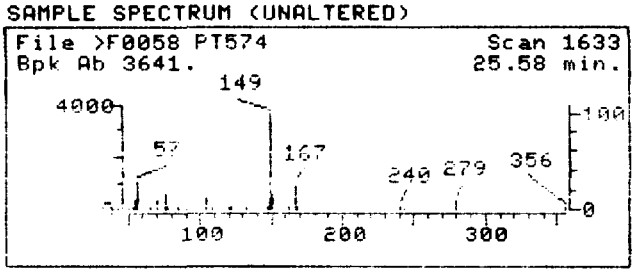
REFERENCE STANDARD SPECTRUM

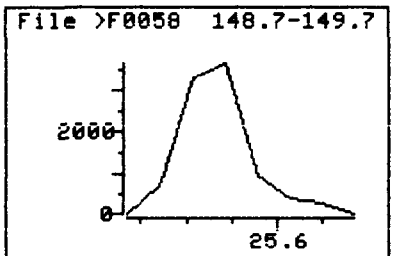


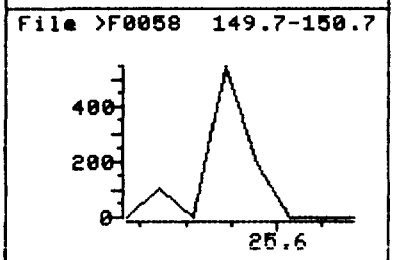
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

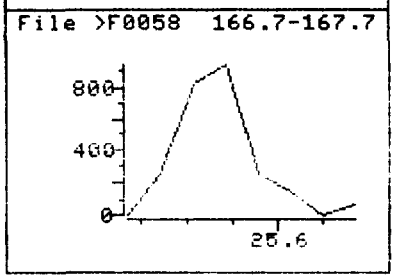


SAMPLE SPECTRUM (UNALTERED)







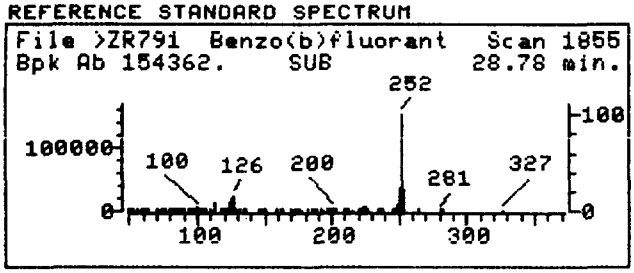


Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

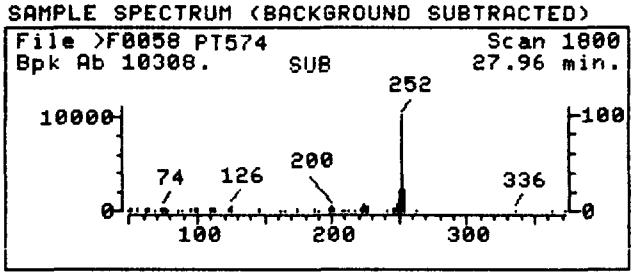
Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1633
Retention Time: 25.58 min.
Quant Ion : 149.0
Area : 7858
Concentration : 3.59 NG/UL
q-value : 84

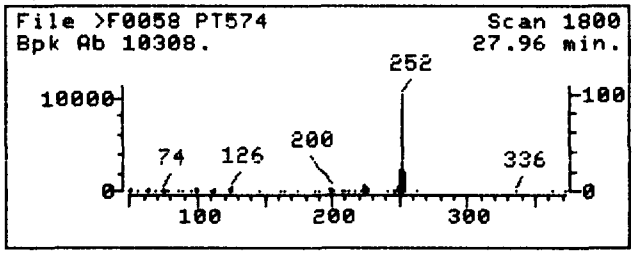
REFERENCE STANDARD SPECTRUM

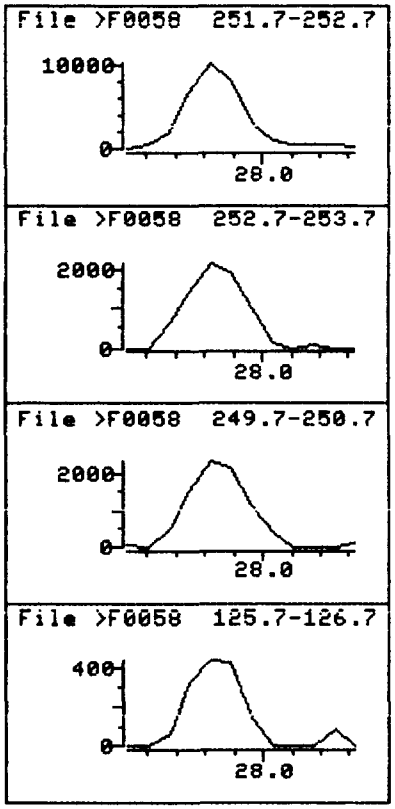


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >F0058::D2
Name: PT574
Misc: SEPT QC 09-29-1994 HP5987
Quant Time: 941003 10:11
Injected at: 940929 14:45
Last Qcal Time: <none>

Quant Output File: ^F0058::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF005::D6
Last Calibration: 941003 10:02

Compound No : 73
Compound Name : Benzo(b)fluoranthene
Scan Number : 1800
Retention Time: 27.96 min.
Quant Ion : 252.0
Area : 29526
Concentration : 14.44 NG/UL
q-value : 85

MS data file header from : >F0058::D2

Sample: PT574 Operator: ZIYAD SUPER GRP. 9/29/94 14:45
Misc : SEPT QC 09-29-1994 HP5987 BTL# 9
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 9 Equip ID: 5985
Method file: TOXIC6 Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	65.	320.	0.	0.	0.
Chromatographic times, min. :	1.0	60.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0058 PT574 SEPT QC 09-29-1994 HP5987
45.01 450.0 CLP TIC
Upslope: .2000 Area Reject: 24211. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IF0058 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	19.43	1199	1203	1209	51224	109724	104066	100.00	54.605
2	22.33	1401	1406	1410	39226	92964	86512	83.13	45.395

Sum of corrected areas: 190578.

Summary of Unknowns PBM Library Search and Quantitation

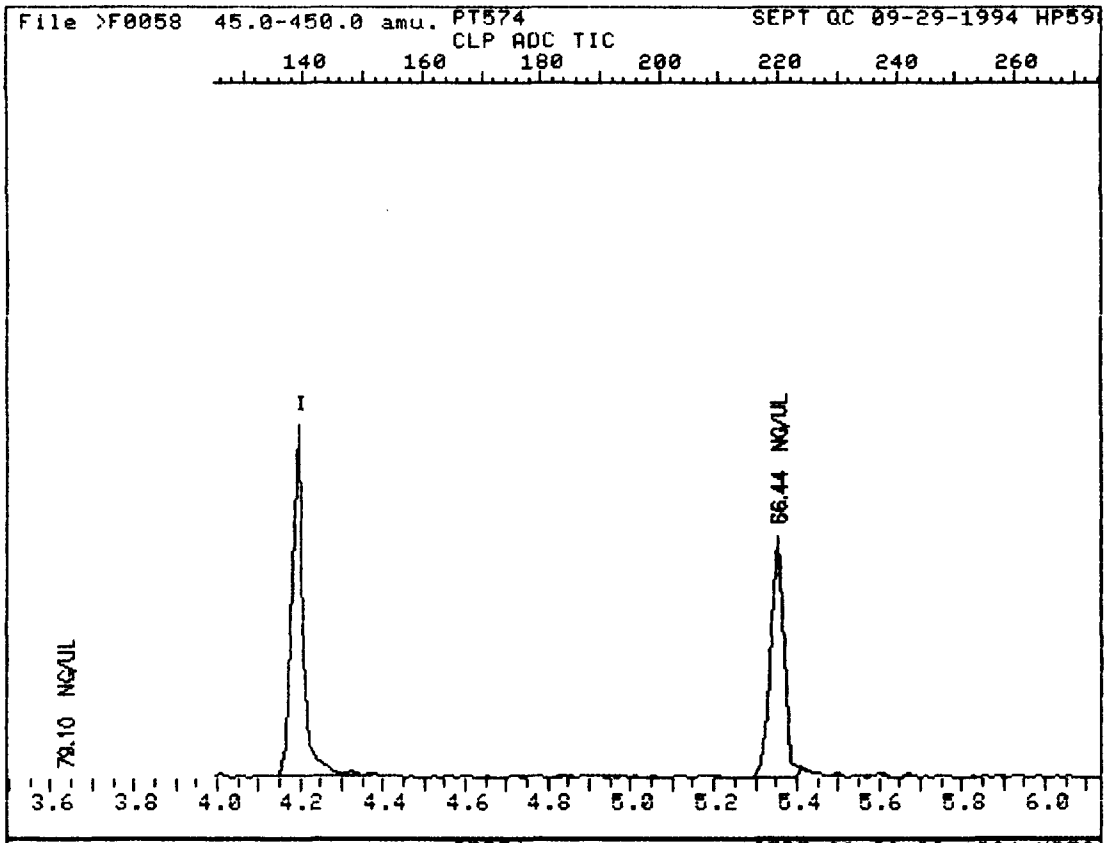
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	406590.	4.19	3.99 - 5.63
2	50.0	514331.	7.07	5.63 - 9.61
3	50.0	488849.	12.14	9.61 - 14.41
4	50.0	465152.	16.68	14.41 - 20.79
5	50.0	318301.	24.89	20.79 - 26.94
6	50.0	242105.	28.98	26.94 - 36.92

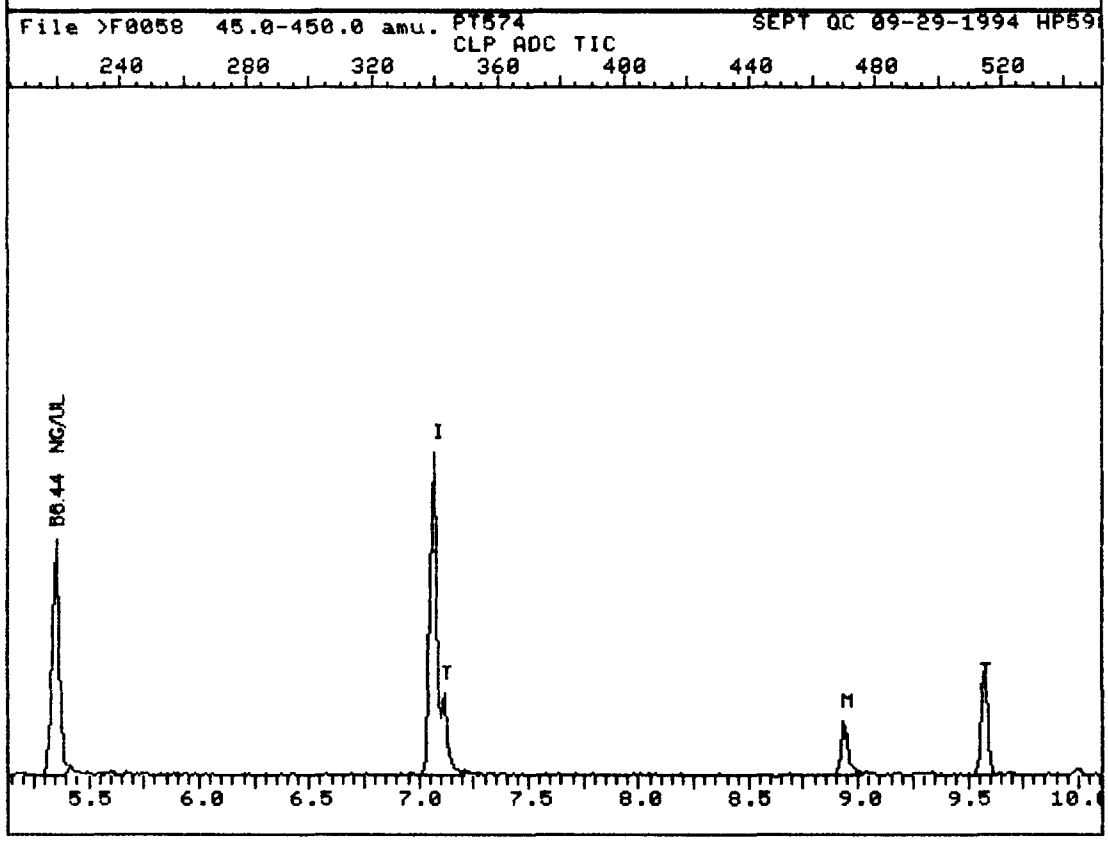
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

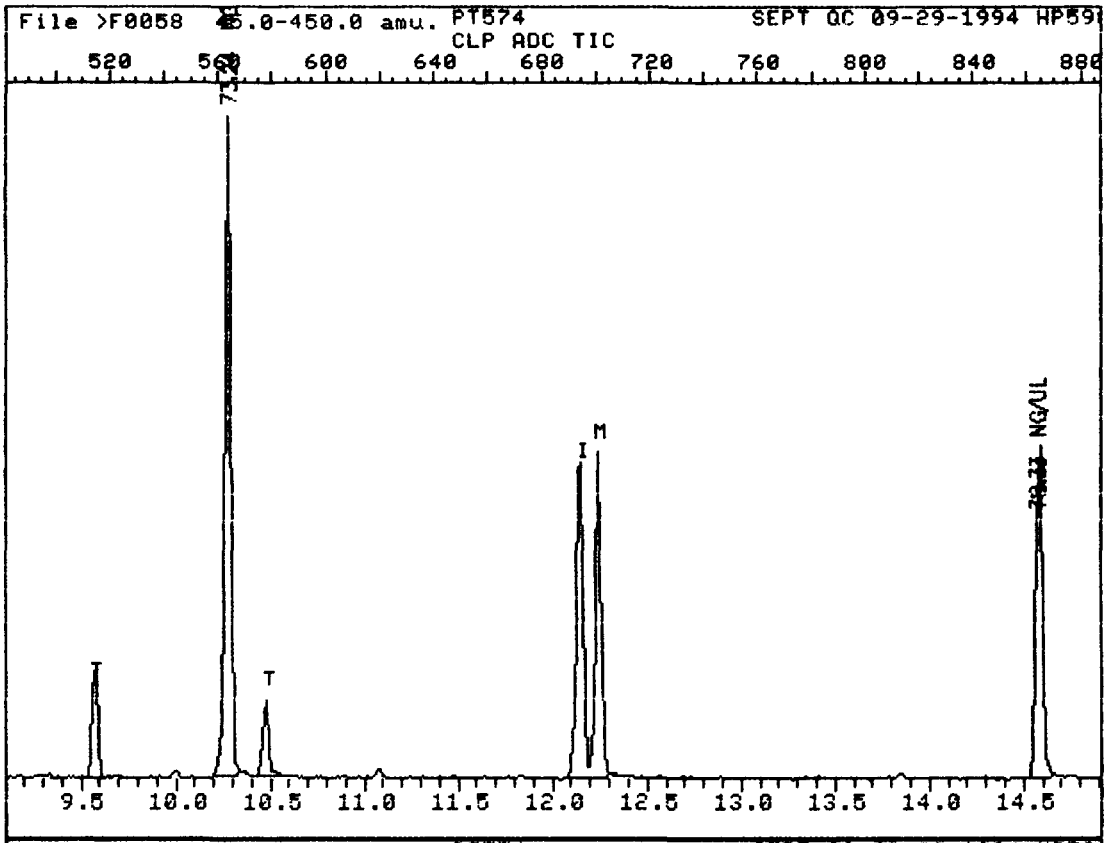
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

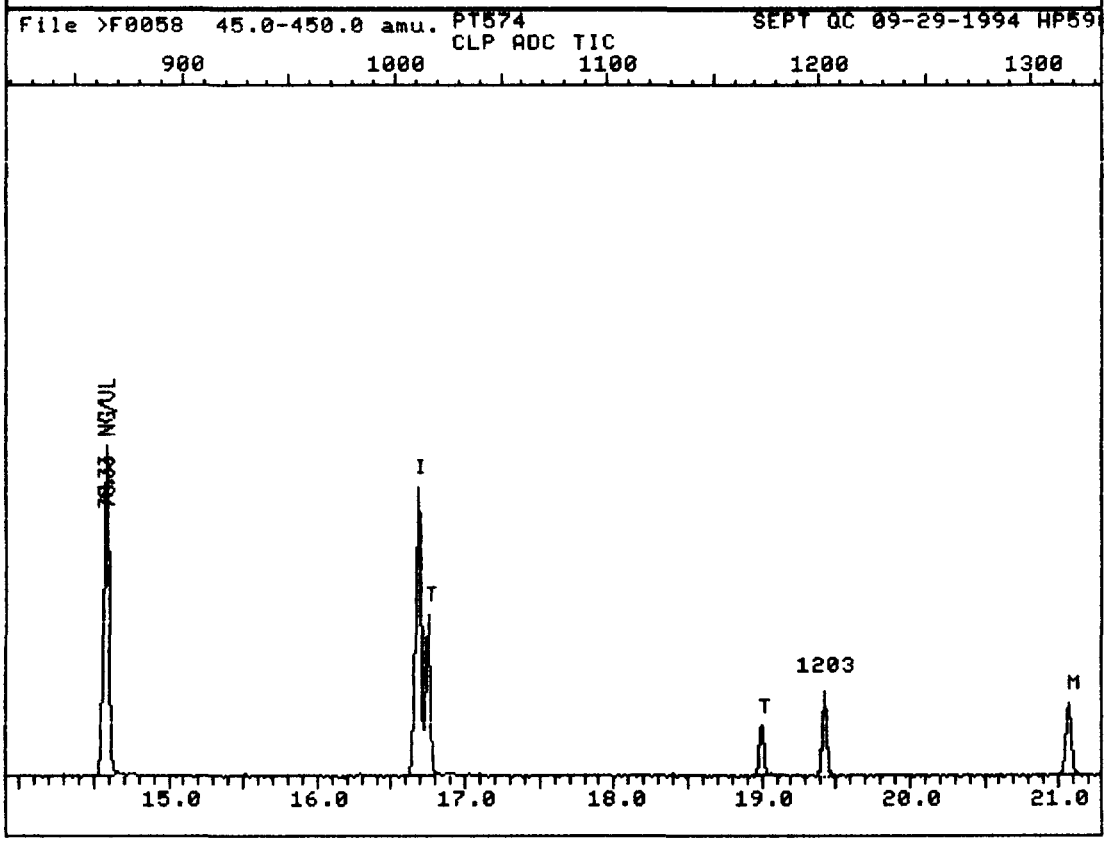
10:07 AM WED., 12 OCT., 1994



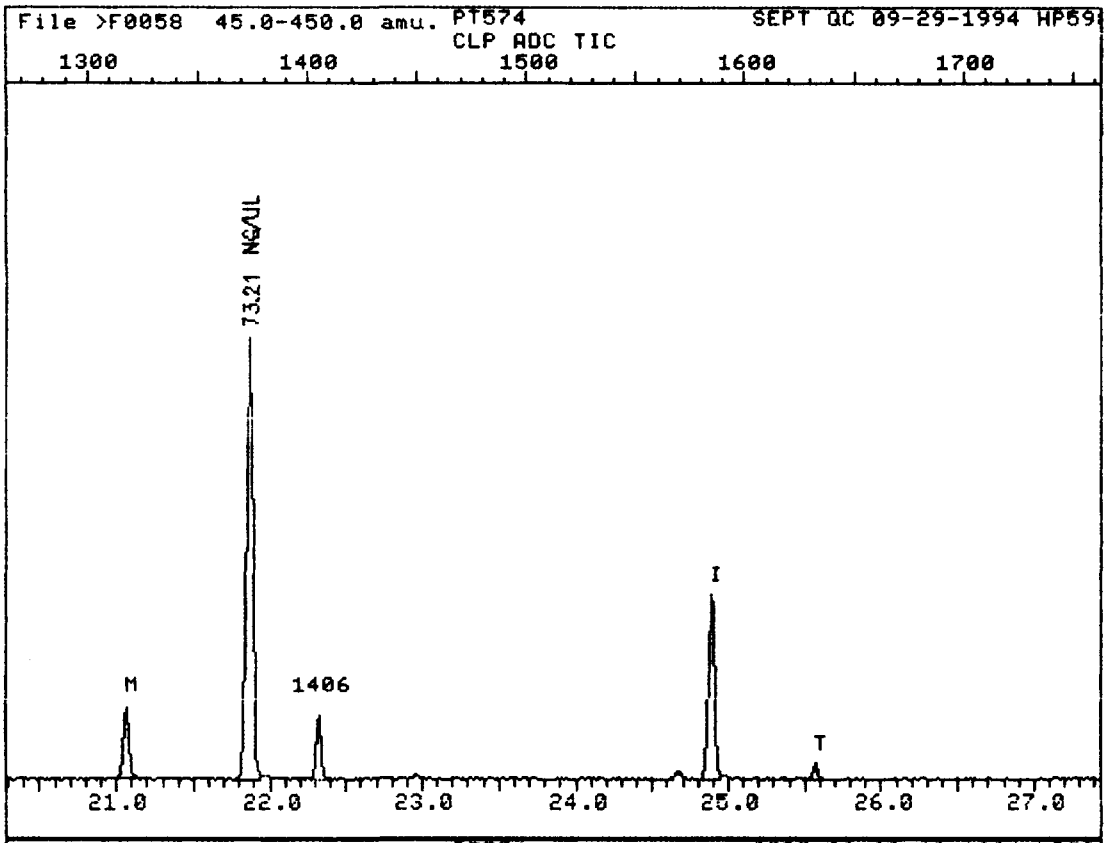


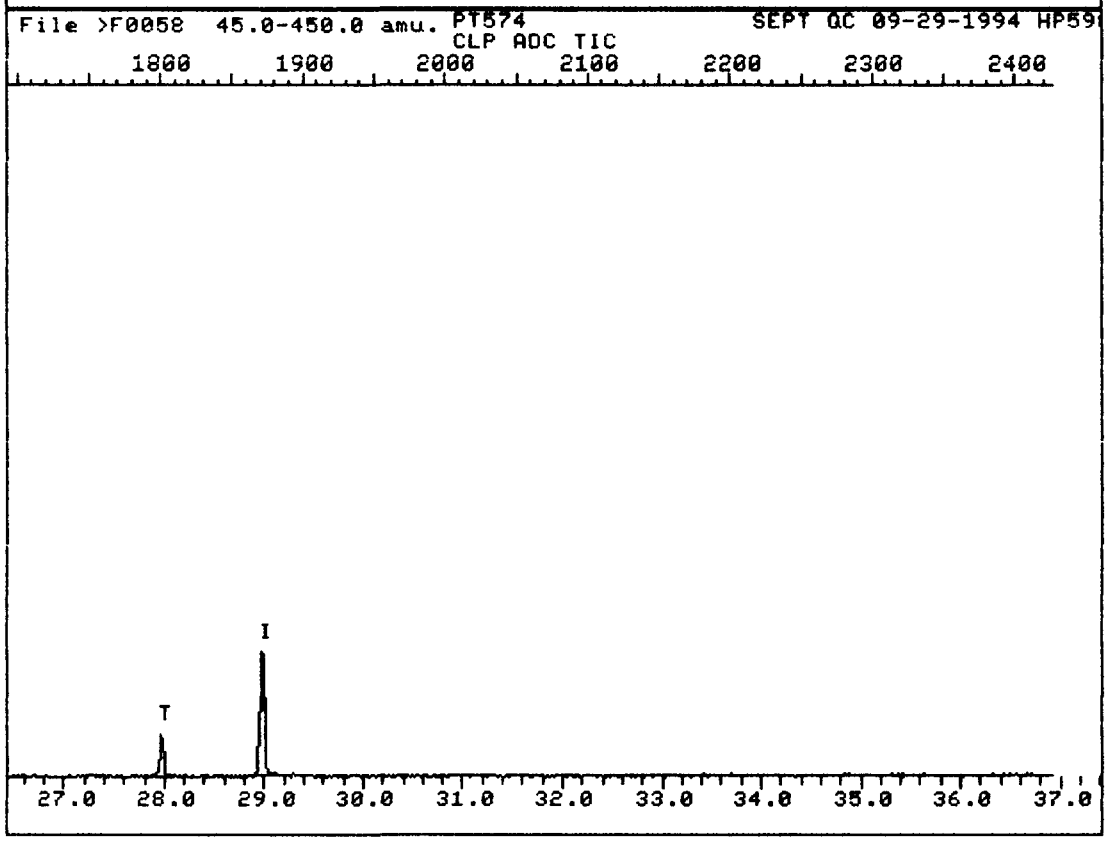
Instrument ID: 5985 Analyzed on: 9/29/94 14:45



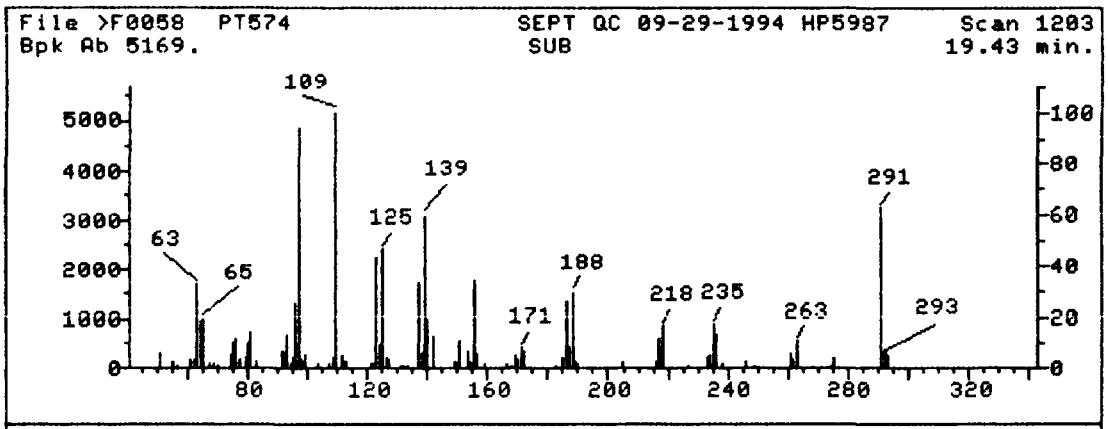


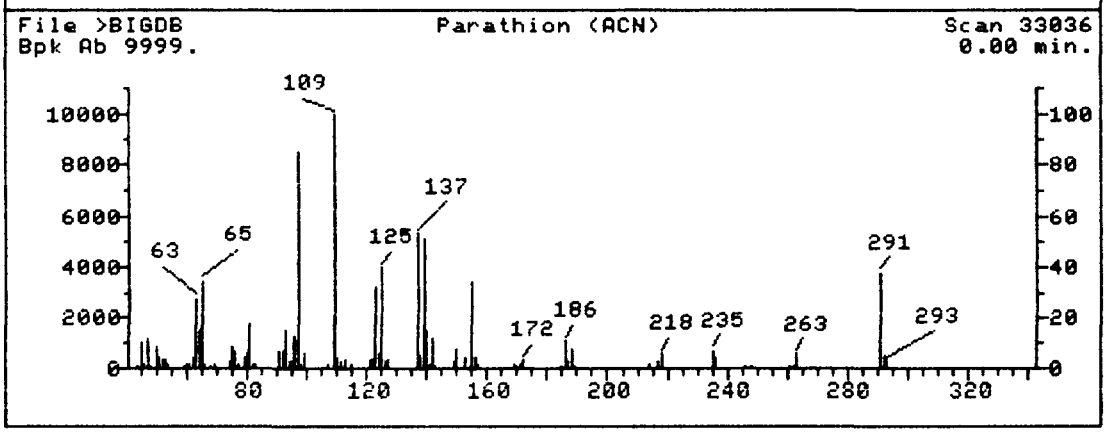
Instrument ID: 5985 Analyzed on: 9/29/94 14:45





Instrument ID: 5985 Analyzed on: 9/29/94 14:45



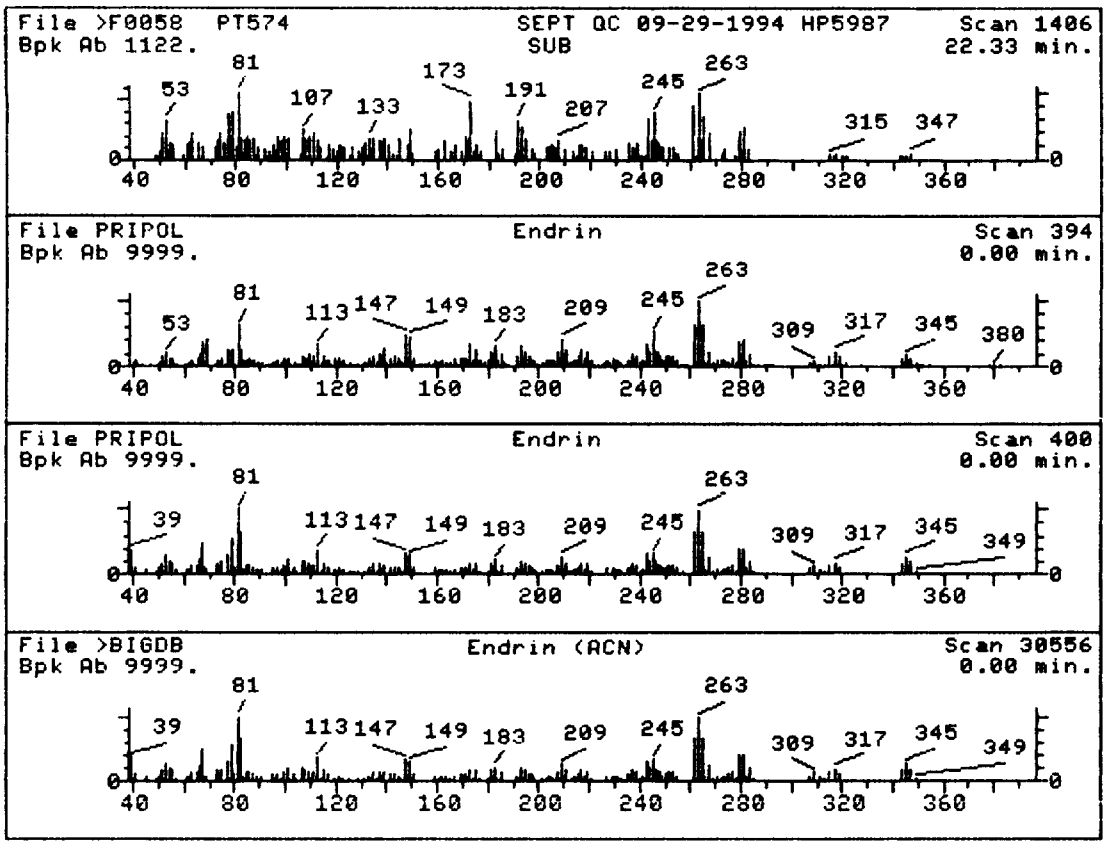


Instrument ID: 5985 Analyzed on: 9/29/94 14:45
Result 1 in PBM results file: LF0058
Retention Time: 19.43 Area: 104066 Tentative Conc: 11.00
The unknown area is 22.37% of the nearest internal standard

1. Parathion (ACN) 291 C10H14NO5PS

Sample file: >F0058 Spectrum #: 1203
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	79*	56382	33036	"BIGDB	102	75	3	0	100	14	43	66



Instrument ID: 5985 Analyzed on: 9/29/94 14:45
Result 2 in PBM results file: LF0058
Retention Time: 22.33 Area: 86512 Tentative Conc: 14.00
The unknown area is 27.18% of the nearest internal standard

1. Endrin 378 C12H8Cl6O
2. Endrin 378 C12H8Cl6O
3. Endrin (ACN) 378 C12H8Cl6O

Sample file: >F0058 Spectrum #: 1406
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	58	394	415	PRIPOL	104	114	3	0	94	19	25	25
2.	52	400	418	PRIPOL	82	136	3	0	97	19	20	15
3.	52	72208	30556	"BIGDB	82	136	3	0	97	19	20	15

Calibration Check Report

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Calibrated: 941003 09:56

Check Standard Data File: >F0064
Injection Time: 941001 16:59

Compound	$\overline{RF}$	RF	%Diff	Calib Meth
2-Fluorophenol	.72609	.73069	.63	Average
Phenol-d5	.62482	.62910	.69	Average
Phenol	.65236	.57001	12.62	Average
Aniline	.69151	.69748	.86	Average
bis(2-Chloroethyl)ether	.56069	.55918	.27	Average
2-Chlorophenol	1.00248	.94735	5.50	Average
1,3-Dichlorobenzene	1.40321	1.33618	4.78	Average
1,4-Dichlorobenzene	1.55625	1.56632	.65	Average
Benzyl alcohol	.37601	.35652	5.18	Average
1,2-Dichlorobenzene	1.43212	1.38378	3.38	Average
2-Methylphenol	.54530	.46321	15.06	Average
bis(2-Chloroisopropyl)ether	.31619	.29468	6.80	Average
4-Methylphenol	.56158	.47408	15.58	Average
N-Nitroso-di-n-propylamine	.39213	.38403	2.06	Average
Hexachloroethane	.71019	.69075	2.74	Average
Nitrobenzene-d5	1.05953	1.02382	3.37	Average
Nitrobenzene	.46015	.44622	3.03	Average
Isophorone	1.27864	1.27644	.17	Average
2-Nitrophenol	.56532	.50941	9.89	Average
2,4-Dimethylphenol	.58138	.60503	4.07	Average
Benzoic acid	.54457	.53263	2.19	Average
bis(2-Chloroethoxy)methane	.58865	.57326	2.61	Average
2,4-Dichlorophenol	.99973	1.01325	1.35	Average
1,2,4-Trichlorobenzene	1.28736	1.28576	.12	Average
Naphthalene	.88736	.83867	5.49	Average
4-Chloroaniline	.31123	.33748	8.43	Average
Hexachlorobutadiene	.39834	.42482	6.65	Average
4-Chloro-3-methylphenol	.31945	.32424	1.50	Average
2-Methylnaphthalene	.68340	.67425	1.34	Average
Hexachlorocyclopentadiene	.31501	.31451	.16	Average
2,4,6-Trichlorophenol	.25874	.27159	4.97	Average
2,4,5-Trichlorophenol	.28350	.27891	1.62	Average
2-Chloronaphthalene	.69667	.70845	1.69	Average
2-Fluorobiphenyl	.92195	.90368	1.98	Average
2-Nitroaniline	.19645	.20135	2.50	Average
Dimethylphthalate	1.05381	1.04880	.48	Average
Acenaphthylene	1.05048	.99965	4.84	Average
3-Nitroaniline	.28915	.27724	4.12	Average
Acenaphthene	1.18386	1.18342	.04	Average
2,4-Dinitrophenol	.19687	.16976	13.77	Average

RF - Response Factor from daily standard file at 25.00 NG/UL

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

Calibration Check Report

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Calibrated: 941003 09:56

Check Standard Data File: >F0064
Injection Time: 941001 16:59

Compound	$\overline{RF}$	RF	%Diff	Calib Meth
4-Nitrophenol	.48155	.56422	17.17	Average
Dibenzofuran	1.60586	1.66225	3.51	Average
2,6-Dinitrotoluene	.36199	.38784	7.14	Average
2,4-Dinitrotoluene	.48551	.52128	7.37	Average
Diethylphthalate	1.86068	2.04291	9.79	Average
4-Chlorophenyl-phenylether	.78850	.77321	1.94	Average
Fluorene	1.23824	1.30549	5.43	Average
4-Nitroaniline	.22244	.25340	13.92	Average
4,6-Dinitro-2-methylphenol	.20248	.23661	16.86	Average
N-Nitrosodiphenylamine	.87734	.95365	8.70	Average
2,4,6-Tribromophenol	.29555	.29514	.14	Average
4-Bromophenyl-phenylether	.48880	.51497	5.35	Average
Hexachlorobenzene	.52939	.63478	19.91	Average
Pentachlorophenol	.23018	.27748	20.55	Average
Phenanthrene	1.05056	1.10265	4.96	Average
Anthracene	1.05422	1.09708	4.07	Average
Carbazole	.88442	.94276	6.60	Average
Di-n-butylphthalate	1.38980	1.56730	12.77	Average
Fluoranthene	.99351	1.14976	15.73	Average
Pyrene	1.01188	1.17314	15.94	Average
Terphenyl-d14	.79517	.95276	19.82	Average
Butylbenzylphthalate	.53729	.67365	25.38	Average
Benzo(a)anthracene	.83398	.96643	15.88	Average
3,3'-Dichlorobenzidine	.33300	.40256	20.89	Average
bis(2-Ethylhexyl)phthalate	.71252	.86966	22.05	Average
Chrysene	1.05094	1.11856	6.43	Average
Di-n-octylphthalate	1.34823	1.43483	6.42	Average
Benzo(b)fluoranthene	.94546	.92773	1.87	Average
Benzo(k)fluoranthene	.97189	1.03111	6.09	Average
Benzo(a)pyrene	.84075	.84280	.24	Average
Indeno(1,2,3-cd)pyrene	.76790	.77622	1.08	Average
Dibenzo(a,h)anthracene	.75014	.77739	3.63	Average
Benzo(g,h,i)perylene	.80581	.81120	.67	Average

RF - Response Factor from daily standard file at 25.00 NG/UL

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

FMGR : QCAL,^F0064,IDF006,C

Quant Output File: ^F0064::QT
From ID File: IDF006::D6
Quant Time: 941001 17:37

Quant ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Clearing previous calibration...
Recalibrating.....

1)	1,4-Dichlorobenzene-d4	RT:	4.18	Scan: 142	(ISTD)
2)	2-Fluorophenol	RT:	2.39	Scan: 17	(New Rf = .73069)
3)	Phenol-d5	RT:	3.62	Scan: 103	(New Rf = .62910)
4)	Phenol	RT:	3.64	Scan: 104	(New Rf = .57001)
5)	Aniline	RT:	3.65	Scan: 105	(New Rf = .69748)
6)	bis(2-Chloroethyl)ether	RT:	3.77	Scan: 113	(New Rf = .55918)
7)	2-Chlorophenol	RT:	3.82	Scan: 117	(New Rf = .94735)
8)	1,3-Dichlorobenzene	RT:	4.08	Scan: 135	(New Rf =1.33618)
9)	1,4-Dichlorobenzene	RT:	4.23	Scan: 145	(New Rf =1.56632)
10)	Benzyl alcohol	RT:	4.51	Scan: 165	(New Rf = .35652)
11)	1,2-Dichlorobenzene	RT:	4.50	Scan: 164	(New Rf =1.38378)
12)	2-Methylphenol	RT:	4.79	Scan: 184	(New Rf = .46321)
13)	bis(2-Chloroisopropyl)ether	RT:	4.80	Scan: 185	(New Rf = .29468)
14)	4-Methylphenol	RT:	5.14	Scan: 209	(New Rf = .47408)
15)	N-Nitroso-di-n-propylamine	RT:	5.10	Scan: 206	(New Rf = .38403)
16)	Hexachloroethane	RT:	5.19	Scan: 212	(New Rf = .69075)
17)	Nitrobenzene-d5	RT:	5.34	Scan: 223	(New Rf =1.02382)
18)	Nitrobenzene	RT:	5.39	Scan: 226	(New Rf = .44622)
19)	Isophorone	RT:	5.99	Scan: 268	(New Rf =1.27644)
20)	2-Nitrophenol	RT:	6.13	Scan: 278	(New Rf = .50941)
21)	2,4-Dimethylphenol	RT:	6.40	Scan: 297	(New Rf = .60503)
22)	Benzoic acid	RT:	6.91	Scan: 332	(New Rf = .53263)
23)	bis(2-Chloroethoxy)methane	RT:	6.65	Scan: 314	(New Rf = .57326)
24)	2,4-Dichlorophenol	RT:	6.79	Scan: 324	(New Rf =1.01325)
25)	1,2,4-Trichlorobenzene	RT:	6.95	Scan: 335	(New Rf =1.28576)
26)	Naphthalene-d8	RT:	7.08	Scan: 344	(ISTD)
27)	Naphthalene	RT:	7.12	Scan: 347	(New Rf = .83867)
28)	4-Chloroaniline	RT:	7.38	Scan: 365	(New Rf = .33748)
29)	Hexachlorobutadiene	RT:	7.54	Scan: 376	(New Rf = .42482)
30)	4-Chloro-3-methylphenol	RT:	8.94	Scan: 474	(New Rf = .32424)
31)	2-Methylnaphthalene	RT:	9.07	Scan: 483	(New Rf = .67425)
32)	Hexachlorocyclopentadiene	RT:	9.57	Scan: 518	(New Rf = .31451)
33)	2,4,6-Trichlorophenol	RT:	10.00	Scan: 548	(New Rf = .27159)
34)	2,4,5-Trichlorophenol	RT:	10.10	Scan: 555	(New Rf = .27891)
35)	2-Chloronaphthalene	RT:	10.47	Scan: 581	(New Rf = .70845)
36)	2-Fluorobiphenyl	RT:	10.27	Scan: 567	(New Rf = .90368)
37)	2-Nitroaniline	RT:	10.92	Scan: 612	(New Rf = .20135)
38)	Dimethylphthalate	RT:	11.66	Scan: 664	(New Rf =1.04880)
39)	Acenaphthylene	RT:	11.69	Scan: 666	(New Rf = .99965)
40)	Acenaphthene-d10	RT:	12.15	Scan: 698	(ISTD)
41)	3-Nitroaniline	RT:	12.21	Scan: 702	(New Rf = .27724)
42)	Acenaphthene	RT:	12.23	Scan: 704	(New Rf =1.18342)
43)	2,4-Dinitrophenol	RT:	12.52	Scan: 724	(New Rf = .16976)
44)	4-Nitrophenol	RT:	13.02	Scan: 759	(New Rf = .56422)
45)	Dibenzofuran	RT:	12.79	Scan: 743	(New Rf =1.66225)
46)	2,6-Dinitrotoluene	RT:	11.76	Scan: 671	(New Rf = .38784)
47)	2,4-Dinitrotoluene	RT:	12.94	Scan: 753	(New Rf = .52128)
48)	Diethylphthalate	RT:	13.88	Scan: 819	(New Rf =2.04291)

49)	4-Chlorophenyl-phenylether	RT:	[illegible]	Scan:	[illegible]
50)	Fluorene	RT:	13.82	Scan:	815 (New Rf =1.30549)
51)	4-Nitroaniline	RT:	14.10	Scan:	834 (New Rf = .25340)
52)	4,6-Dinitro-2-methylphenol	RT:	14.17	Scan:	839 (New Rf = .23661)
53)	N-Nitrosodiphenylamine	RT:	14.40	Scan:	855 (New Rf = .95365)
54)	2,4,6-Tribromophenol	RT:	14.58	Scan:	868 (New Rf = .29514)
55)	4-Bromophenyl-phenylether	RT:	15.47	Scan:	930 (New Rf = .51497)
56)	Hexachlorobenzene	RT:	15.49	Scan:	931 (New Rf = .63478)
57)	Pentachlorophenol	RT:	16.20	Scan:	981 (New Rf = .27748)
58)	Phenanthrene-d10	RT:	16.69	Scan:	1015 (ISTD)
59)	Phenanthrene	RT:	16.75	Scan:	1019 (New Rf =1.10265)
60)	Anthracene	RT:	16.90	Scan:	1030 (New Rf =1.09708)
61)	Carbazole	RT:	17.55	Scan:	1075 (New Rf = .94276)
62)	Di-n-butylphthalate	RT:	19.01	Scan:	1177 (New Rf =1.56730)
63)	Fluoranthene	RT:	20.42	Scan:	1276 (New Rf =1.14976)
64)	Pyrene	RT:	21.08	Scan:	1322 (New Rf =1.17314)
65)	Terphenyl-d14	RT:	21.85	Scan:	1376 (New Rf = .95276)
66)	Butylbenzylphthalate	RT:	23.61	Scan:	1499 (New Rf = .67365)
67)	Benzo(a)anthracene	RT:	24.87	Scan:	1587 (New Rf = .96643)
68)	3,3'-Dichlorobenzidine	RT:	24.99	Scan:	1595 (New Rf = .40256)
69)	bis(2-Ethylhexyl)phthalate	RT:	25.57	Scan:	1636 (New Rf = .86966)
70)	Chrysene-d12	RT:	24.92	Scan:	1590 (ISTD)
71)	Chrysene	RT:	24.97	Scan:	1594 (New Rf =1.11856)
72)	Di-n-octylphthalate	RT:	27.50	Scan:	1771 (New Rf =1.43483)
73)	Benzo(b)fluoranthene	RT:	27.98	Scan:	1804 (New Rf = .92773)
74)	Benzo(k)fluoranthene	RT:	28.06	Scan:	1810 (New Rf =1.03111)
75)	Benzo(a)pyrene	RT:	28.82	Scan:	1863 (New Rf = .84280)
76)	Perylene-d12	RT:	28.99	Scan:	1875 (ISTD)
77)	Indeno(1,2,3-cd)pyrene	RT:	31.55	Scan:	2054 (New Rf = .77622)
78)	Dibenzo(a,h)anthracene	RT:	31.64	Scan:	2060 (New Rf = .77739)
79)	Benzo(g,h,i)perylene	RT:	32.11	Scan:	2093 (New Rf = .81120)

Done

FMGR : IDLST,IDF006

Quant ID File: IDF006::D6

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Last EDIT Date: 940916 14:52 Last Calib Date: 940901 09:50
Last Qcal Date: 941001 16:59 Calib File: CBF001::D6
Qcal File: ^F0064:14906:QT

RT Window (+min -%)	: .2000	Subtraction Method	: 1
Max Hits/Compound	: 1	Ignore max check	: NO
Minimum Area	: 5000	Auto Qdel Method	: 5
Peak/Base Peak Ratio	: 35.00 %	Quantitate Using	: AREA
Up Slope Sensitivity	: .2000000	Units of Conc	: NG/UL
Down Slope Sensitivity	: .0000000	Bunching	: 1

Number of Compounds: 79

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-Dichlorobenzene-d4	(I)	4.18	(1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	2.39	(.572)	.73069	25.00	
3)	Phenol-d5	(S)	3.62	(.866)	.62910	25.00	
4)	Phenol	(M)	3.64	(.870)	.57001	25.00	**
5)	Aniline	(T)	3.65	(.873)	.69748	25.00	**
6)	bis(2-Chloroethyl)ether	(T)	3.77	(.901)	.55918	25.00	**
7)	2-Chlorophenol	(M)	3.82	(.914)	.94735	25.00	**
8)	1,3-Dichlorobenzene	(T)	4.08	(.976)	1.33618	25.00	**
9)	1,4-Dichlorobenzene	(M)	4.23	(1.010)	1.56632	25.00	**
10)	Benzyl alcohol	(T)	4.51	(1.079)	.35652	25.00	**
11)	1,2-Dichlorobenzene	(T)	4.50	(1.075)	1.38378	25.00	**
12)	2-Methylphenol	(T)	4.79	(1.144)	.46321	25.00	**
13)	bis(2-Chloroisopropyl)ether	(T)	4.80	(1.147)	.29468	25.00	**
14)	4-Methylphenol	(T)	5.14	(1.230)	.47408	25.00	**
15)	N-Nitroso-di-n-propylamine	(M)	5.10	(1.219)	.38403	25.00	**
16)	Hexachloroethane	(T)	5.19	(1.240)	.69075	25.00	**
17)	Nitrobenzene-d5	(S)	5.34	(1.278)	1.02382	25.00	
18)	Nitrobenzene	(T)	5.39	(1.288)	.44622	25.00	**
19)	Isophorone	(T)	5.99	(1.432)	1.27644	25.00	**
20)	2-Nitrophenol	(T)	6.13	(1.466)	.50941	25.00	**
21)	2,4-Dimethylphenol	(T)	6.40	(1.531)	.60503	25.00	**
22)	Benzoic acid	(T)	6.91	(1.651)	.53263	25.00	**
23)	bis(2-Chloroethoxy)methane	(T)	6.65	(1.589)	.57326	25.00	**
24)	2,4-Dichlorophenol	(T)	6.79	(1.623)	1.01325	25.00	**
25)	1,2,4-Trichlorobenzene	(M)	6.95	(1.661)	1.28576	25.00	**
26)	*Naphthalene-d8	(I)	7.08	(1.000)	1.00000	50.00	**
27)	Naphthalene	(T)	7.12	(1.006)	.83867	25.00	**
28)	4-Chloroaniline	(T)	7.38	(1.043)	.33748	25.00	**
29)	Hexachlorobutadiene	(T)	7.54	(1.065)	.42482	25.00	**
30)	4-Chloro-3-methylphenol	(M)	8.94	(1.263)	.32424	25.00	**
31)	2-Methylnaphthalene	(T)	9.07	(1.281)	.67425	25.00	**
32)	Hexachlorocyclopentadiene	(T)	9.57	(1.352)	.31451	25.00	**
33)	2,4,6-Trichlorophenol	(T)	10.00	(1.413)	.27159	25.00	**
34)	2,4,5-Trichlorophenol	(T)	10.10	(1.427)	.27891	25.00	**
35)	2-Chloronaphthalene	(T)	10.47	(1.480)	.70845	25.00	**
36)	2-Fluorobiphenyl	(S)	10.27	(1.451)	.90368	25.00	
37)	2-Nitroaniline	(T)	10.92	(1.542)	.20135	25.00	**
38)	Dimethylphthalate	(T)	11.66	(1.648)	1.04880	25.00	**
39)	Acenaphthylene	(T)	11.69	(1.652)	.99965	25.00	**
40)	*Acenaphthene-d10	(I)	12.15	(1.000)	1.00000	50.00	**

41)	[illegible]	[illegible]	12.21(	1.00[illegible]	[illegible]	[illegible]	**
42)	Acenaphthene	(M)	12.23(	1.007)	1.18342	25.00	**
-43)	-2,4-Dinitrophenol	(T)	12.52(	1.031)	.16976	25.00	**
44)	4-Nitrophenol	(M)	13.02(	1.072)	.56422	25.00	**
45)	Dibenzofuran	(T)	12.79(	1.053)	1.66225	25.00	**
46)	2,6-Dinitrotoluene	(T)	11.76(	.968)	.38784	25.00	**
47)	2,4-Dinitrotoluene	(M)	12.94(	1.065)	.52128	25.00	**
48)	Diethylphthalate	(T)	13.88(	1.143)	2.04291	25.00	**
49)	4-Chlorophenyl-phenylether	(T)	14.00(	1.152)	.77321	25.00	**
50)	Fluorene	(T)	13.82(	1.138)	1.30549	25.00	**
51)	4-Nitroaniline	(T)	14.10(	1.160)	.25340	25.00	**
52)	4,6-Dinitro-2-methylphenol	(T)	14.17(	1.166)	.23661	25.00	**
53)	N-Nitrosodiphenylamine	(T)	14.40(	1.185)	.95365	25.00	**
54)	2,4,6-Tribromophenol	(S)	14.58(	1.201)	.29514	25.00	
55)	4-Bromophenyl-phenylether	(T)	15.47(	1.274)	.51497	25.00	**
56)	Hexachlorobenzene	(T)	15.49(	1.275)	.63478	25.00	**
57)	Pentachlorophenol	(M)	16.20(	1.334)	.27748	25.00	**
58)	*Phenanthrene-d10	(I)	16.69(	1.000)	1.00000	50.00	**
59)	Phenanthrene	(T)	16.75(	1.003)	1.10265	25.00	**
60)	Anthracene	(T)	16.90(	1.013)	1.09708	25.00	**
61)	Carbazole	(T)	17.55(	1.051)	.94276	25.00	**
62)	Di-n-butylphthalate	(T)	19.01(	1.139)	1.56730	25.00	**
63)	Fluoranthene	(T)	20.42(	1.224)	1.14976	25.00	**
64)	Pyrene	(M)	21.08(	1.263)	1.17314	25.00	**
65)	Terphenyl-d14	(S)	21.85(	1.310)	.95276	25.00	
66)	Butylbenzylphthalate	(T)	23.61(	1.415)	.67365	25.00	**
67)	Benzo(a)anthracene	(T)	24.87(	1.490)	.96643	25.00	**
68)	3,3'-Dichlorobenzidine	(T)	24.99(	1.497)	.40256	25.00	**
69)	bis(2-Ethylhexyl)phthalate	(T)	25.57(	1.532)	.86966	25.00	**
70)	*Chrysene-d12	(I)	24.92(	1.000)	1.00000	50.00	**
71)	Chrysene	(T)	24.97(	1.002)	1.11856	25.00	**
72)	Di-n-octylphthalate	(T)	27.50(	1.104)	1.43483	25.00	**
73)	Benzo(b)fluoranthene	(T)	27.98(	1.123)	.92773	25.00	**
74)	Benzo(k)fluoranthene	(T)	28.06(	1.126)	1.03111	25.00	**
75)	Benzo(a)pyrene	(T)	28.82(	1.157)	.84280	25.00	**
76)	*Perylene-d12	(I)	28.99(	1.000)	1.00000	50.00	**
77)	Indeno(1,2,3-cd)pyrene	(T)	31.55(	1.088)	.77622	25.00	**
78)	Dibenzo(a,h)anthracene	(T)	31.64(	1.091)	.77739	25.00	
79)	Benzo(g,h,i)perylene	(T)	32.11(	1.107)	.81120	25.00	**

* Compound is ISTD
** Compound uses different Quant parameters

QUANT REPORT

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941001 17:37
Output File: ^F0064::QT Injected at: 941001 16:59
Data File: >F0064::D2 Dilution Factor: 1.00000
Name: 1001CC25B Instrument ID: 5985
Misc: 10-01-1994 HP5987 BTL# 2

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.18	152.0	51683	50.00	NG/UL	97
2)	2-Fluorophenol	2.39	112.0	18882	25.06	NG/UL	96
3)	Phenol-d5	3.62	99.0	16257	24.25	NG/UL	57
4)	Phenol	3.64	94.0	14730M	22.25	NG/UL	
5)	Aniline	3.65	93.0	18024M	24.04	NG/UL	
6)	bis(2-Chloroethyl)ether	3.77	93.0	14450M	22.52	NG/UL	51
7)	2-Chlorophenol	3.82	128.0	24481	24.43	NG/UL	97
8)	1,3-Dichlorobenzene	4.08	146.0	34529	23.98	NG/UL	91
9)	1,4-Dichlorobenzene	4.23	146.0	40476	25.62	NG/UL	95
10)	Benzyl alcohol	4.51	108.0	9213	22.03	NG/UL	83
11)	1,2-Dichlorobenzene	4.50	146.0	35759	23.88	NG/UL	94
12)	2-Methylphenol	4.79	108.0	11970	20.94	NG/UL	86
13)	bis(2-Chloroisopropyl)ether	4.80	121.0	7615M	21.33	NG/UL	53
14)	4-Methylphenol	5.14	108.0	12251	20.68	NG/UL	93
15)	N-Nitroso-di-n-propylamine	5.10	70.0	9924	27.19	NG/UL	58
16)	Hexachloroethane	5.19	201.0	17850	26.49	NG/UL	99
17)	Nitrobenzene-d5	5.34	82.0	26457	25.93	NG/UL	88
18)	Nitrobenzene	5.39	123.0	11531	25.01	NG/UL	95
19)	Isophorone	5.99	82.0	32985	24.85	NG/UL	55
20)	2-Nitrophenol	6.13	139.0	13164M	22.27	NG/UL	
21)	2,4-Dimethylphenol	6.40	122.0	15635	25.96	NG/UL	78
22)	Benzoic acid	6.91	105.0	13764	23.47	NG/UL	72
23)	bis(2-Chloroethoxy)methane	6.65	93.0	14814	23.48	NG/UL	94
24)	2,4-Dichlorophenol	6.79	162.0	26184	25.07	NG/UL	94
25)	1,2,4-Trichlorobenzene	6.95	180.0	33226	23.76	NG/UL	96
26)	*Naphthalene-d8	7.08	136.0	149668	50.00	NG/UL	78
27)	Naphthalene	7.12	128.0	62761	24.34	NG/UL	82
28)	4-Chloroaniline	7.38	127.0	25255	26.60	NG/UL	96
29)	Hexachlorobutadiene	7.54	225.0	31791	30.04	NG/UL	92
30)	4-Chloro-3-methylphenol	8.94	107.0	24264M	27.94	NG/UL	
31)	2-Methylnaphthalene	9.07	142.0	50457M	24.24	NG/UL	
32)	Hexachlorocyclopentadiene	9.57	237.0	23536	27.17	NG/UL	99
33)	2,4,6-Trichlorophenol	10.00	196.0	20324	29.84	NG/UL	92
34)	2,4,5-Trichlorophenol	10.10	196.0	20872	24.07	NG/UL	88
35)	2-Chloronaphthalene	10.47	162.0	53016	26.61	NG/UL	87
36)	2-Fluorobiphenyl	10.27	172.0	67626	25.65	NG/UL	92
37)	2-Nitroaniline	10.92	138.0	15068	23.76	NG/UL	97
38)	Dimethylphthalate	11.66	163.0	78486	27.56	NG/UL	95
39)	Acenaphthylene	11.69	152.0	74808	24.15	NG/UL	98
40)	*Acenaphthene-d10	12.15	164.0	86732	50.00	NG/UL	89

3 of 4
4 QA: Results

QUANT REPORT

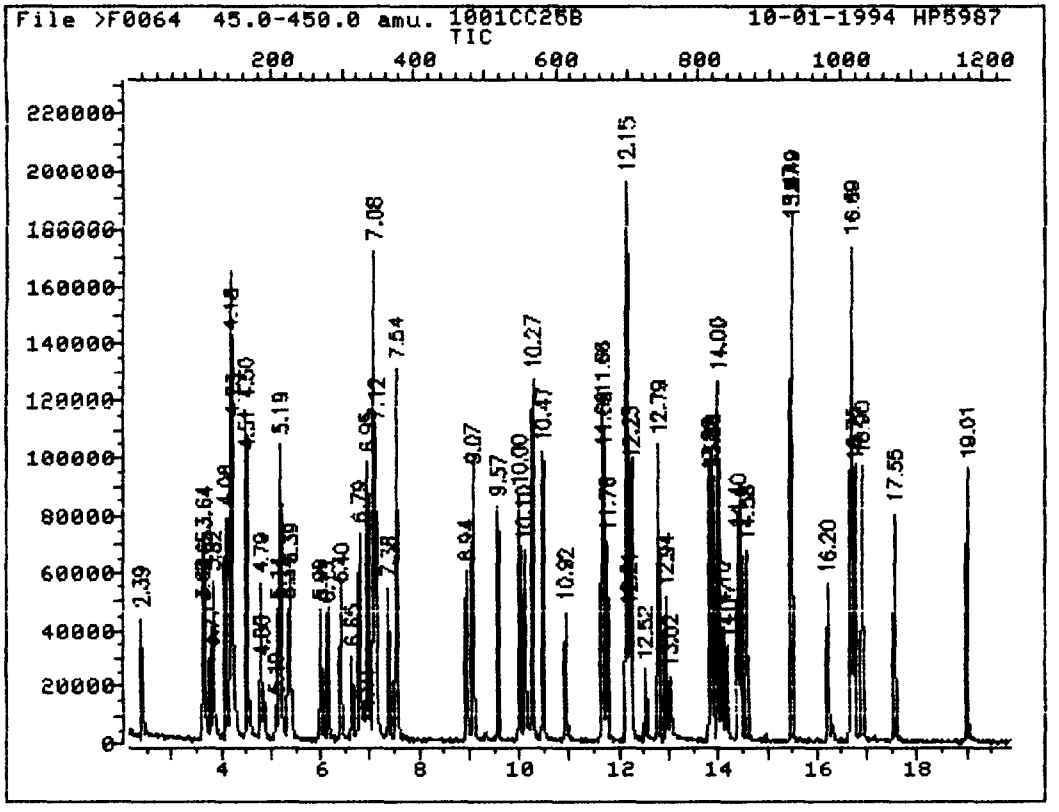
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941001 17:37
Output File: ^F0064::QT Injected at: 941001 16:59
Data File: >F0064::D2 Dilution Factor: 1.00000
Name: 1001CC25B Instrument ID: 5985
Misc: 10-01-1994 HP5987 BTL# 2

ID File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.21	138.0	12023	25.88	NG/UL	91
42)	Acenaphthene	12.23	153.0	51320	25.12	NG/UL	95
43)	2,4-Dinitrophenol	12.52	184.0	7362M	24.56	NG/UL	
44)	4-Nitrophenol	13.02	109.0	24468M	34.38	NG/UL	
45)	Dibenzofuran	12.79	168.0	72085	26.33	NG/UL	60
46)	2,6-Dinitrotoluene	11.76	165.0	16819	27.13	NG/UL	38
47)	2,4-Dinitrotoluene	12.94	165.0	22606	28.92	NG/UL	80
48)	Diethylphthalate	13.88	149.0	88593	28.34	NG/UL	90
49)	4-Chlorophenyl-phenylether	14.00	204.0	33531	26.14	NG/UL	94
50)	Fluorene	13.82	166.0	56614	26.62	NG/UL	97
51)	4-Nitroaniline	14.10	138.0	10989M	26.54	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.17	198.0	10261M	25.86	NG/UL	
53)	N-Nitrosodiphenylamine	14.40	169.0	41356	27.56	NG/UL	96
54)	2,4,6-Tribromophenol	14.58	329.9	12799	28.96	NG/UL	92
55)	4-Bromophenyl-phenylether	15.47	248.0	22332	27.73	NG/UL	90
56)	Hexachlorobenzene	15.49	283.9	27528	30.59	NG/UL	96
57)	Pentachlorophenol	16.20	265.8	12033	26.27	NG/UL	93
58)	*Phenanthrene-d10	16.69	188.0	141062	50.00	NG/UL	98
59)	Phenanthrene	16.75	178.0	77771	26.31	NG/UL	94
60)	Anthracene	16.90	178.0	77378	25.09	NG/UL	94
61)	Carbazole	17.55	167.0	66494	24.55	NG/UL	89
62)	Di-n-butylphthalate	19.01	149.0	110543	27.13	NG/UL	98
63)	Fluoranthene	20.42	202.0	81094M	23.75	NG/UL	
64)	Pyrene	21.08	202.0	82743	23.03	NG/UL	80
65)	Terphenyl-d14	21.85	244.0	67199	24.83	NG/UL	97
66)	Butylbenzylphthalate	23.61	149.0	47513	26.53	NG/UL	77
67)	Benzo(a)anthracene	24.87	228.0	68163M	24.55	NG/UL	85
68)	3,3'-Dichlorobenzidine	24.99	252.0	28393	25.83	NG/UL	87
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	61338	25.91	NG/UL	94
70)	*Chrysene-d12	24.92	240.0	127888	50.00	NG/UL	99
71)	Chrysene	24.97	228.0	71525	24.84	NG/UL	89
72)	Di-n-octylphthalate	27.50	149.0	91749	26.49	NG/UL	87
73)	Benzo(b)fluoranthene	27.98	252.0	59323M	26.23	NG/UL	83
74)	Benzo(k)fluoranthene	28.06	252.0	65933	30.49	NG/UL	83
75)	Benzo(a)pyrene	28.82	252.0	53892	26.06	NG/UL	86
76)	*Perylene-d12	28.99	264.0	109139	50.00	NG/UL	97
77)	Indeno(1,2,3-cd)pyrene	31.55	276.0	42358	26.08	NG/UL	65
78)	Dibenzo(a,h)anthracene	31.64	278.0	42422	26.36	NG/UL	93
79)	Benzo(g,h,i)perylene	32.11	276.0	44267	25.26	NG/UL	64

* Compound is ISTD

TOTAL ION CHROMATOGRAM

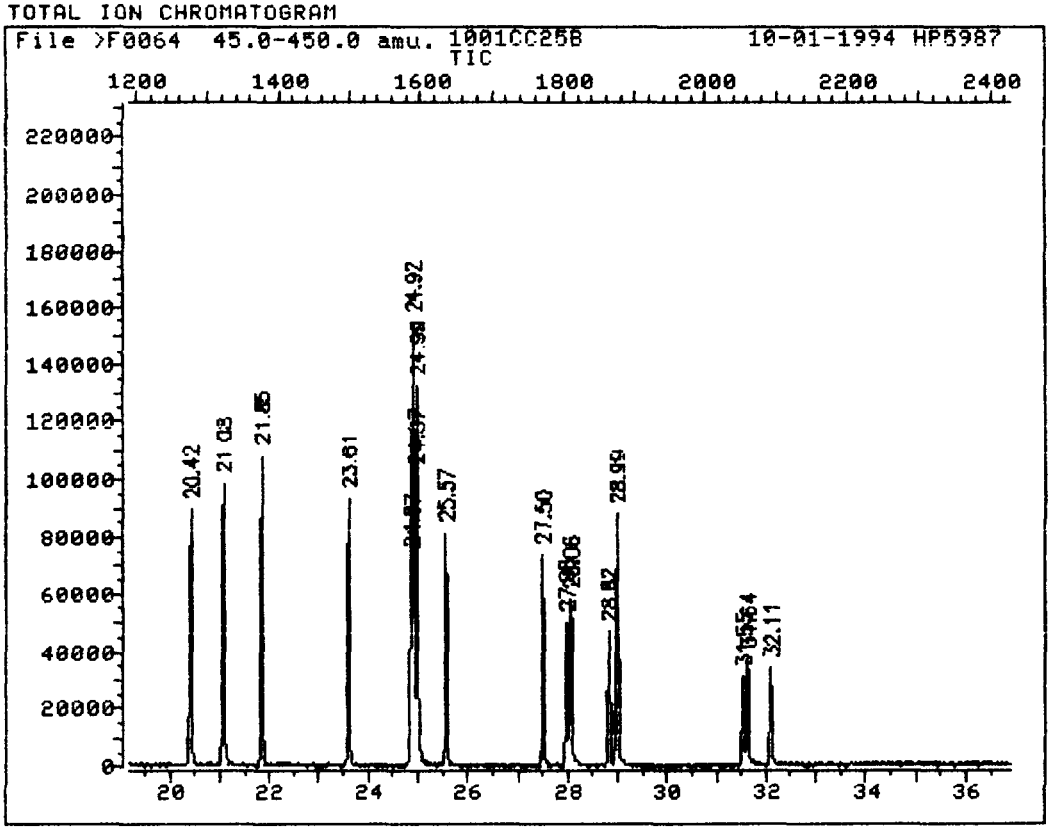


Data File: >F0064::D2 Quant Output File: ^F0064::QT
Name: 1001CC25B Instrument ID: 5985
Misc: 10-01-1994 HP5987 BTL# 2

Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 941001 17:37
Injected at: 941001 16:59

TOTAL ION CHROMATOGRAM



Data File: >F0064::D2 Quant Output File: ^F0064::QT
Name: 1001CC25B Instrument ID: 5985
Misc: 10-01-1994 HP5987 BTL# 2

Id File: IDF006::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 941001 17:37
Injected at: 941001 16:59

Calibration Report

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Calibrated: 941007 12:35

Compound	Files: >F0113 RF 5.00	>F0112 RF 10.00	>F0111 RF 25.00	>F0110 RF 50.00	>F0109 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD
2-Fluorophenol	.44734	.58014	.55667	.54585	.55146	.567	.53629	9.586
Phenol-d5	.21555	.42306	.48979	.50067	.51873	.865	.42956	29.095
Phenol	.25557	.42126	.45071	.46977	.48009	.869	.41548	22.180
Aniline	.52759	.51568	.53025	.49641	.36877	.872	.48774	13.907
bis(2-Chloroethyl)ether	.41890	.33320	.32980	.39619	.49389	.899	.39440	17.206
2-Chlorophenol	.72587	.76991	.87191	.84840	.88378	.913	.81997	8.392
1,3-Dichlorobenzene	1.04421	1.21007	1.29640	1.31673	1.34845	.973	1.24317	9.853
1,4-Dichlorobenzene	1.28088	1.49527	1.41997	1.51058	1.61621	1.008	1.46458	8.486
Benzyl alcohol	.20864	.29485	.28688	.28400	.25262	1.080	.26540	13.401
1,2-Dichlorobenzene	1.15086	1.18089	1.33179	1.39939	1.44397	1.075	1.30138	10.021
2-Methylphenol	.25902	.40667	.39482	.40558	.43680	1.143	.38058	18.321
bis(2-Chloroisopropyl)ether	.17715	.20130	.27808	.25217	.26325	1.152	.23439	18.386
4-Methylphenol	.40895	.35868	.45036	.47624	.52084	1.234	.44301	14.046
N-Nitroso-di-n-propylamine	.25983	.26246	.25209	.31508	.32931	1.221	.28376	12.566
Hexachloroethane	.58610	.84934	.81860	.84463	1.01885	1.239	.82350	18.779
Nitrobenzene-d5	.81688	.84299	.84398	.72203	.77170	1.281	.79952	6.543
Nitrobenzene	.26024	.34127	.42338	.41312	.40383	1.291	.36837	18.568
Isophorone	.90566	.87648	.87199	.87762	.81799	1.439	.86995	3.671
2-Nitrophenol	.26390	.42667	.50553	.49533	.48804	1.472	.43589	23.161
2,4-Dimethylphenol	.53734	.50532	.52529	.51831	.49659	1.539	.51657	3.116
Benzoic acid	-	.26772	.38098	.45447	.48385	1.671	.39675	24.269
bis(2-Chloroethoxy)methane	.30737	.39248	.39863	.39486	.42001	1.596	.38267	11.364
2,4-Dichlorophenol	.70494	.88173	1.07751	1.01697	1.09331	1.631	.95489	17.038
1,2,4-Trichlorobenzene	1.11023	1.17713	1.36646	1.36148	1.44536	1.668	1.29213	10.953
Naphthalene	.73032	.73274	.81348	.85365	1.02557	1.007	.83115	14.546
4-Chloroaniline	.21943	.20494	.28171	.28513	.29834	1.045	.25791	16.483
Hexachlorobutadiene	.46875	.51473	.53278	.54594	.56856	1.068	.52615	7.149
4-Chloro-3-methylphenol	.26038	.31773	.32163	.35420	.37125	1.268	.32504	13.082
2-Methylnaphthalene	.61927	.61239	.67515	.72561	.78884	1.286	.68425	10.868
Hexachlorocyclopentadiene	.28864	.34291	.44731	.48418	.53120	1.358	.41885	24.000
2,4,6-Trichlorophenol	.20207	.29788	.29365	.32991	.33800	1.419	.29230	18.484
2,4,5-Trichlorophenol	.17232	.27984	.34119	.34703	.39116	1.434	.30631	27.667
2-Chloronaphthalene	.69085	.60856	.79955	.77877	.89167	1.487	.75388	14.345
2-Fluorobiphenyl	.94841	.95561	1.02946	1.08872	1.27533	1.457	1.05951	12.616
2-Nitroaniline	-	.16593	.16490	.20073	.20353	1.552	.18377	11.553
Dimethylphthalate	1.04952	1.05381	1.18548	1.21586	1.39493	1.657	1.17992	12.020
Acenaphthylene	.93729	1.02098	1.09894	1.17270	1.48396	1.660	1.14277	18.370
3-Nitroaniline	-	.18124	.24587	.24521	.31332	1.006	.24641	21.887
Acenaphthene	.87109	.92653	1.03294	1.14267	1.43020	1.008	1.08069	20.482

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Calibration Report

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Calibrated: 941007 12:35

Compound	Files: >F0113 RF 5.00	>F0112 RF 10.00	>F0111 RF 25.00	>F0110 RF 50.00	>F0109 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD
2,4-Dinitrophenol	-	.07354	.13107	.16594	.21622	1.032	.14669	40.902
4-Nitrophenol	-	.29666	.50485	.53783	.63400	1.074	.49334	28.804
Dibenzofuran	1.24489	1.32082	1.53626	1.59442	1.80014	1.053	1.49931	14.820
2,6-Dinitrotoluene	.21040	.36231	.36612	.34971	.29085	.968	.31588	20.985
2,4-Dinitrotoluene	.31098	.46387	.53423	.51392	.56992	1.067	.47858	21.153
Diethylphthalate	1.91214	1.83572	1.96375	1.94894	2.18228	1.144	1.96856	6.570
4-Chlorophenyl-phenylether	.67940	.67488	.75782	.83789	.93619	1.153	.77724	14.294
Fluorene	.97005	1.06262	1.18837	1.29753	1.51973	1.140	1.20766	17.727
4-Nitroaniline	-	.14319	.20889	.22103	.18147	1.164	.18865	18.301
4,6-Dinitro-2-methylphenol	-	.15138	.21277	.23219	.20873	1.170	.20127	17.290
N-Nitrosodiphenylamine	.75793	.72875	.84515	.89387	1.01135	1.188	.84741	13.342
2,4,6-Tribromophenol	.20815	.26008	.32692	.30727	.37437	1.202	.29536	21.568
4-Bromophenyl-phenylether	.45254	.51469	.53837	.62215	.73902	1.276	.57336	19.321
Hexachlorobenzene	.50116	.58547	.64067	.73527	.79339	1.277	.65119	17.880
Pentachlorophenol	-	.18090	.22930	.27628	.33161	1.337	.25452	25.332
Phenanthrene	.88756	.92085	1.06824	1.10808	1.25200	1.004	1.04735	14.125
Anthracene	.90186	.92837	1.03556	1.15282	1.26924	1.013	1.05757	14.595
Carbazole	.74884	.77981	.84337	.88281	1.00189	1.052	.85134	11.649
Di-n-butylphthalate	1.25758	1.29131	1.39961	1.47698	1.35843	1.141	1.35678	6.427
Fluoranthene	.86364	.94124	1.05000	1.11478	1.21484	1.225	1.03690	13.387
Pyrene	.86964	.99016	1.04806	1.16703	1.30947	1.265	1.07687	15.644
Terphenyl-d14	.64698	.78167	.87194	.97061	1.00103	1.312	.85445	16.922
Butylbenzylphthalate	.47222	.52356	.54402	.56982	.57538	1.418	.53700	7.777
Benzo(a)anthracene	.77820	.84002	.89003	.87872	.97565	1.493	.87252	8.291
3,3'-Dichlorobenzidine	.23471	.25212	.36092	.38805	.48840	1.501	.34484	30.227
bis(2-Ethylhexyl)phthalate	.62681	.61907	.66297	.70309	.76833	1.537	.67605	9.085
Chrysene	.97128	.94198	1.10204	1.11866	1.21902	1.003	1.07060	10.623
Di-n-octylphthalate	1.27723	1.23851	1.38623	1.22971	1.32675	1.106	1.29169	5.054
Benzo(b)fluoranthene	.64569	.79203	.87626	.79655	.87757	1.124	.79762	11.843
Benzo(k)fluoranthene	.78566	.86673	.92620	.90512	.93602	1.127	.88394	6.905
Benzo(a)pyrene	.34822	.75968	.77714	.76094	.78571	1.158	.68634	27.586
Indeno(1,2,3-cd)pyrene	.40166	.69067	.77902	.79382	.89673	1.089	.71238	26.456
Dibenzo(a,h)anthracene	.60744	.60491	.78318	.80671	.87049	1.092	.73455	16.536
Benzo(g,h,i)perylene	.81927	.68394	.86697	.85707	.89406	1.108	.82426	10.057

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

FMGR : CBCAL,CBF003,IDF008,,A

Calib File: CBF003::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Units: NG/UL
Last Edit: 940705 12:31
Last Calib: 941007 12:35

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Units: NG/UL
Last Edit: 941007 10:06
Last Calib: 940901 09:50

Correct Files ? Y

Calibrating...

1)	2-Fluorophenol	Avg RF: .53629
2)	Phenol-d5	Avg RF: .42956
3)	Phenol	Avg RF: .41548
4)	Aniline	Avg RF: .48774
5)	bis(2-Chloroethyl)ether	Avg RF: .39440
6)	2-Chlorophenol	Avg RF: .81997
7)	1,3-Dichlorobenzene	Avg RF: 1.24317
8)	1,4-Dichlorobenzene	Avg RF: 1.46458
9)	Benzyl alcohol	Avg RF: .26540
10)	1,2-Dichlorobenzene	Avg RF: 1.30138
11)	2-Methylphenol	Avg RF: .38058
12)	bis(2-Chloroisopropyl)ether	Avg RF: .23439
13)	4-Methylphenol	Avg RF: .44301
14)	N-Nitroso-di-n-propylamine	Avg RF: .28376
15)	Hexachloroethane	Avg RF: .82350
16)	Nitrobenzene-d5	Avg RF: .79952
17)	Nitrobenzene	Avg RF: .36837
18)	Isophorone	Avg RF: .86995
19)	2-Nitrophenol	Avg RF: .43589
20)	2,4-Dimethylphenol	Avg RF: .51657
21)	Benzoic acid	Avg RF: .39675
22)	bis(2-Chloroethoxy)methane	Avg RF: .38267
23)	2,4-Dichlorophenol	Avg RF: .95489
24)	1,2,4-Trichlorobenzene	Avg RF: 1.29213
25)	Naphthalene	Avg RF: .83115
26)	4-Chloroaniline	Avg RF: .25791
27)	Hexachlorobutadiene	Avg RF: .52615
28)	4-Chloro-3-methylphenol	Avg RF: .32504
29)	2-Methylnaphthalene	Avg RF: .68425
30)	Hexachlorocyclopentadiene	Avg RF: .41885
31)	2,4,6-Trichlorophenol	Avg RF: .29230
32)	2,4,5-Trichlorophenol	Avg RF: .30631
33)	2-Chloronaphthalene	Avg RF: .75388
34)	2-Fluorobiphenyl	Avg RF: 1.05951
35)	2-Nitroaniline	Avg RF: .18377
36)	Dimethylphthalate	Avg RF: 1.17992
37)	Acenaphthylene	Avg RF: 1.14277
38)	3-Nitroaniline	Avg RF: .24641
39)	Acenaphthene	Avg RF: 1.08069
40)	2,4-Dinitrophenol	Avg RF: .14669
41)	4-Nitrophenol	Avg RF: .49334
42)	Dibenzofuran	Avg RF: 1.49931

43)	2,6-Dinitrotoluene	Avg RF: [illegible]
44)	2,4-Dinitrotoluene	Avg RF: .47858
45)	Diethylphthalate	Avg RF: 1.96856
46)	4-Chlorophenyl-phenylether	Avg RF: .77724
47)	Fluorene	Avg RF: 1.20766
48)	4-Nitroaniline	Avg RF: .18865
49)	4,6-Dinitro-2-methylphenol	Avg RF: .20127
50)	N-Nitrosodiphenylamine	Avg RF: .84741
51)	2,4,6-Tribromophenol	Avg RF: .29536
52)	4-Bromophenyl-phenylether	Avg RF: .57336
53)	Hexachlorobenzene	Avg RF: .65119
54)	Pentachlorophenol	Avg RF: .25452
55)	Phenanthrene	Avg RF: 1.04735
56)	Anthracene	Avg RF: 1.05757
57)	Carbazole	Avg RF: .85134
58)	Di-n-butylphthalate	Avg RF: 1.35678
59)	Fluoranthene	Avg RF: 1.03690
60)	Pyrene	Avg RF: 1.07687
61)	Terphenyl-d14	Avg RF: .85445
62)	Butylbenzylphthalate	Avg RF: .53700
63)	Benzo(a)anthracene	Avg RF: .87252
64)	3,3'-Dichlorobenzidine	Avg RF: .34484
65)	bis(2-Ethylhexyl)phthalate	Avg RF: .67605
66)	Chrysene	Avg RF: 1.07060
67)	Di-n-octylphthalate	Avg RF: 1.29169
68)	Benzo(b)fluoranthene	Avg RF: .79762
69)	Benzo(k)fluoranthene	Avg RF: .88394
70)	Benzo(a)pyrene	Avg RF: .68634
71)	Indeno(1,2,3-cd)pyrene	Avg RF: .71238
72)	Dibenzo(a,h)anthracene	Avg RF: .73455
73)	Benzo(g,h,i)perylene	Avg RF: .82426

Calibration Time Stamp Updated: 941007 12:42

FMGR : IDLST,IDF008

Quant ID File: IDF008::D4

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Last EDIT Date: 941007 10:06 Last Calib Date: 941007 12:42
Last Qcal Date: <none> Calib File: CBF003::D6
Qcal File: <none>

RT Window (+min -%)	: .2000	Subtraction Method	: 1
Max Hits/Compound	: 1	Ignore max check	: NO
Minimum Area	: 5000	Auto Qdel Method	: 5
Peak/Base Peak Ratio	: 35.00 %	Quantitate Using	: AREA
Up Slope Sensitivity	: .2000000	Units of Conc	: NG/UL
Down Slope Sensitivity	: .0000000	Bunching	: 1

Number of Compounds: 79

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-Dichlorobenzene-d4	(I)	4.10	(1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	2.33	(.567)	.53629	25.00	
3)	Phenol-d5	(S)	3.55	(.865)	.42956	25.00	
4)	Phenol	(M)	3.57	(.869)	.41548	25.00	**
5)	Aniline	(T)	3.58	(.872)	.48774	25.00	**
6)	bis(2-Chloroethyl)ether	(T)	3.69	(.899)	.39440	25.00	**
7)	2-Chlorophenol	(M)	3.75	(.913)	.81997	25.00	**
8)	1,3-Dichlorobenzene	(T)	3.99	(.973)	1.24317	25.00	**
9)	1,4-Dichlorobenzene	(M)	4.14	(1.008)	1.46458	25.00	**
10)	Benzyl alcohol	(T)	4.43	(1.080)	.26540	25.00	**
11)	1,2-Dichlorobenzene	(T)	4.41	(1.075)	1.30138	25.00	**
12)	2-Methylphenol	(T)	4.69	(1.143)	.38058	25.00	**
13)	bis(2-Chloroisopropyl)ether	(T)	4.73	(1.152)	.23439	25.00	**
14)	4-Methylphenol	(T)	5.06	(1.234)	.44301	25.00	**
15)	N-Nitroso-di-n-propylamine	(M)	5.01	(1.221)	.28376	25.00	**
16)	Hexachloroethane	(T)	5.09	(1.239)	.82350	25.00	**
17)	Nitrobenzene-d5	(S)	5.26	(1.281)	.79952	25.00	
18)	Nitrobenzene	(T)	5.30	(1.291)	.36837	25.00	**
19)	Isophorone	(T)	5.91	(1.439)	.86995	25.00	**
20)	2-Nitrophenol	(T)	6.04	(1.472)	.43589	25.00	**
21)	2,4-Dimethylphenol	(T)	6.32	(1.539)	.51657	25.00	**
22)	Benzoic acid	(T)	6.86	(1.671)	.39675	25.00	**
23)	bis(2-Chloroethoxy)methane	(T)	6.55	(1.596)	.38267	25.00	**
24)	2,4-Dichlorophenol	(T)	6.69	(1.631)	.95489	25.00	**
25)	1,2,4-Trichlorobenzene	(M)	6.85	(1.668)	1.29213	25.00	**
26)	*Naphthalene-d8	(I)	6.98	(1.000)	1.00000	50.00	**
27)	Naphthalene	(T)	7.03	(1.007)	.83115	25.00	**
28)	4-Chloroaniline	(T)	7.30	(1.045)	.25791	25.00	**
29)	Hexachlorobutadiene	(T)	7.46	(1.068)	.52615	25.00	**
30)	4-Chloro-3-methylphenol	(M)	8.85	(1.268)	.32504	25.00	**
31)	2-Methylnaphthalene	(T)	8.98	(1.286)	.68425	25.00	**
32)	Hexachlorocyclopentadiene	(T)	9.48	(1.358)	.41885	25.00	**
33)	2,4,6-Trichlorophenol	(T)	9.91	(1.419)	.29230	25.00	**
34)	2,4,5-Trichlorophenol	(T)	10.02	(1.434)	.30631	25.00	**
35)	2-Chloronaphthalene	(T)	10.39	(1.487)	.75388	25.00	**
36)	2-Fluorobiphenyl	(S)	10.18	(1.457)	1.05951	25.00	
37)	2-Nitroaniline	(T)	10.84	(1.552)	.18377	25.00	**
38)	Dimethylphthalate	(T)	11.57	(1.657)	1.17992	25.00	**

39)	Acenaphthylene		[illegible]		1.14277	25.00 **
40)	*Acenaphthene-d10	(I)	12.04(	1.000)	1.00000	50.00 **
41)	3-Nitroaniline	(T)	12.11(	1.006)	.24641	25.00 **
42)	Acenaphthene	(M)	12.13(	1.008)	1.08069	25.00 **
43)	2,4-Dinitrophenol	(T)	12.42(	1.032)	.14669	25.00 **
44)	4-Nitrophenol	(M)	12.93(	1.074)	.49334	25.00 **
45)	Dibenzofuran	(T)	12.67(	1.053)	1.49931	25.00 **
46)	2,6-Dinitrotoluene	(T)	11.65(	.968)	.31588	25.00 **
47)	2,4-Dinitrotoluene	(M)	12.84(	1.067)	.47858	25.00 **
48)	Diethylphthalate	(T)	13.77(	1.144)	1.96856	25.00 **
49)	4-Chlorophenyl-phenylether	(T)	13.88(	1.153)	.77724	25.00 **
50)	Fluorene	(T)	13.72(	1.140)	1.20766	25.00 **
51)	4-Nitroaniline	(T)	14.01(	1.164)	.18865	25.00 **
52)	4,6-Dinitro-2-methylphenol	(T)	14.08(	1.170)	.20127	25.00 **
53)	N-Nitrosodiphenylamine	(T)	14.29(	1.188)	.84741	25.00 **
54)	2,4,6-Tribromophenol	(S)	14.47(	1.202)	.29536	25.00
55)	4-Bromophenyl-phenylether	(T)	15.36(	1.276)	.57336	25.00 **
56)	Hexachlorobenzene	(T)	15.37(	1.277)	.65119	25.00 **
57)	Pentachlorophenol	(M)	16.09(	1.337)	.25452	25.00 **
58)	*Phenanthrene-d10	(I)	16.56(	1.000)	1.00000	50.00 **
59)	Phenanthrene	(T)	16.63(	1.004)	1.04735	25.00 **
60)	Anthracene	(T)	16.78(	1.013)	1.05757	25.00 **
61)	Carbazole	(T)	17.43(	1.052)	.85134	25.00 **
62)	Di-n-butylphthalate	(T)	18.90(	1.141)	1.35678	25.00 **
63)	Fluoranthene	(T)	20.29(	1.225)	1.03690	25.00 **
64)	Pyrene	(M)	20.95(	1.265)	1.07687	25.00 **
65)	Terphenyl-d14	(S)	21.73(	1.312)	.85445	25.00
66)	Butylbenzylphthalate	(T)	23.49(	1.418)	.53700	25.00 **
67)	Benzo(a)anthracene	(T)	24.74(	1.493)	.87252	25.00 **
68)	3,3'-Dichlorobenzidine	(T)	24.87(	1.501)	.34484	25.00 **
69)	bis(2-Ethylhexyl)phthalate	(T)	25.46(	1.537)	.67605	25.00 **
70)	*Chrysene-d12	(I)	24.76(	1.000)	1.00000	50.00 **
71)	Chrysene	(T)	24.83(	1.003)	1.07060	25.00 **
72)	Di-n-octylphthalate	(T)	27.37(	1.106)	1.29169	25.00 **
73)	Benzo(b)fluoranthene	(T)	27.84(	1.124)	.79762	25.00 **
74)	Benzo(k)fluoranthene	(T)	27.92(	1.127)	.88394	25.00 **
75)	Benzo(a)pyrene	(T)	28.67(	1.158)	.68634	25.00 **
76)	*Perylene-d12	(I)	28.82(	1.000)	1.00000	50.00 **
77)	Indeno(1,2,3-cd)pyrene	(T)	31.39(	1.089)	.71238	25.00 **
78)	Dibenzo(a,h)anthracene	(T)	31.48(	1.092)	.73455	25.00
79)	Benzo(g,h,i)perylene	(T)	31.94(	1.108)	.82426	25.00 **

* Compound is ISTD
** Compound uses different Quant parameters

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0113::QT
Data File: >F0113::D3
Name: 1006IC05
Misc: 10-06-1994 HP5987

Quant Rev: 7
Quant Time: 941007 10:51
Injected at: 941006 20:00
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 6

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941006 17:04

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.09	152.0	49224	50.00	NG/UL	93
2)	2-Fluorophenol	2.32	112.0	2202M	4.08	NG/UL	
3)	Phenol-d5	3.53	99.0	1061M	2.28	NG/UL	
4)	Phenol	3.55	94.0	1258M	2.46	NG/UL	
5)	Aniline	3.56	93.0	2597M	5.32	NG/UL	
6)	bis(2-Chloroethyl)ether	3.68	93.0	2062	4.86	NG/UL	92
7)	2-Chlorophenol	3.73	128.0	3573M	4.42	NG/UL	
8)	1,3-Dichlorobenzene	3.98	146.0	5140	3.99	NG/UL	80
9)	1,4-Dichlorobenzene	4.12	146.0	6305	4.97	NG/UL	92
10)	Benzyl alcohol	4.42	108.0	1027M	3.50	NG/UL	
11)	1,2-Dichlorobenzene	4.41	146.0	5665	4.37	NG/UL	89
12)	2-Methylphenol	4.68	108.0	1275	2.90	NG/UL	69
13)	bis(2-Chloroisopropyl)ether	4.69	121.0	872M	2.82	NG/UL	99
14)	4-Methylphenol	5.03	108.0	2013M	4.60	NG/UL	
15)	N-Nitroso-di-n-propylamine	4.98	70.0	1279	3.80	NG/UL	71
16)	Hexachloroethane	5.08	201.0	2885	3.51	NG/UL	92
17)	Nitrobenzene-d5	5.23	82.0	4021M	4.59	NG/UL	
18)	Nitrobenzene	5.28	123.0	1281	3.37	NG/UL	96
19)	Isophorone	5.88	82.0	4458	4.57	NG/UL	62
20)	2-Nitrophenol	6.02	139.0	1299M	2.67	NG/UL	
21)	2,4-Dimethylphenol	6.29	122.0	2645	5.48	NG/UL	70
23)	bis(2-Chloroethoxy)methane	6.52	93.0	1513	3.23	NG/UL	79
24)	2,4-Dichlorophenol	6.68	162.0	3470	3.48	NG/UL	78
25)	1,2,4-Trichlorobenzene	6.82	180.0	5465	4.19	NG/UL	94
26)	*Naphthalene-d8	6.95	136.0	134804	50.00	NG/UL	71
27)	Naphthalene	6.99	128.0	9845	4.48	NG/UL	80
28)	4-Chloroaniline	7.25	127.0	2958	3.64	NG/UL	84
29)	Hexachlorobutadiene	7.42	225.0	6319	4.71	NG/UL	91
30)	4-Chloro-3-methylphenol	8.82	107.0	3510	3.61	NG/UL	77
31)	2-Methylnaphthalene	8.94	142.0	8348	4.53	NG/UL	86
32)	Hexachlorocyclopentadiene	9.44	237.0	3891	3.13	NG/UL	86
33)	2,4,6-Trichlorophenol	9.87	196.0	2724M	3.24	NG/UL	
34)	2,4,5-Trichlorophenol	9.98	196.0	2323	2.74	NG/UL	80
35)	2-Chloronaphthalene	10.34	162.0	9313	4.48	NG/UL	73
36)	2-Fluorobiphenyl	10.12	172.0	12785	4.62	NG/UL	88
38)	Dimethylphthalate	11.49	163.0	14148	4.19	NG/UL	92
39)	Acenaphthylene	11.54	152.0	12635	4.11	NG/UL	96
40)	*Acenaphthene-d10	12.01	164.0	92964	50.00	NG/UL	87
42)	Acenaphthene	12.08	153.0	8098	4.20	NG/UL	87
45)	Dibenzofuran	12.62	168.0	11573	4.26	NG/UL	57

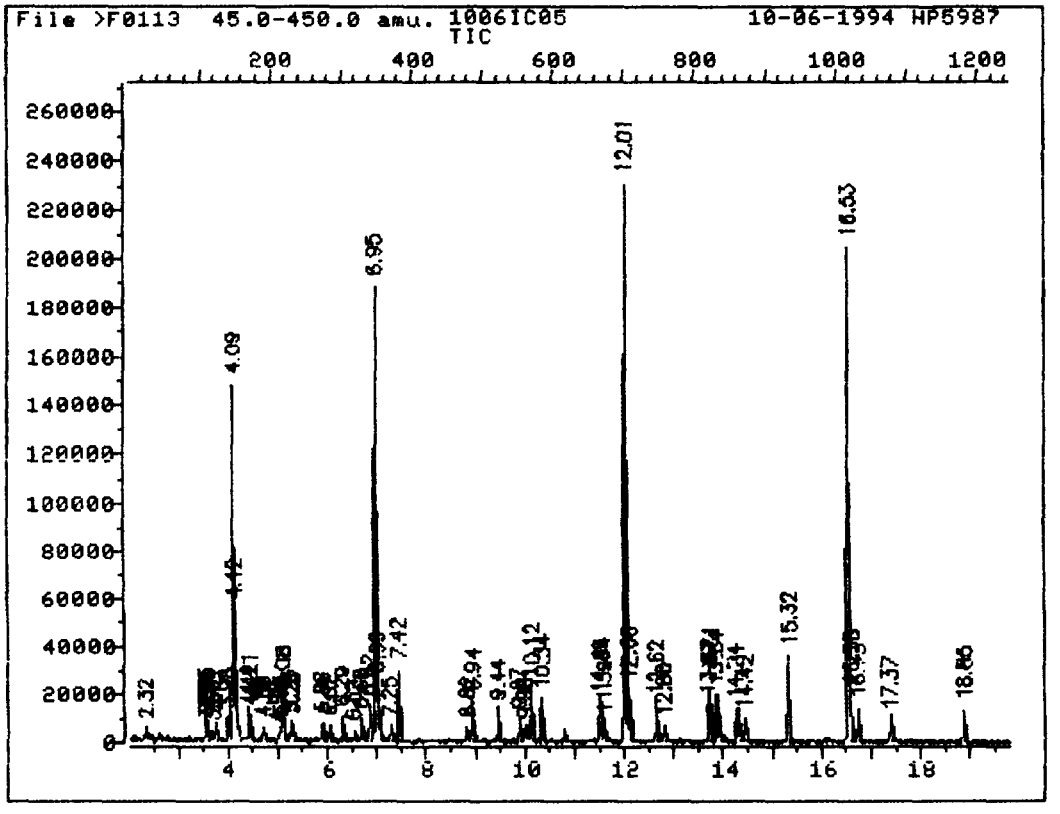
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941007 10:51
Output File: ^F0113::QT Injected at: 941006 20:00
Data File: >F0113::D3 Dilution Factor: 1.00000
Name: 1006IC05 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 6

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 . Last Qcal Time: 941006 17:04

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2,6-Dinitrotoluene	11.59	165.0	1956M	3.22	NG/UL	
47)	2,4-Dinitrotoluene	12.80	165.0	2891M	3.05	NG/UL	
48)	Diethylphthalate	13.71	149.0	17776	5.15	NG/UL	97
49)	4-Chlorophenyl-phenylether	13.84	204.0	6316	4.41	NG/UL	87
50)	Fluorene	13.67	166.0	9018	4.30	NG/UL	95
53)	N-Nitrosodiphenylamine	14.24	169.0	7046	4.85	NG/UL	80
54)	2,4,6-Tribromophenol	14.42	329.9	1935M	3.76	NG/UL	
55)	4-Bromophenyl-phenylether	15.32	248.0	4207	4.26	NG/UL	77
56)	Hexachlorobenzene	15.32	283.9	4659	4.07	NG/UL	79
58)	*Phenanthrene-d10	16.53	188.0	146774	50.00	NG/UL	95
59)	Phenanthrene	16.58	178.0	13027	4.36	NG/UL	85
60)	Anthracene	16.73	178.0	13237	4.11	NG/UL	87
61)	Carbazole	17.37	167.0	10991	4.26	NG/UL	80
62)	Di-n-butylphthalate	18.85	149.0	18458	4.57	NG/UL	99
63)	Fluoranthene	20.24	202.0	12676M	4.14	NG/UL	
64)	Pyrene	20.90	202.0	12764M	4.05	NG/UL	
65)	Terphenyl-d14	21.68	244.0	9496	3.84	NG/UL	83
66)	Butylbenzylphthalate	23.44	149.0	6931	4.37	NG/UL	84
67)	Benzo(a)anthracene	24.68	228.0	11422M	4.63	NG/UL	
68)	3,3'-Dichlorobenzidine	24.81	252.0	3445M	3.42	NG/UL	
69)	bis(2-Ethylhexyl)phthalate	25.41	149.0	9200	4.21	NG/UL	86
70)	*Chrysene-d12	24.71	240.0	100311	50.00	NG/UL	96
71)	Chrysene	24.78	228.0	9743M	4.51	NG/UL	
72)	Di-n-octylphthalate	27.32	149.0	12812	4.57	NG/UL	89
73)	Benzo(b)fluoranthene	27.78	252.0	6477M	3.71	NG/UL	
74)	Benzo(k)fluoranthene	27.85	252.0	7881M	4.45	NG/UL	
75)	Benzo(a)pyrene	28.62	252.0	3493	2.18	NG/UL	83
76)	*Perylene-d12	28.78	264.0	85869	50.00	NG/UL	92
77)	Indeno(1,2,3-cd)pyrene	31.34	276.0	3449M	2.54	NG/UL	
78)	Dibenzo(a,h)anthracene	31.44	278.0	5216M	3.95	NG/UL	
79)	Benzo(g,h,i)perylene	31.90	276.0	7035M	4.90	NG/UL	

* Compound is ISTD

TOTAL ION CHROMATOGRAM

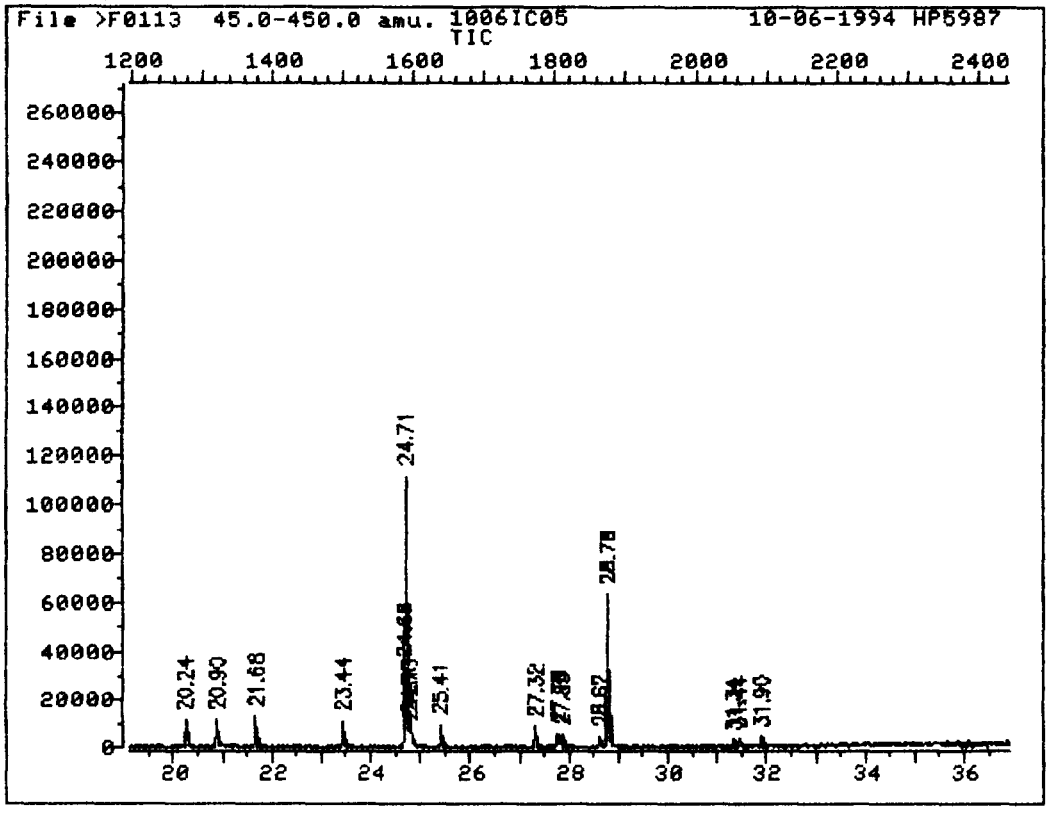


Data File: >F0113::D3 Quant Output File: ^F0113::QT
Name: 1006IC05 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 6

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 17:04

Operator ID: ZIYAD
Quant Time : 941007 10:51
Injected at: 941006 20:00

TOTAL ION CHROMATOGRAM



Data File: >F0113::D3 Quant Output File: ^F0113::QT
Name: 1006IC05 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 6

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 17:04

Operator ID: ZIYAD
Quant Time : 941007 10:51
Injected at: 941006 20:00

QUANT REPORT

Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941006 19:54
Output File: ^F0112::QT
Injected at: 941006 19:16
Data File: >F0112::D3
Dilution Factor: 1.00000
Name: 1006IC10
Instrument ID: 5985
Misc: 10-06-1994 HP5987
BTL# 5

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.10	152.0	63761	50.00	NG/UL	90
2)	2-Fluorophenol	2.33	112.0	7398	10.57	NG/UL	75
3)	Phenol-d5	3.53	99.0	5395M	8.96	NG/UL	
4)	Phenol	3.55	94.0	5372M	8.12	NG/UL	
5)	Aniline	3.56	93.0	6576	10.40	NG/UL	5
6)	bis(2-Chloroethyl)ether	3.69	93.0	4249	7.74	NG/UL	91
7)	2-Chlorophenol	3.73	128.0	9818	9.38	NG/UL	99
8)	1,3-Dichlorobenzene	3.99	146.0	15431	9.25	NG/UL	92
9)	1,4-Dichlorobenzene	4.13	146.0	19068	11.61	NG/UL	99
10)	Benzyl alcohol	4.42	108.0	3760	9.89	NG/UL	89
11)	1,2-Dichlorobenzene	4.41	146.0	15059	8.97	NG/UL	95
12)	2-Methylphenol	4.68	108.0	5186	9.11	NG/UL	83
13)	bis(2-Chloroisopropyl)ether	4.71	121.0	2567M	6.41	NG/UL	
14)	4-Methylphenol	5.03	108.0	4574	8.07	NG/UL	93
15)	N-Nitroso-di-n-propylamine	4.99	70.0	3347	7.69	NG/UL	59
16)	Hexachloroethane	5.08	201.0	10831	10.18	NG/UL	81
17)	Nitrobenzene-d5	5.24	82.0	10750	9.48	NG/UL	87
18)	Nitrobenzene	5.28	123.0	4352	8.85	NG/UL	94
19)	Isophorone	5.88	82.0	11177	8.85	NG/UL	45
20)	2-Nitrophenol	6.02	139.0	5441M	8.63	NG/UL	
21)	2,4-Dimethylphenol	6.29	122.0	6444M	10.30	NG/UL	
22)	Benzoic acid	6.69	105.0	3414	6.37	NG/UL	78
23)	bis(2-Chloroethoxy)methane	6.54	93.0	5005	8.25	NG/UL	99
24)	2,4-Dichlorophenol	6.66	162.0	11244	8.70	NG/UL	85
25)	1,2,4-Trichlorobenzene	6.84	180.0	15011	8.89	NG/UL	87
26)	*Naphthalene-d8	6.95	136.0	175102	50.00	NG/UL	77
27)	Naphthalene	6.99	128.0	25661	9.00	NG/UL	73
28)	4-Chloroaniline	7.25	127.0	7177	6.81	NG/UL	85
29)	Hexachlorobutadiene	7.42	225.0	18026	10.35	NG/UL	90
30)	4-Chloro-3-methylphenol	8.81	107.0	11127M	8.82	NG/UL	
31)	2-Methylnaphthalene	8.94	142.0	21446M	8.95	NG/UL	
32)	Hexachlorocyclopentadiene	9.44	237.0	12009	7.44	NG/UL	95
33)	2,4,6-Trichlorophenol	9.87	196.0	10432	9.55	NG/UL	86
34)	2,4,5-Trichlorophenol	9.97	196.0	9800	8.90	NG/UL	96
35)	2-Chloronaphthalene	10.34	162.0	21312	7.89	NG/UL	74
36)	2-Fluorobiphenyl	10.12	172.0	33466	9.31	NG/UL	94
37)	2-Nitroaniline	10.78	138.0	5811	8.20	NG/UL	71
38)	Dimethylphthalate	11.51	163.0	36905	8.42	NG/UL	95
39)	Acenaphthylene	11.54	152.0	35755	8.94	NG/UL	94
40)	*Acenaphthene-d10	12.01	164.0	119732	50.00	NG/UL	84

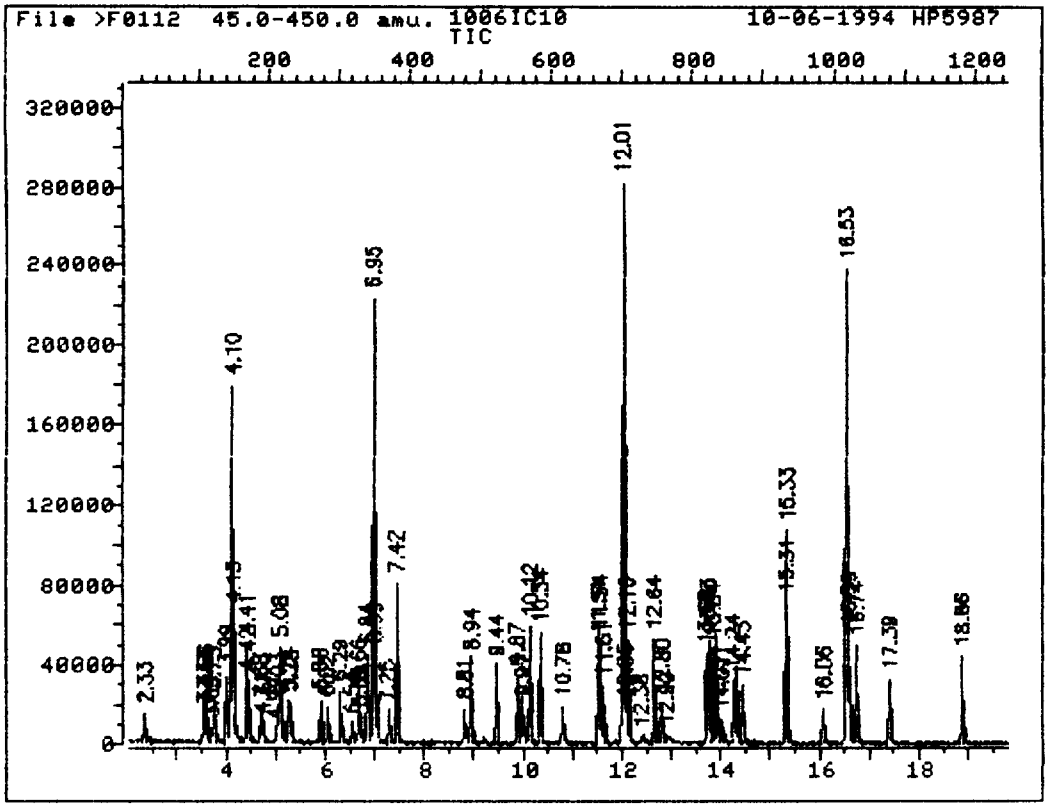
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941006 19:54
Output File: ^F0112::QT Injected at: 941006 19:16
Data File: >F0112::D3 Dilution Factor: 1.00000
Name: 1006IC10 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 5

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.05	138.0	4340	8.03	NG/UL	78
42)	Acenaphthene	12.10	153.0	22187	8.93	NG/UL	93
43)	2,4-Dinitrophenol	12.38	184.0	1761M	5.93	NG/UL	
44)	4-Nitrophenol	12.90	109.0	7104M	5.14	NG/UL	
45)	Dibenzofuran	12.64	168.0	31629M	9.05	NG/UL	
46)	2,6-Dinitrotoluene	11.61	165.0	8676	11.10	NG/UL	52
47)	2,4-Dinitrotoluene	12.80	165.0	11108	9.11	NG/UL	79
48)	Diethylphthalate	13.73	149.0	43959	9.89	NG/UL	86
49)	4-Chlorophenyl-phenylether	13.84	204.0	16161	8.77	NG/UL	92
50)	Fluorene	13.68	166.0	25446	9.42	NG/UL	94
51)	4-Nitroaniline	13.91	138.0	3429M	6.11	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.01	198.0	3625M	6.89	NG/UL	
53)	N-Nitrosodiphenylamine	14.24	169.0	17451	9.32	NG/UL	88
54)	2,4,6-Tribromophenol	14.43	329.9	6228	9.39	NG/UL	96
55)	4-Bromophenyl-phenylether	15.31	248.0	12325	9.68	NG/UL	89
56)	Hexachlorobenzene	15.33	283.9	14020	9.51	NG/UL	83
57)	Pentachlorophenol	16.06	265.8	4332	7.84	NG/UL	97
58)	*Phenanthrene-d10	16.53	188.0	196215	50.00	NG/UL	95
59)	Phenanthrene	16.59	178.0	36137	9.05	NG/UL	84
60)	Anthracene	16.74	178.0	36432	8.46	NG/UL	89
61)	Carbazole	17.39	167.0	30602	8.87	NG/UL	87
62)	Di-n-butylphthalate	18.86	149.0	50675	9.38	NG/UL	97
63)	Fluoranthene	20.24	202.0	36937	9.03	NG/UL	81
64)	Pyrene	20.90	202.0	38857	9.22	NG/UL	81
65)	Terphenyl-d14	21.69	244.0	30675	9.29	NG/UL	95
66)	Butylbenzylphthalate	23.44	149.0	20546	9.68	NG/UL	77
67)	Benzo(a)anthracene	24.69	228.0	32965	9.99	NG/UL	89
68)	3,3'-Dichlorobenzidine	24.82	252.0	9894	7.34	NG/UL	88
69)	bis(2-Ethylhexyl)phthalate	25.40	149.0	24294	8.32	NG/UL	90
70)	*Chrysene-d12	24.73	240.0	147318	50.00	NG/UL	97
71)	Chrysene	24.79	228.0	27754M	8.75	NG/UL	
72)	Di-n-octylphthalate	27.33	149.0	36491	8.86	NG/UL	85
73)	Benzo(b)fluoranthene	27.79	252.0	23336	9.11	NG/UL	85
74)	Benzo(k)fluoranthene	27.86	252.0	25537	9.83	NG/UL	84
75)	Benzo(a)pyrene	28.62	252.0	22383M	9.52	NG/UL	
76)	*Perylene-d12	28.80	264.0	123184	50.00	NG/UL	96
77)	Indeno(1,2,3-cd)pyrene	31.34	276.0	17016	8.72	NG/UL	61
78)	Dibenzo(a,h)anthracene	31.43	278.0	14903	7.87	NG/UL	83
79)	Benzo(g,h,i)perylene	31.89	276.0	16850	8.18	NG/UL	66

* Compound is ISTD

TOTAL ION CHROMATOGRAM

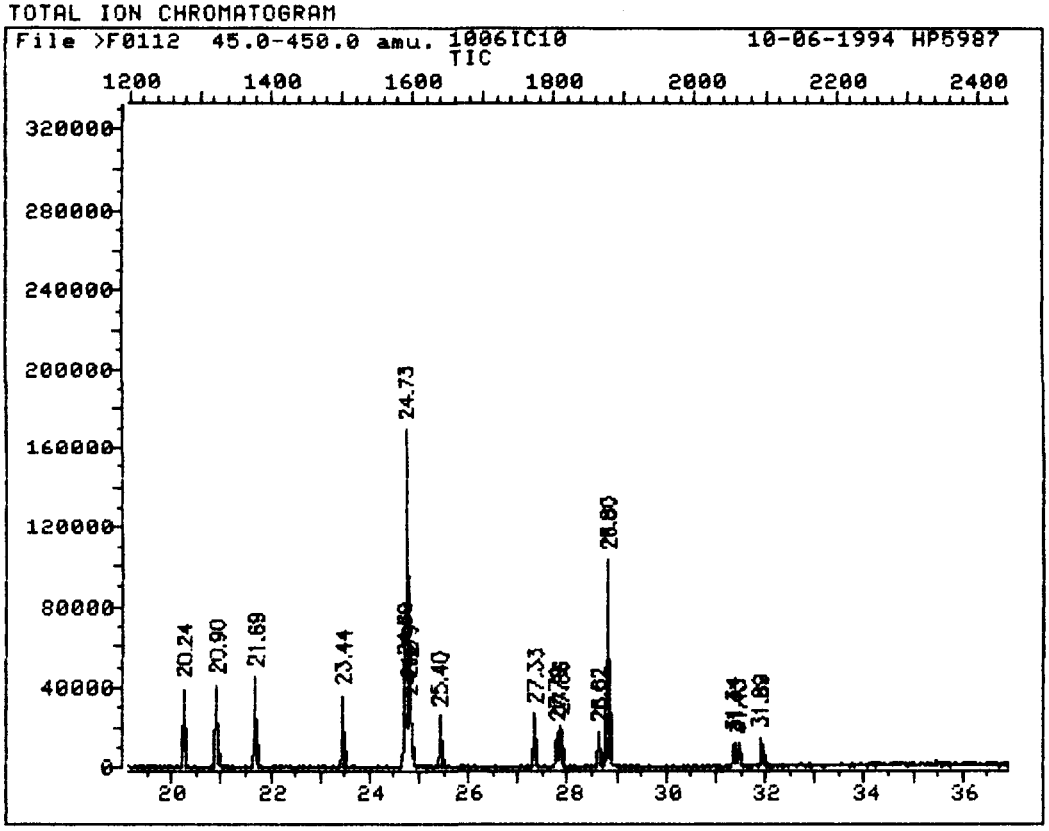


Data File: >F0112::D3 Quant Output File: ^F0112::QT
Name: 1006IC10 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 5

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 19:54
Injected at: 941006 19:16

TOTAL ION CHROMATOGRAM



Data File: >F0112::D3 Quant Output File: ^F0112::QT
Name: 1006IC10 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 5

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 19:54
Injected at: 941006 19:16

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0111::QT
Data File: >F0111::D3
Name: 1006IC25
Misc: 10-06-1994 HP5987

Quant Rev: 7
Quant Time: 941006 19:10
Injected at: 941006 18:32
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 4

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.10	152.0	50418	50.00	NG/UL	88
2)	2-Fluorophenol	2.32	112.0	14033	25.36	NG/UL	72
3)	Phenol-d5	3.53	99.0	12347M	25.94	NG/UL	
4)	Phenol	3.56	94.0	11362M	21.71	NG/UL	99
5)	Aniline	3.56	93.0	13367M	26.74	NG/UL	
6)	bis(2-Chloroethyl)ether	3.67	93.0	8314M	19.15	NG/UL	50
7)	2-Chlorophenol	3.73	128.0	21980	26.56	NG/UL	96
8)	1,3-Dichlorobenzene	3.99	146.0	32681	24.78	NG/UL	92
9)	1,4-Dichlorobenzene	4.13	146.0	35796	27.57	NG/UL	93
10)	Benzyl alcohol	4.42	108.0	7232	24.06	NG/UL	80
11)	1,2-Dichlorobenzene	4.40	146.0	33573	25.29	NG/UL	86
12)	2-Methylphenol	4.68	108.0	9953	22.12	NG/UL	73
13)	bis(2-Chloroisopropyl)ether	4.71	121.0	7010M	22.13	NG/UL	95
14)	4-Methylphenol	5.05	108.0	11353	25.33	NG/UL	97
15)	N-Nitroso-di-n-propylamine	4.99	70.0	6355M	18.46	NG/UL	
16)	Hexachloroethane	5.08	201.0	20636	24.54	NG/UL	90
17)	Nitrobenzene-d5	5.25	82.0	21276	23.73	NG/UL	97
18)	Nitrobenzene	5.28	123.0	10673	27.44	NG/UL	69
19)	Isophorone	5.89	82.0	21982	22.01	NG/UL	41
20)	2-Nitrophenol	6.04	139.0	12744M	25.57	NG/UL	
21)	2,4-Dimethylphenol	6.31	122.0	13242M	26.78	NG/UL	
22)	Benzoic acid	6.78	105.0	9604	22.66	NG/UL	86
23)	bis(2-Chloroethoxy)methane	6.54	93.0	10049	20.94	NG/UL	98
24)	2,4-Dichlorophenol	6.68	162.0	27163	26.59	NG/UL	89
25)	1,2,4-Trichlorobenzene	6.84	180.0	34447	25.79	NG/UL	98
26)	*Naphthalene-d8	6.95	136.0	135088	50.00	NG/UL	80
27)	Naphthalene	7.01	128.0	54946	24.97	NG/UL	78
28)	4-Chloroaniline	7.27	127.0	19028	23.40	NG/UL	93
29)	Hexachlorobutadiene	7.42	225.0	35986	26.78	NG/UL	90
30)	4-Chloro-3-methylphenol	8.81	107.0	21724	22.32	NG/UL	76
31)	2-Methylnaphthalene	8.95	142.0	45602M	24.68	NG/UL	
32)	Hexachlorocyclopentadiene	9.45	237.0	30213	24.26	NG/UL	91
33)	2,4,6-Trichlorophenol	9.87	196.0	19834	23.54	NG/UL	92
34)	2,4,5-Trichlorophenol	9.97	196.0	23045	27.13	NG/UL	86
35)	2-Chloronaphthalene	10.34	162.0	54005	25.93	NG/UL	79
36)	2-Fluorobiphenyl	10.14	172.0	69534	25.06	NG/UL	94
37)	2-Nitroaniline	10.78	138.0	11138	20.37	NG/UL	62
38)	Dimethylphthalate	11.53	163.0	80072	23.67	NG/UL	98
39)	Acenaphthylene	11.54	152.0	74227	24.07	NG/UL	98
40)	*Acenaphthene-d10	12.01	164.0	91357	50.00	NG/UL	94

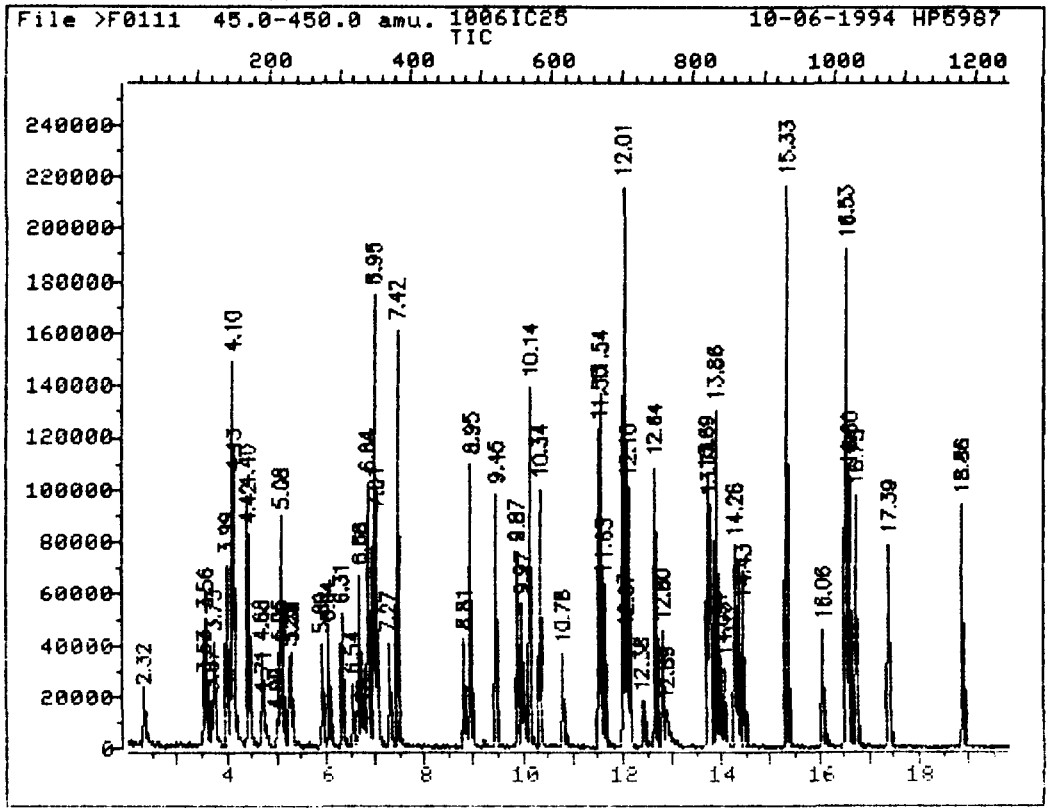
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941006 19:10
Output File: ^F0111::QT Injected at: 941006 18:32
Data File: >F0111::D3 Dilution Factor: 1.00000
Name: 1006IC25 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 4

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.07	138.0	11231M	27.22	NG/UL	
42)	Acenaphthene	12.10	153.0	47183	24.90	NG/UL	95
43)	2,4-Dinitrophenol	12.38	184.0	5987M	26.43	NG/UL	
44)	4-Nitrophenol	12.89	109.0	23061M	21.89	NG/UL	45
45)	Dibenzofuran	12.64	168.0	70174	26.30	NG/UL	53
46)	2,6-Dinitrotoluene	11.63	165.0	16724	28.03	NG/UL	53
47)	2,4-Dinitrotoluene	12.80	165.0	24403	26.23	NG/UL	96
48)	Diethylphthalate	13.74	149.0	89701	26.45	NG/UL	88
49)	4-Chlorophenyl-phenylether	13.86	204.0	34616	24.61	NG/UL	98
50)	Fluorene	13.69	166.0	54283	26.34	NG/UL	99
51)	4-Nitroaniline	13.94	138.0	9542M	22.27	NG/UL	91
52)	4,6-Dinitro-2-methylphenol	14.03	198.0	9719M	24.20	NG/UL	
53)	N-Nitrosodiphenylamine	14.26	169.0	38605	27.03	NG/UL	91
54)	2,4,6-Tribromophenol	14.43	329.9	14933	29.51	NG/UL	96
55)	4-Bromophenyl-phenylether	15.33	248.0	24592	25.32	NG/UL	90
56)	Hexachlorobenzene	15.33	283.9	29265	26.01	NG/UL	90
57)	Pentachlorophenol	16.06	265.8	10474	24.86	NG/UL	95
58)	*Phenanthrene-d10	16.53	188.0	146975	50.00	NG/UL	97
59)	Phenanthrene	16.60	178.0	78502	26.24	NG/UL	98
60)	Anthracene	16.75	178.0	76101	23.59	NG/UL	93
61)	Carbazole	17.39	167.0	61977	23.97	NG/UL	92
62)	Di-n-butylphthalate	18.86	149.0	102854	25.41	NG/UL	96
63)	Fluoranthene	20.26	202.0	77162	25.18	NG/UL	79
64)	Pyrene	20.90	202.0	77019	24.39	NG/UL	81
65)	Terphenyl-d14	21.69	244.0	64077	25.90	NG/UL	98
66)	Butylbenzylphthalate	23.45	149.0	39979	25.15	NG/UL	90
67)	Benzo(a)anthracene	24.69	228.0	65406	26.45	NG/UL	86
68)	3,3'-Dichlorobenzidine	24.82	252.0	26523	26.29	NG/UL	87
69)	bis(2-Ethylhexyl)phthalate	25.41	149.0	48720	22.28	NG/UL	94
70)	*Chrysene-d12	24.72	240.0	117057	50.00	NG/UL	93
71)	Chrysene	24.79	228.0	64501M	25.58	NG/UL	92
72)	Di-n-octylphthalate	27.33	149.0	81134	24.78	NG/UL	81
73)	Benzo(b)fluoranthene	27.79	252.0	51286	25.20	NG/UL	85
74)	Benzo(k)fluoranthene	27.88	252.0	54209	26.26	NG/UL	84
75)	Benzo(a)pyrene	28.63	252.0	45485	24.35	NG/UL	81
76)	*Perylene-d12	28.79	264.0	95623	50.00	NG/UL	94
77)	Indeno(1,2,3-cd)pyrene	31.35	276.0	37246	24.60	NG/UL	63
78)	Dibenzo(a,h)anthracene	31.45	278.0	37445	25.46	NG/UL	94
79)	Benzo(g,h,i)perylene	31.91	276.0	41451M	25.94	NG/UL	

* Compound is ISTD

TOTAL ION CHROMATOGRAM

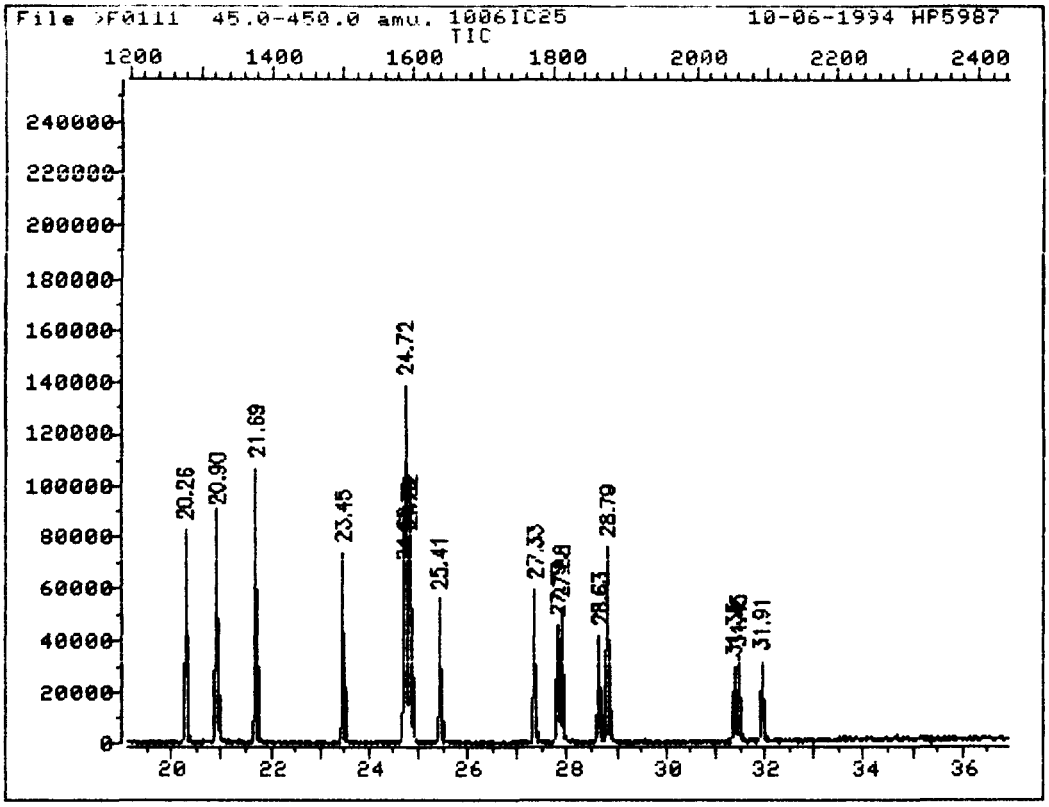


Data File: >F0111::D3 Quant Output File: ^F0111::QT
Name: 1006IC25 Instrument ID: 5985
Misc: 10-06-1994 HP5987 PW # 4

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 19:10
Injected at: 941006 18:32

TOTAL ION CHROMATOGRAM



Data File: >F0111::D3 Quant Output File: ^F0111::QT
Name: 1006IC25 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 4

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 19:10
Injected at: 941006 18:32

QUANT REPORT

Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941006 18:26
Output File: ^F0110::QT
Injected at: 941006 17:48
Data File: >F0110::D3
Dilution Factor: 1.00000
Name: 1006IC50
Instrument ID: 5985
Misc: 10-06-1994 HP5987
BTL# 3

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.10	152.0	54103	50.00	NG/UL	92
2)	2-Fluorophenol	2.33	112.0	29532	49.74	NG/UL	61
3)	Phenol-d5	3.55	99.0	27088M	53.03	NG/UL	
4)	Phenol	3.57	94.0	25416M	45.25	NG/UL	
5)	Aniline	3.57	93.0	26857M	50.06	NG/UL	
6)	bis(2-Chloroethyl)ether	3.69	93.0	21435M	46.00	NG/UL	55
7)	2-Chlorophenol	3.75	128.0	45901	51.68	NG/UL	94
8)	1,3-Dichlorobenzene	3.99	146.0	71239	50.33	NG/UL	99
9)	1,4-Dichlorobenzene	4.13	146.0	81727	58.67	NG/UL	96
10)	Benzyl alcohol	4.43	108.0	15365	47.63	NG/UL	84
11)	1,2-Dichlorobenzene	4.41	146.0	75711	53.15	NG/UL	98
12)	2-Methylphenol	4.69	108.0	21943M	45.44	NG/UL	87
13)	bis(2-Chloroisopropyl)ether	4.73	121.0	13643M	40.14	NG/UL	92
14)	4-Methylphenol	5.06	108.0	25766	53.57	NG/UL	87
15)	N-Nitroso-di-n-propylamine	5.02	70.0	17047M	46.13	NG/UL	
16)	Hexachloroethane	5.09	201.0	45697	50.64	NG/UL	97
17)	Nitrobenzene-d5	5.26	82.0	39064	40.60	NG/UL	91
18)	Nitrobenzene	5.31	123.0	22351	53.55	NG/UL	81
19)	Isophorone	5.91	82.0	47482	44.30	NG/UL	33
20)	2-Nitrophenol	6.04	139.0	26799M	50.11	NG/UL	
21)	2,4-Dimethylphenol	6.32	122.0	28042M	52.85	NG/UL	
22)	Benzoic acid	6.92	105.0	24588M	54.06	NG/UL	81
23)	bis(2-Chloroethoxy)methane	6.55	93.0	21363	41.49	NG/UL	92
24)	2,4-Dichlorophenol	6.69	162.0	55021	50.19	NG/UL	95
25)	1,2,4-Trichlorobenzene	6.85	180.0	73660	51.40	NG/UL	89
26)	*Naphthalene-d8	6.97	136.0	143482	50.00	NG/UL	79
27)	Naphthalene	7.02	128.0	122483	52.41	NG/UL	79
28)	4-Chloroaniline	7.28	127.0	40911	47.36	NG/UL	92
29)	Hexachlorobutadiene	7.44	225.0	78332	54.88	NG/UL	90
30)	4-Chloro-3-methylphenol	8.83	107.0	50822	49.17	NG/UL	83
31)	2-Methylnaphthalene	8.95	142.0	104112M	53.04	NG/UL	
32)	Hexachlorocyclopentadiene	9.46	237.0	69471	52.52	NG/UL	99
33)	2,4,6-Trichlorophenol	9.88	196.0	47336	52.89	NG/UL	90
34)	2,4,5-Trichlorophenol	9.98	196.0	49793	55.19	NG/UL	90
35)	2-Chloronaphthalene	10.36	162.0	111739	50.51	NG/UL	77
36)	2-Fluorobiphenyl	10.16	172.0	156212	53.01	NG/UL	96
37)	2-Nitroaniline	10.81	138.0	28801	49.58	NG/UL	81
38)	Dimethylphthalate	11.54	163.0	174454	48.55	NG/UL	95
39)	Acenaphthylene	11.56	152.0	168261	51.37	NG/UL	98
40)	*Acenaphthene-d10	12.02	164.0	95686	50.00	NG/UL	95

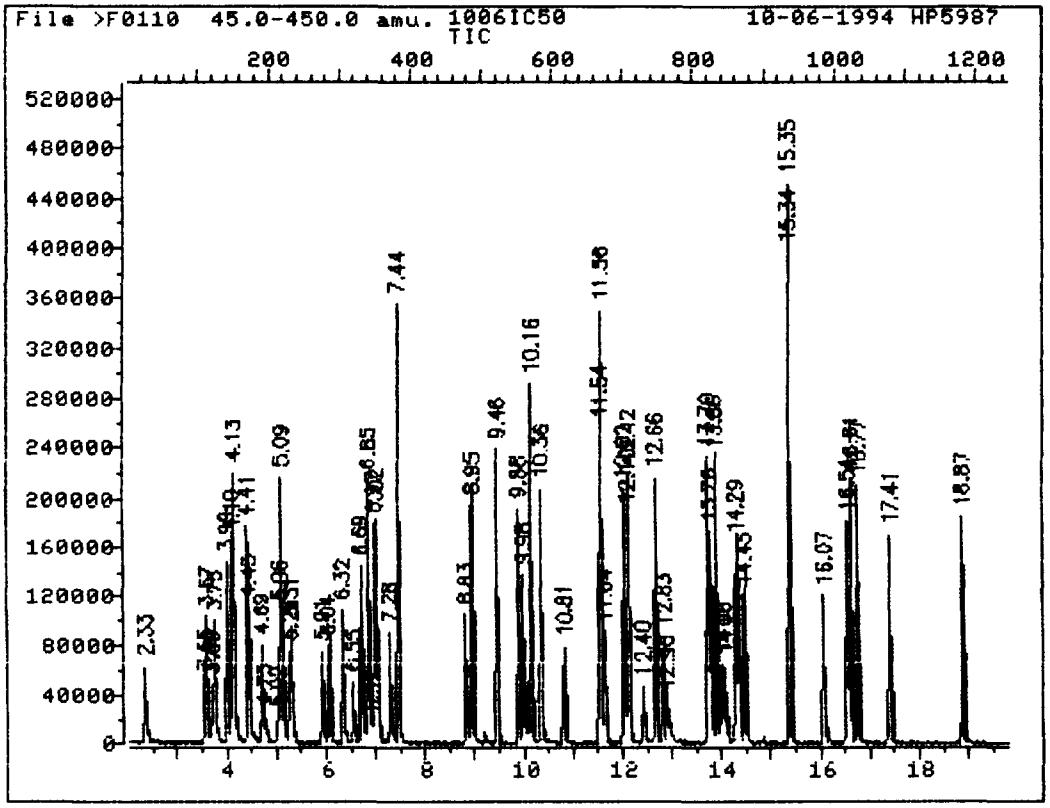
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941006 18:26
Output File: ^F0110::QT Injected at: 941006 17:48
Data File: >F0110::D3 Dilution Factor: 1.00000
Name: 1006IC50 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 3

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.10	138.0	23463	54.30	NG/UL	63
42)	Acenaphthene	12.12	153.0	109338	55.09	NG/UL	98
43)	2,4-Dinitrophenol	12.40	184.0	15878M	66.92	NG/UL	
44)	4-Nitrophenol	12.90	109.0	51463M	46.63	NG/UL	
45)	Dibenzofuran	12.66	168.0	152564	54.59	NG/UL	50
46)	2,6-Dinitrotoluene	11.64	165.0	33462	53.55	NG/UL	59
47)	2,4-Dinitrotoluene	12.83	165.0	49175	50.46	NG/UL	95
48)	Diethylphthalate	13.76	149.0	186486	52.50	NG/UL	91
49)	4-Chlorophenyl-phenylether	13.86	204.0	80174	54.42	NG/UL	99
50)	Fluorene	13.70	166.0	124155	57.52	NG/UL	98
51)	4-Nitroaniline	14.01	138.0	21149M	47.14	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.06	198.0	22217M	52.82	NG/UL	
53)	N-Nitrosodiphenylamine	14.29	169.0	85531	57.17	NG/UL	86
54)	2,4,6-Tribromophenol	14.45	329.9	29401	55.47	NG/UL	97
55)	4-Bromophenyl-phenylether	15.34	248.0	59531	58.52	NG/UL	94
56)	Hexachlorobenzene	15.35	283.9	70355	59.69	NG/UL	94
57)	Pentachlorophenol	16.07	265.8	26436	59.90	NG/UL	96
58)	*Phenanthrene-d10	16.54	188.0	154527	50.00	NG/UL	99
59)	Phenanthrene	16.61	178.0	171229	54.45	NG/UL	97
60)	Anthracene	16.77	178.0	178142	52.53	NG/UL	96
61)	Carbazole	17.41	167.0	136418	50.19	NG/UL	86
62)	Di-n-butylphthalate	18.87	149.0	228233	53.64	NG/UL	98
63)	Fluoranthene	20.27	202.0	172263	53.47	NG/UL	78
64)	Pyrene	20.93	202.0	180337	54.31	NG/UL	81
65)	Terphenyl-d14	21.70	244.0	149985	57.66	NG/UL	97
66)	Butylbenzylphthalate	23.45	149.0	88053	52.68	NG/UL	87
67)	Benzo(a)anthracene	24.70	228.0	135786	52.23	NG/UL	89
68)	3,3'-Dichlorobenzidine	24.83	252.0	59964	56.52	NG/UL	97
69)	bis(2-Ethylhexyl)phthalate	25.43	149.0	108647	47.26	NG/UL	93
70)	*Chrysene-d12	24.74	240.0	131311	50.00	NG/UL	96
71)	Chrysene	24.81	228.0	146893	51.93	NG/UL	90
72)	Di-n-octylphthalate	27.34	149.0	161475	43.97	NG/UL	86
73)	Benzo(b)fluoranthene	27.81	252.0	104596	45.82	NG/UL	86
74)	Benzo(k)fluoranthene	27.90	252.0	118852	51.32	NG/UL	85
75)	Benzo(a)pyrene	28.64	252.0	99920	47.69	NG/UL	87
76)	*Perylene-d12	28.80	264.0	98959	50.00	NG/UL	98
77)	Indeno(1,2,3-cd)pyrene	31.37	276.0	78556	50.14	NG/UL	64
78)	Dibenzo(a,h)anthracene	31.46	278.0	79831	52.45	NG/UL	91
79)	Benzo(g,h,i)perylene	31.93	276.0	84815M	51.28	NG/UL	71

* Compound is ISTD

TOTAL ION CHROMATOGRAM

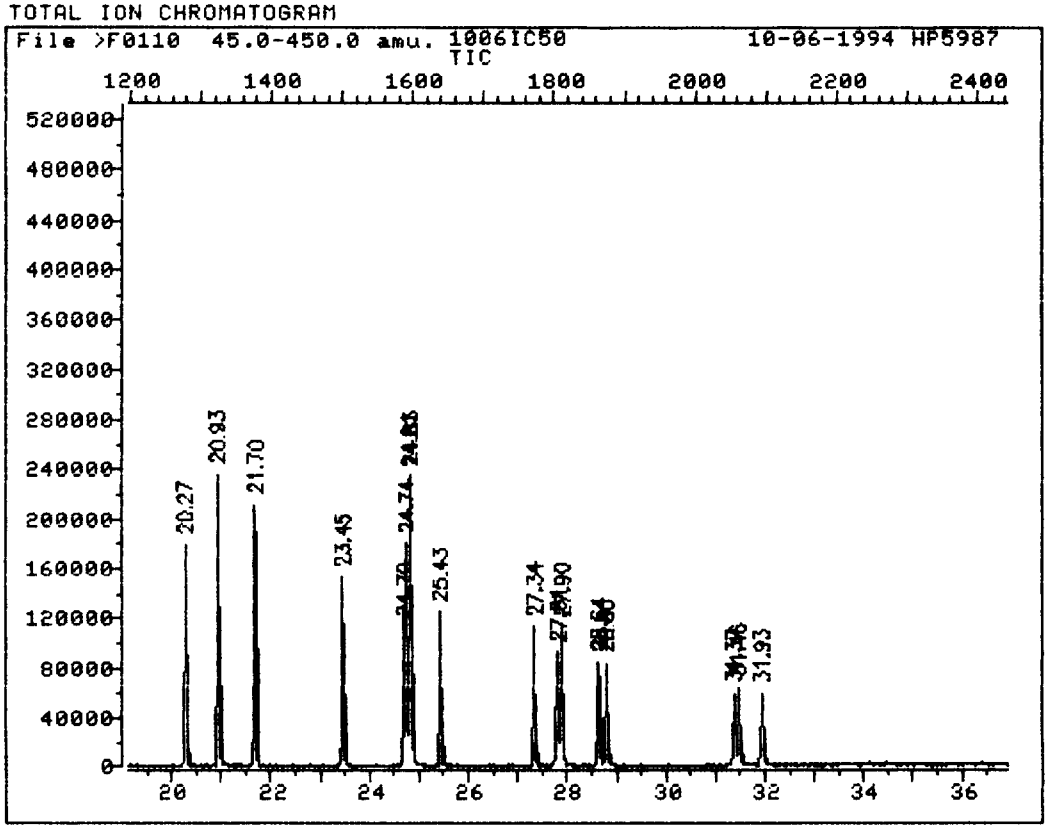


Data File: >F0110::D3 Quant Output File: ^F0110::QT
Name: 1006IC50 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 3

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 18:26
Injected at: 941006 17:48

TOTAL ION CHROMATOGRAM



Data File: >F0110::D3 Quant Output File: ^F0110::QT
Name: 1006IC50 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 3

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 18:26
Injected at: 941006 17:48

QUANT REPORT

Operator ID: ZIYAD
Quant Rev: 7
Quant Time: 941006 17:42
Output File: ^F0109::QT
Injected at: 941006 17:04
Data File: >F0109::D3
Dilution Factor: 1.00000
Name: 1006IC100
Instrument ID: 5985
Misc: 10-06-1994 HP5987
BTL# 2

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.10	152.0	67812	50.00	NG/UL	89
2)	2-Fluorophenol	2.33	112.0	74791	100.50	NG/UL	79
3)	Phenol-d5	3.59	99.0	70352M	109.88	NG/UL	
4)	Phenol	3.60	94.0	65112M	92.49	NG/UL	
5)	Aniline	3.62	93.0	50014	74.38	NG/UL	20
6)	bis(2-Chloroethyl)ether	3.72	93.0	66983M	114.69	NG/UL	86
7)	2-Chlorophenol	3.78	128.0	119862	107.67	NG/UL	87
8)	1,3-Dichlorobenzene	4.00	146.0	182882	103.09	NG/UL	98
9)	1,4-Dichlorobenzene	4.15	146.0	219197	125.54	NG/UL	97
10)	Benzyl alcohol	4.46	108.0	34261	84.74	NG/UL	90
11)	1,2-Dichlorobenzene	4.42	146.0	195837	109.68	NG/UL	96
12)	2-Methylphenol	4.72	108.0	59240	97.88	NG/UL	93
13)	bis(2-Chloroisopropyl)ether	4.79	121.0	35703M	83.81	NG/UL	93
14)	4-Methylphenol	5.12	108.0	70639	117.17	NG/UL	99
15)	N-Nitroso-di-n-propylamine	5.06	70.0	44663M	96.43	NG/UL	
16)	Hexachloroethane	5.09	201.0	138181	122.17	NG/UL	99
17)	Nitrobenzene-d5	5.29	82.0	104661	86.78	NG/UL	93
18)	Nitrobenzene	5.34	123.0	54769	104.69	NG/UL	72
19)	Isophorone	5.97	82.0	110939	82.58	NG/UL	25
20)	2-Nitrophenol	6.07	139.0	66190M	98.75	NG/UL	68
21)	2,4-Dimethylphenol	6.35	122.0	67349	101.27	NG/UL	76
22)	Benzoic acid	7.04	105.0	65621M	115.12	NG/UL	92
23)	bis(2-Chloroethoxy)methane	6.58	93.0	56964	88.27	NG/UL	86
24)	2,4-Dichlorophenol	6.72	162.0	148279	107.91	NG/UL	91
25)	1,2,4-Trichlorobenzene	6.87	180.0	196025	109.13	NG/UL	91
26)	*Naphthalene-d8	6.98	136.0	170951	50.00	NG/UL	77
27)	Naphthalene	7.04	128.0	350644	125.93	NG/UL	86
28)	4-Chloroaniline	7.31	127.0	102002	99.11	NG/UL	88
29)	Hexachlorobutadiene	7.46	225.0	194393	114.32	NG/UL	90
30)	4-Chloro-3-methylphenol	8.86	107.0	126931	103.08	NG/UL	72
31)	2-Methylnaphthalene	8.99	142.0	269707M	115.32	NG/UL	
32)	Hexachlorocyclopentadiene	9.47	237.0	181617	115.25	NG/UL	98
33)	2,4,6-Trichlorophenol	9.90	196.0	115563	108.38	NG/UL	90
34)	2,4,5-Trichlorophenol	10.02	196.0	133740	124.41	NG/UL	93
35)	2-Chloronaphthalene	10.39	162.0	304864	115.67	NG/UL	85
36)	2-Fluorobiphenyl	10.18	172.0	436037	124.19	NG/UL	96
37)	2-Nitroaniline	10.85	138.0	69587	100.55	NG/UL	81
38)	Dimethylphthalate	11.59	163.0	476931	111.40	NG/UL	91
39)	Acenaphthylene	11.59	152.0	507369	130.01	NG/UL	95
40)	*Acenaphthene-d10	12.04	164.0	110173	50.00	NG/UL	92

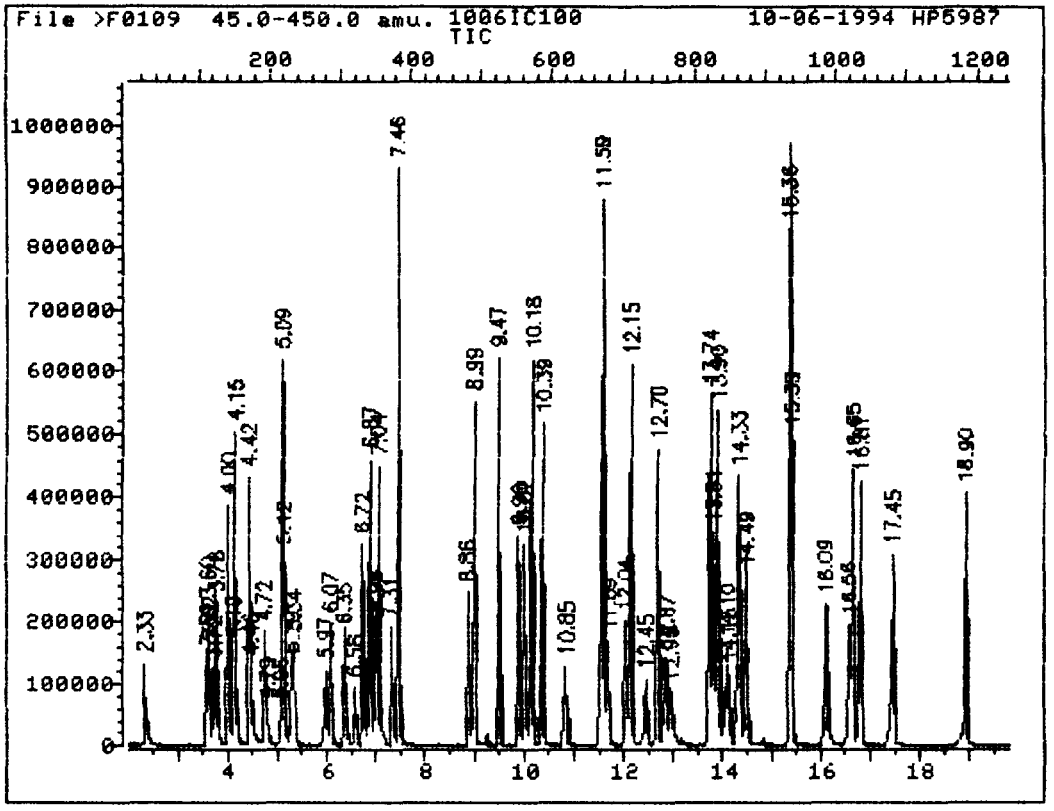
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941006 17:42
Output File: ^F0109::QT Injected at: 941006 17:04
Data File: >F0109::D3 Dilution Factor: 1.00000
Name: 1006IC100 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 2

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.15	138.0	69039M	138.75	NG/UL	75
42)	Acenaphthene	12.15	153.0	315139	137.91	NG/UL	98
43)	2,4-Dinitrophenol	12.45	184.0	47643M	174.39	NG/UL	
44)	4-Nitrophenol	12.95	109.0	139699M	109.94	NG/UL	56
45)	Dibenzofuran	12.70	168.0	396654	123.28	NG/UL	63
46)	2,6-Dinitrotoluene	11.69	165.0	64087	89.07	NG/UL	51
47)	2,4-Dinitrotoluene	12.87	165.0	125579	111.92	NG/UL	91
48)	Diethylphthalate	13.81	149.0	480856M	117.58	NG/UL	91
49)	4-Chlorophenyl-phenylether	13.90	204.0	206286	121.61	NG/UL	98
50)	Fluorene	13.74	166.0	334866	134.74	NG/UL	97
51)	4-Nitroaniline	14.10	138.0	39986M	77.40	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.13	198.0	45993M	94.97	NG/UL	68
53)	N-Nitrosodiphenylamine	14.33	169.0	222848	129.37	NG/UL	90
54)	2,4,6-Tribromophenol	14.49	329.9	82492	135.17	NG/UL	98
55)	4-Bromophenyl-phenylether	15.36	248.0	162841	139.03	NG/UL	88
56)	Hexachlorobenzene	15.39	283.9	174821	128.82	NG/UL	94
57)	Pentachlorophenol	16.09	265.8	73069	143.80	NG/UL	96
58)	*Phenanthrene-d10	16.56	188.0	177914	50.00	NG/UL	92
59)	Phenanthrene	16.65	178.0	445498	123.03	NG/UL	96
60)	Anthracene	16.81	178.0	451631	115.67	NG/UL	93
61)	Carbazole	17.45	167.0	356500	113.92	NG/UL	88
62)	Di-n-butylphthalate	18.90	149.0	483367	98.66	NG/UL	98
63)	Fluoranthene	20.30	202.0	432275	116.54	NG/UL	79
64)	Pyrene	20.95	202.0	465946	121.88	NG/UL	82
65)	Terphenyl-d14	21.73	244.0	356193	118.94	NG/UL	98
66)	Butylbenzylphthalate	23.49	149.0	204735	106.39	NG/UL	87
67)	Benzo(a)anthracene	24.73	228.0	347162	115.98	NG/UL	89
68)	3,3'-Dichlorobenzidine	24.86	252.0	173787	142.28	NG/UL	98
69)	bis(2-Ethylhexyl)phthalate	25.45	149.0	273393	103.28	NG/UL	95
70)	*Chrysene-d12	24.76	240.0	152458	50.00	NG/UL	99
71)	Chrysene	24.86	228.0	371700	113.18	NG/UL	90
72)	Di-n-octylphthalate	27.38	149.0	404546	94.88	NG/UL	85
73)	Benzo(b)fluoranthene	27.85	252.0	267586	100.97	NG/UL	86
74)	Benzo(k)fluoranthene	27.94	252.0	285407M	106.13	NG/UL	86
75)	Benzo(a)pyrene	28.68	252.0	239576	98.48	NG/UL	84
76)	*Perylene-d12	28.82	264.0	100231	50.00	NG/UL	95
77)	Indeno(1,2,3-cd)pyrene	31.41	276.0	179760M	113.27	NG/UL	
78)	Dibenzo(a,h)anthracene	31.50	278.0	174501	113.20	NG/UL	92
79)	Benzo(g,h,i)perylene	31.97	276.0	179226	106.99	NG/UL	63

* Compound is ISTD

TOTAL ION CHROMATOGRAM

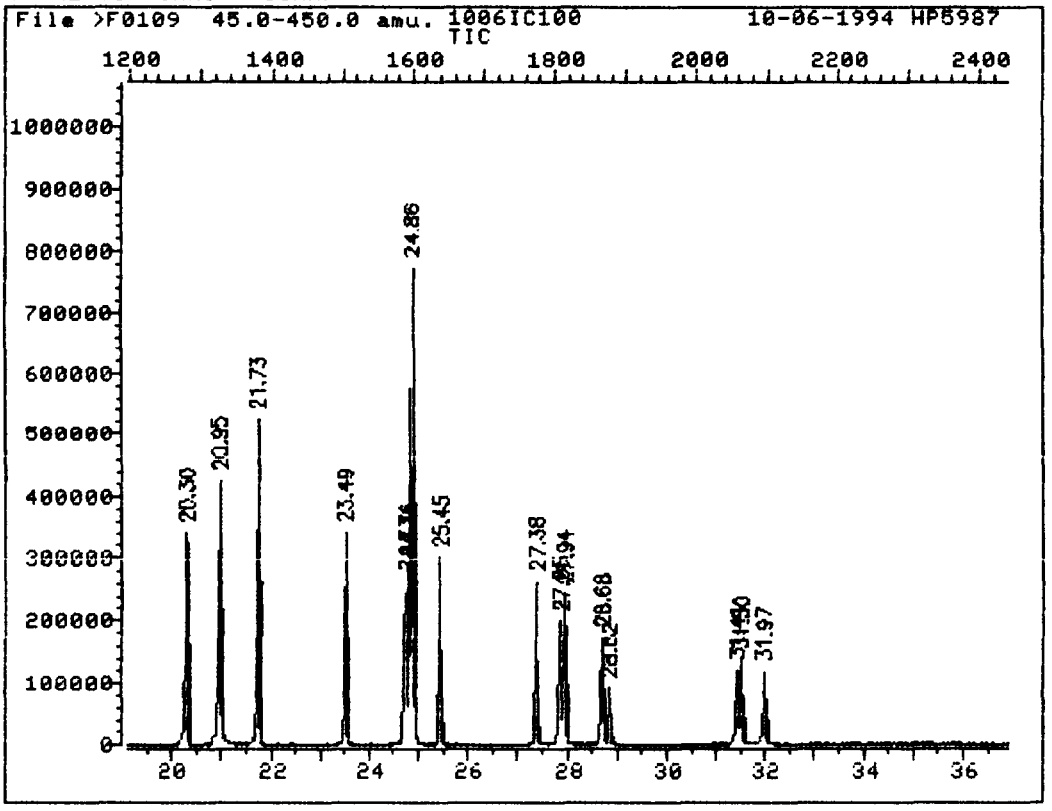


Data File: >F0109::D3 Quant Output File: ^F0109::QT
Name: 1006IC100 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 2

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 17:42
Injected at: 941006 17:04

TOTAL ION CHROMATOGRAM



Data File: >F0109::D3 Quant Output File: ^F0109::QT
Name: 1006IC100 Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 2

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 941006 14:23

Operator ID: ZIYAD
Quant Time : 941006 17:42
Injected at: 941006 17:04

Calibration Report

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Calibrated: 941003 09:56

Compound	Files: >F0055 RF 5.00	>F0054 RF 10.00	>F0053 RF 25.00	>F0052 RF 50.00	>F0051 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD
2-Fluorophenol	.62791	.75945	.70988	.71075	.82244	.572	.72609	9.868
Phenol-d5	.57631	.54761	.61187	.66400	.72429	.867	.62482	11.292
Phenol	.60108	.61265	.65194	.63938	.75677	.873	.65236	9.473
Aniline	.70145	.76125	.71456	.63572	.64455	.873	.69151	7.518
bis(2-Chloroethyl)ether	.53859	.46891	.58794	.56558	.64243	.900	.56069	11.406
2-Chlorophenol	.95820	.92999	1.01414	.99053	1.11955	.914	1.00248	7.262
1,3-Dichlorobenzene	1.42088	1.22625	1.41905	1.43223	1.51763	.973	1.40321	7.627
1,4-Dichlorobenzene	1.40763	1.60746	1.48251	1.55620	1.72746	1.008	1.55625	7.835
Benzyl alcohol	.38536	.34096	.37417	.38729	.39229	1.079	.37601	5.502
1,2-Dichlorobenzene	1.36944	1.43406	1.35451	1.47630	1.52628	1.073	1.43212	5.032
2-Methylphenol	.48131	.49380	.57259	.56376	.61507	1.144	.54530	10.333
bis(2-Chloroisopropyl)ether	.39956	.30887	.31196	.22118	.33937	1.156	.31619	20.367
4-Methylphenol	.45937	.52918	.54083	.62145	.65705	1.232	.56158	13.972
N-Nitroso-di-n-propylamine	.41677	.36246	.38622	.38055	.41465	1.219	.39213	5.931
Hexachloroethane	.61371	.68467	.67803	.75731	.81722	1.237	.71019	11.058
Nitrobenzene-d5	1.04136	1.13208	1.01483	1.06882	1.04054	1.277	1.05953	4.231
Nitrobenzene	.44123	.43650	.46909	.48143	.47250	1.288	.46015	4.350
Isophorone	1.41631	1.35822	1.14340	1.22119	1.25406	1.433	1.27864	8.521
2-Nitrophenol	.55406	.49857	.60974	.56911	.59511	1.466	.56532	7.638
2,4-Dimethylphenol	.49630	.58500	.57780	.58368	.66411	1.533	.58138	10.217
Benzoic acid	-	.34912	.57996	.60925	.63995	1.672	.54457	24.347
bis(2-Chloroethoxy)methane	.61213	.60936	.57906	.55957	.58312	1.586	.58865	3.749
2,4-Dichlorophenol	.95930	.90743	1.02065	1.03842	1.07283	1.623	.99973	6.604
1,2,4-Trichlorobenzene	1.24020	1.33768	1.25680	1.28921	1.31291	1.659	1.28736	3.094
Naphthalene	.84593	.84609	.92180	.90258	.92039	1.007	.88736	4.339
4-Chloroaniline	.30239	.31027	.34799	.29866	.29684	1.044	.31123	6.808
Hexachlorobutadiene	.36320	.40973	.41235	.40203	.40438	1.066	.39834	5.038
4-Chloro-3-methylphenol	.26579	.33769	.33105	.32680	.33592	1.265	.31945	9.484
2-Methylnaphthalene	.64200	.66735	.70006	.69433	.71328	1.283	.68340	4.178
Hexachlorocyclopentadiene	.28449	.29258	.32369	.33324	.34104	1.353	.31501	7.969
2,4,6-Trichlorophenol	.24326	.24089	.26547	.27147	.27259	1.414	.25874	5.980
2,4,5-Trichlorophenol	.22420	.24218	.32567	.30507	.32040	1.429	.28350	16.572
2-Chloronaphthalene	.61852	.72848	.69571	.70844	.73222	1.481	.69667	6.626
2-Fluorobiphenyl	.89005	.92243	.92892	.91470	.95367	1.451	.92195	2.500
2-Nitroaniline	.16423	.18094	.21270	.21088	.21349	1.545	.19645	11.500
Dimethylphthalate	.99994	1.10576	1.07322	1.04957	1.04057	1.649	1.05381	3.727
Acenaphthylene	.97846	.97735	1.05114	1.09404	1.15142	1.652	1.05048	7.159
3-Nitroaniline	-	.22856	.30584	.31782	.30438	1.006	.28915	14.124
Acenaphthene	1.07069	1.14412	1.20818	1.21717	1.27914	1.008	1.18386	6.700

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Calibration Report

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Calibrated: 941003 09:56

Compound	Files: >F0055 RF 5.00	>F0054 RF 10.00	>F0053 RF 25.00	>F0052 RF 50.00	>F0051 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD
2,4-Dinitrophenol	-	-	.18515	.19806	.20739	1.032	.19687	5.674
4-Nitrophenol	.33843	.40941	.53820	.57332	.54836	1.075	.48155	21.224
Dibenzofuran	1.51201	1.59222	1.58353	1.63670	1.70485	1.053	1.60586	4.430
2,6-Dinitrotoluene	.39174	.37124	.38002	.38250	.28444	.968	.36199	12.145
2,4-Dinitrotoluene	.45821	.45843	.50367	.52595	.48129	1.066	.48551	6.059
Diethylphthalate	1.83464	1.87889	1.82840	1.83919	1.92229	1.143	1.86068	2.134
4-Chlorophenyl-phenylether	.75224	.84052	.77548	.79009	.78418	1.152	.78850	4.115
Fluorene	1.16286	1.18065	1.21474	1.27808	1.35486	1.139	1.23824	6.351
4-Nitroaniline	.15246	.19105	.27718	.27179	.21971	1.161	.22244	23.918
4,6-Dinitro-2-methylphenol	.14865	.18523	.21702	.25814	.20339	1.167	.20248	19.916
N-Nitrosodiphenylamine	.82697	.87124	.84101	.88725	.96023	1.186	.87734	5.940
2,4,6-Tribromophenol	.26425	.28379	.30622	.29963	.32386	1.200	.29555	7.661
4-Bromophenyl-phenylether	.36749	.50255	.47409	.54312	.55674	1.273	.48880	15.408
Hexachlorobenzene	.49335	.50739	.52197	.56026	.56400	1.275	.52939	5.965
Pentachlorophenol	.12795	.19556	.25492	.27069	.30179	1.334	.23018	29.966
Phenanthrene	1.04388	1.03413	1.01549	1.08291	1.07641	1.004	1.05056	2.717
Anthracene	.99331	1.13371	1.01709	1.07301	1.05399	1.013	1.05422	5.143
Carbazole	.76236	.87216	.93141	.97419	.88195	1.052	.88442	8.996
Di-n-butylphthalate	1.30235	1.43620	1.36562	1.40273	1.44208	1.139	1.38980	4.147
Fluoranthene	.82991	.96973	1.02362	1.05624	1.08807	1.224	.99351	10.205
Pyrene	.83089	1.02080	1.02537	1.06438	1.11796	1.263	1.01188	10.716
Terphenyl-d14	.70677	.79174	.78816	.86802	.82114	1.310	.79517	7.402
Butylbenzylphthalate	.40870	.58398	.53611	.57733	.58035	1.415	.53729	13.857
Benzo(a)anthracene	.74851	.83659	.77557	.89404	.91519	1.490	.83398	8.673
3,3'-Dichlorobenzidine	.22237	.33047	.32176	.39424	.39617	1.498	.33300	21.294
bis(2-Ethylhexyl)phthalate	.58731	.69191	.69987	.79175	.79175	1.533	.71252	11.913
Chrysene	1.04291	1.00924	1.07223	1.07604	1.05430	1.003	1.05094	2.561
Di-n-octylphthalate	1.07358	1.20853	1.45323	1.46598	1.53984	1.104	1.34823	14.674
Benzo(b)fluoranthene	.89920	.91697	.95037	.98379	.97697	1.124	.94546	3.900
Benzo(k)fluoranthene	.88171	.96548	1.02054	.99161	1.00009	1.127	.97189	5.571
Benzo(a)pyrene	.74464	.81735	.84680	.91833	.87661	1.157	.84075	7.783
Indeno(1,2,3-cd)pyrene	.72185	.71151	.82892	.79271	.78451	1.088	.76790	6.484
Dibenzo(a,h)anthracene	.65166	.68548	.76958	.84972	.79425	1.092	.75014	10.772
Benzo(g,h,i)perylene	.79983	.75916	.86348	.81774	.78882	1.108	.80581	4.794

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

FMGR : CBCAL,CBF002,IDF005,,A

Calib File: CBF002::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Units: NG/UL
Last Edit: 940705 12:31
Last Calib: 941003 09:56

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Units: NG/UL
Last Edit: 940916 14:52
Last Calib: 940901 09:50

Correct Files ? Y

Calibrating...

1)	2-Fluorophenol	Avg RF: .72609
2)	Phenol-d5	Avg RF: .62482
3)	Phenol	Avg RF: .65236
4)	Aniline	Avg RF: .69151
5)	bis(2-Chloroethyl)ether	Avg RF: .56069
6)	2-Chlorophenol	Avg RF: 1.00248
7)	1,3-Dichlorobenzene	Avg RF: 1.40321
8)	1,4-Dichlorobenzene	Avg RF: 1.55625
9)	Benzyl alcohol	Avg RF: .37601
10)	1,2-Dichlorobenzene	Avg RF: 1.43212
11)	2-Methylphenol	Avg RF: .54530
12)	bis(2-Chloroisopropyl)ether	Avg RF: .31619
13)	4-Methylphenol	Avg RF: .56158
14)	N-Nitroso-di-n-propylamine	Avg RF: .39213
15)	Hexachloroethane	Avg RF: .71019
16)	Nitrobenzene-d5	Avg RF: 1.05953
17)	Nitrobenzene	Avg RF: .46015
18)	Isophorone	Avg RF: 1.27864
19)	2-Nitrophenol	Avg RF: .56532
20)	2,4-Dimethylphenol	Avg RF: .58138
21)	Benzoic acid	Avg RF: .54457
22)	bis(2-Chloroethoxy)methane	Avg RF: .58865
23)	2,4-Dichlorophenol	Avg RF: .99973
24)	1,2,4-Trichlorobenzene	Avg RF: 1.28736
25)	Naphthalene	Avg RF: .88736
26)	4-Chloroaniline	Avg RF: .31123
27)	Hexachlorobutadiene	Avg RF: .39834
28)	4-Chloro-3-methylphenol	Avg RF: .31945
29)	2-Methylnaphthalene	Avg RF: .68340
30)	Hexachlorocyclopentadiene	Avg RF: .31501
31)	2,4,6-Trichlorophenol	Avg RF: .25874
32)	2,4,5-Trichlorophenol	Avg RF: .28350
33)	2-Chloronaphthalene	Avg RF: .69667
34)	2-Fluorobiphenyl	Avg RF: .92195
35)	2-Nitroaniline	Avg RF: .19645
36)	Dimethylphthalate	Avg RF: 1.05381
37)	Acenaphthylene	Avg RF: 1.05048
38)	3-Nitroaniline	Avg RF: .28915
39)	Acenaphthene	Avg RF: 1.18386
40)	2,4-Dinitrophenol	Avg RF: .19687
41)	4-Nitrophenol	Avg RF: .48155
42)	Dibenzofuran	Avg RF: 1.60586

44)	2,4-Dinitrotoluene	Avg RF: .48851
45)	Diethylphthalate	Avg RF: 1.86068
46)	4-Chlorophenyl-phenylether	Avg RF: .78850
47)	Fluorene	Avg RF: 1.23824
48)	4-Nitroaniline	Avg RF: .22244
49)	4,6-Dinitro-2-methylphenol	Avg RF: .20248
50)	N-Nitrosodiphenylamine	Avg RF: .87734
51)	2,4,6-Tribromophenol	Avg RF: .29555
52)	4-Bromophenyl-phenylether	Avg RF: .48880
53)	Hexachlorobenzene	Avg RF: .52939
54)	Pentachlorophenol	Avg RF: .23018
55)	Phenanthrene	Avg RF: 1.05056
56)	Anthracene	Avg RF: 1.05422
57)	Carbazole	Avg RF: .88442
58)	Di-n-butylphthalate	Avg RF: 1.38980
59)	Fluoranthene	Avg RF: .99351
60)	Pyrene	Avg RF: 1.01188
61)	Terphenyl-d14	Avg RF: .79517
62)	Butylbenzylphthalate	Avg RF: .53729
63)	Benzo(a)anthracene	Avg RF: .83398
64)	3,3'-Dichlorobenzidine	Avg RF: .33300
65)	bis(2-Ethylhexyl)phthalate	Avg RF: .71252
66)	Chrysene	Avg RF: 1.05094
67)	Di-n-octylphthalate	Avg RF: 1.34823
68)	Benzo(b)fluoranthene	Avg RF: .94546
69)	Benzo(k)fluoranthene	Avg RF: .97189
70)	Benzo(a)pyrene	Avg RF: .84075
71)	Indeno(1,2,3-cd)pyrene	Avg RF: .76790
72)	Dibenzo(a,h)anthracene	Avg RF: .75014
73)	Benzo(g,h,i)perylene	Avg RF: .80581

Calibration Time Stamp Updated: 941003 10:02

FMGR : IDLST,IDF005

Quant ID File: IDF005::D6

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Last EDIT Date: 940916 14:52 Last Calib Date: 941003 10:02
Last Qcal Date: <none> Calib File: CBF002::D6
Qcal File: <none>

RT Window (+min -%)	: .2000	Subtraction Method	: 1
Max Hits/Compound	: 1	Ignore max check	: NO
Minimum Area	: 5000	Auto Qdel Method	: 5
Peak/Base Peak Ratio	: 35.00 %	Quantitate Using	: AREA
Up Slope Sensitivity	: .2000000	Units of Conc	: NG/UL
Down Slope Sensitivity	: .0000000	Bunching	: 1

Number of Compounds: 79

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-Dichlorobenzene-d4	(I)	4.19	(1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	2.40	(.572)	.72609	25.00	
3)	Phenol-d5	(S)	3.64	(.867)	.62482	25.00	
4)	Phenol	(M)	3.66	(.873)	.65236	25.00	**
5)	Aniline	(T)	3.66	(.873)	.69151	25.00	**
6)	bis(2-Chloroethyl)ether	(T)	3.78	(.900)	.56069	25.00	**
7)	2-Chlorophenol	(M)	3.84	(.914)	1.00248	25.00	**
8)	1,3-Dichlorobenzene	(T)	4.08	(.973)	1.40321	25.00	**
9)	1,4-Dichlorobenzene	(M)	4.23	(1.008)	1.55625	25.00	**
10)	Benzyl alcohol	(T)	4.52	(1.079)	.37601	25.00	**
11)	1,2-Dichlorobenzene	(T)	4.50	(1.073)	1.43212	25.00	**
12)	2-Methylphenol	(T)	4.80	(1.144)	.54530	25.00	**
13)	bis(2-Chloroisopropyl)ether	(T)	4.85	(1.156)	.31619	25.00	**
14)	4-Methylphenol	(T)	5.17	(1.232)	.56158	25.00	**
15)	N-Nitroso-di-n-propylamine	(M)	5.11	(1.219)	.39213	25.00	**
16)	Hexachloroethane	(T)	5.19	(1.237)	.71019	25.00	**
17)	Nitrobenzene-d5	(S)	5.36	(1.277)	1.05953	25.00	
18)	Nitrobenzene	(T)	5.40	(1.288)	.46015	25.00	**
19)	Isophorone	(T)	6.01	(1.433)	1.27864	25.00	**
20)	2-Nitrophenol	(T)	6.15	(1.466)	.56532	25.00	**
21)	2,4-Dimethylphenol	(T)	6.43	(1.533)	.58138	25.00	**
22)	Benzoic acid	(T)	7.01	(1.672)	.54457	25.00	**
23)	bis(2-Chloroethoxy)methane	(T)	6.65	(1.586)	.58865	25.00	**
24)	2,4-Dichlorophenol	(T)	6.81	(1.623)	.99973	25.00	**
25)	1,2,4-Trichlorobenzene	(M)	6.96	(1.659)	1.28736	25.00	**
26)	*Naphthalene-d8	(I)	7.09	(1.000)	1.00000	50.00	**
27)	Naphthalene	(T)	7.14	(1.007)	.88736	25.00	**
28)	4-Chloroaniline	(T)	7.40	(1.044)	.31123	25.00	**
29)	Hexachlorobutadiene	(T)	7.56	(1.066)	.39834	25.00	**
30)	4-Chloro-3-methylphenol	(M)	8.98	(1.265)	.31945	25.00	**
31)	2-Methylnaphthalene	(T)	9.10	(1.283)	.68340	25.00	**
32)	Hexachlorocyclopentadiene	(T)	9.60	(1.353)	.31501	25.00	**
33)	2,4,6-Trichlorophenol	(T)	10.03	(1.414)	.25874	25.00	**
34)	2,4,5-Trichlorophenol	(T)	10.14	(1.429)	.28350	25.00	**
35)	2-Chloronaphthalene	(T)	10.51	(1.481)	.69667	25.00	**
36)	2-Fluorobiphenyl	(S)	10.29	(1.451)	.92195	25.00	
37)	2-Nitroaniline	(T)	10.96	(1.545)	.19645	25.00	**
38)	Dimethylphthalate	(T)	11.69	(1.649)	1.05381	25.00	**
39)	Acenaphthylene	(T)	11.72	(1.652)	1.05048	25.00	**
40)	*Acenaphthene-d10	(I)	12.16	(1.000)	1.00000	50.00	**

42)	Acenaphthene	(M)	12.[illegible]	1.008)	1.18386	25.00	**
43)	2,4-Dinitrophenol	(T)	12.55(	1.032)	.19687	25.00	**
44)	4-Nitrophenol	(M)	13.06(	1.075)	.48155	25.00	**
45)	Dibenzofuran	(T)	12.80(	1.053)	1.60586	25.00	**
46)	2,6-Dinitrotoluene	(T)	11.77(	.968)	.36199	25.00	**
47)	2,4-Dinitrotoluene	(M)	12.96(	1.066)	.48551	25.00	**
48)	Diethylphthalate	(T)	13.90(	1.143)	1.86068	25.00	**
49)	4-Chlorophenyl-phenylether	(T)	14.01(	1.152)	.78850	25.00	**
50)	Fluorene	(T)	13.84(	1.139)	1.23824	25.00	**
51)	4-Nitroaniline	(T)	14.12(	1.161)	.22244	25.00	**
52)	4,6-Dinitro-2-methylphenol	(T)	14.19(	1.167)	.20248	25.00	**
53)	N-Nitrosodiphenylamine	(T)	14.42(	1.186)	.87734	25.00	**
54)	2,4,6-Tribromophenol	(S)	14.59(	1.200)	.29555	25.00	
55)	4-Bromophenyl-phenylether	(T)	15.48(	1.273)	.48880	25.00	**
56)	Hexachlorobenzene	(T)	15.50(	1.275)	.52939	25.00	**
57)	Pentachlorophenol	(M)	16.22(	1.334)	.23018	25.00	**
58)	*Phenanthrene-d10	(I)	16.70(	1.000)	1.00000	50.00	**
59)	Phenanthrene	(T)	16.76(	1.004)	1.05056	25.00	**
60)	Anthracene	(T)	16.92(	1.013)	1.05422	25.00	**
61)	Carbazole	(T)	17.56(	1.052)	.88442	25.00	**
62)	Di-n-butylphthalate	(T)	19.02(	1.139)	1.38980	25.00	**
63)	Fluoranthene	(T)	20.43(	1.224)	.99351	25.00	**
64)	Pyrene	(M)	21.09(	1.263)	1.01188	25.00	**
65)	Terphenyl-d14	(S)	21.86(	1.310)	.79517	25.00	
66)	Butylbenzylphthalate	(T)	23.63(	1.415)	.53729	25.00	**
67)	Benzo(a)anthracene	(T)	24.88(	1.490)	.83398	25.00	**
68)	3,3'-Dichlorobenzidine	(T)	25.01(	1.498)	.33300	25.00	**
69)	bis(2-Ethylhexyl)phthalate	(T)	25.59(	1.533)	.71252	25.00	**
70)	*Chrysene-d12	(I)	24.92(	1.000)	1.00000	50.00	**
71)	Chrysene	(T)	25.00(	1.003)	1.05094	25.00	**
72)	Di-n-octylphthalate	(T)	27.53(	1.104)	1.34823	25.00	**
73)	Benzo(b)fluoranthene	(T)	28.00(	1.124)	.94546	25.00	**
74)	Benzo(k)fluoranthene	(T)	28.08(	1.127)	.97189	25.00	**
75)	Benzo(a)pyrene	(T)	28.84(	1.157)	.84075	25.00	**
76)	*Perylene-d12	(I)	28.99(	1.000)	1.00000	50.00	**
77)	Indeno(1,2,3-cd)pyrene	(T)	31.55(	1.088)	.76790	25.00	**
78)	Dibenzo(a,h)anthracene	(T)	31.65(	1.092)	.75014	25.00	
79)	Benzo(g,h,i)perylene	(T)	32.12(	1.108)	.80581	25.00	**

* Compound is ISTD
** Compound uses different Quant parameters

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0055::QT
Data File: >F0055::D2
Name: 0929IC05
Misc: 09-29-1994 HP5987

Quant Rev: 7
Quant Time: 940929 13:13
Injected at: 940929 12:35
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 6

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.19	152.0	63369	50.00	NG/UL	94
2)	2-Fluorophenol	2.40	112.0	3979M	4.31	NG/UL	
3)	Phenol-d5	3.62	99.0	3652M	4.44	NG/UL	
4)	Phenol	3.64	94.0	3809M	4.69	NG/UL	
5)	Aniline	3.64	93.0	4445M	4.84	NG/UL	
6)	bis(2-Chloroethyl)ether	3.76	93.0	3413M	4.34	NG/UL	58
7)	2-Chlorophenol	3.82	128.0	6072	4.94	NG/UL	92
8)	1,3-Dichlorobenzene	4.07	146.0	9004	5.10	NG/UL	98
9)	1,4-Dichlorobenzene	4.22	146.0	8920	4.60	NG/UL	87
10)	Benzyl alcohol	4.51	108.0	2442	4.76	NG/UL	84
11)	1,2-Dichlorobenzene	4.49	146.0	8678	4.73	NG/UL	97
12)	2-Methylphenol	4.78	108.0	3050	4.35	NG/UL	88
13)	bis(2-Chloroisopropyl)ether	4.85	121.0	2532M	5.78	NG/UL	93
14)	4-Methylphenol	5.14	108.0	2911	4.01	NG/UL	84
15)	N-Nitroso-di-n-propylamine	5.08	70.0	2641	5.90	NG/UL	57
16)	Hexachloroethane	5.18	201.0	3889	4.71	NG/UL	84
17)	Nitrobenzene-d5	5.34	82.0	6599	5.27	NG/UL	92
18)	Nitrobenzene	5.37	123.0	2796	4.95	NG/UL	93
19)	Isophorone	5.98	82.0	8975	5.51	NG/UL	83
20)	2-Nitrophenol	6.12	139.0	3511M	4.84	NG/UL	
21)	2,4-Dimethylphenol	6.41	122.0	3145	4.26	NG/UL	79
23)	bis(2-Chloroethoxy)methane	6.63	93.0	3879	5.01	NG/UL	80
24)	2,4-Dichlorophenol	6.78	162.0	6079	4.75	NG/UL	96
25)	1,2,4-Trichlorobenzene	6.94	180.0	7859	4.58	NG/UL	94
26)	*Naphthalene-d8	7.07	136.0	189921	50.00	NG/UL	83
27)	Naphthalene	7.11	128.0	16066	4.91	NG/UL	86
28)	4-Chloroaniline	7.37	127.0	5743	4.77	NG/UL	89
29)	Hexachlorobutadiene	7.53	225.0	6898	5.14	NG/UL	89
30)	4-Chloro-3-methylphenol	8.95	107.0	5048	4.58	NG/UL	81
31)	2-Methylnaphthalene	9.06	142.0	12193M	4.62	NG/UL	
32)	Hexachlorocyclopentadiene	9.56	237.0	5403	4.91	NG/UL	91
33)	2,4,6-Trichlorophenol	9.99	196.0	4620	5.34	NG/UL	82
34)	2,4,5-Trichlorophenol	10.11	196.0	4258	3.87	NG/UL	90
35)	2-Chloronaphthalene	10.46	162.0	11747	4.65	NG/UL	75
36)	2-Fluorobiphenyl	10.25	172.0	16904	5.05	NG/UL	86
37)	2-Nitroaniline	10.91	138.0	3119	3.88	NG/UL	80
38)	Dimethylphthalate	11.64	163.0	18991	5.25	NG/UL	94
39)	Acenaphthylene	11.67	152.0	18583	4.73	NG/UL	98
40)	*Acenaphthene-d10	12.15	164.0	110125	50.00	NG/UL	95
42)	Acenaphthene	12.23	153.0	11791	4.55	NG/UL	95

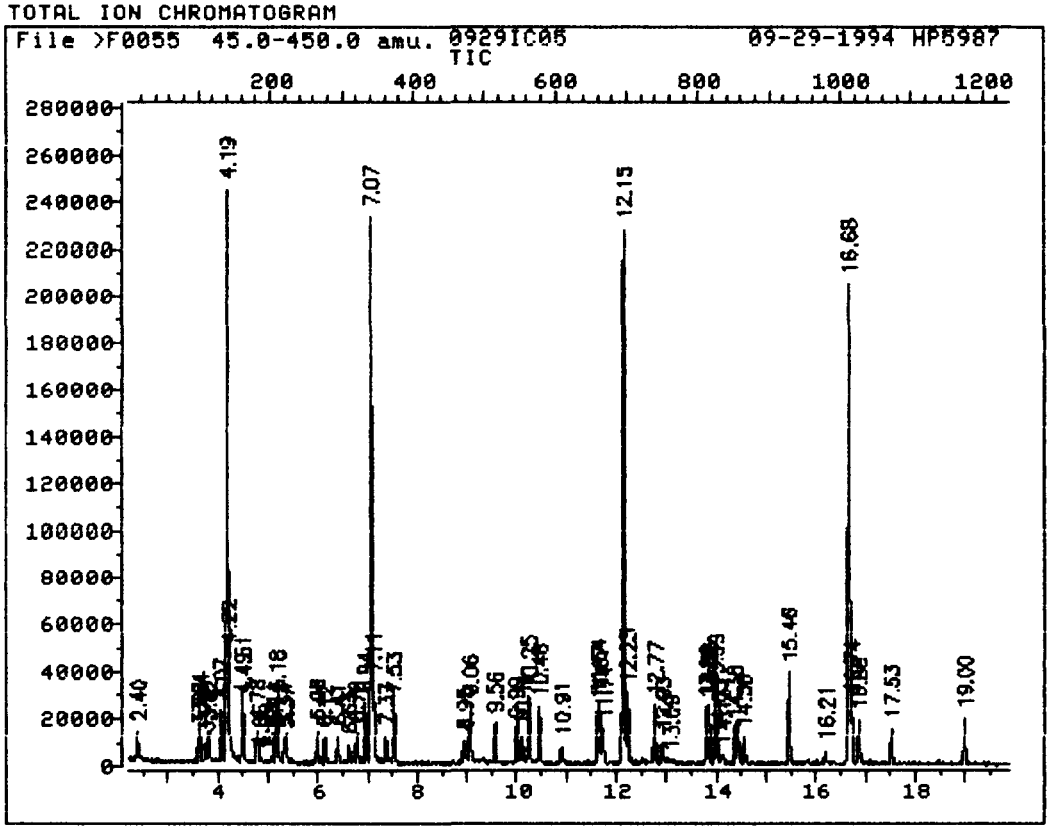
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940929 13:13
Output File: ^F0055::QT Injected at: 940929 12:35
Data File: >F0055::D2 Dilution Factor: 1.00000
Name: 0929IC05 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 6

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-Nitrophenol	13.09	109.0	3727M	4.12	NG/UL	58
45)	Dibenzofuran	12.77	168.0	16651	4.79	NG/UL	79
46)	2,6-Dinitrotoluene	11.74	165.0	4314M	5.48	NG/UL	
47)	2,4-Dinitrotoluene	12.93	165.0	5046	5.08	NG/UL	77
48)	Diethylphthalate	13.86	149.0	20204	5.09	NG/UL	92
49)	4-Chlorophenyl-phenylether	13.99	204.0	8284	5.09	NG/UL	95
50)	Fluorene	13.82	166.0	12806	4.74	NG/UL	96
51)	4-Nitroaniline	14.05	138.0	1679M	3.19	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.13	198.0	1637M	3.25	NG/UL	
53)	N-Nitrosodiphenylamine	14.38	169.0	9107	4.78	NG/UL	96
54)	2,4,6-Tribromophenol	14.56	329.9	2910M	5.19	NG/UL	
55)	4-Bromophenyl-phenylether	15.46	248.0	4047	3.96	NG/UL	91
56)	Hexachlorobenzene	15.46	283.9	5433	4.76	NG/UL	82
57)	Pentachlorophenol	16.21	265.8	1409	2.42	NG/UL	89
58)	*Phenanthrene-d10	16.68	188.0	163151	50.00	NG/UL	95
59)	Phenanthrene	16.74	178.0	17031	4.98	NG/UL	98
60)	Anthracene	16.88	178.0	16206	4.54	NG/UL	98
61)	Carbazole	17.53	167.0	12438	3.97	NG/UL	94
62)	Di-n-butylphthalate	19.00	149.0	21248	4.51	NG/UL	98
63)	Fluoranthene	20.40	202.0	13540	3.43	NG/UL	81
64)	Pyrene	21.06	202.0	13556	3.26	NG/UL	86
65)	Terphenyl-d14	21.85	244.0	11531	3.68	NG/UL	85
66)	Butylbenzylphthalate	23.61	149.0	6668	3.22	NG/UL	76
67)	Benzo(a)anthracene	24.85	228.0	12212M	3.80	NG/UL	
68)	3,3'-Dichlorobenzidine	24.98	252.0	3628M	2.85	NG/UL	
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	9582	3.50	NG/UL	92
70)	*Chrysene-d12	24.89	240.0	116070	50.00	NG/UL	95
71)	Chrysene	24.95	228.0	12105M	4.63	NG/UL	
72)	Di-n-octylphthalate	27.50	149.0	12461	3.96	NG/UL	87
73)	Benzo(b)fluoranthene	27.95	252.0	10437	5.09	NG/UL	89
74)	Benzo(k)fluoranthene	28.04	252.0	10234	5.21	NG/UL	88
75)	Benzo(a)pyrene	28.80	252.0	8643	4.61	NG/UL	88
76)	*Perylene-d12	28.98	264.0	93607	50.00	NG/UL	97
77)	Indeno(1,2,3-cd)pyrene	31.53	276.0	6757M	4.85	NG/UL	
78)	Dibenzo(a,h)anthracene	31.63	278.0	6100M	4.42	NG/UL	
79)	Benzo(g,h,i)perylene	32.09	276.0	7487	4.98	NG/UL	73

* Compound is ISTD

TOTAL ION CHROMATOGRAM

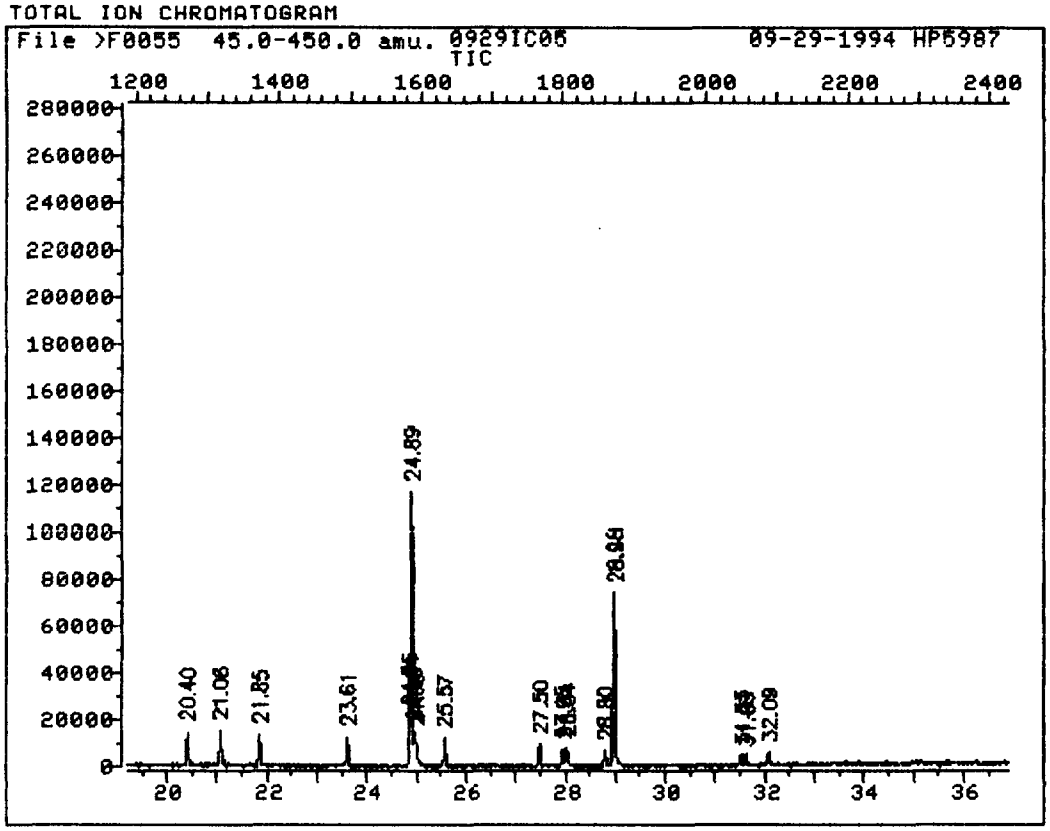


Data File: >F0055::D2 Quant Output File: ^F0055::QT
Name: 0929IC05 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 6

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 13:13
Injected at: 940929 12:35

TOTAL ION CHROMATOGRAM



Data File: >F0055::D2 Quant Output File: ^F0055::QT
Name: 0929IC05 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 6

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 13:13
Injected at: 940929 12:35

QUANT REPORT

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940929 12:29
Output File: ^F0054::QT Injected at: 940929 11:51
Data File: >F0054::D2 Dilution Factor: 1.00000
Name: 0929IC10 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 5

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.18	152.0	47205	50.00	NG/UL	92
2)	2-Fluorophenol	2.39	112.0	7170	10.42	NG/UL	99
3)	Phenol-d5	3.61	99.0	5170	8.44	NG/UL	55
4)	Phenol	3.64	94.0	5784M	9.56	NG/UL	
5)	Aniline	3.64	93.0	7187M	10.50	NG/UL	
6)	bis(2-Chloroethyl)ether	3.75	93.0	4427M	7.56	NG/UL	93
7)	2-Chlorophenol	3.82	128.0	8780	9.59	NG/UL	91
8)	1,3-Dichlorobenzene	4.07	146.0	11577	8.80	NG/UL	97
9)	1,4-Dichlorobenzene	4.21	146.0	15176	10.52	NG/UL	95
10)	Benzyl alcohol	4.50	108.0	3219	8.43	NG/UL	87
11)	1,2-Dichlorobenzene	4.48	146.0	13539	9.90	NG/UL	93
12)	2-Methylphenol	4.77	108.0	4662	8.93	NG/UL	90
13)	bis(2-Chloroisopropyl)ether	4.86	121.0	2916M	8.94	NG/UL	67
14)	4-Methylphenol	5.13	108.0	4996	9.23	NG/UL	95
15)	N-Nitroso-di-n-propylamine	5.07	70.0	3422M	10.26	NG/UL	78
16)	Hexachloroethane	5.17	201.0	6464	10.50	NG/UL	95
17)	Nitrobenzene-d5	5.33	82.0	10688	11.47	NG/UL	83
18)	Nitrobenzene	5.37	123.0	4121	9.79	NG/UL	87
19)	Isophorone	5.97	82.0	12823	10.58	NG/UL	54
20)	2-Nitrophenol	6.13	139.0	4707M	8.72	NG/UL	
21)	2,4-Dimethylphenol	6.40	122.0	5523M	10.04	NG/UL	
22)	Benzoic acid	6.76	105.0	3296	6.15	NG/UL	99
23)	bis(2-Chloroethoxy)methane	6.63	93.0	5753	9.98	NG/UL	96
24)	2,4-Dichlorophenol	6.78	162.0	8567	8.98	NG/UL	91
25)	1,2,4-Trichlorobenzene	6.93	180.0	12629	9.89	NG/UL	98
26)	*Naphthalene-d8	7.06	136.0	131452	50.00	NG/UL	81
27)	Naphthalene	7.11	128.0	22244	9.82	NG/UL	83
28)	4-Chloroaniline	7.36	127.0	8157	9.78	NG/UL	91
29)	Hexachlorobutadiene	7.54	225.0	10772	11.59	NG/UL	85
30)	4-Chloro-3-methylphenol	8.94	107.0	8878	11.64	NG/UL	70
31)	2-Methylnaphthalene	9.07	142.0	17545M	9.60	NG/UL	
32)	Hexachlorocyclopentadiene	9.57	237.0	7692	10.11	NG/UL	91
33)	2,4,6-Trichlorophenol	10.00	196.0	6333	10.58	NG/UL	75
34)	2,4,5-Trichlorophenol	10.10	196.0	6367	8.36	NG/UL	94
35)	2-Chloronaphthalene	10.46	162.0	19152	10.94	NG/UL	84
36)	2-Fluorobiphenyl	10.26	172.0	24251	10.47	NG/UL	94
37)	2-Nitroaniline	10.90	138.0	4757	8.54	NG/UL	97
38)	Dimethylphthalate	11.63	163.0	29071	11.62	NG/UL	89
39)	Acenaphthylene	11.68	152.0	25695	9.44	NG/UL	94
40)	*Acenaphthene-d10	12.13	164.0	76500	50.00	NG/UL	90

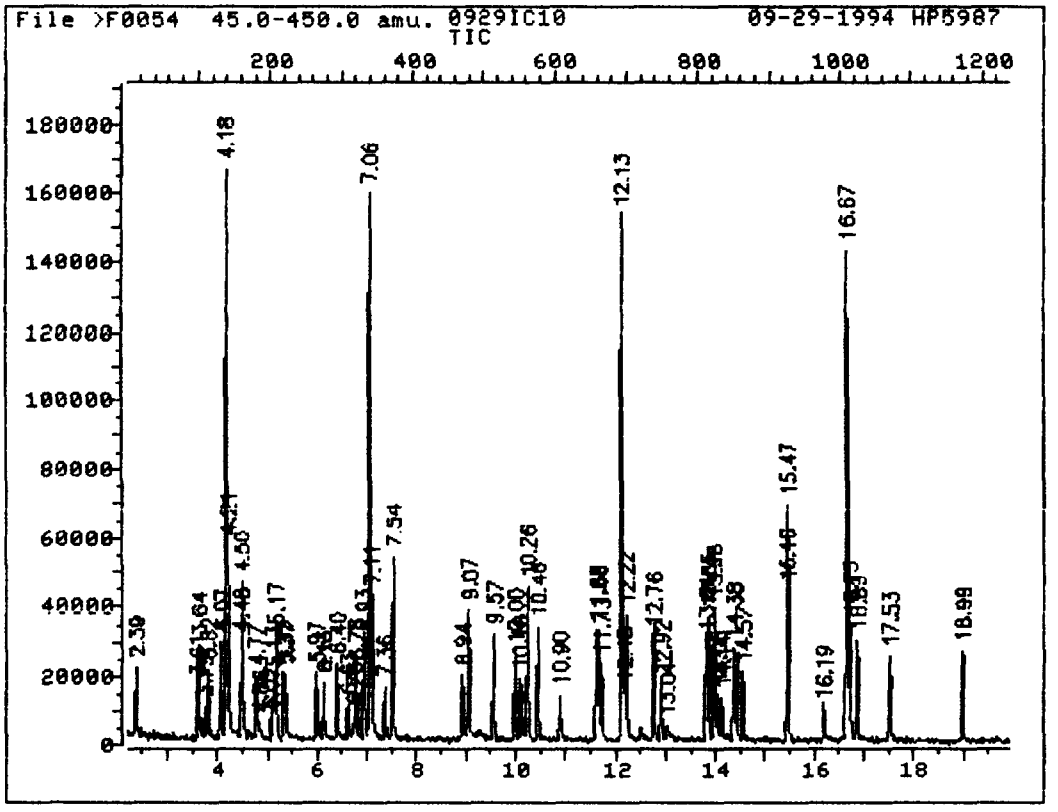
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940929 12:29
Output File: ^F0054::QT Injected at: 940929 11:51
Data File: >F0054::D2 Dilution Factor: 1.00000
Name: 0929IC10 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 5

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.18	138.0	3497M	8.53	NG/UL	
42)	Acenaphthene	12.22	153.0	17505	9.71	NG/UL	90
44)	4-Nitrophenol	13.04	109.0	6264M	9.98	NG/UL	
45)	Dibenzofuran	12.76	168.0	24361	10.09	NG/UL	68
46)	2,6-Dinitrotoluene	11.73	165.0	5680	10.39	NG/UL	42
47)	2,4-Dinitrotoluene	12.92	165.0	7014	10.17	NG/UL	59
48)	Diethylphthalate	13.85	149.0	28747	10.43	NG/UL	91
49)	4-Chlorophenyl-phenylether	13.98	204.0	12860	11.37	NG/UL	95
50)	Fluorene	13.81	166.0	18064	9.63	NG/UL	91
51)	4-Nitroaniline	14.05	138.0	2923M	8.00	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.14	198.0	2834M	8.10	NG/UL	
53)	N-Nitrosodiphenylamine	14.38	169.0	13330	10.07	NG/UL	94
54)	2,4,6-Tribromophenol	14.57	329.9	4342M	11.14	NG/UL	
55)	4-Bromophenyl-phenylether	15.46	248.0	7689	10.82	NG/UL	89
56)	Hexachlorobenzene	15.47	283.9	7763	9.78	NG/UL	92
57)	Pentachlorophenol	16.19	265.8	2992	7.41	NG/UL	90
58)	*Phenanthrene-d10	16.67	188.0	117393	50.00	NG/UL	99
59)	Phenanthrene	16.73	178.0	24280	9.87	NG/UL	94
60)	Anthracene	16.89	178.0	26618	10.37	NG/UL	95
61)	Carbazole	17.53	167.0	20477	9.08	NG/UL	94
62)	Di-n-butylphthalate	18.99	149.0	33720	9.95	NG/UL	99
63)	Fluoranthene	20.41	202.0	22768	8.01	NG/UL	80
64)	Pyrene	21.05	202.0	23967	8.01	NG/UL	83
65)	Terphenyl-d14	21.84	244.0	18589	8.25	NG/UL	97
66)	Butylbenzylphthalate	23.60	149.0	13711	9.20	NG/UL	80
67)	Benzo(a)anthracene	24.84	228.0	19642M	8.50	NG/UL	
68)	3,3'-Dichlorobenzidine	24.99	252.0	7759M	8.48	NG/UL	
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	16245	8.24	NG/UL	92
70)	*Chrysene-d12	24.89	240.0	94507	50.00	NG/UL	96
71)	Chrysene	24.96	228.0	19076	8.96	NG/UL	88
72)	Di-n-octylphthalate	27.49	149.0	22843	8.93	NG/UL	91
73)	Benzo(b)fluoranthene	27.96	252.0	17332M	10.37	NG/UL	88
74)	Benzo(k)fluoranthene	28.03	252.0	18249	11.42	NG/UL	88
75)	Benzo(a)pyrene	28.79	252.0	15449M	10.11	NG/UL	
76)	*Perylene-d12	28.98	264.0	78383	50.00	NG/UL	96
77)	Indeno(1,2,3-cd)pyrene	31.52	276.0	11154M	9.56	NG/UL	
78)	Dibenzo(a,h)anthracene	31.62	278.0	10746M	9.30	NG/UL	
79)	Benzo(g,h,i)perylene	32.08	276.0	11901	9.46	NG/UL	64

* Compound is ISTD

TOTAL ION CHROMATOGRAM

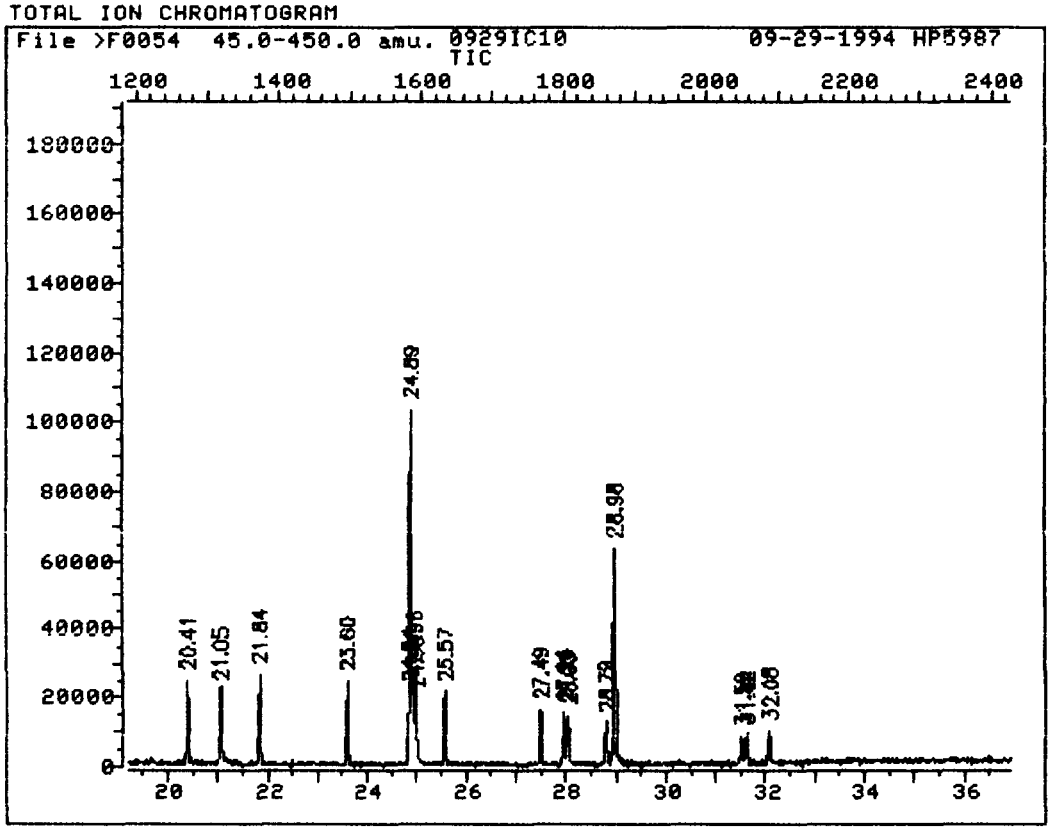


Data File: >F0054::D2 Quant Output File: ^F0054::QT
Name: 0929IC10 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 5

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 12:29
Injected at: 940929 11:51

TOTAL ION CHROMATOGRAM



Data File: >F0054::D2 Quant Output File: ^F0054::QT
Name: 0929IC10 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 5

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 12:29
Injected at: 940929 11:51

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0053::QT
Data File: >F0053::D2
Name: 0929IC25
Misc: 09-29-1994 HP5987

Quant Rev: 7
Quant Time: 940929 11:45
Injected at: 940929 11:07
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 4

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.19	152.0	66687	50.00	NG/UL	97
2)	2-Fluorophenol	2.40	112.0	23670	24.35	NG/UL	96
3)	Phenol-d5	3.63	99.0	20402M	23.59	NG/UL	
4)	Phenol	3.64	94.0	21738M	25.44	NG/UL	75
5)	Aniline	3.66	93.0	23826M	24.63	NG/UL	
6)	bis(2-Chloroethyl)ether	3.77	93.0	19604M	23.68	NG/UL	53
7)	2-Chlorophenol	3.83	128.0	33815	26.15	NG/UL	99
8)	1,3-Dichlorobenzene	4.07	146.0	47316	25.47	NG/UL	97
9)	1,4-Dichlorobenzene	4.22	146.0	49432	24.25	NG/UL	98
10)	Benzyl alcohol	4.52	108.0	12476	23.12	NG/UL	80
11)	1,2-Dichlorobenzene	4.50	146.0	45164	23.38	NG/UL	88
12)	2-Methylphenol	4.79	108.0	19092	25.88	NG/UL	93
13)	bis(2-Chloroisopropyl)ether	4.80	121.0	10402M	22.58	NG/UL	98
14)	4-Methylphenol	5.15	108.0	18033	23.59	NG/UL	93
15)	N-Nitroso-di-n-propylamine	5.10	70.0	12878	27.34	NG/UL	39
16)	Hexachloroethane	5.18	201.0	22608	26.00	NG/UL	90
17)	Nitrobenzene-d5	5.35	82.0	33838	25.70	NG/UL	94
18)	Nitrobenzene	5.39	123.0	15641	26.30	NG/UL	98
19)	Isophorone	5.99	82.0	38125	22.26	NG/UL	57
20)	2-Nitrophenol	6.14	139.0	20331M	26.65	NG/UL	66
21)	2,4-Dimethylphenol	6.41	122.0	19266	24.79	NG/UL	75
22)	Benzoic acid	6.95	105.0	19338M	25.56	NG/UL	78
23)	bis(2-Chloroethoxy)methane	6.64	93.0	19308	23.72	NG/UL	86
24)	2,4-Dichlorophenol	6.80	162.0	34032	25.26	NG/UL	95
25)	1,2,4-Trichlorobenzene	6.95	180.0	41906	23.22	NG/UL	89
26)	*Naphthalene-d8	7.07	136.0	181865	50.00	NG/UL	82
27)	Naphthalene	7.13	128.0	83822	26.76	NG/UL	85
28)	4-Chloroaniline	7.37	127.0	31644	27.42	NG/UL	91
29)	Hexachlorobutadiene	7.54	225.0	37496	29.16	NG/UL	89
30)	4-Chloro-3-methylphenol	8.95	107.0	30103	28.52	NG/UL	88
31)	2-Methylnaphthalene	9.07	142.0	63658M	25.17	NG/UL	
32)	Hexachlorocyclopentadiene	9.56	237.0	29434	27.96	NG/UL	95
33)	2,4,6-Trichlorophenol	9.99	196.0	24140	29.16	NG/UL	88
34)	2,4,5-Trichlorophenol	10.11	196.0	29614	28.10	NG/UL	93
35)	2-Chloronaphthalene	10.48	162.0	63263	26.13	NG/UL	78
36)	2-Fluorobiphenyl	10.26	172.0	84469	26.36	NG/UL	95
37)	2-Nitroaniline	10.92	138.0	19341	25.10	NG/UL	94
38)	Dimethylphthalate	11.65	163.0	97591	28.20	NG/UL	96
39)	Acenaphthylene	11.68	152.0	95583	25.39	NG/UL	99
40)	*Acenaphthene-d10	12.14	164.0	108810	50.00	NG/UL	91

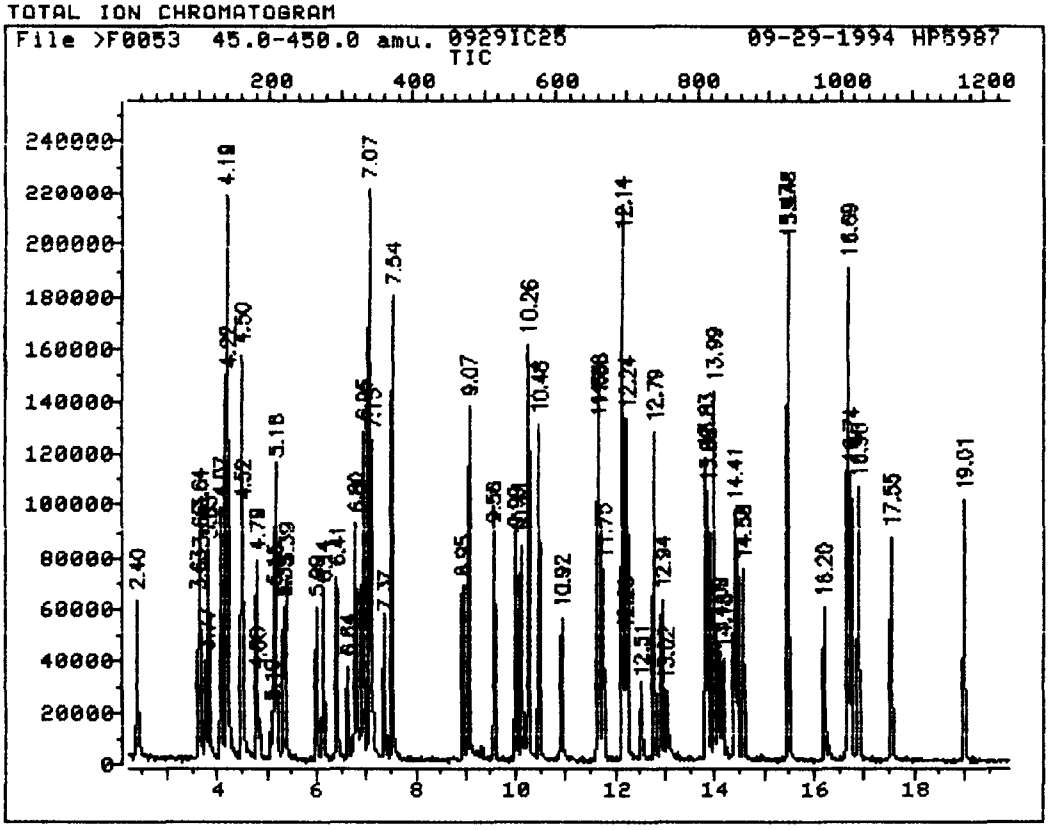
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940929 11:45
Output File: ^F0053::QT Injected at: 940929 11:07
Data File: >F0053::D2 Dilution Factor: 1.00000
Name: 0929IC25 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 4

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.20	138.0	16639	28.55	NG/UL	78
42)	Acenaphthene	12.24	153.0	65731	25.64	NG/UL	94
43)	2,4-Dinitrophenol	12.51	184.0	10073M	26.79	NG/UL	74
44)	4-Nitrophenol	13.02	109.0	29281M	32.80	NG/UL	
45)	Dibenzofuran	12.79	168.0	86152	25.08	NG/UL	64
46)	2,6-Dinitrotoluene	11.75	165.0	20675	26.58	NG/UL	48
47)	2,4-Dinitrotoluene	12.94	165.0	27402	27.94	NG/UL	69
48)	Diethylphthalate	13.88	149.0	99474	25.36	NG/UL	91
49)	4-Chlorophenyl-phenylether	13.99	204.0	42190	26.22	NG/UL	96
50)	Fluorene	13.83	166.0	66088	24.77	NG/UL	98
51)	4-Nitroaniline	14.09	138.0	15080M	29.03	NG/UL	75
52)	4,6-Dinitro-2-methylphenol	14.18	198.0	11807M	23.72	NG/UL	
53)	N-Nitrosodiphenylamine	14.41	169.0	45755	24.31	NG/UL	91
54)	2,4,6-Tribromophenol	14.58	329.9	16660	30.05	NG/UL	97
55)	4-Bromophenyl-phenylether	15.47	248.0	25793	25.53	NG/UL	71
56)	Hexachlorobenzene	15.48	283.9	28398	25.16	NG/UL	95
57)	Pentachlorophenol	16.20	265.8	13869	24.14	NG/UL	93
58)	*Phenanthrene-d10	16.69	188.0	165583	50.00	NG/UL	99
59)	Phenanthrene	16.74	178.0	84074	24.23	NG/UL	95
60)	Anthracene	16.90	178.0	84206	23.26	NG/UL	95
61)	Carbazole	17.55	167.0	77113	24.25	NG/UL	86
62)	Di-n-butylphthalate	19.01	149.0	113062	23.64	NG/UL	96
63)	Fluoranthene	20.41	202.0	84747	21.14	NG/UL	80
64)	Pyrene	21.07	202.0	84892	20.13	NG/UL	81
65)	Terphenyl-d14	21.84	244.0	65253	20.54	NG/UL	96
66)	Butylbenzylphthalate	23.60	149.0	44385	21.11	NG/UL	80
67)	Benzo(a)anthracene	24.86	228.0	64211	19.70	NG/UL	87
68)	3,3'-Dichlorobenzidine	24.99	252.0	26639	20.64	NG/UL	93
69)	bis(2-Ethylhexyl)phthalate	25.57	149.0	57943	20.85	NG/UL	91
70)	*Chrysene-d12	24.90	240.0	118890	50.00	NG/UL	93
71)	Chrysene	24.97	228.0	63739	23.81	NG/UL	87
72)	Di-n-octylphthalate	27.51	149.0	86387	26.83	NG/UL	87
73)	Benzo(b)fluoranthene	27.98	252.0	56495M	26.87	NG/UL	87
74)	Benzo(k)fluoranthene	28.05	252.0	60666	30.17	NG/UL	88
75)	Benzo(a)pyrene	28.81	252.0	50338	26.19	NG/UL	83
76)	*Perylene-d12	28.98	264.0	95787	50.00	NG/UL	95
77)	Indeno(1,2,3-cd)pyrene	31.53	276.0	39700	27.85	NG/UL	66
78)	Dibenzo(a,h)anthracene	31.63	278.0	36858	26.10	NG/UL	94
79)	Benzo(g,h,i)perylene	32.10	276.0	41355	26.89	NG/UL	64

* Compound is ISTD

TOTAL ION CHROMATOGRAM

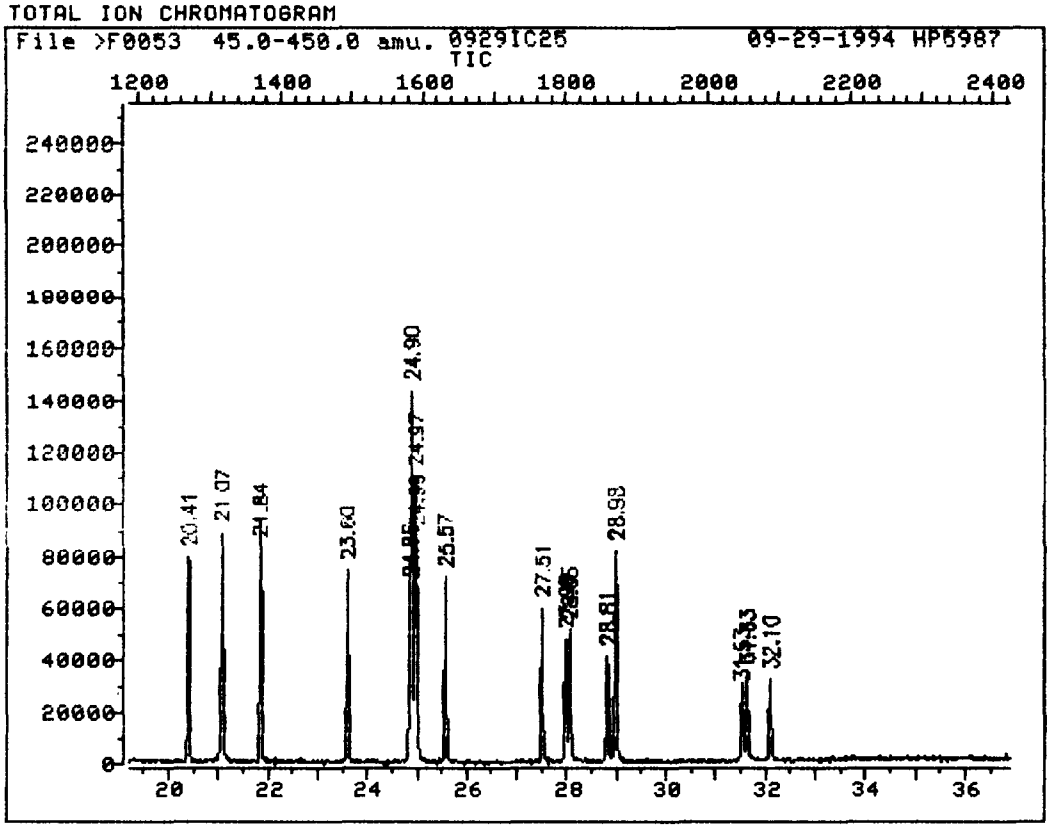


Data File: >F0053::D2 Quant Output File: ^F0053::QT
Name: 0929IC25 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 4

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 11:45
Injected at: 940929 11:07

TOTAL ION CHROMATOGRAM



Data File: >F0053::D2 Quant Output File: ^F0053::QT
Name: 0929IC25 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 4

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 11:45
Injected at: 940929 11:07

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0052::QT
Data File: >F0052::D2
Name: 0929IC50
Misc: 09-29-1994 HP5987

Quant Rev: 7
Quant Time: 940929 11:02
Injected at: 940929 10:24
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 3

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.20	152.0	71726	50.00	NG/UL	95
2)	2-Fluorophenol	2.39	112.0	50979	48.75	NG/UL	97
3)	Phenol-d5	3.65	99.0	47626M	51.19	NG/UL	
4)	Phenol	3.67	94.0	45860M	49.91	NG/UL	
5)	Aniline	3.67	93.0	45598M	43.83	NG/UL	
6)	bis(2-Chloroethyl)ether	3.78	93.0	40567M	45.56	NG/UL	63
7)	2-Chlorophenol	3.84	128.0	71047	51.08	NG/UL	95
8)	1,3-Dichlorobenzene	4.08	146.0	102728	51.40	NG/UL	96
9)	1,4-Dichlorobenzene	4.23	146.0	111620	50.91	NG/UL	97
10)	Benzyl alcohol	4.53	108.0	27779	47.86	NG/UL	90
11)	1,2-Dichlorobenzene	4.50	146.0	105889	50.96	NG/UL	99
12)	2-Methylphenol	4.80	108.0	40436	50.97	NG/UL	91
13)	bis(2-Chloroisopropyl)ether	4.83	121.0	15864	32.02	NG/UL	96
14)	4-Methylphenol	5.19	108.0	44574	54.22	NG/UL	98
15)	N-Nitroso-di-n-propylamine	5.13	70.0	27295	53.88	NG/UL	28
16)	Hexachloroethane	5.19	201.0	54319	58.07	NG/UL	99
17)	Nitrobenzene-d5	5.36	82.0	76662	54.14	NG/UL	97
18)	Nitrobenzene	5.42	123.0	34531	53.98	NG/UL	94
19)	Isophorone	6.02	82.0	87591	47.55	NG/UL	48
20)	2-Nitrophenol	6.15	139.0	40820M	49.75	NG/UL	
21)	2,4-Dimethylphenol	6.43	122.0	41865	50.08	NG/UL	80
22)	Benzoic acid	7.09	105.0	43699M	53.70	NG/UL	90
23)	bis(2-Chloroethoxy)methane	6.65	93.0	40136	45.84	NG/UL	99
24)	2,4-Dichlorophenol	6.81	162.0	74482	51.39	NG/UL	93
25)	1,2,4-Trichlorobenzene	6.95	180.0	92470	47.64	NG/UL	93
26)	*Naphthalene-d8	7.08	136.0	200529	50.00	NG/UL	83
27)	Naphthalene	7.14	128.0	180993	52.39	NG/UL	83
28)	4-Chloroaniline	7.40	127.0	59890	47.07	NG/UL	94
29)	Hexachlorobutadiene	7.54	225.0	80619	56.86	NG/UL	92
30)	4-Chloro-3-methylphenol	8.96	107.0	65532M	56.32	NG/UL	
31)	2-Methylnaphthalene	9.09	142.0	139233M	49.93	NG/UL	
32)	Hexachlorocyclopentadiene	9.58	237.0	66825	57.57	NG/UL	97
33)	2,4,6-Trichlorophenol	10.01	196.0	54437	59.64	NG/UL	90
34)	2,4,5-Trichlorophenol	10.11	196.0	61175	52.65	NG/UL	91
35)	2-Chloronaphthalene	10.49	162.0	142063	53.21	NG/UL	85
36)	2-Fluorobiphenyl	10.28	172.0	183424	51.92	NG/UL	94
37)	2-Nitroaniline	10.94	138.0	42287	49.77	NG/UL	87
38)	Dimethylphthalate	11.68	163.0	210469	55.16	NG/UL	92
39)	Acenaphthylene	11.70	152.0	219387	52.86	NG/UL	98
40)	*Acenaphthene-d10	12.16	164.0	115761	50.00	NG/UL	96

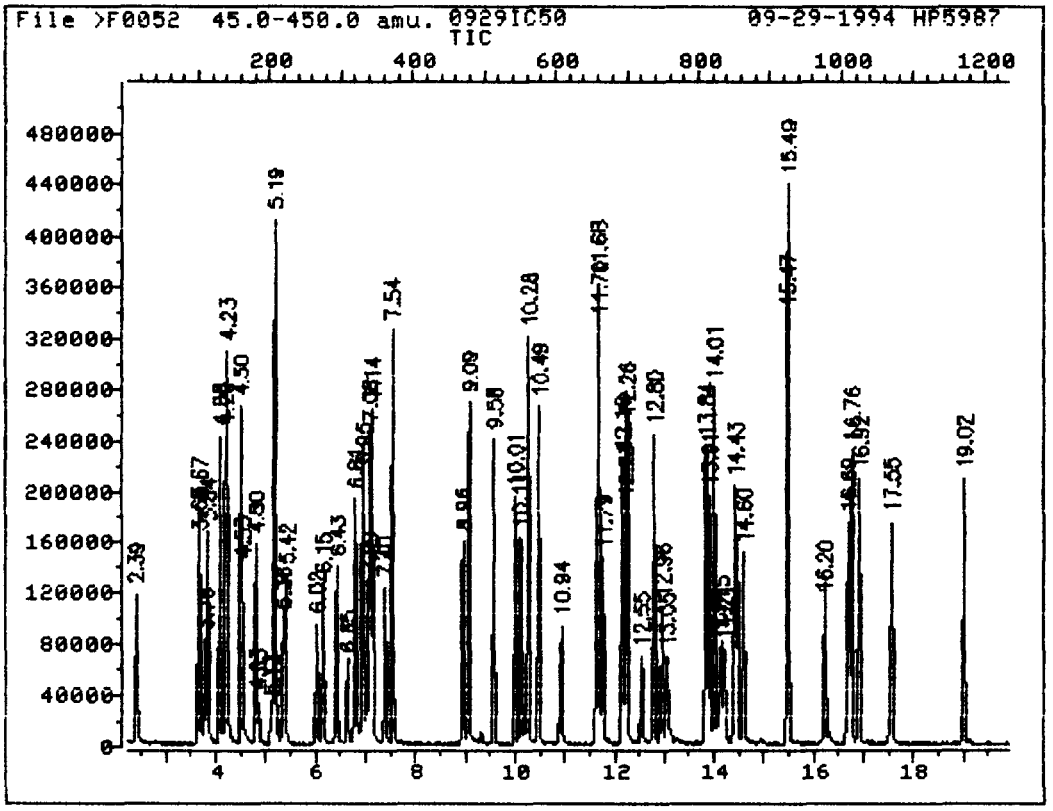
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940929 11:02
Output File: ^F0052::QT Injected at: 940929 10:24
Data File: >F0052::D2 Dilution Factor: 1.00000
Name: 0929IC50 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 3

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.23	138.0	36791	59.33	NG/UL	83
42)	Acenaphthene	12.26	153.0	140901	51.67	NG/UL	97
43)	2,4-Dinitrophenol	12.55	184.0	22928M	57.31	NG/UL	
44)	4-Nitrophenol	13.05	109.0	66368M	69.87	NG/UL	94
45)	Dibenzofuran	12.80	168.0	189466	51.85	NG/UL	66
46)	2,6-Dinitrotoluene	11.79	165.0	44279	53.51	NG/UL	37
47)	2,4-Dinitrotoluene	12.96	165.0	60884	58.36	NG/UL	94
48)	Diethylphthalate	13.91	149.0	212907	51.02	NG/UL	89
49)	4-Chlorophenyl-phenylether	14.01	204.0	91462	53.42	NG/UL	95
50)	Fluorene	13.84	166.0	147952	52.12	NG/UL	98
51)	4-Nitroaniline	14.15	138.0	31463M	56.94	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.21	198.0	29882M	56.42	NG/UL	
53)	N-Nitrosodiphenylamine	14.43	169.0	102709	51.29	NG/UL	94
54)	2,4,6-Tribromophenol	14.60	329.9	34686	58.81	NG/UL	96
55)	4-Bromophenyl-phenylether	15.47	248.0	62872	58.49	NG/UL	99
56)	Hexachlorobenzene	15.49	283.9	64856	54.00	NG/UL	98
57)	Pentachlorophenol	16.20	265.8	31335	51.26	NG/UL	97
58)	*Phenanthrene-d10	16.69	188.0	178898	50.00	NG/UL	99
59)	Phenanthrene	16.76	178.0	193730	51.68	NG/UL	97
60)	Anthracene	16.92	178.0	191959	49.09	NG/UL	98
61)	Carbazole	17.55	167.0	174281	50.74	NG/UL	95
62)	Di-n-butylphthalate	19.02	149.0	250945	48.57	NG/UL	98
63)	Fluoranthene	20.43	202.0	188959	43.63	NG/UL	78
64)	Pyrene	21.08	202.0	190416	41.78	NG/UL	82
65)	Terphenyl-d14	21.85	244.0	155287	45.24	NG/UL	99
66)	Butylbenzylphthalate	23.61	149.0	103284	45.47	NG/UL	83
67)	Benzo(a)anthracene	24.87	228.0	159942	45.43	NG/UL	92
68)	3,3'-Dichlorobenzidine	25.00	252.0	70528	50.59	NG/UL	95
69)	bis(2-Ethylhexyl)phthalate	25.58	149.0	141642	47.17	NG/UL	95
70)	*Chrysene-d12	24.92	240.0	144641	50.00	NG/UL	97
71)	Chrysene	24.99	228.0	155640	47.79	NG/UL	87
72)	Di-n-octylphthalate	27.51	149.0	212041	54.14	NG/UL	84
73)	Benzo(b)fluoranthene	28.00	252.0	142296	55.64	NG/UL	87
74)	Benzo(k)fluoranthene	28.08	252.0	143428	58.64	NG/UL	87
75)	Benzo(a)pyrene	28.83	252.0	132828	56.80	NG/UL	86
76)	*Perylene-d12	28.98	264.0	121398	50.00	NG/UL	97
77)	Indeno(1,2,3-cd)pyrene	31.55	276.0	96234	53.27	NG/UL	64
78)	Dibenzo(a,h)anthracene	31.65	278.0	103154	57.63	NG/UL	92
79)	Benzo(g,h,i)perylene	32.12	276.0	99272	50.93	NG/UL	65

* Compound is ISTD

TOTAL ION CHROMATOGRAM

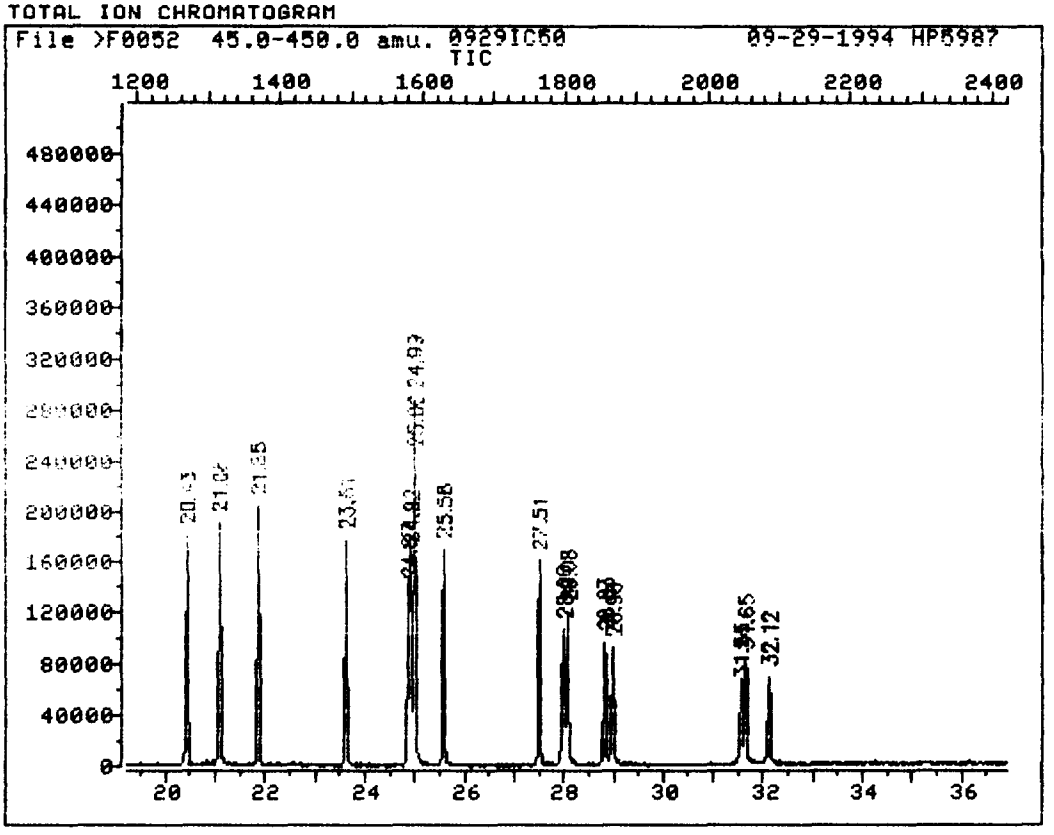


Data File: >F0052::D2 Quant Output File: ^F0052::QT
Name: 0929IC50 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 3

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 11:02
Injected at: 940929 10:24

TOTAL ION CHROMATOGRAM



Data File: >F0052::D2 Quant Output File: ^F0052::QT
Name: 0929IC50 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 3

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940929 09:40

Operator ID: ZIYAD
Quant Time : 940929 11:02
Injected at: 940929 10:24

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0051::QT
Data File: >F0051::D2
Name: 0929IC100
Misc: 09-29-1994 HP5987

Quant Rev: 7
Quant Time: 940929 10:18
Injected at: 940929 09:40
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 2

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50
Last Qcal Time: 940923 16:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.19	152.0	57809	50.00	NG/UL	91
2)	2-Fluorophenol	2.40	112.0	95089	112.83	NG/UL	95
3)	Phenol-d5	3.66	99.0	83741	111.68	NG/UL	60
4)	Phenol	3.69	94.0	87496M	118.14	NG/UL	
5)	Aniline	3.69	93.0	74522M	88.88	NG/UL	
6)	bis(2-Chloroethyl)ether	3.79	93.0	74276M	103.51	NG/UL	57
7)	2-Chlorophenol	3.85	128.0	129440	115.47	NG/UL	93
8)	1,3-Dichlorobenzene	4.09	146.0	175465	108.94	NG/UL	96
9)	1,4-Dichlorobenzene	4.24	146.0	199726	113.02	NG/UL	97
10)	Benzyl alcohol	4.55	108.0	45356	96.95	NG/UL	80
11)	1,2-Dichlorobenzene	4.51	146.0	176465	105.36	NG/UL	98
12)	2-Methylphenol	4.83	108.0	71113	111.21	NG/UL	91
13)	bis(2-Chloroisopropyl)ether	4.88	121.0	39237M	98.27	NG/UL	92
14)	4-Methylphenol	5.21	108.0	75967	114.65	NG/UL	97
15)	N-Nitroso-di-n-propylamine	5.16	70.0	47941	117.42	NG/UL	31
16)	Hexachloroethane	5.20	201.0	94485	125.34	NG/UL	97
17)	Nitrobenzene-d5	5.39	82.0	120305	105.41	NG/UL	98
18)	Nitrobenzene	5.43	123.0	54630	105.95	NG/UL	89
19)	Isophorone	6.06	82.0	144992	97.66	NG/UL	51
20)	2-Nitrophenol	6.17	139.0	68805M	104.05	NG/UL	75
21)	2,4-Dimethylphenol	6.46	122.0	76783	113.97	NG/UL	79
22)	Benzoic acid	7.22	105.0	73990M	112.81	NG/UL	97
23)	bis(2-Chloroethoxy)methane	6.68	93.0	67419	95.54	NG/UL	85
24)	2,4-Dichlorophenol	6.83	162.0	124039	106.19	NG/UL	93
25)	1,2,4-Trichlorobenzene	6.98	180.0	151796	97.03	NG/UL	93
26)	*Naphthalene-d8	7.09	136.0	166929	50.00	NG/UL	85
27)	Naphthalene	7.15	128.0	307278	106.86	NG/UL	87
28)	4-Chloroaniline	7.42	127.0	99101	93.57	NG/UL	93
29)	Hexachlorobutadiene	7.57	225.0	135007	114.38	NG/UL	91
30)	4-Chloro-3-methylphenol	8.97	107.0	112150	115.78	NG/UL	49
31)	2-Methylnaphthalene	9.10	142.0	238134	102.59	NG/UL	83
32)	Hexachlorocyclopentadiene	9.59	237.0	113860	117.83	NG/UL	98
33)	2,4,6-Trichlorophenol	10.03	196.0	91007	119.78	NG/UL	85
34)	2,4,5-Trichlorophenol	10.13	196.0	106969	110.60	NG/UL	95
35)	2-Chloronaphthalene	10.51	162.0	244457	109.99	NG/UL	88
36)	2-Fluorobiphenyl	10.29	172.0	318389	108.25	NG/UL	94
37)	2-Nitroaniline	10.97	138.0	71277	100.78	NG/UL	87
38)	Dimethylphthalate	11.71	163.0	347401	109.37	NG/UL	97
39)	Acenaphthylene	11.71	152.0	384411	111.27	NG/UL	99
40)	*Acenaphthene-d10	12.16	164.0	96403	50.00	NG/UL	96

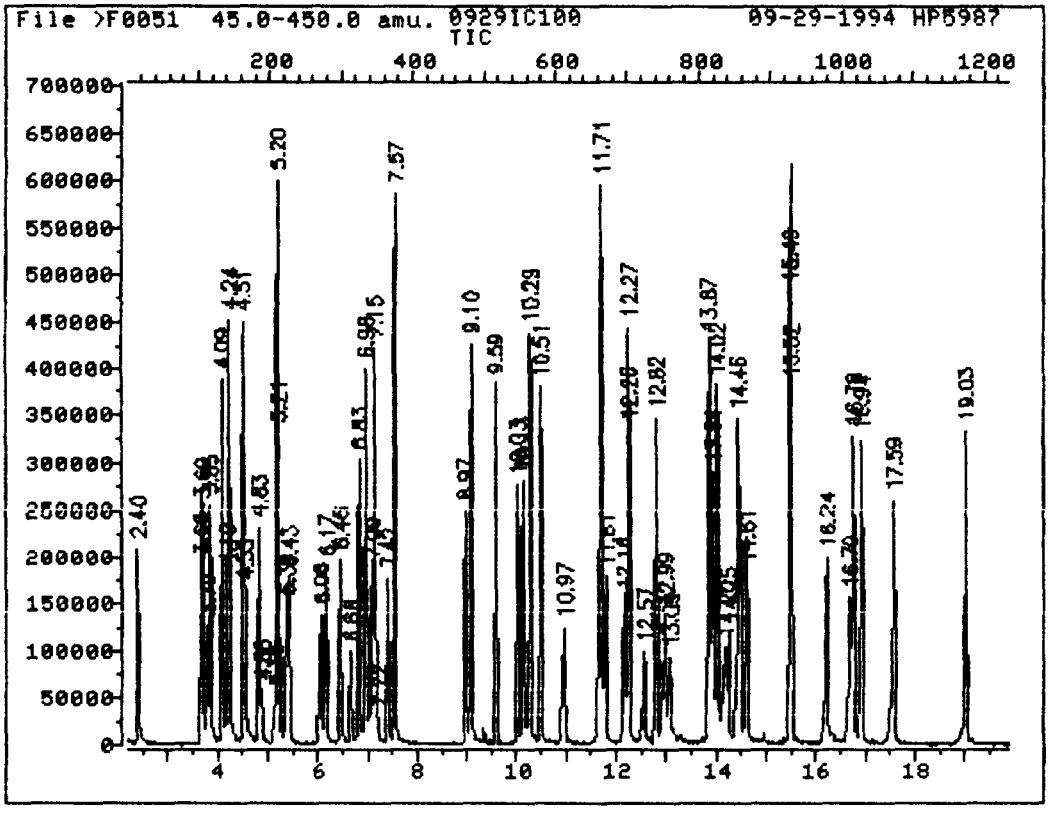
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940929 10:18
Output File: ^F0051::QT Injected at: 940929 09:40
Data File: >F0051::D2 Dilution Factor: 1.00000
Name: 0929IC100 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 2

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940923 16:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.26	138.0	58687	113.65	NG/UL	66
42)	Acenaphthene	12.27	153.0	246626	108.60	NG/UL	98
43)	2,4-Dinitrophenol	12.57	184.0	39987M	120.03	NG/UL	87
44)	4-Nitrophenol	13.09	109.0	105727M	133.66	NG/UL	
45)	Dibenzofuran	12.82	168.0	328706	108.01	NG/UL	71
46)	2,6-Dinitrotoluene	11.81	165.0	54841	79.58	NG/UL	44
47)	2,4-Dinitrotoluene	12.99	165.0	92796	106.81	NG/UL	83
48)	Diethylphthalate	13.94	149.0	370629	106.66	NG/UL	90
49)	4-Chlorophenyl-phenylether	14.02	204.0	151195	106.05	NG/UL	99
50)	Fluorene	13.87	166.0	261225	110.51	NG/UL	99
51)	4-Nitroaniline	14.20	138.0	42361M	92.06	NG/UL	89
52)	4,6-Dinitro-2-methylphenol	14.25	198.0	39215M	88.91	NG/UL	
53)	N-Nitrosodiphenylamine	14.46	169.0	185138	111.01	NG/UL	94
54)	2,4,6-Tribromophenol	14.61	329.9	62443	127.13	NG/UL	97
55)	4-Bromophenyl-phenylether	15.49	248.0	107343	119.91	NG/UL	91
56)	Hexachlorobenzene	15.52	283.9	108743	108.73	NG/UL	97
57)	Pentachlorophenol	16.24	265.8	58186	114.29	NG/UL	95
58)	*Phenanthrene-d10	16.70	188.0	159955	50.00	NG/UL	98
59)	Phenanthrene	16.78	178.0	344353	102.75	NG/UL	93
60)	Anthracene	16.94	178.0	337183	96.44	NG/UL	98
61)	Carbazole	17.59	167.0	282146	91.86	NG/UL	92
62)	Di-n-butylphthalate	19.03	149.0	461337	99.86	NG/UL	96
63)	Fluoranthene	20.45	202.0	348084	89.89	NG/UL	79
64)	Pyrene	21.11	202.0	357648	87.77	NG/UL	82
65)	Terphenyl-d14	21.87	244.0	262690	85.59	NG/UL	99
66)	Butylbenzylphthalate	23.63	149.0	185659	91.42	NG/UL	79
67)	Benzo(a)anthracene	24.89	228.0	292777	93.01	NG/UL	90
68)	3,3'-Dichlorobenzidine	25.02	252.0	126739	101.67	NG/UL	98
69)	bis(2-Ethylhexyl)phthalate	25.60	149.0	253290	94.34	NG/UL	91
70)	*Chrysene-d12	24.92	240.0	128681	50.00	NG/UL	98
71)	Chrysene	25.01	228.0	271336	93.65	NG/UL	88
72)	Di-n-octylphthalate	27.53	149.0	396296	113.73	NG/UL	86
73)	Benzo(b)fluoranthene	28.02	252.0	251436	110.51	NG/UL	87
74)	Benzo(k)fluoranthene	28.10	252.0	257385	118.27	NG/UL	86
75)	Benzo(a)pyrene	28.86	252.0	225607	108.44	NG/UL	87
76)	*Perylene-d12	28.99	264.0	103660	50.00	NG/UL	98
77)	Indeno(1,2,3-cd)pyrene	31.57	276.0	162644	105.44	NG/UL	66
78)	Dibenzo(a,h)anthracene	31.67	278.0	164664	107.74	NG/UL	94
79)	Benzo(g,h,i)perylene	32.15	276.0	163538	98.25	NG/UL	67

* Compound is ISTD

TOTAL ION CHROMATOGRAM

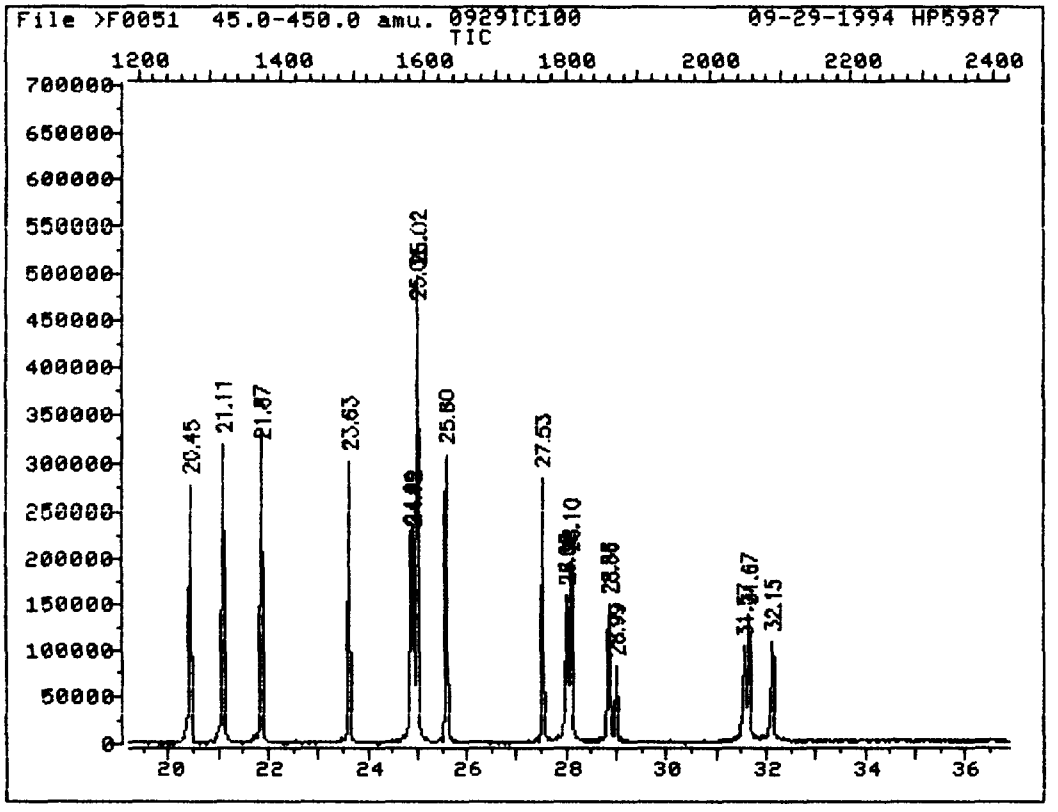


Data File: >F0051::D2 Quant Output File: ^F0051::QT
Name: 0929IC100 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 2

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940923 16:19

Operator ID: ZIYAD
Quant Time : 940929 10:18
Injected at: 940929 09:40

TOTAL ION CHROMATOGRAM



Data File: >F0051::D2 Quant Output File: ^F0051::QT
Name: 0929IC100 Instrument ID: 5985
Misc: 09-29-1994 HP5987 BTL# 2

Id File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 940901 09:50 Last Qcal Time: 940923 16:19

Operator ID: ZIYAD
Quant Time : 940929 10:18
Injected at: 940929 09:40

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

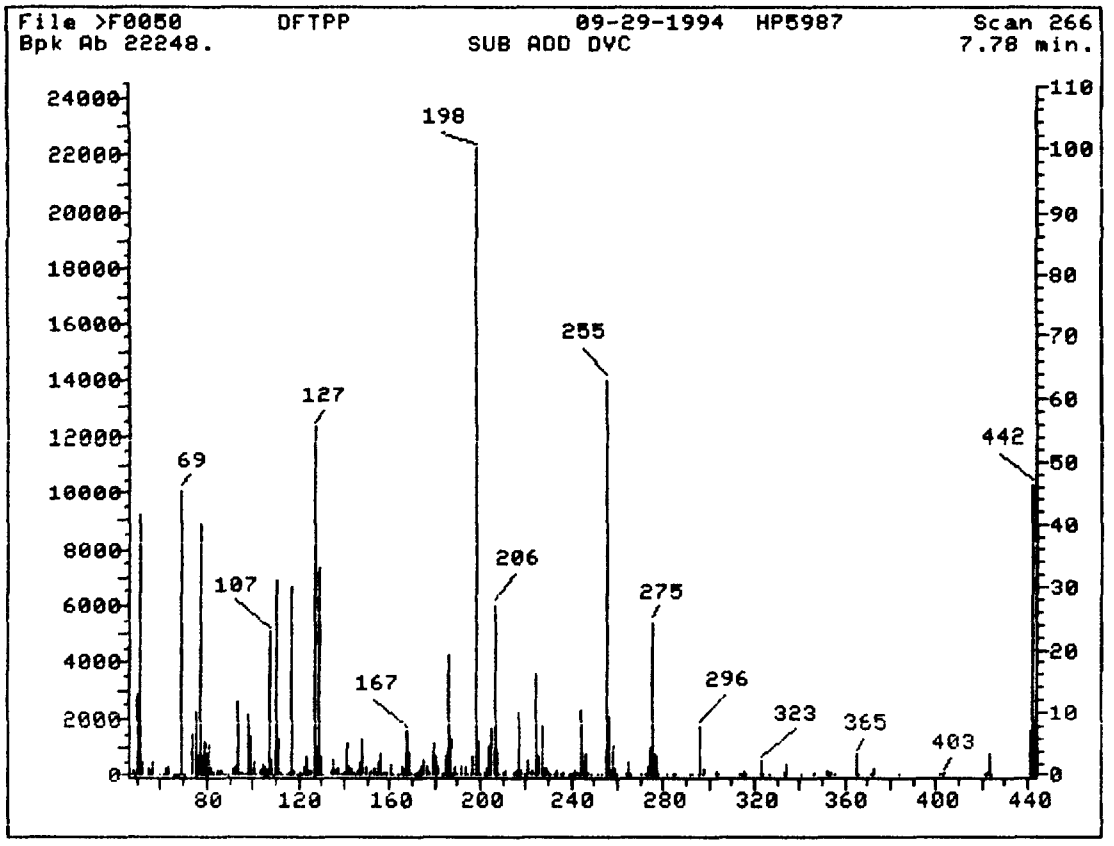
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-80% of mass 198	41.26	41.26	Ok
68	Less than 2% of mass 69	-.26	-.57	Ok
69	(reference only)	45.38	45.38	Ok
70	Less than 2% of mass 69	.17	.38	Ok
127	25-75% of mass 198	55.45	55.45	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	5.50	5.50	Ok
275	10-30% of mass 198	24.35	24.35	Ok
365	Greater than 1% of mass 198	3.45	3.45	Ok
441	0-100% of mass 443	7.21	83.64	Ok
442	40-110% of mass 198	46.46	46.46	Ok
443	15-24% of mass 442	8.63	18.57	Ok

Injection Date: 09/29/94
Injection Time: 09:18
Data File: >F0050
Scan: 266

MS data file header from : >F0050::D2

Sample: DFTPP Operator: ZIYAD SUPER GRP. 9/29/94 9:18
Misc : 09-29-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0



MS data file header from : >F0050::D2

Sample: DFTPP Operator: ZIYAD SUPER GRP. 9/29/94 9:18
Misc : 09-29-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>F0050 DFTPP 09-29-1994 HP5987
266 SUB ADD DVC

File: >F0050 Scan #: 266 Retn. time: 7.78

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
46.65	21.0	98.00	2158.3	149.05	321.3	204.15	1094.7	265.80	43.3
47.40	14.3	99.00	1356.7	151.20	149.7	205.15	1664.3	270.70	41.7
48.00	23.7	100.15	43.3	151.45	53.0	206.15	6038.3	272.05	35.3
48.75	162.7	101.00	486.7	151.70	52.3	207.15	923.0	273.05	344.0
49.25	-104.0	101.75	17.3	153.05	292.7	208.00	121.3	274.05	984.3
50.00	2818.0	102.15	49.0	154.20	110.7	208.75	20.7	275.05	5417.0
51.00	9178.7	103.25	177.3	155.20	463.0	210.00	70.7	276.05	803.3
52.00	499.7	104.15	418.3	156.05	757.7	210.40	32.3	277.05	713.7
55.15	239.3	105.00	358.0	156.95	48.0	211.15	193.3	278.05	37.7
56.00	197.3	105.00	-140.0	158.05	78.3	214.65	15.7	281.80	22.3
57.00	484.0	106.00	202.0	159.05	91.0	215.00	74.0	284.05	53.7
59.25	17.0	106.40	-49.0	159.20	29.7	215.90	196.0	285.05	38.3
61.00	38.0	107.00	5083.3	161.05	390.7	217.00	2220.3	292.05	20.0
61.75	32.0	108.15	593.7	161.95	49.7	218.00	200.3	292.95	48.7
62.15	249.3	109.05	-28.0	163.45	37.7	220.15	44.0	296.05	1734.7
62.40	41.0	110.05	6891.7	164.05	49.0	221.00	570.7	297.05	233.0
63.00	348.3	110.95	1342.7	165.05	318.7	222.25	194.3	303.05	162.7
66.15	-102.0	111.95	137.7	166.20	238.3	223.00	212.7	303.70	27.7
66.50	17.0	113.05	21.7	167.05	1580.0	224.15	3586.7	304.05	25.0
66.90	16.0	115.05	13.7	168.05	888.3	225.15	711.7	312.95	12.0
67.50	-19.0	116.05	81.7	169.05	94.3	227.00	1746.3	313.95	45.3
68.00	-58.0	117.05	6709.3	169.20	25.7	228.00	272.7	314.30	31.3
69.00	10095.7	118.05	173.0	171.45	25.3	229.00	264.7	315.05	184.0
70.00	38.0	119.05	65.7	172.05	141.0	230.00	106.3	315.95	53.3
71.15	-29.0	120.05	92.7	173.20	178.7	231.00	62.3	323.05	547.3
73.15	48.0	120.45	-122.0	174.05	344.3	233.00	51.7	324.00	32.0
74.00	1441.0	121.30	31.7	175.20	533.7	234.15	169.3	326.90	48.3
75.00	2204.0	121.95	316.3	176.20	214.7	236.00	48.3	333.00	71.3
75.50	-48.0	122.95	698.0	177.05	359.0	236.65	15.3	334.00	401.7
76.00	722.3	124.05	205.0	177.95	105.3	237.00	84.3	340.15	15.3
77.00	8875.0	124.70	127.7	179.05	1173.3	239.00	-2.7	346.00	139.3
78.15	680.7	125.05	161.0	180.00	726.3	240.15	34.3	352.00	149.3
79.00	1262.7	126.55	-38.0	181.15	336.0	241.00	153.3	353.00	70.3
80.00	804.0	127.05	12337.0	182.75	11.3	241.65	20.0	353.90	136.7
80.40	-103.0	128.05	988.7	184.00	15.7	242.15	112.0	355.25	16.7
81.00	1116.3	129.05	7349.0	185.15	708.3	243.15	118.0	364.90	767.3
82.00	356.0	130.05	676.0	186.15	4253.0	244.15	2270.0	365.90	67.7
83.00	101.0	131.05	54.7	187.00	1292.7	245.15	405.0	371.50	48.3
83.90	55.3	134.05	151.7	187.90	51.3	246.15	770.7	372.00	285.0
85.00	172.7	135.05	580.3	189.00	340.0	247.00	110.3	384.00	26.3
86.15	218.3	136.05	155.7	190.00	36.3	249.00	39.3	401.80	57.3
87.00	212.0	136.95	249.0	191.25	82.7	251.25	13.7	402.20	36.3
87.50	21.0	138.05	21.0	192.00	312.0	251.95	36.7	403.05	101.0
88.15	50.7	139.05	26.3	193.15	334.7	253.05	34.0	403.70	50.7
89.25	-139.0	140.05	123.3	194.25	34.0	255.05	14032.7	420.95	43.7
91.00	273.3	141.05	1137.0	196.15	699.3	256.05	2095.7	421.95	73.0
92.15	337.3	142.05	299.7	198.00	22248.1	257.05	186.3	423.05	819.7
93.00	2595.3	143.05	220.0	199.00	1224.7	258.05	1088.7	423.95	58.3
94.15	107.3	143.95	88.0	200.00	55.7	259.05	222.3	441.05	1605.0
94.50	53.3	144.80	18.3	201.50	82.3	260.05	23.7	442.05	10335.3
94.75	99.0	146.05	196.7	201.75	83.3	263.70	47.7	443.05	1919.0
96.15	21.3	147.05	505.7	202.65	-45.0	265.05	459.0	443.95	173.0
97.00	49.7	148.05	1300.0	203.00	291.0	265.45	-32.0		

MS data file header from : >F0050::D2

Sample: DFTPP Operator: ZIYAD SUPER GRP. 9/29/94 9:18
Misc : 09-29-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

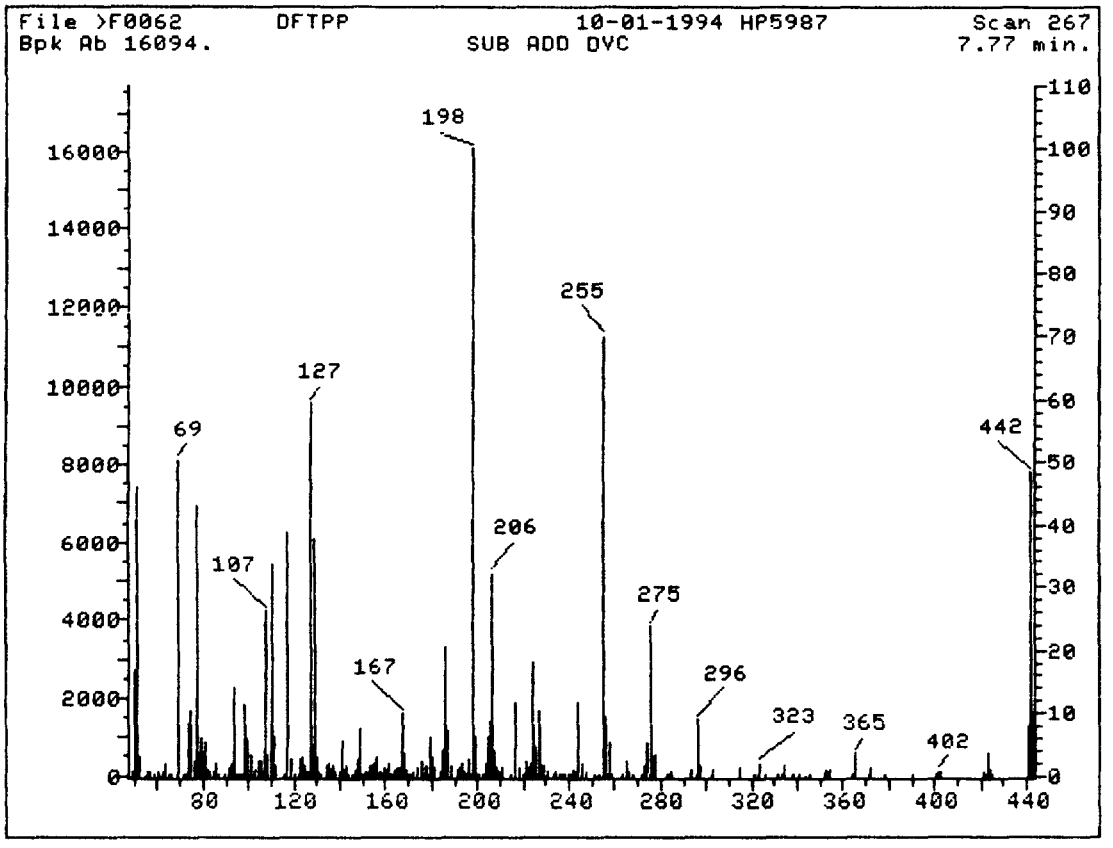
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-80% of mass 198	46.00	46.00	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	50.56	50.56	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	25-75% of mass 198	59.58	59.58	Ok
197	Less than 1% of mass 198	.27	.27	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.45	6.45	Ok
275	10-30% of mass 198	23.93	23.93	Ok
365	Greater than 1% of mass 198	3.50	3.50	Ok
441	0-100% of mass 443	8.02	80.96	Ok
442	40-110% of mass 198	48.27	48.27	Ok
443	15-24% of mass 442	9.90	20.51	Ok

Injection Date: 10/01/94
Injection Time: 15:55
Data File: >F0062
Scan: 267

MS data file header from : >F0062::D2

Sample: DFTPP Operator: ZIYAD SUPER GRP. 10/01/94 15:55
Misc : 10-01-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	250.	0.	0.	0.
Chromatographic times, min. :	1.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0



MS data file header from : >F0062::D2

Sample: DFTPP Operator: ZIYAD SUPER GRP. 10/01/94 15:55
Misc : 10-01-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	250.	0.	0.	0.
Chromatographic times, min. :	1.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0062 DFTPP 10-01-1994 HP5987
267 SUB ADD DVC

File: >F0062 Scan #: 267 Retn. time: 7.77

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
47.65	13.0	104.00	378.7	155.05	307.0	203.15	287.3	264.95	345.0
49.00	88.0	105.00	347.7	155.20	71.3	204.15	1024.7	266.20	77.7
50.00	2715.3	106.15	88.0	156.05	479.7	205.00	1403.3	267.70	12.7
50.40	-52.0	107.00	4216.7	157.05	48.0	206.15	5186.0	271.95	13.0
51.00	7402.7	108.15	514.0	158.05	86.3	207.00	655.7	273.05	266.3
52.00	439.0	109.95	5467.3	159.05	46.0	208.15	203.0	274.05	851.0
55.00	-61.0	111.05	1001.7	160.05	188.3	209.00	76.0	275.05	3851.7
56.15	100.7	111.95	220.0	160.55	141.3	209.90	83.0	276.05	475.0
57.00	79.3	115.70	41.7	161.05	276.0	211.00	190.0	277.05	514.0
58.40	47.3	116.95	6244.3	162.05	43.7	214.75	33.0	282.95	23.3
60.50	-62.0	118.05	394.0	162.95	35.7	216.15	105.3	283.45	17.7
60.90	89.7	120.05	34.0	164.70	155.0	217.00	1888.7	285.05	70.7
62.00	77.3	121.95	417.7	165.05	194.0	218.15	190.0	292.95	116.7
62.25	27.3	123.05	462.0	166.05	217.0	220.40	31.7	296.05	1445.0
63.00	288.7	123.95	247.7	167.05	1597.0	221.15	366.7	297.05	225.7
63.15	39.0	124.05	35.3	168.05	572.0	221.90	213.0	302.95	124.7
65.00	30.0	124.55	26.7	169.05	138.3	222.40	57.7	315.05	174.0
66.00	23.0	124.95	99.3	170.30	40.3	223.15	303.0	320.95	9.0
69.00	8137.0	125.70	72.7	171.20	32.0	224.15	2919.7	323.05	326.3
71.65	40.7	127.05	9589.3	172.05	107.0	225.00	713.7	326.15	15.0
72.90	55.0	128.05	801.3	173.20	158.7	226.25	53.0	332.00	48.7
74.00	1334.7	129.05	6072.7	174.05	198.0	227.00	1692.7	333.15	30.0
75.00	1651.3	129.20	-95.0	175.05	367.0	228.00	258.7	334.00	255.0
76.15	347.7	130.05	492.0	175.95	53.3	228.40	17.0	338.40	23.0
77.00	6911.0	131.05	78.3	177.05	239.0	229.00	256.7	340.90	33.3
78.15	520.7	131.95	24.7	178.05	40.0	230.90	66.7	343.75	-28.0
78.90	978.3	133.95	250.0	179.05	1029.0	233.40	13.7	345.75	55.0
80.00	559.0	135.05	326.7	180.00	469.3	234.15	99.7	352.00	147.3
81.00	839.7	136.05	156.0	181.00	218.3	236.00	54.0	353.00	91.0
82.00	161.0	137.05	271.0	184.00	102.0	237.00	49.0	353.40	14.0
82.90	66.3	137.95	60.3	185.15	629.3	237.75	11.0	354.15	142.3
84.90	99.0	139.95	56.0	186.00	3288.7	239.90	32.7	364.00	12.3
85.25	88.3	141.05	916.0	187.15	1188.3	241.00	43.0	364.90	563.0
86.00	315.7	141.95	151.0	188.15	132.0	242.15	143.0	372.15	175.7
86.75	16.3	143.05	264.0	189.00	262.7	243.15	103.3	378.00	11.0
89.75	12.0	143.95	49.3	191.00	134.7	244.15	1887.3	390.00	24.7
91.00	177.7	145.45	29.3	192.15	217.7	245.15	228.0	400.95	21.7
92.00	302.3	146.05	160.0	193.15	311.0	246.00	327.0	401.80	101.0
93.00	2271.7	147.20	433.3	194.15	74.7	247.15	60.7	402.95	76.0
94.00	38.3	148.05	1205.7	194.75	13.7	250.90	35.3	420.95	71.7
95.25	32.0	149.05	45.7	196.00	437.3	253.05	49.3	422.05	55.0
95.65	36.0	149.80	-60.0	196.90	43.7	255.05	11237.7	422.95	588.3
97.00	44.0	150.30	19.0	198.00	16094.4	255.95	1518.3	424.05	144.3
98.00	1850.7	150.80	55.7	199.00	1038.7	256.80	37.7	425.20	10.7
99.00	943.3	151.20	15.3	200.15	42.7	257.05	36.0	441.05	1290.0
100.00	25.0	151.95	35.0	200.90	36.3	257.95	848.3	441.95	7768.0
101.00	521.3	152.95	257.3	201.15	41.0	258.80	12.0	443.05	1593.3
101.90	12.0	153.70	-42.0	202.25	15.3	263.80	8.7	444.05	159.7
103.00	160.7	154.05	230.7						

MS data file header from : >F0062::D2

Sample: DFTPP Operator: ZIYAD SUPER GRP. 10/01/94 15:55

Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	250.	0.	0.	0.
Chromatographic times, min. :	1.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

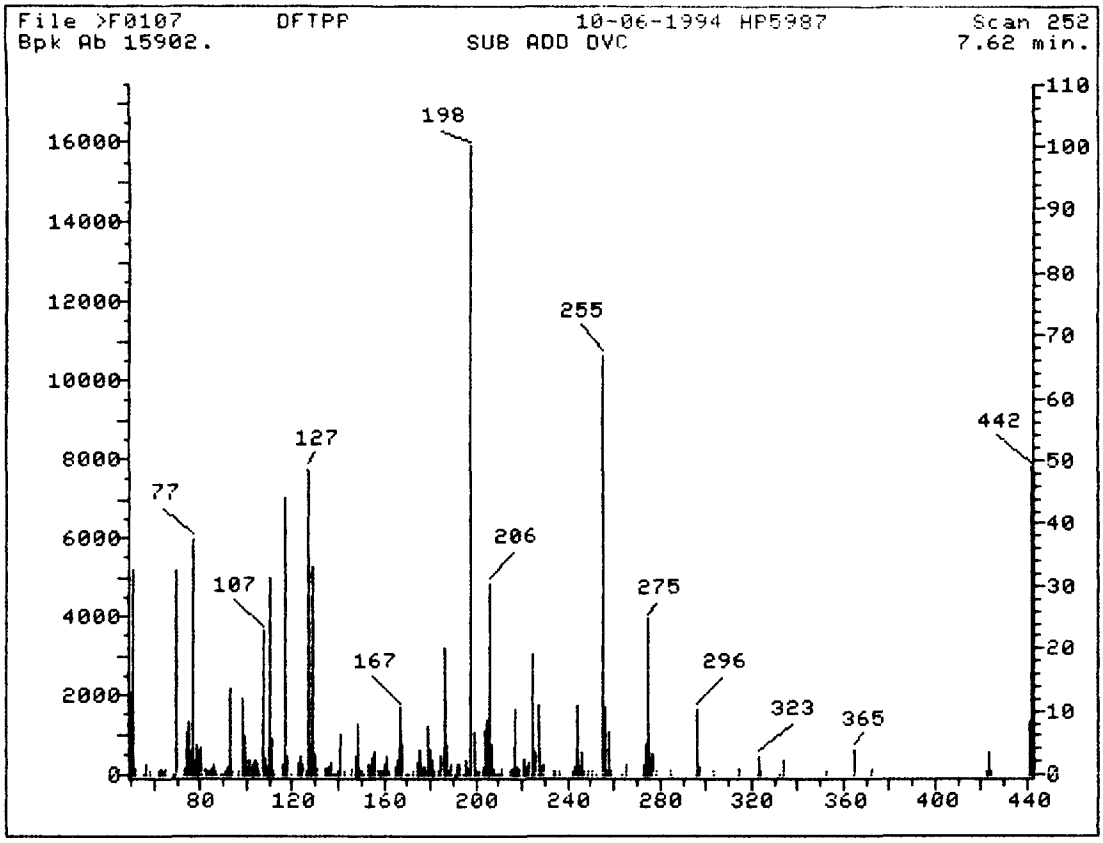
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-80% of mass 198	32.68	32.68	Ok
68	Less than 2% of mass 69	-.75	-2.30	Ok
69	(reference only)	32.58	32.58	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	25-75% of mass 198	48.75	48.75	Ok
197	Less than 1% of mass 198	.53	.53	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.52	6.52	Ok
275	10-30% of mass 198	24.74	24.74	Ok
365	Greater than 1% of mass 198	3.83	3.83	Ok
441	0-100% of mass 443	8.10	93.60	Ok
442	40-110% of mass 198	48.86	48.86	Ok
443	15-24% of mass 442	8.65	17.70	Ok

Injection Date: 10/06/94
Injection Time: 14:02
Data File: >F0107
Scan: 252

MS data file header from : >F0107::D3

Sample: DFTPP Operator: ZIYAD SUPER GRP. 10/06/94 14:02
Misc : 10-06-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	250.	0.	0.	0.
Chromatographic times, min. :	1.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0



MS data file header from : >F0107::D3

Sample: DFTPP Operator: ZIYAD SUPER GRP. 10/06/94 14:02
Misc : 10-06-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	250.	0.	0.	0.
Chromatographic times, min. :	1.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0107 DFTPP 10-06-1994 HP5987
252 SUB ADD DVC

File: >F0107 Scan #: 252 Retn. time: 7.62

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
49.25	112.0	102.15	50.0	151.20	23.0	193.00	198.7	245.50	71.0
50.00	2069.0	103.15	196.7	153.05	234.7	195.15	16.7	246.15	545.0
51.00	5197.7	104.00	317.7	153.95	158.7	196.00	344.0	247.00	67.7
52.15	86.3	105.00	294.3	154.95	402.0	197.00	83.7	248.75	43.0
55.40	25.3	105.50	69.0	156.05	569.7	198.00	15902.4	250.90	38.7
56.90	213.3	107.15	3607.7	157.30	42.3	199.00	1037.0	252.80	24.7
58.40	48.7	108.00	405.7	157.95	48.7	200.00	36.7	255.05	10607.3
61.90	36.0	109.05	153.7	159.05	32.3	201.75	45.3	255.95	1673.3
63.15	94.3	110.05	4966.3	159.55	35.0	203.00	191.3	256.80	61.3
63.75	39.0	110.95	857.3	160.20	214.0	204.00	1070.0	257.30	66.3
65.15	95.3	111.80	54.0	161.05	462.0	205.15	1381.0	257.95	1009.7
68.65	-119.0	116.05	205.7	162.05	63.3	206.15	4828.3	258.80	35.3
69.00	5180.7	117.05	7023.0	165.05	184.0	207.15	715.3	263.80	29.3
72.90	111.7	118.05	429.0	165.95	302.7	207.90	92.3	264.95	216.7
74.00	1005.0	119.55	29.3	167.05	1671.0	208.25	40.7	273.05	232.0
75.00	1328.3	122.30	254.0	168.05	719.3	208.75	29.3	274.05	776.7
76.15	522.3	123.05	459.3	169.95	28.3	209.40	20.3	275.05	3933.7
77.00	5966.7	123.95	232.7	170.45	19.7	210.15	18.7	276.05	403.7
78.00	291.7	125.95	52.3	172.20	69.3	211.15	98.3	276.95	471.0
79.00	711.0	127.05	7752.7	172.95	70.3	215.15	65.3	278.05	59.0
80.00	465.0	128.05	717.7	174.05	272.0	216.00	127.3	285.20	60.7
81.00	635.0	129.05	5225.7	175.05	619.0	217.00	1620.7	295.95	1645.0
82.00	110.7	130.20	501.3	175.80	42.0	218.00	155.3	296.95	164.7
83.00	82.7	131.05	136.3	176.30	78.3	219.00	98.3	303.05	72.3
84.25	37.0	134.05	114.3	177.05	148.3	221.00	378.7	314.30	21.7
84.90	103.3	134.95	134.0	177.55	42.3	221.75	142.0	314.95	136.7
86.00	227.0	136.05	190.0	177.80	39.0	223.00	283.3	323.05	460.7
87.00	81.0	136.45	131.0	179.05	1190.7	224.15	3015.3	324.00	68.7
88.90	21.7	137.05	267.0	180.00	595.0	225.00	558.3	332.40	29.7
90.00	29.0	138.05	29.7	181.00	318.3	227.00	1730.3	334.00	347.3
90.50	30.0	139.55	23.7	182.25	51.0	228.15	175.0	352.90	46.0
91.75	151.7	139.95	61.3	183.75	50.3	229.15	195.0	364.90	608.3
92.00	56.0	141.05	994.3	185.00	438.3	234.00	41.0	372.00	84.7
93.00	2185.3	142.95	69.7	186.00	3187.3	234.90	46.7	421.95	38.7
94.00	30.7	146.05	95.3	187.00	714.3	236.90	75.0	422.95	537.0
96.15	59.0	147.05	417.3	188.15	36.7	242.00	78.7	424.05	45.3
98.00	1884.3	148.05	1232.7	189.00	227.7	243.00	148.3	441.05	1287.7
99.00	910.3	148.55	-109.0	191.00	-29.3	244.15	1723.7	441.95	7770.3
100.15	53.3	149.05	82.7	192.00	196.3	245.00	177.3	443.05	1375.7
101.15	319.3	150.05	68.0						

MS data file header from : >F0107::D3

Sample: DFTPP Operator: ZIYAD SUPER GRP. 10/06/94 14:02
Misc : 10-06-1994 HP5987 BTL# 1
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 1 Equip ID: 5985
Method file: DFTPP Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	250.	0.	0.	0.
Chromatographic times, min. :	1.0	2.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

FMGR : BLIST,BAF006

Sequence File: BAF006::SC

Tune File: MT5987

CR List: D2,D3,D4,D6
CR Cut-off: 5000 blocks.

Number of samples: 12

Samp No.	Data File / Method File	Sample Name / Misc Data	Bottle	Sample Size	Report Data Archive / Quant ID Archive / Output Archive	Quant ID / Quant Output
001)	>F0062	DFTPP	1	2	N N N N N	
	DFTPP	10-01-1994 HP5987			Dil=1.00000	^F0062::QT
002)	>F0063	1001CC25A	2	1	Y M N N N	IDF006::D6
	TOXIC6	10-01-1994 HP5987			Dil=1.00000	^F0063::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
003)	>F0064	1001CC25B	3	1	Y M N N N	IDF006::D6
	TOXIC6	10-01-1994 HP5987			Dil=1.00000	^F0064::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
004)	>F0065	MB092594	4	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0065::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
005)	>F0066	94ZB19S01	5	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0066::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
006)	>F0067	94ZB19S02	6	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0067::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
007)	>F0068	94ZB19S03	7	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0068::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
008)	>F0069	94ZB19S05	8	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0069::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
009)	>F0070	94ZB19S06	9	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0070::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
010)	>F0071	94ZB19R07	10	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0071::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
011)	>F0072	94ZB19S08	11	1	Y M N N N	IDF006::D6
	TOXIC6	940152 10-01-1994 HP598			Dil=1.00000	^F0072::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					
012)	>F0073	BAKE	12	1	Y N N N N	IDF006::D6
	BAKE	10-01-1994 HP5987			Dil=1.00000	^F0073::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000					
	REPRT OPTIONS: Qion replaces Scan#					

Aborted
End of sequence file.

FMGR : BLIST,BAF010

Sequence File: BAF010::D4

Tune File: MT5987

CR List: D3,D4,D5,D6
CR Cut-off: 5000 blocks.

Number of samples: 26

Samp No.	Data File / Method File	Sample Name / Misc Data	Bottle	Sample Size	Report Data Archive / Quant	ID Archive	Output Archive	Quant ID / Quant Output
001)	>F0108	DFTPP	1	1	N	N	N	IDF008::D4
	DFTPP	10-06-1994 HP5987		Dil=1.00000				^F0108::QT
002)	>F0109	1006IC100	2	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0109::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
003)	>F0110	1006IC50	3	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0110::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
004)	>F0111	1006IC25	4	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0111::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
005)	>F0112	1006IC10	5	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0112::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
006)	>F0113	1006IC05	6	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0113::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
007)	>F0114	1006ICCK	7	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0114::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
008)	>F0115	94ZB19S03RE	8	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0115::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
009)	>F0116	94ZB19S05RE	9	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0116::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
010)	>F0117	94ZB19S06	10	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0117::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
011)	>F0118	94ZB19R07	11	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0118::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							
012)	>F0119	94ZB19S08	12	1	Y	M	N	IDF008::D4
	TOXIC6	10-06-1994 HP5987		Dil=1.00000				^F0119::QT
	REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000							
	REPRT OPTIONS: Qion replaces Scan#							

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013) >F0120        DFTPP                          1      1 N N N N N     IDF008::D4
     DFTPP         10-06-1994 HP5987                     Dil=1.00000     ^F0120::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
014) >F0121        DFTPP                          1      1 N N N N N     IDF008::D4
     DFTPP         10-06-1994 HP5987                     Dil=1.00000     ^F0121::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
015) >F0122        1007CC25A                      4      1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0122::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
016) >F0123        1007CC25B                      4      1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0123::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
017) >F0124        MB093094                       13     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0124::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
018) >F0125        94ZG15R03                      14     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0125::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
019) >F0126        94ZG15S01                      15     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0126::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
020) >F0127        94ZG15D01                      16     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0127::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
021) >F0128        94ZG15S02                      17     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0128::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
022) >F0129        PE                             18     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0129::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
023) >F0130        LCS093094                      19     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0130::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
024) >F0131        LCSD093094                     20     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987                     Dil=1.00000     ^F0131::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
025) >F0132        LCSCHKSOLN                     21     1 Y M N N N     IDF008::D4
     TOXIC6        10-06-1994 HP5987 750uL               Dil=1.00000     ^F0132::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
026) >F0133        BAKE OUT                       22     1 Y M N N N     IDF008::D4
     BAKE                                                Dil=1.00000     ^F0133::QT
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#

End of sequence file.
```

Quant ID File: IDF005::D6

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Last EDIT Date: 940916 14:52 Last Calib Date: 941003 10:02
Last Qcal Date: <none> Calib File: CBF002::D6
Qcal File: <none>

RT Window (+min -%)	: .2000	Subtraction Method	: 1
Max Hits/Compound	: 1	Ignore max check	: NO
Minimum Area	: 5000	Auto Qdel Method	: 5
Peak/Base Peak Ratio	: 35.00 %	Quantitate Using	: AREA
Up Slope Sensitivity	: .2000000	Units of Conc	: NG/UL
Down Slope Sensitivity	: .0000000	Bunching	: 1

Number of Compounds: 79

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-Dichlorobenzene-d4	(I)	4.19(	1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	2.40(	.572)	.72609	25.00	
3)	Phenol-d5	(S)	3.64(	.867)	.62482	25.00	
4)	Phenol	(M)	3.66(	.873)	.65236	25.00	**
5)	Aniline	(T)	3.66(	.873)	.69151	25.00	**
6)	bis(2-Chloroethyl)ether	(T)	3.78(	.900)	.56069	25.00	**
7)	2-Chlorophenol	(M)	3.84(	.914)	1.00248	25.00	**
8)	1,3-Dichlorobenzene	(T)	4.08(	.973)	1.40321	25.00	**
9)	1,4-Dichlorobenzene	(M)	4.23(	1.008)	1.55625	25.00	**
10)	Benzyl alcohol	(T)	4.52(	1.079)	.37601	25.00	**
11)	1,2-Dichlorobenzene	(T)	4.50(	1.073)	1.43212	25.00	**
12)	2-Methylphenol	(T)	4.80(	1.144)	.54530	25.00	**
13)	bis(2-Chloroisopropyl)ether	(T)	4.85(	1.156)	.31619	25.00	**
14)	4-Methylphenol	(T)	5.17(	1.232)	.56158	25.00	**
15)	N-Nitroso-di-n-propylamine	(M)	5.11(	1.219)	.39213	25.00	**
16)	Hexachloroethane	(T)	5.19(	1.237)	.71019	25.00	**
17)	Nitrobenzene-d5	(S)	5.36(	1.277)	1.05953	25.00	
18)	Nitrobenzene	(T)	5.40(	1.288)	.46015	25.00	**
19)	Isophorone	(T)	6.01(	1.433)	1.27864	25.00	**
20)	2-Nitrophenol	(T)	6.15(	1.466)	.56532	25.00	**
21)	2,4-Dimethylphenol	(T)	6.43(	1.533)	.58138	25.00	**
22)	Benzoic acid	(T)	7.01(	1.672)	.54457	25.00	**
23)	bis(2-Chloroethoxy)methane	(T)	6.65(	1.586)	.58865	25.00	**
24)	2,4-Dichlorophenol	(T)	6.81(	1.623)	.99973	25.00	**
25)	1,2,4-Trichlorobenzene	(M)	6.96(	1.659)	1.28736	25.00	**
26)	*Naphthalene-d8	(I)	7.09(	1.000)	1.00000	50.00	**
27)	Naphthalene	(T)	7.14(	1.007)	.88736	25.00	**
28)	4-Chloroaniline	(T)	7.40(	1.044)	.31123	25.00	**
29)	Hexachlorobutadiene	(T)	7.56(	1.066)	.39834	25.00	**
30)	4-Chloro-3-methylphenol	(M)	8.98(	1.265)	.31945	25.00	**
31)	2-Methylnaphthalene	(T)	9.10(	1.283)	.68340	25.00	**
32)	Hexachlorocyclopentadiene	(T)	9.60(	1.353)	.31501	25.00	**
33)	2,4,6-Trichlorophenol	(T)	10.03(	1.414)	.25874	25.00	**
34)	2,4,5-Trichlorophenol	(T)	10.14(	1.429)	.28350	25.00	**
35)	2-Chloronaphthalene	(T)	10.51(	1.481)	.69667	25.00	**
36)	2-Fluorobiphenyl	(S)	10.29(	1.451)	.92195	25.00	

37)	2-Nitroaniline	[illegible]	[illegible]	[illegible]	[illegible]	**
38)	Dimethylphthalate	(T)	11.69(1.649)	1.05381	25.00	**
39)	Acenaphthylene	(T)	11.72(1.652)	1.05048	25.00	**
40)	*Acenaphthene-d10	(I)	12.16(1.000)	1.00000	50.00	**
41)	3-Nitroaniline	(T)	12.23(1.006)	.28915	25.00	**
42)	Acenaphthene	(M)	12.25(1.008)	1.18386	25.00	**
43)	2,4-Dinitrophenol	(T)	12.55(1.032)	.19687	25.00	**
44)	4-Nitrophenol	(M)	13.06(1.075)	.48155	25.00	**
45)	Dibenzofuran	(T)	12.80(1.053)	1.60586	25.00	**
46)	2,6-Dinitrotoluene	(T)	11.77(.968)	.36199	25.00	**
47)	2,4-Dinitrotoluene	(M)	12.96(1.066)	.48551	25.00	**
48)	Diethylphthalate	(T)	13.90(1.143)	1.86068	25.00	**
49)	4-Chlorophenyl-phenylether	(T)	14.01(1.152)	.78850	25.00	**
50)	Fluorene	(T)	13.84(1.139)	1.23824	25.00	**
51)	4-Nitroaniline	(T)	14.12(1.161)	.22244	25.00	**
52)	4,6-Dinitro-2-methylphenol	(T)	14.19(1.167)	.20248	25.00	**
53)	N-Nitrosodiphenylamine	(T)	14.42(1.186)	.87734	25.00	**
54)	2,4,6-Tribromophenol	(S)	14.59(1.200)	.29555	25.00	
55)	4-Bromophenyl-phenylether	(T)	15.48(1.273)	.48880	25.00	**
56)	Hexachlorobenzene	(T)	15.50(1.275)	.52939	25.00	**
57)	Pentachlorophenol	(M)	16.22(1.334)	.23018	25.00	**
58)	*Phenanthrene-d10	(I)	16.70(1.000)	1.00000	50.00	**
59)	Phenanthrene	(T)	16.76(1.004)	1.05056	25.00	**
60)	Anthracene	(T)	16.92(1.013)	1.05422	25.00	**
61)	Carbazole	(T)	17.56(1.052)	.88442	25.00	**
62)	Di-n-butylphthalate	(T)	19.02(1.139)	1.38980	25.00	**
63)	Fluoranthene	(T)	20.43(1.224)	.99351	25.00	**
64)	Pyrene	(M)	21.09(1.263)	1.01188	25.00	**
65)	Terphenyl-d14	(S)	21.86(1.310)	.79517	25.00	
66)	Butylbenzylphthalate	(T)	23.63(1.415)	.53729	25.00	**
67)	Benzo(a)anthracene	(T)	24.88(1.490)	.83398	25.00	**
68)	3,3'-Dichlorobenzidine	(T)	25.01(1.498)	.33300	25.00	**
69)	bis(2-Ethylhexyl)phthalate	(T)	25.59(1.533)	.71252	25.00	**
70)	*Chrysene-d12	(I)	24.92(1.000)	1.00000	50.00	**
71)	Chrysene	(T)	25.00(1.003)	1.05094	25.00	**
72)	Di-n-octylphthalate	(T)	27.53(1.104)	1.34823	25.00	**
73)	Benzo(b)fluoranthene	(T)	28.00(1.124)	.94546	25.00	**
74)	Benzo(k)fluoranthene	(T)	28.08(1.127)	.97189	25.00	**
75)	Benzo(a)pyrene	(T)	28.84(1.157)	.84075	25.00	**
76)	*Perylene-d12	(I)	28.99(1.000)	1.00000	50.00	**
77)	Indeno(1,2,3-cd)pyrene	(T)	31.55(1.088)	.76790	25.00	**
78)	Dibenzo(a,h)anthracene	(T)	31.65(1.092)	.75014	25.00	
79)	Benzo(g,h,i)perylene	(T)	32.12(1.108)	.80581	25.00	**

* Compound is ISTD
** Compound uses different Quant parameters

Quant ID File: IDF006::D6

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Last EDIT Date: 940916 14:52 Last Calib Date: 940901 09:50
Last Qcal Date: 941001 16:59 Calib File: CBF001::D6
Qcal File: ^F0064:14906:QT

RT Window (+min -%)	: .2000	Subtraction Method	: 1
Max Hits/Compound	: 1	Ignore max check	: NO
Minimum Area	: 5000	Auto Qdel Method	: 5
Peak/Base Peak Ratio	: 35.00 %	Quantitate Using	: AREA
Up Slope Sensitivity	: .2000000	Units of Conc	: NG/UL
Down Slope Sensitivity	: .0000000	Bunching	: 1

Number of Compounds: 79

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-Dichlorobenzene-d4	(I)	4.18	(1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	2.39	(.572)	.73069	25.00	
3)	Phenol-d5	(S)	3.62	(.866)	.62910	25.00	
4)	Phenol	(M)	3.64	(.870)	.57001	25.00	**
5)	Aniline	(T)	3.65	(.873)	.69748	25.00	**
6)	bis(2-Chloroethyl)ether	(T)	3.77	(.901)	.55918	25.00	**
7)	2-Chlorophenol	(M)	3.82	(.914)	.94735	25.00	**
8)	1,3-Dichlorobenzene	(T)	4.08	(.976)	1.33618	25.00	**
9)	1,4-Dichlorobenzene	(M)	4.23	(1.010)	1.56632	25.00	**
10)	Benzyl alcohol	(T)	4.51	(1.079)	.35652	25.00	**
11)	1,2-Dichlorobenzene	(T)	4.50	(1.075)	1.38378	25.00	**
12)	2-Methylphenol	(T)	4.79	(1.144)	.46321	25.00	**
13)	bis(2-Chloroisopropyl)ether	(T)	4.80	(1.147)	.29468	25.00	**
14)	4-Methylphenol	(T)	5.14	(1.230)	.47408	25.00	**
15)	N-Nitroso-di-n-propylamine	(M)	5.10	(1.219)	.38403	25.00	**
16)	Hexachloroethane	(T)	5.19	(1.240)	.69075	25.00	**
17)	Nitrobenzene-d5	(S)	5.34	(1.278)	1.02382	25.00	
18)	Nitrobenzene	(T)	5.39	(1.288)	.44622	25.00	**
19)	Isophorone	(T)	5.99	(1.432)	1.27644	25.00	**
20)	2-Nitrophenol	(T)	6.13	(1.466)	.50941	25.00	**
21)	2,4-Dimethylphenol	(T)	6.40	(1.531)	.60503	25.00	**
22)	Benzoic acid	(T)	6.91	(1.651)	.53263	25.00	**
23)	bis(2-Chloroethoxy)methane	(T)	6.65	(1.589)	.57326	25.00	**
24)	2,4-Dichlorophenol	(T)	6.79	(1.623)	1.01325	25.00	**
25)	1,2,4-Trichlorobenzene	(M)	6.95	(1.661)	1.28576	25.00	**
26)	*Naphthalene-d8	(I)	7.08	(1.000)	1.00000	50.00	**
27)	Naphthalene	(T)	7.12	(1.006)	.83867	25.00	**
28)	4-Chloroaniline	(T)	7.38	(1.043)	.33748	25.00	**
29)	Hexachlorobutadiene	(T)	7.54	(1.065)	.42482	25.00	**
30)	4-Chloro-3-methylphenol	(M)	8.94	(1.263)	.32424	25.00	**
31)	2-Methylnaphthalene	(T)	9.07	(1.281)	.67425	25.00	**
32)	Hexachlorocyclopentadiene	(T)	9.57	(1.352)	.31451	25.00	**
33)	2,4,6-Trichlorophenol	(T)	10.00	(1.413)	.27159	25.00	**
34)	2,4,5-Trichlorophenol	(T)	10.10	(1.427)	.27891	25.00	**
35)	2-Chloronaphthalene	(T)	10.47	(1.480)	.70845	25.00	**
36)	2-Fluorobiphenyl	(S)	10.27	(1.451)	.90368	25.00	
37)	2-Nitroaniline	(T)	10.92	(1.542)	.20135	25.00	**
38)	Dimethylphthalate	(T)	11.66	(1.648)	1.04880	25.00	**

39)	Acenaphthylene	(T)	12.[illegible]	[illegible]	[illegible]	[illegible] **
40)	*Acenaphthene-d10	(I)	12.15(	1.000)	1.00000	50.00 **
41)	3-Nitroaniline	(T)	12.21(	1.005)	.27724	25.00 **
42)	Acenaphthene	(M)	12.23(	1.007)	1.18342	25.00 **
43)	2,4-Dinitrophenol	(T)	12.52(	1.031)	.16976	25.00 **
44)	4-Nitrophenol	(M)	13.02(	1.072)	.56422	25.00 **
45)	Dibenzofuran	(T)	12.79(	1.053)	1.66225	25.00 **
46)	2,6-Dinitrotoluene	(T)	11.76(	.968)	.38784	25.00 **
47)	2,4-Dinitrotoluene	(M)	12.94(	1.065)	.52128	25.00 **
48)	Diethylphthalate	(T)	13.88(	1.143)	2.04291	25.00 **
49)	4-Chlorophenyl-phenylether	(T)	14.00(	1.152)	.77321	25.00 **
50)	Fluorene	(T)	13.82(	1.138)	1.30549	25.00 **
51)	4-Nitroaniline	(T)	14.10(	1.160)	.25340	25.00 **
52)	4,6-Dinitro-2-methylphenol	(T)	14.17(	1.166)	.23661	25.00 **
53)	N-Nitrosodiphenylamine	(T)	14.40(	1.185)	.95365	25.00 **
54)	2,4,6-Tribromophenol	(S)	14.58(	1.201)	.29514	25.00
55)	4-Bromophenyl-phenylether	(T)	15.47(	1.274)	.51497	25.00 **
56)	Hexachlorobenzene	(T)	15.49(	1.275)	.63478	25.00 **
57)	Pentachlorophenol	(M)	16.20(	1.334)	.27748	25.00 **
58)	*Phenanthrene-d10	(I)	16.69(	1.000)	1.00000	50.00 **
59)	Phenanthrene	(T)	16.75(	1.003)	1.10265	25.00 **
60)	Anthracene	(T)	16.90(	1.013)	1.09708	25.00 **
61)	Carbazole	(T)	17.55(	1.051)	.94276	25.00 **
62)	Di-n-butylphthalate	(T)	19.01(	1.139)	1.56730	25.00 **
63)	Fluoranthene	(T)	20.42(	1.224)	1.14976	25.00 **
64)	Pyrene	(M)	21.08(	1.263)	1.17314	25.00 **
65)	Terphenyl-d14	(S)	21.85(	1.310)	.95276	25.00
66)	Butylbenzylphthalate	(T)	23.61(	1.415)	.67365	25.00 **
67)	Benzo(a)anthracene	(T)	24.87(	1.490)	.96643	25.00 **
68)	3,3'-Dichlorobenzidine	(T)	24.99(	1.497)	.40256	25.00 **
69)	bis(2-Ethylhexyl)phthalate	(T)	25.57(	1.532)	.86966	25.00 **
70)	*Chrysene-d12	(I)	24.92(	1.000)	1.00000	50.00 **
71)	Chrysene	(T)	24.97(	1.002)	1.11856	25.00 **
72)	Di-n-octylphthalate	(T)	27.50(	1.104)	1.43483	25.00 **
73)	Benzo(b)fluoranthene	(T)	27.98(	1.123)	.92773	25.00 **
74)	Benzo(k)fluoranthene	(T)	28.06(	1.126)	1.03111	25.00 **
75)	Benzo(a)pyrene	(T)	28.82(	1.157)	.84280	25.00 **
76)	*Perylene-d12	(I)	28.99(	1.000)	1.00000	50.00 **
77)	Indeno(1,2,3-cd)pyrene	(T)	31.55(	1.088)	.77622	25.00 **
78)	Dibenzo(a,h)anthracene	(T)	31.64(	1.091)	.77739	25.00
79)	Benzo(g,h,i)perylene	(T)	32.11(	1.107)	.81120	25.00 **

* Compound is ISTD
** Compound uses different Quant parameters

Quant ID File: IDF008::D4

Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993

Last EDIT Date: 941007 10:06 Last Calib Date: 941007 12:42
Last Qcal Date: <none> Calib File: CBF003::D6
Qcal File: <none>

RT Window (+min -%)	.2000	Subtraction Method	1
Max Hits/Compound	1	Ignore max check	NO
Minimum Area	5000	Auto Qdel Method	5
Peak/Base Peak Ratio	35.00 %	Quantitate Using	AREA
Up Slope Sensitivity	.2000000	Units of Conc	NG/UL
Down Slope Sensitivity	.0000000	Bunching	1

Number of Compounds: 79

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-Dichlorobenzene-d4	(I)	4.10	(1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	2.33	(.567)	.53629	25.00	
3)	Phenol-d5	(S)	3.55	(.865)	.42956	25.00	
4)	Phenol	(M)	3.57	(.869)	.41548	25.00	**
5)	Aniline	(T)	3.58	(.872)	.48774	25.00	**
6)	bis(2-Chloroethyl)ether	(T)	3.69	(.899)	.39440	25.00	**
7)	2-Chlorophenol	(M)	3.75	(.913)	.81997	25.00	**
8)	1,3-Dichlorobenzene	(T)	3.99	(.973)	1.24317	25.00	**
9)	1,4-Dichlorobenzene	(M)	4.14	(1.008)	1.46458	25.00	**
10)	Benzyl alcohol	(T)	4.43	(1.080)	.26540	25.00	**
11)	1,2-Dichlorobenzene	(T)	4.41	(1.075)	1.30138	25.00	**
12)	2-Methylphenol	(T)	4.69	(1.143)	.38058	25.00	**
13)	bis(2-Chloroisopropyl)ether	(T)	4.73	(1.152)	.23439	25.00	**
14)	4-Methylphenol	(T)	5.06	(1.234)	.44301	25.00	**
15)	N-Nitroso-di-n-propylamine	(M)	5.01	(1.221)	.28376	25.00	**
16)	Hexachloroethane	(T)	5.09	(1.239)	.82350	25.00	**
17)	Nitrobenzene-d5	(S)	5.26	(1.281)	.79952	25.00	
18)	Nitrobenzene	(T)	5.30	(1.291)	.36837	25.00	**
19)	Isophorone	(T)	5.91	(1.439)	.86995	25.00	**
20)	2-Nitrophenol	(T)	6.04	(1.472)	.43589	25.00	**
21)	2,4-Dimethylphenol	(T)	6.32	(1.539)	.51657	25.00	**
22)	Benzoic acid	(T)	6.86	(1.671)	.39675	25.00	**
23)	bis(2-Chloroethoxy)methane	(T)	6.55	(1.596)	.38267	25.00	**
24)	2,4-Dichlorophenol	(T)	6.69	(1.631)	.95489	25.00	**
25)	1,2,4-Trichlorobenzene	(M)	6.85	(1.668)	1.29213	25.00	**
26)	*Naphthalene-d8	(I)	6.98	(1.000)	1.00000	50.00	**
27)	Naphthalene	(T)	7.03	(1.007)	.83115	25.00	**
28)	4-Chloroaniline	(T)	7.30	(1.045)	.25791	25.00	**
29)	Hexachlorobutadiene	(T)	7.46	(1.068)	.52615	25.00	**
30)	4-Chloro-3-methylphenol	(M)	8.85	(1.268)	.32504	25.00	**
31)	2-Methylnaphthalene	(T)	8.98	(1.286)	.68425	25.00	**
32)	Hexachlorocyclopentadiene	(T)	9.48	(1.358)	.41885	25.00	**
33)	2,4,6-Trichlorophenol	(T)	9.91	(1.419)	.29230	25.00	**
34)	2,4,5-Trichlorophenol	(T)	10.02	(1.434)	.30631	25.00	**
35)	2-Chloronaphthalene	(T)	10.39	(1.487)	.75388	25.00	**
36)	2-Fluorobiphenyl	(S)	10.18	(1.457)	1.05951	25.00	
37)	2-Nitroaniline	(T)	10.84	(1.552)	.18377	25.00	**
38)	Dimethylphthalate	(T)	11.57	(1.657)	1.17992	25.00	**

39)	[illegible]	[illegible]	11.59(1.000)	[illegible]	[illegible]	[illegible]
40)	*Acenaphthene-d10	(I)	12.04(1.000)	1.00000	50.00	**
41)	3-Nitroaniline	(T)	12.11(1.006)	.24641	25.00	**
42)	Acenaphthene	(M)	12.13(1.008)	1.08069	25.00	**
43)	2,4-Dinitrophenol	(T)	12.42(1.032)	.14669	25.00	**
44)	4-Nitrophenol	(M)	12.93(1.074)	.49334	25.00	**
45)	Dibenzofuran	(T)	12.67(1.053)	1.49931	25.00	**
46)	2,6-Dinitrotoluene	(T)	11.65(.968)	.31588	25.00	**
47)	2,4-Dinitrotoluene	(M)	12.84(1.067)	.47858	25.00	**
48)	Diethylphthalate	(T)	13.77(1.144)	1.96856	25.00	**
49)	4-Chlorophenyl-phenylether	(T)	13.88(1.153)	.77724	25.00	**
50)	Fluorene	(T)	13.72(1.140)	1.20766	25.00	**
51)	4-Nitroaniline	(T)	14.01(1.164)	.18865	25.00	**
52)	4,6-Dinitro-2-methylphenol	(T)	14.08(1.170)	.20127	25.00	**
53)	N-Nitrosodiphenylamine	(T)	14.29(1.188)	.84741	25.00	**
54)	2,4,6-Tribromophenol	(S)	14.47(1.202)	.29536	25.00	
55)	4-Bromophenyl-phenylether	(T)	15.36(1.276)	.57336	25.00	**
56)	Hexachlorobenzene	(T)	15.37(1.277)	.65119	25.00	**
57)	Pentachlorophenol	(M)	16.09(1.337)	.25452	25.00	**
58)	*Phenanthrene-d10	(I)	16.56(1.000)	1.00000	50.00	**
59)	Phenanthrene	(T)	16.63(1.004)	1.04735	25.00	**
60)	Anthracene	(T)	16.78(1.013)	1.05757	25.00	**
61)	Carbazole	(T)	17.43(1.052)	.85134	25.00	**
62)	Di-n-butylphthalate	(T)	18.90(1.141)	1.35678	25.00	**
63)	Fluoranthene	(T)	20.29(1.225)	1.03690	25.00	**
64)	Pyrene	(M)	20.95(1.265)	1.07687	25.00	**
65)	Terphenyl-d14	(S)	21.73(1.312)	.85445	25.00	
66)	Butylbenzylphthalate	(T)	23.49(1.418)	.53700	25.00	**
67)	Benzo(a)anthracene	(T)	24.74(1.493)	.87252	25.00	**
68)	3,3'-Dichlorobenzidine	(T)	24.87(1.501)	.34484	25.00	**
69)	bis(2-Ethylhexyl)phthalate	(T)	25.46(1.537)	.67605	25.00	**
70)	*Chrysene-d12	(I)	24.76(1.000)	1.00000	50.00	**
71)	Chrysene	(T)	24.83(1.003)	1.07060	25.00	**
72)	Di-n-octylphthalate	(T)	27.37(1.106)	1.29169	25.00	**
73)	Benzo(b)fluoranthene	(T)	27.84(1.124)	.79762	25.00	**
74)	Benzo(k)fluoranthene	(T)	27.92(1.127)	.88394	25.00	**
75)	Benzo(a)pyrene	(T)	28.67(1.158)	.68634	25.00	**
76)	*Perylene-d12	(I)	28.82(1.000)	1.00000	50.00	**
77)	Indeno(1,2,3-cd)pyrene	(T)	31.39(1.089)	.71238	25.00	**
78)	Dibenzo(a,h)anthracene	(T)	31.48(1.092)	.73455	25.00	
79)	Benzo(g,h,i)perylene	(T)	31.94(1.108)	.82426	25.00	**

* Compound is ISTD
** Compound uses different Quant parameters

[illegible] was changed for Hexane

9-01-94 KM + ST

Pesticide / PCB samples from SF940143 were ~~concent~~ clean-up by Florisil cartridge (1g)
2 ml of each samples was eluted by Florisil cartridge and wash by 8 ml of hexane, additional 2 ml of hexane was
All clean up samples were concentrated to 2 ml under nitrogen and 1 ml was placed in GC vial.

9-15-94 KM + ST

Extraction monthly LCS + PE samples

A B/N	pH	VOL
1- MB 9.15.94	<2	1L
2- LCS	<2	1L
3- LCS DUP	<2	1L
4- PE PT574	<2	1L

All samples were spiked by 0.75 ml of surrogate
LCS and LCS DUP were spiked by 0.75 ml of spiking solution.
PE was spiked by 1 ml of concentrate.

P/P	pH	VOL
5- MB 9.15.94	5	1L
6- LCS	5	1L
7- LCS DUP	5	1L
8- PE PR713	5	1L

All samples were spiked by 0.5 ml of surrogates (TCMX & DCLR).
LCS and LCS DUP were spiked by 1 ml of pesticide matrix spike.
PE was spiked by 1 ml of concentrate.

9-16-94 ST.
ABN samples were concentrate to 1 ml
P/P samples - solvent exchanged to hexane and concentrate to 5 ml (exception LCS & LCS DUP to 10 ml)

9-16-94 KM+ST
Extraction ABN samples SF 940149

	pH	VOL	
1- MB 91694	<2	1L	All samples were spiked by 0.75 ml of surrogate
~~2-94ZF~~			
2-94ZF62RG1	<2	1L	
3-94ZF62S62	<2	1L	
4-94ZF62S63	<2	1L	
5-94ZF62S65	<2	1L	

Extraction P/P samples SF 940149

	pH	VOL	
6- MB 91694	5	1L	~~0.5 ml~~ KM
[illegible]	5	1L	

cleanup and concentrated to a mL
(extraction date 9/15/94).

9-21-94

ABN samples extracted 9-20-94 were concentrated to 1 ml under nitrogen and transferred to 1 ml GC vials.

1 ml spiking sol.

9/23/94 RJS

extracted PAH MDL study. 8 spikes and one method blank. The spikes were spiked with 25 ul of intermediate standard. The Blanks ~~were~~ was spiked with 25 ul of surrogate solution. each sample consisted of 1000 ml of BCJ reagent water that was extracted three times with 60 ml of $MeCl_2$. The 3 extracts were combined and stored in the refrigerator over the weekend.

KM + RS

9/23/94 BNA extraction SF 940152 sample no:

1- MB 923941	L	PH<2	94ZB14 - KM
2 - R07	1 L	PH<2	94ZB19 -
3 - S01	1 L	PH<2	
4 - S02	1 L	PH<2	
5 - S03	1 L	PH<2	
6 - S05	1 L	PH<2	
7 - S08	1 L	PH<2	
8 - S06	1 L	PH<2	

0.75 ml spiking solution of surrogate

All samples were spiked by 0.75 ml of surrogate.

9-25-94 KM + ZR

Pesticide / PCB extraction SF 940152

1- MB 92594	pH = 5	1L
2- 94ZB19R07	pH = 5	1L
3- 94ZB19S01	pH = 7	1L
4- 94ZB19S02	pH = 7	1L
5- 94ZB19S03	pH = 6.5	1L
6- 94ZB19S05	pH = 7	1L
7- 94ZB19S06	pH = 7	1L
8- 94ZB19S08	pH = 6.5	1L

All samples were spiked by 0.5 ml of surrogates.

9-25-94 KM

ABN samples from SF 940152 were concentrated and transferred to 1 ml vials. All extracts except of MB and S03 were yellowish. S03 extract was blue.

9-26-94 KM

Pesticide samples from SF 940152 were concentrated to 5 ml with solvent exchange to hexane and 2 ml of each sample and method blank were transferred to Florisil cartridge and concentrated under nitrogen.

9-30-94 KM + PS

ABN extraction SF 940157

1- MB 93094	pH <2	1L	
2- 942615R03	pH <2	1L	
3- 942615S01	pH <2	1L	sample yellowish
4- 942615D01	pH <2	1L	yellowish
5- 942615S02	pH <2	1L	yellowish
6- LCS	pH <2	1L	
7- LCS DUP	pH <2	1L	
8- PE	pH <2	1L	

All samples were spiked by 0.75 ml of surrogate LCS and LCS DUP were prepared by using 1L of reagent water and spiked by 0.75 ml of spiking solution each.
PE sample were prepared using 1L reagent water and spiked by 1 ml of concentrate.

~~1-10-94~~ KM 10-01-94 KM

All ABN samples were concentrated to 1 ml and extracts were transferred to 1 ml GC vials.

~~1000-94~~ KM 10-01-94 KM

Pesticide PCB extraction SF 940159

1-MB100194 pH = 5 1L

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0929ICCK

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 0929ICCK

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0056

Level: (low/med) LOW Date Received: --/--/--

% Moisture: not dec. ---- dec. ---- Date Extracted: --/--/--

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	24	
111-44-4	bis(2-Chloroethyl)ether	21	
95-57-8	2-Chlorophenol	26	
95-48-7	2-Methylphenol	25	
108-60-1	bis(2-Chloroisopropyl)ether	25	
106-44-5	4-Methylphenol	24	
621-64-7	N-Nitroso-di-n-propylamine	24	
67-72-1	Hexachloroethane	24	
98-95-3	Nitrobenzene	26	
78-59-1	Isophorone	25	
88-75-5	2-Nitrophenol	26	
105-67-9	2,4-Dimethylphenol	25	
111-91-1	bis(2-Chloroethoxy)methane	27	
120-83-2	2,4-Dichlorophenol	28	
120-82-1	1,2,4-Trichlorobenzene	26	
91-20-3	Naphthalene	26	
106-47-8	4-Chloroaniline	26	
87-68-3	Hexachlorobutadiene	26	
59-50-7	4-Chloro-3-methylphenol	26	
91-57-6	2-Methylnaphthalene	26	
77-47-4	Hexachlorocyclopentadiene	23	
88-06-2	2,4,6-Trichlorophenol	25	
95-95-4	2,4,5-Trichlorophenol	26	
91-58-7	2-Chloronaphthalene	24	
88-74-4	2-Nitroaniline	25	
131-11-3	Dimethylphthalate	24	
208-96-8	Acenaphthylene	25	
606-20-2	2,6-Dinitrotoluene	26	

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0929ICCK

Lab Name: REGION V Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: SEP.LCS SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 0929ICCK

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0056

Level: (low/med) LOW Date Received: --/--/--

% Moisture: not dec. ---- dec. ---- Date Extracted: --/--/--

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 09/29/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	25	
83-32-9	Acenaphthene	27	
51-28-5	2,4-Dinitrophenol	23	
100-02-7	4-Nitrophenol	30	
132-64-9	Dibenzofuran	26	
121-14-2	2,4-Dinitrotoluene	26	
84-66-2	Diethylphthalate	26	
7005-72-3	4-Chlorophenyl-phenylether	25	
86-73-7	Fluorene	26	
100-01-6	4-Nitroaniline	31	
534-52-1	4,6-Dinitro-2-methylphenol	31	
86-30-6	N-Nitrosodiphenylamine	28	
101-55-3	4-Bromophenyl-phenylether	26	
118-74-1	Hexachlorobenzene	25	
87-86-5	Pentachlorophenol	28	
85-01-8	Phenanthrene	26	
120-12-7	Anthracene	25	
84-74-2	Di-n-butylphthalate	26	
206-44-0	Fluoranthene	26	
129-00-0	Pyrene	26	
85-68-7	Butylbenzylphthalate	26	
91-94-1	3,3'-Dichlorobenzidine	24	
56-55-3	Benzo(a)anthracene	26	
218-01-9	Chrysene	25	
117-81-7	bis(2-Ethylhexyl)phthalate	25	
117-84-0	Di-n-octylphthalate	25	
205-99-2	Benzo(b)fluoranthene	25	
207-08-9	Benzo(k)fluoranthene	26	
50-32-8	Benzo(a)pyrene	24	
193-39-5	Indeno(1,2,3-cd)pyrene	28	
53-70-3	Dibenzo(a,h)anthracene	28	
191-24-2	Benzo(g,h,i)perylene	31	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941003 10:04
Output File: ^F0056::QT Injected at: 940929 13:18
Data File: >F0056::D2 Dilution Factor: 1.00000
Name: 0929ICCK Instrument ID: 5985
Misc: 09-29-1994 HP5987 05-93 STD 25 BTL# 7

ID File: IDF005::D6
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941003 10:02 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.19	152.0	66036	50.00	NG/UL	97
2)	2-Fluorophenol	2.40	112.0	24142	25.18	NG/UL	86
3)	Phenol-d5	3.63	99.0	22187M	26.89	NG/UL	
4)	Phenol	3.64	94.0	20340M	23.61	NG/UL	
5)	Aniline	3.66	93.0	16976M	18.59	NG/UL	
6)	bis(2-Chloroethyl)ether	3.77	93.0	15733	21.25	NG/UL	90
7)	2-Chlorophenol	3.83	128.0	34006	25.68	NG/UL	96
8)	1,3-Dichlorobenzene	4.07	146.0	46455	25.07	NG/UL	98
9)	1,4-Dichlorobenzene	4.22	146.0	48738	23.71	NG/UL	97
10)	Benzyl alcohol	4.52	108.0	12790	25.75	NG/UL	88
11)	1,2-Dichlorobenzene	4.51	146.0	44307	23.43	NG/UL	95
12)	2-Methylphenol	4.79	108.0	18309	25.42	NG/UL	97
13)	bis(2-Chloroisopropyl)ether	4.82	121.0	10332M	24.74	NG/UL	89
14)	4-Methylphenol	5.15	108.0	17437	23.51	NG/UL	93
15)	N-Nitroso-di-n-propylamine	5.11	70.0	12536	24.21	NG/UL	33
16)	Hexachloroethane	5.18	201.0	22394	23.88	NG/UL	95
17)	Nitrobenzene-d5	5.35	82.0	30744	21.97	NG/UL	99
18)	Nitrobenzene	5.39	123.0	15516	25.53	NG/UL	96
19)	Isophorone	6.00	82.0	41502	24.58	NG/UL	55
20)	2-Nitrophenol	6.14	139.0	19602M	26.25	NG/UL	57
21)	2,4-Dimethylphenol	6.41	122.0	19317	25.16	NG/UL	78
22)	Benzoic acid	6.96	105.0	19483M	27.09	NG/UL	89
23)	bis(2-Chloroethoxy)methane	6.64	93.0	21043	27.07	NG/UL	92
24)	2,4-Dichlorophenol	6.80	162.0	37041	28.05	NG/UL	94
25)	1,2,4-Trichlorobenzene	6.96	180.0	44170	25.98	NG/UL	89
26)	*Naphthalene-d8	7.07	136.0	184605	50.00	NG/UL	85
27)	Naphthalene	7.13	128.0	83548	25.50	NG/UL	82
28)	4-Chloroaniline	7.37	127.0	29614	25.77	NG/UL	86
29)	Hexachlorobutadiene	7.55	225.0	38165	25.95	NG/UL	88
30)	4-Chloro-3-methylphenol	8.93	107.0	30369	25.75	NG/UL	92
31)	2-Methylnaphthalene	9.08	142.0	64362	25.51	NG/UL	79
32)	Hexachlorocyclopentadiene	9.57	237.0	27120	23.32	NG/UL	98
33)	2,4,6-Trichlorophenol	10.00	196.0	23916	25.04	NG/UL	86
34)	2,4,5-Trichlorophenol	10.11	196.0	27664	26.43	NG/UL	87
35)	2-Chloronaphthalene	10.48	162.0	62253	24.20	NG/UL	83
36)	2-Fluorobiphenyl	10.27	172.0	82896	24.35	NG/UL	94
37)	2-Nitroaniline	10.93	138.0	18309	25.24	NG/UL	93
38)	Dimethylphthalate	11.66	163.0	93735	24.09	NG/UL	98
39)	Acenaphthylene	11.69	152.0	97862	25.23	NG/UL	96
40)	*Acenaphthene-d10	12.16	164.0	107421	50.00	NG/UL	92

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1006ICCK

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 1006ICCK

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0114

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	26	
111-44-4	bis(2-Chloroethyl)ether	23	
95-57-8	2-Chlorophenol	25	
95-48-7	2-Methylphenol	28	
108-60-1	bis(2-Chloroisopropyl)ether	27	
106-44-5	4-Methylphenol	23	
621-64-7	N-Nitroso-di-n-propylamine	31	
67-72-1	Hexachloroethane	25	
98-95-3	Nitrobenzene	24	
78-59-1	Isophorone	25	
88-75-5	2-Nitrophenol	27	
105-67-9	2,4-Dimethylphenol	21	
111-91-1	bis(2-Chloroethoxy)methane	24	
120-83-2	2,4-Dichlorophenol	26	
120-82-1	1,2,4-Trichlorobenzene	26	
91-20-3	Naphthalene	24	
106-47-8	4-Chloroaniline	25	
87-68-3	Hexachlorobutadiene	24	
59-50-7	4-Chloro-3-methylphenol	25	
91-57-6	2-Methylnaphthalene	23	
77-47-4	Hexachlorocyclopentadiene	23	
88-06-2	2,4,6-Trichlorophenol	26	
95-95-4	2,4,5-Trichlorophenol	26	
91-58-7	2-Chloronaphthalene	24	
88-74-4	2-Nitroaniline	27	
131-11-3	Dimethylphthalate	25	
208-96-8	Acenaphthylene	23	
606-20-2	2,6-Dinitrotoluene	27	

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1006ICCK

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 1006ICCK

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0114

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	24	
83-32-9	Acenaphthene	26	
51-28-5	2,4-Dinitrophenol	22	
100-02-7	4-Nitrophenol	27	
132-64-9	Dibenzofuran	25	
121-14-2	2,4-Dinitrotoluene	28	
84-66-2	Diethylphthalate	24	
7005-72-3	4-Chlorophenyl-phenylether	24	
86-73-7	Fluorene	25	
100-01-6	4-Nitroaniline	23	
534-52-1	4,6-Dinitro-2-methylphenol	27	
86-30-6	N-Nitrosodiphenylamine	25	
101-55-3	4-Bromophenyl-phenylether	25	
118-74-1	Hexachlorobenzene	26	
87-86-5	Pentachlorophenol	27	
85-01-8	Phenanthrene	26	
120-12-7	Anthracene	25	
84-74-2	Di-n-butylphthalate	27	
206-44-0	Fluoranthene	27	
129-00-0	Pyrene	26	
85-68-7	Butylbenzylphthalate	28	
91-94-1	3,3'-Dichlorobenzidine	27	
56-55-3	Benzo(a)anthracene	27	
218-01-9	Chrysene	24	
117-81-7	bis(2-Ethylhexyl)phthalate	29	
117-84-0	Di-n-octylphthalate	25	
205-99-2	Benzo(b)fluoranthene	27	
207-08-9	Benzo(k)fluoranthene	24	
50-32-8	Benzo(a)pyrene	26	
193-39-5	Indeno(1,2,3-cd)pyrene	31	
53-70-3	Dibenzo(a,h)anthracene	30	
191-24-2	Benzo(g,h,i)perylene	28	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0114::QT
Data File: >F0114::D3
Name: 1006ICCK
Misc: 10-06-1994 HP5987

Quant Rev: 7
Quant Time: 941007 12:44
Injected at: 941006 20:43
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 7

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.09	152.0	65263	50.00	NG/UL	92
2)	2-Fluorophenol	2.33	112.0	17013	24.30	NG/UL	69
3)	Phenol-d5	3.53	99.0	14530	25.91	NG/UL	82
4)	Phenol	3.56	94.0	13860M	25.56	NG/UL	
5)	Aniline	3.56	93.0	11993M	18.84	NG/UL	
6)	bis(2-Chloroethyl)ether	3.69	93.0	11697M	22.72	NG/UL	53
7)	2-Chlorophenol	3.73	128.0	26264	24.54	NG/UL	79
8)	1,3-Dichlorobenzene	3.99	146.0	41765	25.74	NG/UL	94
9)	1,4-Dichlorobenzene	4.13	146.0	44688	23.38	NG/UL	79
10)	Benzyl alcohol	4.42	108.0	10109	29.18	NG/UL	88
11)	1,2-Dichlorobenzene	4.41	146.0	41221	24.27	NG/UL	94
12)	2-Methylphenol	4.68	108.0	13718	27.62	NG/UL	84
13)	bis(2-Chloroisopropyl)ether	4.72	121.0	8408M	27.48	NG/UL	95
14)	4-Methylphenol	5.05	108.0	13095	22.65	NG/UL	94
15)	N-Nitroso-di-n-propylamine	5.01	70.0	11430	30.86	NG/UL	92
16)	Hexachloroethane	5.08	201.0	27093	25.21	NG/UL	96
17)	Nitrobenzene-d5	5.25	82.0	26591	25.48	NG/UL	93
18)	Nitrobenzene	5.29	123.0	11622	24.17	NG/UL	94
19)	Isophorone	5.89	82.0	28088	24.74	NG/UL	38
20)	2-Nitrophenol	6.04	139.0	15108M	26.55	NG/UL	66
21)	2,4-Dimethylphenol	6.29	122.0	14227	21.10	NG/UL	73
22)	Benzoic acid	6.84	105.0	13380	25.84	NG/UL	84
23)	bis(2-Chloroethoxy)methane	6.54	93.0	12192	24.41	NG/UL	84
24)	2,4-Dichlorophenol	6.68	162.0	31917	25.61	NG/UL	91
25)	1,2,4-Trichlorobenzene	6.84	180.0	43158	25.59	NG/UL	95
26)	*Naphthalene-d8	6.95	136.0	173400	50.00	NG/UL	73
27)	Naphthalene	7.01	128.0	69972	24.28	NG/UL	78
28)	4-Chloroaniline	7.27	127.0	22644	25.32	NG/UL	98
29)	Hexachlorobutadiene	7.42	225.0	43900	24.06	NG/UL	90
30)	4-Chloro-3-methylphenol	8.81	107.0	28082	24.91	NG/UL	86
31)	2-Methylnaphthalene	8.95	142.0	54789	23.09	NG/UL	79
32)	Hexachlorocyclopentadiene	9.44	237.0	33561	23.10	NG/UL	96
33)	2,4,6-Trichlorophenol	9.87	196.0	26413	26.06	NG/UL	86
34)	2,4,5-Trichlorophenol	9.97	196.0	28132	26.48	NG/UL	87
35)	2-Chloronaphthalene	10.34	162.0	62378	23.86	NG/UL	76
36)	2-Fluorobiphenyl	10.14	172.0	84626	23.03	NG/UL	93
37)	2-Nitroaniline	10.78	138.0	17254	27.07	NG/UL	97
38)	Dimethylphthalate	11.53	163.0	101870	24.90	NG/UL	97
39)	Acenaphthylene	11.54	152.0	89252	22.52	NG/UL	99
40)	*Acenaphthene-d10	12.01	164.0	114761	50.00	NG/UL	90

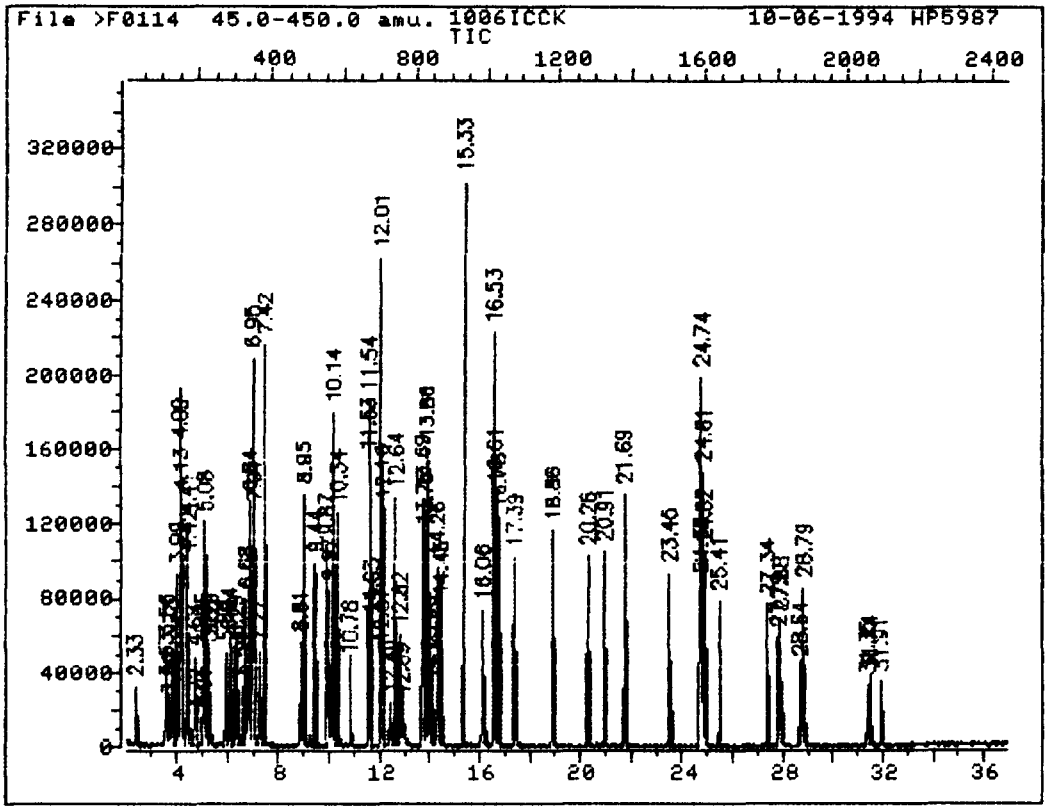
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 941007 12:44
Output File: ^F0114::QT Injected at: 941006 20:43
Data File: >F0114::D3 Dilution Factor: 1.00000
Name: 1006ICCK Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 7

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	12.07	138.0	13632	24.10	NG/UL	87
42)	Acenaphthene	12.10	153.0	64549	26.02	NG/UL	94
43)	2,4-Dinitrophenol	12.40	184.0	7556M	22.44	NG/UL	
44)	4-Nitrophenol	12.89	109.0	30554M	26.98	NG/UL	
45)	Dibenzofuran	12.64	168.0	85913M	24.97	NG/UL	87
46)	2,6-Dinitrotoluene	11.63	165.0	19672	27.13	NG/UL	55
47)	2,4-Dinitrotoluene	12.82	165.0	30955	28.18	NG/UL	94
48)	Diethylphthalate	13.75	149.0	109575	24.25	NG/UL	89
49)	4-Chlorophenyl-phenylether	13.86	204.0	42387	23.76	NG/UL	98
50)	Fluorene	13.69	166.0	68855	24.84	NG/UL	93
51)	4-Nitroaniline	13.96	138.0	10148M	23.44	NG/UL	
52)	4,6-Dinitro-2-methylphenol	14.03	198.0	12396M	26.83	NG/UL	
53)	N-Nitrosodiphenylamine	14.26	169.0	49004	25.19	NG/UL	82
54)	2,4,6-Tribromophenol	14.43	329.9	20049	29.57	NG/UL	94
55)	4-Bromophenyl-phenylether	15.33	248.0	32482	24.68	NG/UL	89
56)	Hexachlorobenzene	15.33	283.9	38717	25.90	NG/UL	94
57)	Pentachlorophenol	16.06	265.8	15549	26.62	NG/UL	90
58)	*Phenanthrene-d10	16.53	188.0	174927	50.00	NG/UL	99
59)	Phenanthrene	16.61	178.0	95234	25.99	NG/UL	93
60)	Anthracene	16.75	178.0	94110	25.44	NG/UL	98
61)	Carbazole	17.39	167.0	76272	25.61	NG/UL	81
62)	Di-n-butylphthalate	18.86	149.0	130530	27.50	NG/UL	97
63)	Fluoranthene	20.26	202.0	98944	27.28	NG/UL	79
64)	Pyrene	20.91	202.0	98693	26.20	NG/UL	84
65)	Terphenyl-d14	21.69	244.0	85766	28.69	NG/UL	95
66)	Butylbenzylphthalate	23.45	149.0	52080	27.72	NG/UL	80
67)	Benzo(a)anthracene	24.69	228.0	81623M	26.74	NG/UL	
68)	3,3'-Dichlorobenzidine	24.82	252.0	32394	26.85	NG/UL	94
69)	bis(2-Ethylhexyl)phthalate	25.41	149.0	68535	28.98	NG/UL	90
70)	*Chrysene-d12	24.74	240.0	158037	50.00	NG/UL	99
71)	Chrysene	24.81	228.0	81609	24.12	NG/UL	86
72)	Di-n-octylphthalate	27.34	149.0	100070	24.51	NG/UL	85
73)	Benzo(b)fluoranthene	27.79	252.0	67662	26.84	NG/UL	85
74)	Benzo(k)fluoranthene	27.88	252.0	67722	24.24	NG/UL	87
75)	Benzo(a)pyrene	28.64	252.0	57376M	26.45	NG/UL	
76)	*Perylene-d12	28.79	264.0	105382	50.00	NG/UL	96
77)	Indeno(1,2,3-cd)pyrene	31.35	276.0	46275	30.82	NG/UL	95
78)	Dibenzo(a,h)anthracene	31.44	278.0	46779	30.22	NG/UL	94
79)	Benzo(g,h,i)perylene	31.91	276.0	48524	27.93	NG/UL	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F0114::D3 Quant Output File: ^F0114::QT
Name: 1006ICCK Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 7

Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941007 12:44
Injected at: 941006 20:43

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S03RE

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S03R

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0115

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [X] NO [ ]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S03RE

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S03R

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0115

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

94ZB19S03RE

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S03RE

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >F0115

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec.---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

GPC Cleanup: (Y/N) Y pH: NA Dilution Factor: 1.00000

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	928949	2-Hexen-1-ol, (Z)- (8CI9CI)	2.50	18.	J
2.					
3.					
4.					
5.					
6.					
7.					
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10.					
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12.					
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29.					
30.					

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0115::QT
Data File: >F0115::D3
Name: 94ZB19S03RE
Misc: 10-06-1994 HP5987

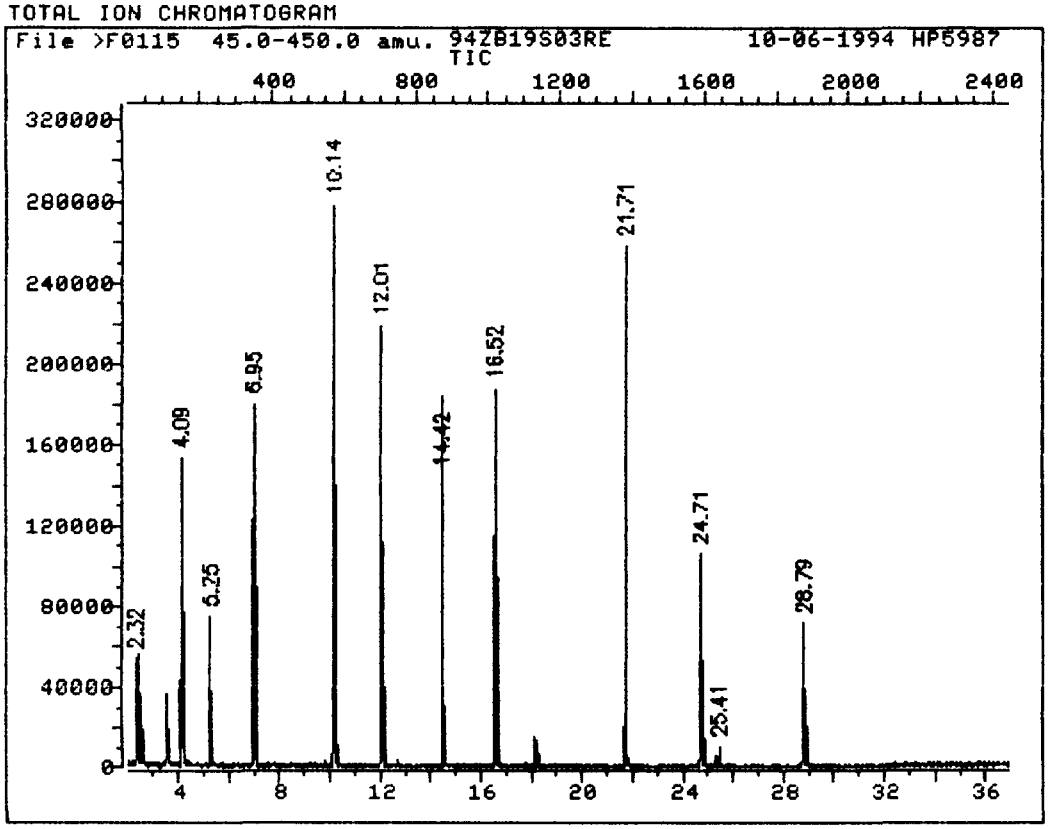
Quant Rev: 7
Quant Time: 941007 12:48
Injected at: 941006 21:27
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 8

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.09	152.0	47629	50.00	NG/UL	90
2)	2-Fluorophenol	2.32	112.0	27079	53.01	NG/UL	48
17)	Nitrobenzene-d5	5.25	82.0	45719	60.03	NG/UL	89
26)	*Naphthalene-d8	6.95	136.0	128671	50.00	NG/UL	67
36)	2-Fluorobiphenyl	10.14	172.0	146909	53.88	NG/UL	94
40)	*Acenaphthene-d10	12.01	164.0	82601	50.00	NG/UL	81
54)	2,4,6-Tribromophenol	14.42	329.9	40786	83.59	NG/UL	97
58)	*Phenanthrene-d10	16.52	188.0	124642	50.00	NG/UL	99
65)	Terphenyl-d14	21.71	244.0	151990	71.36	NG/UL	90
69)	bis(2-Ethylhexyl)phthalate	25.41	149.0	9559	5.67	NG/UL	94
70)	*Chrysene-d12	24.71	240.0	90252	50.00	NG/UL	91
76)	*Perylene-d12	28.79	264.0	84760	50.00	NG/UL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

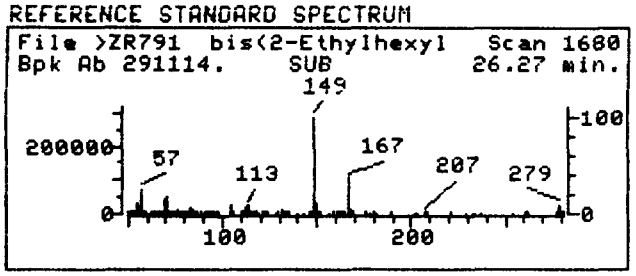


Data File: >F0115::D3 Quant Output File: ^F0115::QT
Name: 94ZB19S03RE Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 8

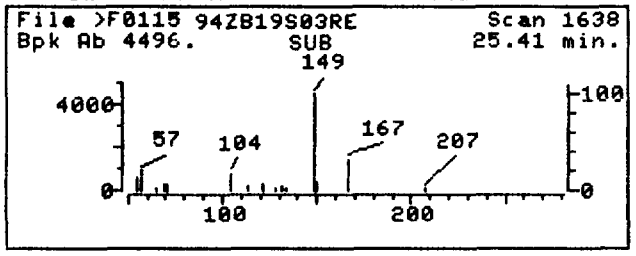
Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941007 12:48
Injected at: 941006 21:27

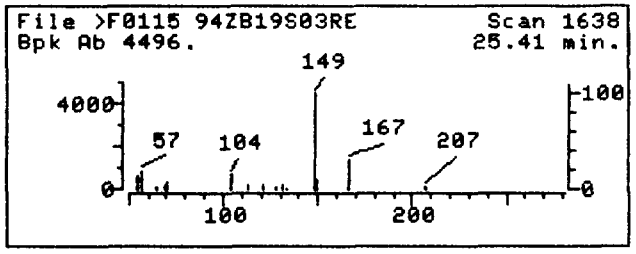
REFERENCE STANDARD SPECTRUM

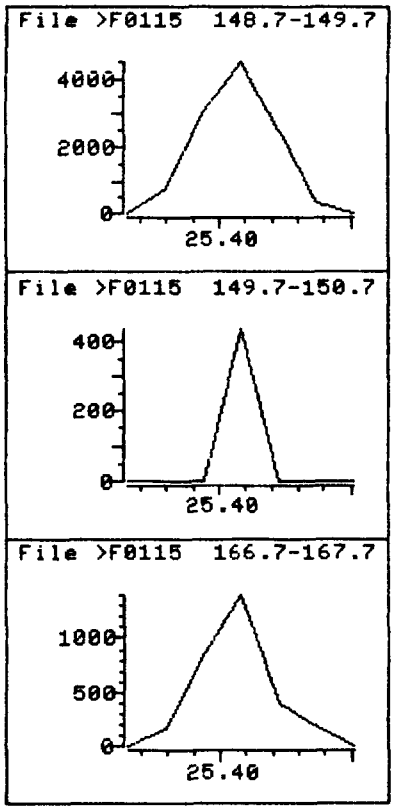


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >F0115::D3
Name: 94ZB19S03RE
Misc: 10-06-1994 HP5987
Quant Time: 941007 12:48
Injected at: 941006 21:27
Last Qcal Time: <none>

Quant Output File: ^F0115::QT
Instrument ID: 5985
BTL# 8
Quant ID File: IDF008::D4
Last Calibration: 941007 12:42

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1638
Retention Time: 25.41 min.
Quant Ion : 149.0
Area : 9559
Concentration : 5.67 NG/UL
q-value : 94

MS data file header from : >F0115::D3

Sample: 94ZB19S03RE Operator: ZIYAD SUPER GRP. 10/06/94 21:27
Misc : 10-06-1994 HP5987 BTL# 8
Sys. #: 1 MS model: 88 SW/HW rev.: LF ALS # : 8 Equip ID: 5985
Method file: TOXIC6 Tuning file: MT5987 No. of extra records: 2
Source temp.: 200 Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	65.	320.	0.	0.	0.
Chromatographic times, min. :	1.0	60.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.2	0.0

>F0115 94ZB19S03RE 10-06-1994 HP5987
45.01 450.0 CLP TIC
Upslope: .2000 Area Reject: 19753. Max Peaks: 4 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IF0115 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.50	31	35	44	55547	136565	126555	100.00	48.751
2	3.53	102	107	114	36071	89357	78050	61.67	30.066
3	12.07	702	704	708	17623	23643	20605	16.28	7.937
4	18.15	1127	1130	1136	15130	37202	34386	27.17	13.246

Sum of corrected areas: 259596.

Summary of Unknowns PBM Library Search and Quantitation

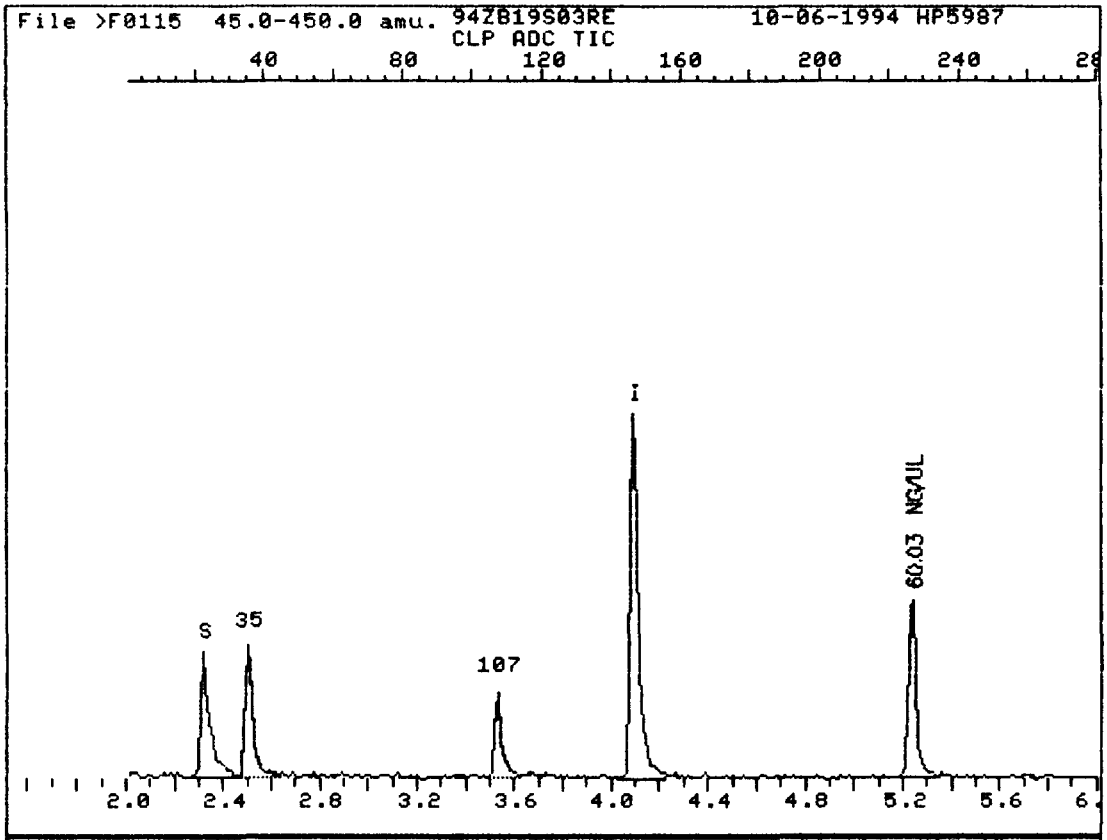
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	349068.	4.09	2.02 - 5.52
2	50.0	367388.	6.95	5.52 - 9.48
3	50.0	496569.	12.01	9.48 - 14.27
4	50.0	431719.	16.52	14.27 - 20.62
5	50.0	276969.	24.71	20.62 - 26.75
6	50.0	197527.	28.79	26.75 - 36.91

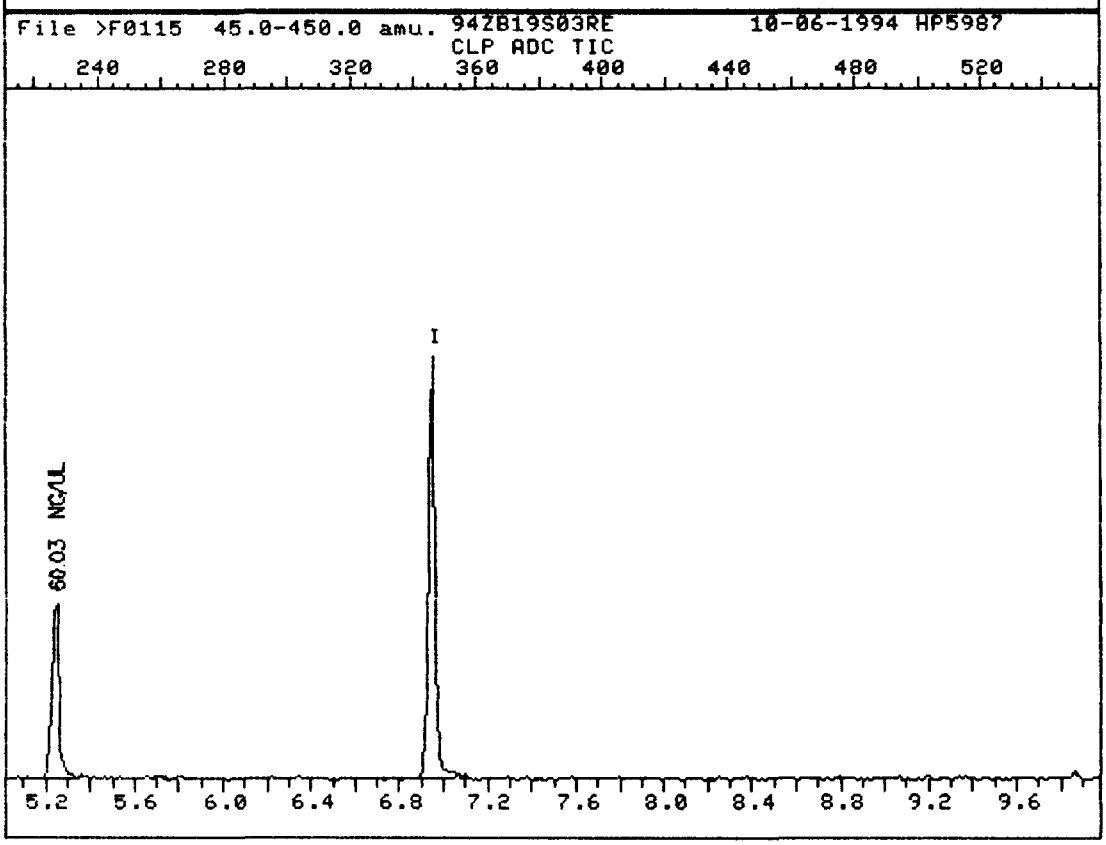
Dilution Factor = 1.00 This sample was 1000.00 g or mL

Correction Factor = 1.00

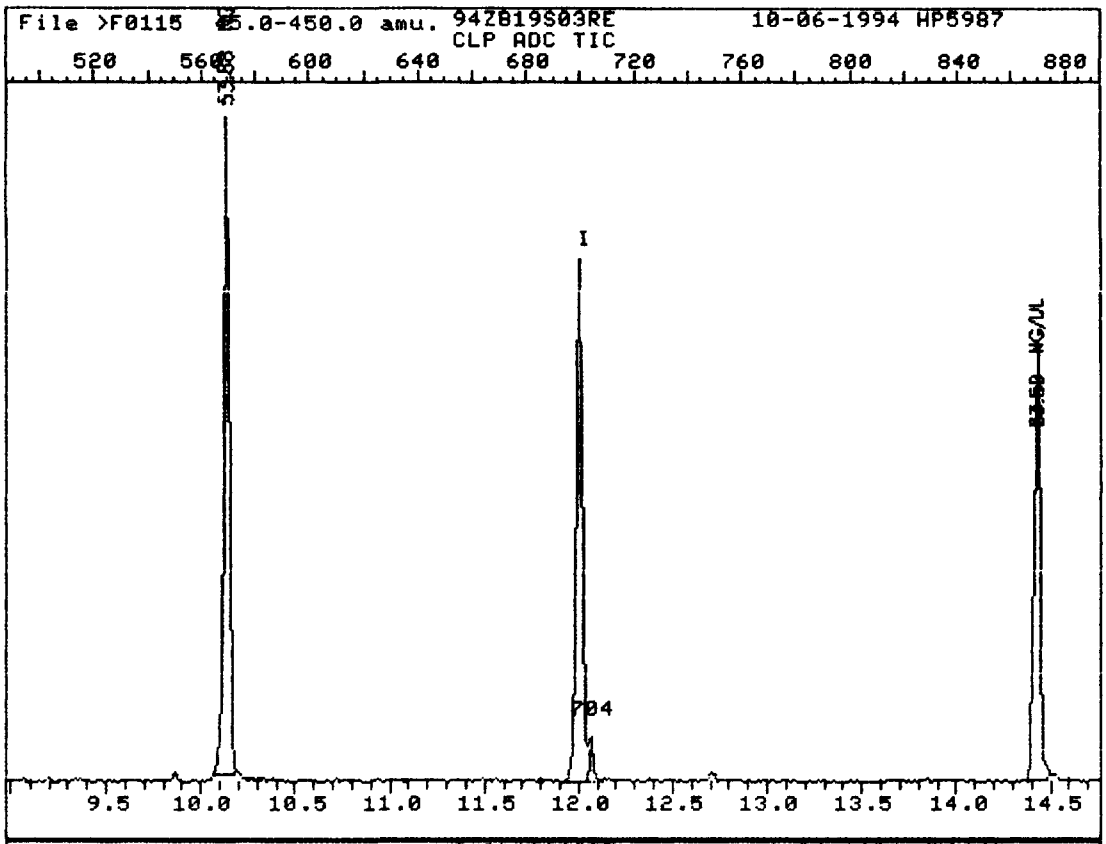
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

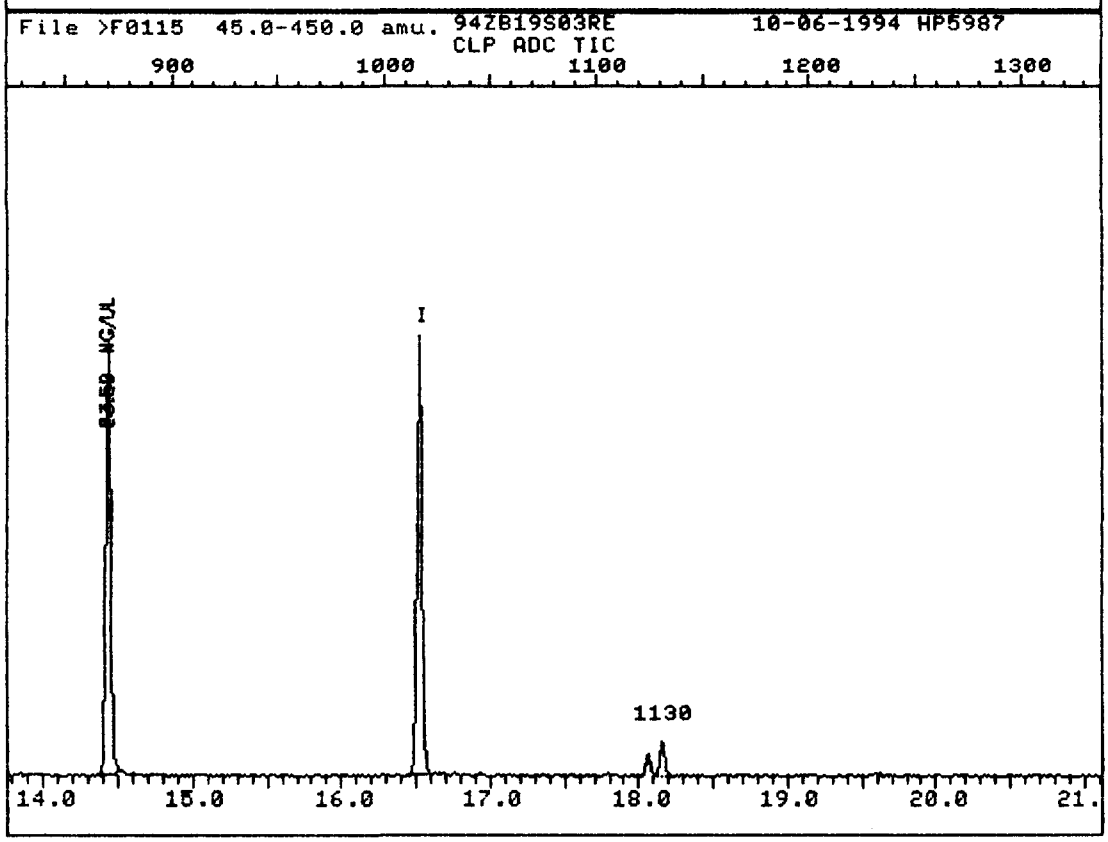
11:13 AM WED., 12 OCT., 1994



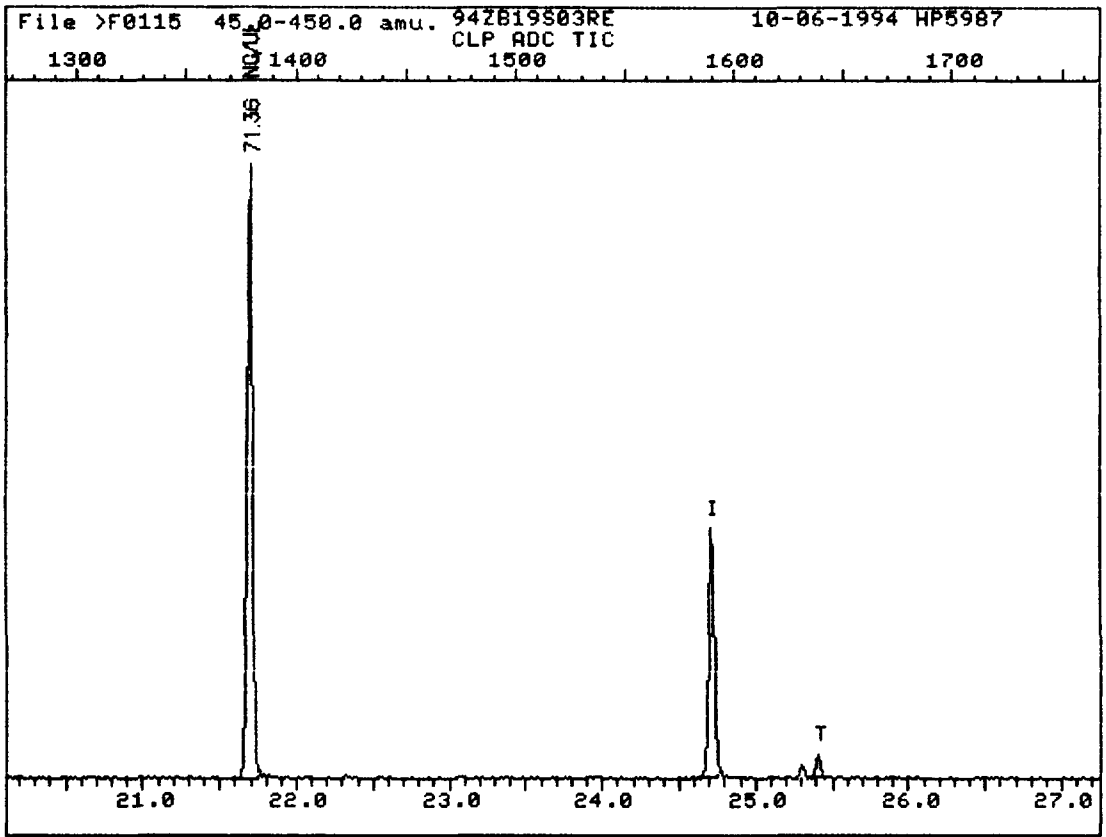


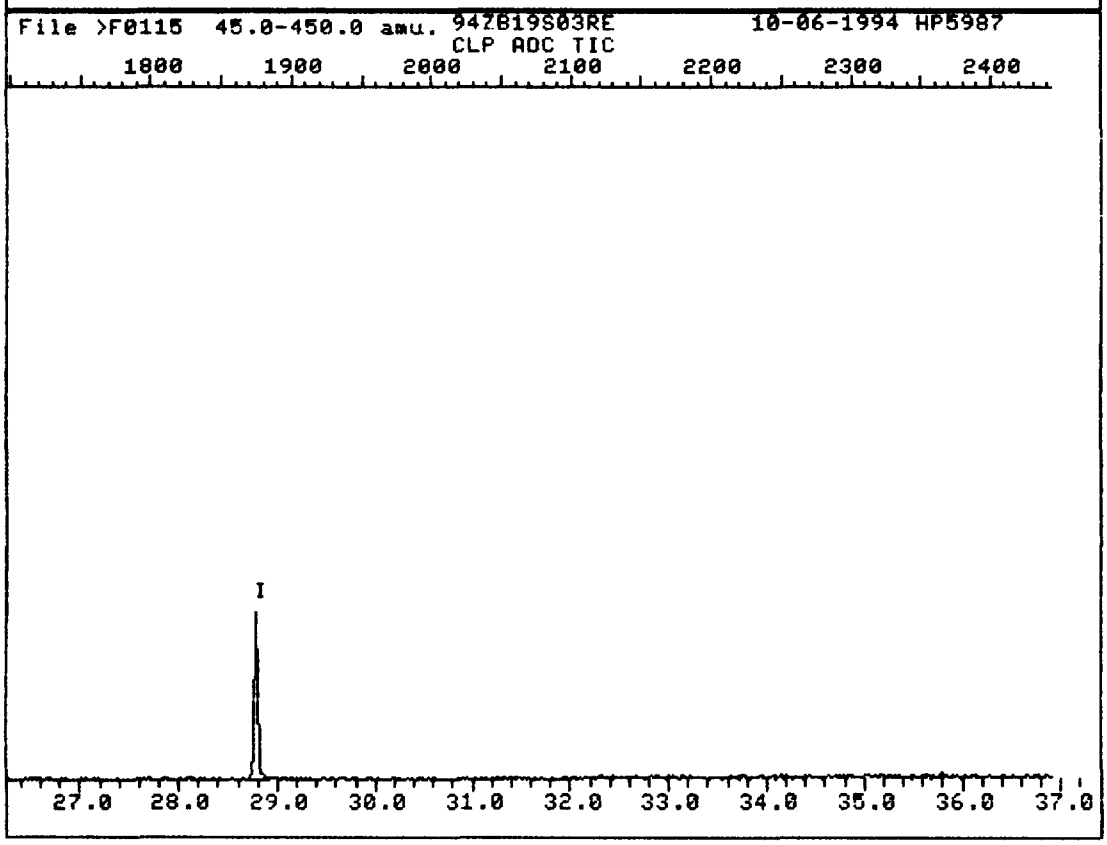
Instrument ID: 5985 Analyzed on: 10/06/94 21:27



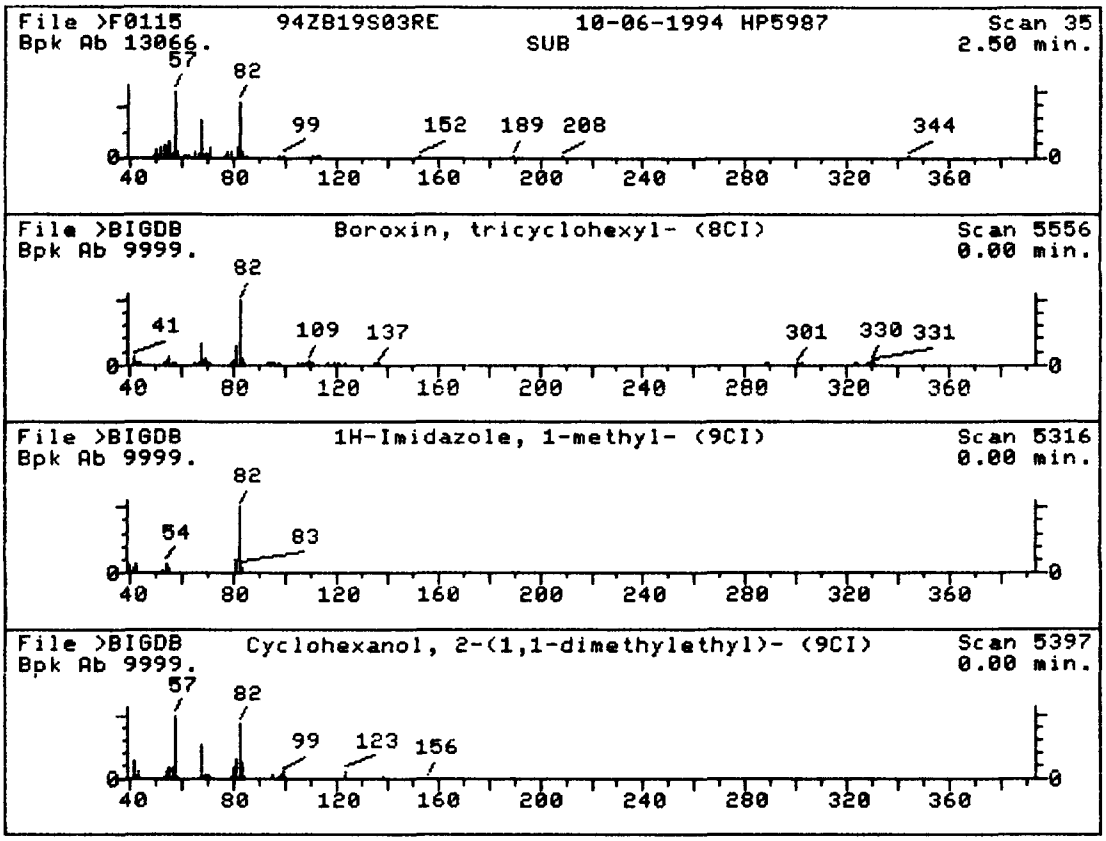


Instrument ID: 5985 Analyzed on: 10/06/94 21:27





Instrument ID: 5985 Analyzed on: 10/06/94 21:27

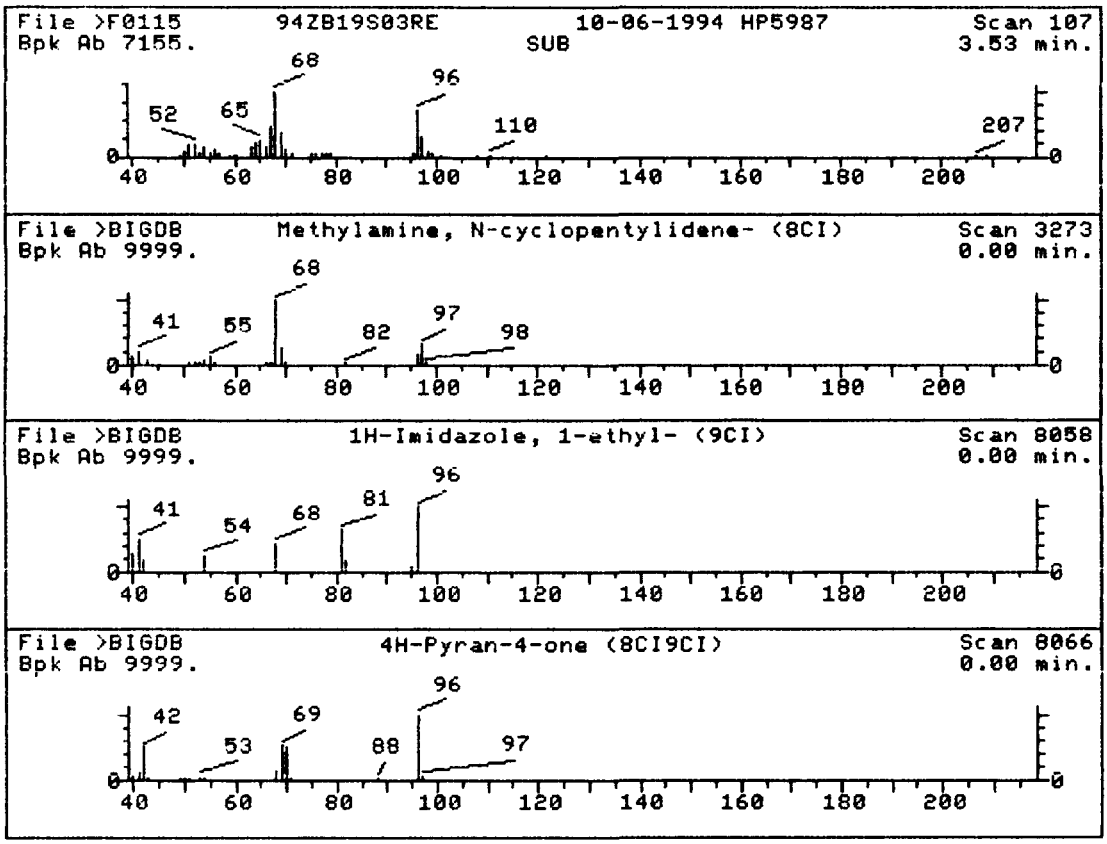


Instrument ID: 5985 Analyzed on: 10/06/94 21:27
Result 1 in PBM results file: LF0115
Retention Time: 2.50 Area: 126555 Tentative Conc: 18.00
The unknown area is 36.26% of the nearest internal standard

1.	Boroxin, tricyclohexyl- (8CI)	330	C18H33B3O3
2.	1H-Imidazole, 1-methyl- (9CI)	82	C4H6N2
3.	Cyclohexanol, 2-(1,1-dimethylethyl)- (9CI)	156	C10H20O
4.	1,6-Octadiene, 2,7-dimethyl- (9CI)	138	C10H18
5.	Hexanoic acid, 3-hexenyl ester, (Z)- (8CI9CI)	198	C12H22O2
6.	3-Hexen-1-ol, propanoate, (Z)- (9CI)	156	C9H16O2

Sample file: >F0115 Spectrum #: 35
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	56	28289863	5556	"BIGDB	73	58	1	0	83	21	22	28
2.	43*	616477	5316	"BIGDB	25	50	2	0	68	21	17	14
3.	43*	13491797	5397	"BIGDB	31	72	2	0	89	21	17	14
4.	42*	40195093	5344	"BIGDB	42	54	3	0	83	21	17	13
5.	41	31501118	5352	"BIGDB	59	49	2	0	83	21	17	12
6.	15	33467742	5333	"BIGDB	33	52	1	0	80	60	3	12



phenol d5
Breakdown
ZR 10-12-94

Instrument ID: 5985 Analyzed on: 10/06/94 21:27
Result 2 in PBM results file: LF0115
Retention Time: 3.53 Area: 78050 Tentative Conc: 11.00
The unknown area is 22.36% of the nearest internal standard

1. Methylamine, N-cyclopentylidene- (8CI)	97	C6H11N
2. 1H-Imidazole, 1-ethyl- (9CI)	96	C5H8N2
3. 4H-Pyran-4-one (8CI9CI)	96	C5H4O2
4. 1H-1,2,4-Triazole, 3-ethyl- (9CI)	97	C4H7N3
5. 1H-Pyrazole, 1,5-dimethyl- (9CI)	96	C5H8N2

Sample file: >F0115 Spectrum #: 107
Search speed: 1 Tilting option: S No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	10599834	3273	"BIGDB	31	47	2	0	95	56	3	15
2.	11*	7098079	8058	"BIGDB	22	44	2	0	60	63	2	13
3.	11*	108974	8066	"BIGDB	26	62	2	0	68	64	2	14
4.	11*	7411167	8086	"BIGDB	23	62	2	0	56	62	2	13
5.	11*	694315	8072	"BIGDB	25	68	2	0	73	64	2	14

Instrument ID: 5985 Analyzed on: 10/06/94 21:27

Retention Time: 12.07 Area: 20605 Tentative Conc: 2.00

The unknown area is 4.15% of the nearest internal standard

This peak is less than 10% of the nearest internal standard.

No library search has been performed on this peak.

Instrument ID: 5985 Analyzed on: 10/06/94 21:27

Retention Time: 18.15 Area: 34386 Tentative Conc: 4.00

The unknown area is 7.96% of the nearest internal standard

This peak is less than 10% of the nearest internal standard.

No library search has been performed on this peak.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S05RE

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S05R

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0116

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	5	U
111-44-4	bis(2-Chloroethyl)ether	5	U
95-57-8	2-Chlorophenol	5	U
95-48-7	2-Methylphenol	5	U
108-60-1	bis(2-Chloroisopropyl)ether	5	U
106-44-5	4-Methylphenol	5	U
621-64-7	N-Nitroso-di-n-propylamine	5	U
67-72-1	Hexachloroethane	5	U
98-95-3	Nitrobenzene	5	U
78-59-1	Isophorone	5	U
88-75-5	2-Nitrophenol	5	U
105-67-9	2,4-Dimethylphenol	5	U
111-91-1	bis(2-Chloroethoxy)methane	5	U
120-83-2	2,4-Dichlorophenol	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
91-20-3	Naphthalene	5	U
106-47-8	4-Chloroaniline	5	U
87-68-3	Hexachlorobutadiene	5	U
59-50-7	4-Chloro-3-methylphenol	5	U
91-57-6	2-Methylnaphthalene	5	U
77-47-4	Hexachlorocyclopentadiene	5	U
88-06-2	2,4,6-Trichlorophenol	5	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	5	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	5	U

TENTATIVELY IDENTIFIED COMPOUNDS (TICs): YES [ ] NO [X]

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

94ZB19S05RE

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

Lab Code: 5CRL Case No.: 940152 SAS No.: ------- SDG No.: -------

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19S05R

Sample wt/vol: 1000 (g/ml) mL Lab File ID: >F0116

Level: (low/med) LOW Date Received: 09/22/94

% Moisture: not dec. ---- dec. ---- Date Extracted: 09/23/94

Extraction: (Sepf/Cont/Sonc) CONT Date Analyzed: 10/06/94

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

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

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water; J = Estimated; D=Diluted Sample; X = Result rejected for failing mass spectral confirmation; E = Concentration exceeded calibration range; B_ = Contaminant found in laboratory method blank.

QUANT REPORT

Operator ID: ZIYAD
Output File: ^F0116::QT
Data File: >F0116::D3
Name: 94ZB19S05RE
Misc: 10-06-1994 HP5987

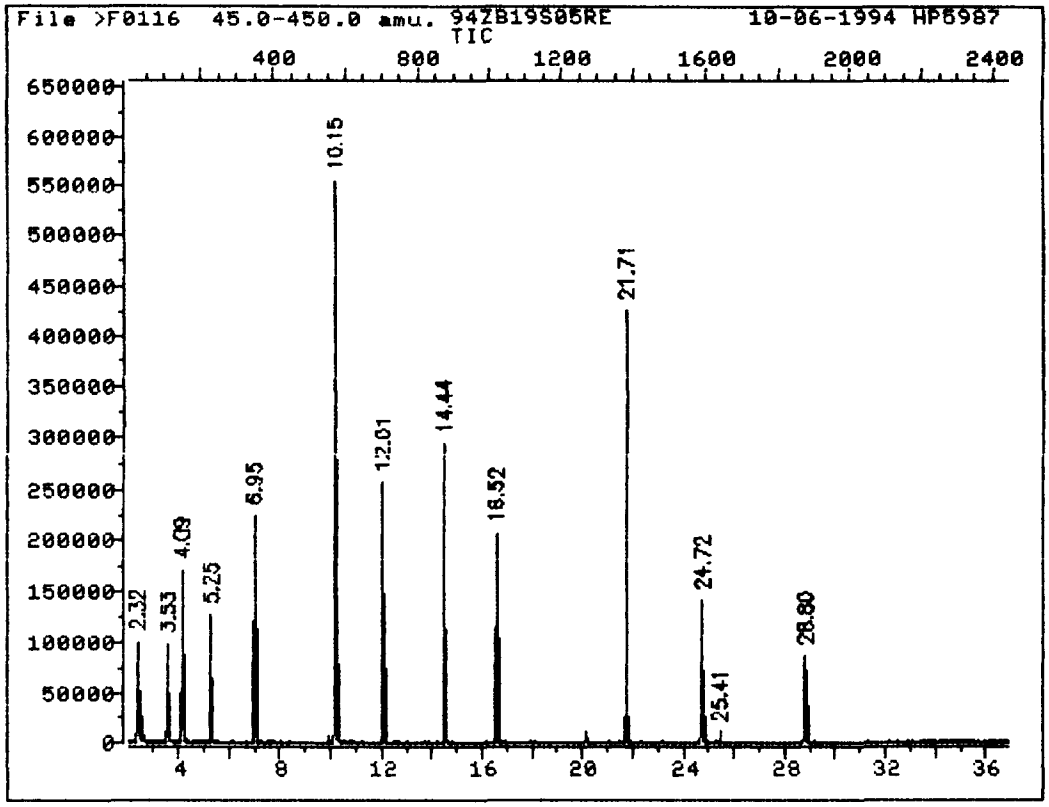
Quant Rev: 7
Quant Time: 941007 12:50
Injected at: 941006 22:11
Dilution Factor: 1.00000
Instrument ID: 5985
BTL# 9

ID File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	4.09	152.0	56146	50.00	NG/UL	94
2)	2-Fluorophenol	2.32	112.0	53184	88.31	NG/UL	61
3)	Phenol-d5	3.53	99.0	38649	80.12	NG/UL	95
17)	Nitrobenzene-d5	5.25	82.0	75509	84.11	NG/UL	94
26)	*Naphthalene-d8	6.95	136.0	150259	50.00	NG/UL	74
36)	2-Fluorobiphenyl	10.15	172.0	292419	91.84	NG/UL	94
40)	*Acenaphthene-d10	12.01	164.0	102551	50.00	NG/UL	91
54)	2,4,6-Tribromophenol	14.44	329.9	73964	122.10	NG/UL	99
58)	*Phenanthrene-d10	16.52	188.0	158548	50.00	NG/UL	97
65)	Terphenyl-d14	21.71	244.0	291939	107.75	NG/UL	96
69)	bis(2-Ethylhexyl)phthalate	25.41	149.0	9040	4.22	NG/UL	92
70)	*Chrysene-d12	24.72	240.0	120396	50.00	NG/UL	91
76)	*Perylene-d12	28.80	264.0	107055	50.00	NG/UL	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

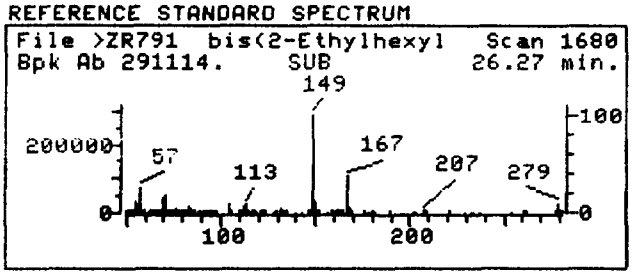


Data File: >F0116::D3 Quant Output File: ^F0116::QT
Name: 94ZB19S05RE Instrument ID: 5985
Misc: 10-06-1994 HP5987 BTL# 9

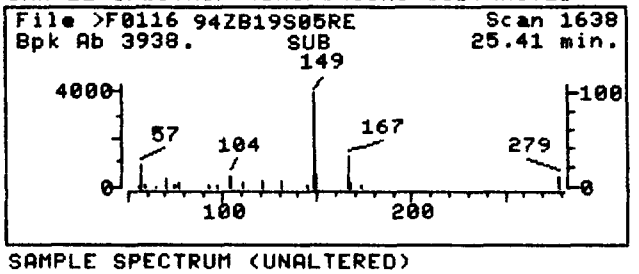
Id File: IDF008::D4
Title: HP-BNA STD RTE-A (Rev. F) use W MSR Forms Program Babu092993
Last Calibration: 941007 12:42 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 941007 12:50
Injected at: 941006 22:11

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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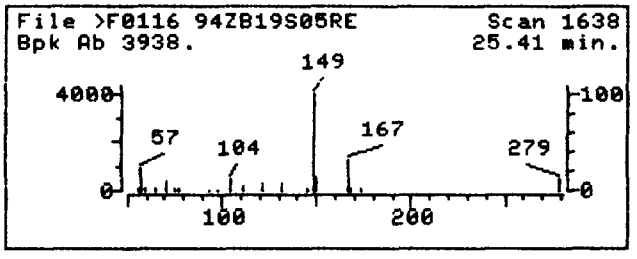

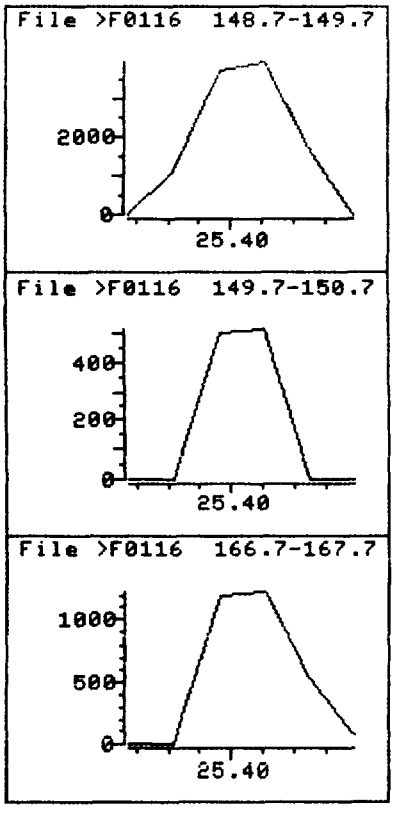

Data File: >F0116::D3
Name: 94ZB19S05RE
Misc: 10-06-1994 HP5987
Quant Time: 941007 12:50
Injected at: 941006 22:11
Last Qcal Time: <none>

Quant Output File: ^F0116::QT
Instrument ID: 5985
BTL# 9
Quant ID File: IDF008::D4
Last Calibration: 941007 12:42

Compound No : 69
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1638
Retention Time: 25.41 min.
Quant Ion : 149.0
Area : 9040
Concentration : 4.22 NG/UL
q-value : 92