UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: OCT 14 1994

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

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

To:

Attached are the results for: **ALCO STEEL SERVICE**
CRL request number: **940152**
Analyzed for: **VOA (Organics)**
Results are reported for sample designations: 94ZB19S01, S02, S03, S05, S06, R07, S08, AND R09. #PX648. (10 SITE SAMPLES)

Results Status:
(X) Acceptable for Use
(X) Data Qualified, but Acceptable for use, compound 1,2-dibromo-3-chloropropane in all samples
( ) Data Unacceptable for Use

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

An initial calibration was analyzed on September 26, 1994 all analytes met the requirements for percent relative standard deviation except for 1,2-dibromo-3-chloropropane. Compound was not detected in any sample but, samples were flagged as estimated "J".

Comments by Laboratory Director or Quality Control Coordinator

Review Record for **ALCO STEEL SERVICE (940152) VOA (Organics)**

Nidia Fuentes 10/11/94

Team Leader and Task Monitor Date (X) Reviewed ( ) Unreviewed

Eli Yang 10/13/94

Section Chief and Date (✓) Reviewed ( ) Unreviewed

Charles J. Elly 10/13/94

QC Coordinator and Date (✓) Reviewed ( ) Unreviewed

Sylvia Griffin OCT 14 1994

Data Management Coordinator and Date Received

Date Transmitted OCT 14 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:

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LAB BLANK

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: 0926VBLK2

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0389

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

1A-2

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LAB BLANK

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: 0926VBLK2

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0389

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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:VOA

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	3	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglotta

Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	3	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglotta

Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	3	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglotta

Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	3	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Inglisotta

Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	3	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglietta
Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	3	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglutta

Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

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

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglotta

Team Leader: [illegible]

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

Sample organization: B & V
Sample Requestor: B & V
Facility: ALCO STEEL
Matrix:DRINKING
Method:A624SAS.0

Sample Batch ID: 940152
Account No: TFA301
Sample ID: 94ZB19R09
Units: ug/L

Date Collected:21-SEP-94
Date Extracted:30-SEP-94

Date Received:22-SEP-94
Date Analyzed:26-SEP-94

CAS NUMBER	COMPOUND	AMOUNT	QUALIFIERS
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	J
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	2-Butanone	3	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	Cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
127-18-4	Tetrachloroethene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1083836423	m &/or p-Xylene	1	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UJ

Analyzed by: Anthony Guglietta

Team Leader: [illegible]

LOCKHEED ESAT CONTRACT

DATA SET CUSTODY TRANSFER FORM

DATA SET # 940152 Charge # 233-51-186

SITE NAME ALCO STEEL SERVICE Task # 0594-0910

PARAMETER VOA MATRIX WATER

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

SAMPLE NUMBERS: 942B19501, -502, -503, -505, -506, -R07, -508 and -R09. Also, PES PX648 + LCS 9/94.

NUMBER OF SAMPLES 8

ESAT APPROVALS:

Anthony Gugliotta	9/28/94	[illegible]	9-30-94
Analyst	Date	Task Group Leader	Date
Lewis Kra	9/30/94	Donna Miller	9-30-94
QA/QC Coordinator	Date	ESAT Team Manager	Date

COMMENTS:

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

Anthony Gugliotta	9-30-94	Barbara Podzielnicki for N.T.	9-30-94
Relinquished by	Date	Received by	Date

EPA APPROVALS:

Nidia Fuentes 10/11/94
EPA Task Monitor Date

[✓] Reviewed
[ ] Unreviewed
[ ] Accepted
[ ] Rejected
[ ] Returned: 10/11/94 Date

COMMENTS:

[illegible] 10/13/94
Section Chief Date

[✓] Reviewed [ ] Unreviewed

ESAT DPO Date

DATA COORDINATOR/RECD/TRANSMTD

ESAT-5-014.6

ESAT-5-007.0

To: Jay Thakkar, EPA DPO

For: Transmittal to: Babu Paruchuri, EPA Task Monitor

Thru: Dennis Miller, ESAT Team Manager

From: Anthony Gugliotta, ESAT Chemist ag
Weihong Zhang, ESAT Chemist

Copies: Ira Wilson, ESAT Assistant Team Manager
Ziyad Rajabi, ESAT Organic Group Leader

Date: September 28, 1994

SUBJECT: Data Set SF940152 - Alco Steel Service
Volatile Organic Analyses

CASE NARRATIVE

Method Number: 624VOA

Project Name: Alco Steel Service

Date Generated: Sept. 28, 1994

Charge Number: 233-51-186

Author: Anthony Gugliotta

TID Number: 05-94-09-10

Case: **SF940152**

1. CASE DESCRIPTION

Eight samples (94ZB19S01, -S02, -S03, -S05, -S06, -R07, -S08, and -R09) from the Alco Steel Service site and one performance evaluation sample (PES) were assigned to ESAT on September 23, 1994 as case number 940152. The laboratory control sample (LCS), and the performance evaluation sample (PES) were analyzed in a previous data set this month, and their results are included with this package. ESAT was informed by the Task Monitor to use the OLC01 QC criteria and the low-level (25-mL purges) calibration described in the CRL Method 624VOA. The samples were analyzed for volatiles (VOA) by GC/MS on HP MSD #2 on September 26, 1994.

The GC/MS was calibrated using all 68 analytes listed in the 624VOC SOP, and this list includes the required 40 compounds given in the 10/92 Statement of Work. The *meta* and *para* isomers of xylene were quantitated together as one compound, while *o*-xylene was quantitated as a separate compound. Searches for tentatively identified compounds (TICs) were performed on each sample and blank.

None of the samples required a dilution or a reanalysis.

One initial calibration at 1, 2, 5, 10, and 25 µg/L was performed on HP MSD System #2 on September 26, 1994. The eight samples of this case were analyzed immediately after the initial calibration and quantitated based on the average response factors from the five-point calibration. A continuing calibration was not needed for this case.

2. INSTRUMENT TUNING

The tuning criteria for 50 ng of 4-bromofluorobenzene (BFB) given in the OLC01 method were met on September 26, 1994 on the HP MSD#2. All samples and calibration standards were injected within 12 hours of the BFB injection time. (FORM V)

3. INITIAL CALIBRATION

An initial calibration at 1, 2, 5, 10, and 25 µg/L levels was performed on September 26, 1994 on HP MSD#2, and all analytes met the requirements for percent relative standard deviation (%RSD < 30%) except for vinyl acetate (39.2% RSD) and 1,2-dibromo-3-chloropropane (34.7% RSD). Acrolein, and 2-chloroethyl vinyl ether were not detected at their lowest levels; therefore, these compounds were calibrated using four points. The resulting calibration range for acrolein is 10 to 125 µg/L, and for 2-chloroethyl vinyl ether, the range is 2 to 25 µg/L. The *cis* and *trans* isomers of 1,3-dichloropropene were present in the standard in a 53/47 ratio, and the calibration was adjusted to reflect this slight variation. Also, the coelution of *m*-xylene and *p*-xylene results in a doubling of the calibration range for *m/p*-xylene (i.e., 2 - 50 µg/L). (Form VI)

Acrolein, vinyl acetate and 2-chloroethyl vinyl ether are not required compounds for this case, and they do not appear on the Forms 1. 1,2-Dibromo-3-chloropropane is a required analyte, but it was not detected in any sample or blank. Because it was a calibration outlier, it was flagged as estimated (J or UJ) on the Forms 1.

4. CONTINUING CALIBRATION

Continuing calibrations were not needed for this case.

5. QUALITY CONTROL

a. Holding Time Summary

Sampling was performed on September 21, 1994. The samples were analyzed on September 26, 1994 and within the seven-day holding time.

b. Analysis Summary

All standards, samples, blanks and QC samples were analyzed in a 12-hour period from the injections of BFB.

c. Surrogate Recovery Summary

The recovery limits for BFB were set to 80% - 120% according to the OLC01 method. The other two surrogates, benzene-d_6 and toluene-d_8, had limits of 70% - 130%. All

surrogate recoveries were within their QC limits. (Form II)

d. Internal Standard Area and Retention Time Summary

All internal standard areas and retention times were within the QC limits. (FORM VIII)

e. Instrument Sensitivity Summary

To verify instrument sensitivity and calibration, a volatile standard at 5 µg/L was analyzed (ICALCHK05, file >B0387) immediately after the initial calibration. This standard was made from Ultra Scientific's DWM-580 VOC Mixture which contains 200 ng/µL of each 624VOC analyte except for acrolein, acrylonitrile, acetone, carbon disulfide, vinyl acetate, 2-butanone, 2-chloroethyl vinyl ether, 4-methyl-2-pentanone and 2-hexanone. The results indicate that the HP MSD #2 GC/MS is capable of accurately detecting the VOA analytes at 5 µg/L.

f. Field Duplicates

Field duplicates were not submitted.

g. Laboratory Control Sample Summary

A laboratory control sample (Lab Spike) was prepared by spiking 10 µL of the initial calibration check solution into 25 mL reagent water. A LCS was analyzed on the HP MSD#2 on September 16, 1994, and all recoveries of the twelve required compounds were within the QC limits. (See Form 11.) The analytical results are included in a separate section in this data package. A complete set of raw data for the calibrations can be found in the previously submitted data case (SF940146, U.S. Aviex).

h. Performance Evaluation Samples (PES)

A performance evaluation sample was prepared by spiking a 10-µL aliquot of solution PX648 into a 25-mL syringe with water. The PES was analyzed on HP MSD#2 (file >B0378) on September 16, 1994. The analytical results are included in a separate section in this data package. A complete set of raw data for the calibrations can be found in the previously submitted data case (SF940146, U.S. Aviex).

6. SAMPLE RESULTS

a. Method Blank Results

A method blanks, called a "Lab Blank" in this case, was analyzed immediately before the samples were run on September 26, 1994. Target analytes or tentatively identified compounds were not detected in this Lab Blank (file >B0389).

b. Sample Results

None of the samples required a dilution or a reanalysis.

Samples 94ZB19S05 and S06 contained estimated levels of naphthalene (0.55 and 0.51 *J* µg/L, respectively). These concentrations appear on the raw data, but they are not listed on the corresponding Forms 1 because naphthalene is not a target analyte for this case. Furthermore, searches for tentatively identified compounds (TICs) failed to detect naphthalene, which indicated that it was below the 10% limit for reporting TICs.

As shown in Table 1 below, tentatively identified compounds (TICs) were not detected in any of the samples from this case. 94ZF19R07 and 94ZF19R09 were the only two samples in which target analytes were found. Both acetone (5.1 and 5.5 µg/L, respectively) and methylene chloride (1.1 and 0.9 µg/L, respectively) were found in these two samples.

SAMPLE	TCL	TIC	Dil Required
94ZB19S01	0	0	N
94ZB19S02	0	0	N
94ZB19S03	0	0	N
94ZB19S05	0	0	N
94ZB19S06	0	0	N
94ZB19R07	2	0	N
94ZB19S08	0	0	N
94ZB19R09	2	0	N
PES PX648	9	1	N

Table 1. Summary of Sample Results

7. CONCLUSIONS

The samples were analyzed according to the CRL 624VOC SOP with modifications for low-level analyses. All internal standards and surrogates were within their QC limits, and all analyses were within the holding times.

LOCKHEED ENGINEERING & SCIENCES COMPANY

VOLATILE ORGANIC DELIVERABLES CHECK-OFF LIST

DATA SET NUMBER: 940152 CHARGE NUMBER: 1233-51-186 ag 9/28/94

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

PRESENT	NOT REQD	ITEM
		CALIBRATION DATA
[✓]	[ ]	INITIAL CAL RRF (FORM VI)
[✓]	[ ]	ICV RAW DATA
[✓]	[ ]	CONT CAL VERIFI (FORM VII) – not needed for this case
[✓]	[ ]	CCV RAW DATA – "
[✓]	[ ]	INT STD AREA & RT (FORM VIII)
		SAMPLE DATA
[✓]	[ ]	ID FILE (SHORT) (HP ONLY)
[✓]	[ ]	TCL RESULTS (FORM I) – no TICs found
[✓]	[ ]	TIC RESULTS (FORM I-TIC) – no TICs found
[✓]	[ ]	SAMPLE RAW DATA
[✓]	[ ]	SAMPLE TAGS
[✓]	[ ]	ARCHIVE REFERENCE
[✓]	[ ]	QC SUMMARY PACKAGE (FORMS 2-8)

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 26

RUN DATE(S): Sept. 26, 1994
INSTRUMENT NO: HP MSD #2
ANALYST(S): Z. Rajabi + A. Gugliotta

SAMPLE SUMMARY MATRIX

DATA SET NUMBER:	940152				
TASK NUMBER:	0594-0910				
DU/ACTIVITY NUMBER:	TFA 301				
PARAMETER:	VOA				
MATRIX:	WATER				
NUMBER OF SAMPLES:	8				
DATE RECEIVED:	9/22/94				
DATE EXTRACTED:	9/26/94				
NOTEBOOK/PAGE NO:	—				
DATE ASSAYED:	NA				

FILE IDENTIFICATION SUMMARY

TUNING FILE:	MTMSD2	BFB:	>B0381		
BLANK FILE:	>B0389				

PRIMARY COLUMN

INITIAL CALIBRATION FILE: CBB006 ; files: >B0382 to >B0386
CONTINUING CALIBRATION FILES: None needed for this case.
STANDARDS FILES: N/A
SAMPLE FILES: >B0390 to >B0397

ID/METHOD FILES: ID File: IDB025
Method files: BFB#2, VOA #2

SECONDARY COLUMN

INITIAL CALIBRATION FILE: N/A
CONTINUING CALIBRATION FILES:
STANDARDS FILES:
SAMPLE FILES:

ID/METHOD FILES:

LOCKHEED
ANALYTICAL LABORATORY
TIME TRACKING RECORD

Task Number: 233-51-186 Date Assigned: 9/23/94
TID Number: 0594-0910 Date Due: 10/7/94
SF Number: 94/0152 Estimated Hours: 56.0
Site Name: ALCO STEEL SERVICE
Assigned To:

VOA ✓ BNA ____ Pest/PCBs ____ Other ____

****

Extraction Record

Person: N/A	Date:	Hours:
Person:	Date:	Hours:
Person:	Date:	Hours:
Person:	Date:	Hours:

****

Analysis Record

Person: ZAR	Date: 9/26 - 9/30/94	Hours: 4 + 4.5 = 8.5
Person: AGG	Date: 9/26 - 9/30/94	Hours: 4 + 8.5 + 5 + 6.5 + 1.0 = 25.0
Person:	Date:	Hours:
Person:	Date:	Hours:
Person:	Date:	Hours:
Person:	Date:	Hours:

****

QA/QC Record

Person: ZAR	Date: 9/30-94	Hours: 0.5
Person: [illegible]	Date: 9/30/94	Hours: 0.5
Person:	Date:	Hours:

****

LIMS Data Entry

Person:	Date:	Hours:
Person:	Date:	Hours:

****

Comments:

****

Total Hours: EMT:

ESAT Work Unit Document (WUD)

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

To be completed by Task Monitor

TASK DESCRIPTION:

RESIDENTIAL WELL SAMPLES

DELIVERABLES:

START DATE:	09/23/94	COMPLETION DATE:	10/07/94
ESTIMATED HOURS:	7HR PER SAMPLE (8 SAMPLES)		

To be completed by PO/RPO

WORK UNIT NUMBER:	233-51-186	TID NUMBER:	0594-0910
PO/RPO APPROVAL:		DATE:	

To be completed by ESAT

COI CHECK COMPLETED?:	Yes	ESAT CONTACT: (ETM or Group) print job configuration
ETM ACKNOWLEDGEMENT OF RECEIPT:	Denise 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:

940152

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

TFA301

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 VOLATILE ORGANICS SCAN UG/L TOX 17684	WATER ABN ORGANICS SCAN UG/L TOX 17674	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
94ZB19S01	AS-RW01-001 5-022951 5-022952	X			
94ZB19S02	AS-RW02-001 5-022957 5-022958	X			
94ZB19S03	AS-RW04-001 5-022975 5-022976	X			
94ZB19S05	AS-RW05-001 5-022981 5-022982	X			
94ZB19S06	AS-RW06-001 5-022987 5-022988	X			
94ZB19R07	AS-FB01-201 5-022993 5-022994	X			
94ZB19S08	AS-RW02-101 5-022963 5-022964	X			
94ZB19R09	AS-TB01-201 5-022999 5-023000	X			
94ZB19S01	AS-RW01-001 5-022953		X		
94ZB19S02	AS-RW02-001 5-022959		X		
94ZB19S03	AS-RW04-001 5-022977		X		
94ZB19S05	AS-RW05-001 5-022983		X		
94ZB19S06	AS-RW06-001 5-022989		X		
94ZB19R07	AS-RB01-201 5-022995		X		
94ZB19S08	AS-RW02-101 5-022965		X		

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

	EPA SAMPLE NO.	S1 (BEN)#	S2 (BFB)#	S3 (TOL)#	S4 ( )#	TOT OUT
01	LAB BLANK	97	99	96		0
02	94ZB19S01	98	94	99		0
03	94ZB19S02	98	96	101		0
04	94ZB19S03	97	93	100		0
05	94ZB19S05	100	92	104		0
06	94ZB19S06	99	94	101		0
07	94ZB19R07	99	93	99		0
08	94ZB19S08	100	95	102		0
09	94ZB19R09	97	96	97		0
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1 (BEN)	= BENZENE-D6	(70-130)
S2 (BFB)	= p-BROMOFLUOROBENZENE	(80-120)
S3 (TOL)	= TOLUENE-D8	(70-130)

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

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

Lab File ID: >B0389 Lab Sample ID: 0926VBLK2

Date Analyzed: 09/26/94 Time Analyzed: 15:01

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

Instrument ID: HP MSD#2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	94ZB19S01	94ZB19S01	>B0390	15:39
2	94ZB19S02	94ZB19S02	>B0391	16:16
3	94ZB19S03	94ZB19S03	>B0392	16:53
4	94ZB19S05	94ZB19S05	>B0393	17:31
5	94ZB19S06	94ZB19S06	>B0394	18:08
6	94ZB19R07	94ZB19R07	>B0395	18:45
7	94ZB19S08	94ZB19S08	>B0396	19:23
8	94ZB19R09	94ZB19R09	>B0397	20:00
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM IV VOA 1/87 Rev.

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

Lab File ID: >B0381 BFB Injection Date: 9/26/94

Instrument ID: HP MSD#2 BFB Injection Time: 9:54

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.1
75	30.0 - 66.0% of mass 95	55.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	.4 (.5)1
174	50.0 -120.0% of mass 95	80.8
175	4.0 - 9.0% of mass 174	6.5 (8.1)1
176	93.0 - 101.0% of mass 174	79.4 (98.3)1
177	5.0 - 9.0% of mass 176	5.3 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

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	0926IC10	0926IC10	>B0382	09/26/94	10:23
02	0926IC02	0926IC02	>B0383	09/26/94	11:01
03	0926IC01	0926IC01	>B0384	09/26/94	11:53
04	0926IC05	0926IC05	>B0385	09/26/94	12:30
05	0926IC25	0926IC25	>B0386	09/26/94	13:08
06	ICCHK05	ICCHK05	>B0387	09/26/94	13:45
07	LAB BLANK	0926VBLK2	>B0389	09/26/94	15:01
08	94ZB19S01	94ZB19S01	>B0390	09/26/94	15:39
09	94ZB19S02	94ZB19S02	>B0391	09/26/94	16:16
10	94ZB19S03	94ZB19S03	>B0392	09/26/94	16:53
11	94ZB19S05	94ZB19S05	>B0393	09/26/94	17:31
12	94ZB19S06	94ZB19S06	>B0394	09/26/94	18:08
13	94ZB19R07	94ZB19R07	>B0395	09/26/94	18:45
14	94ZB19S08	94ZB19S08	>B0396	09/26/94	19:23
15	94ZB19R09	94ZB19R09	>B0397	09/26/94	20:00
16					
17					
18					
19					
20					
21					
22					

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

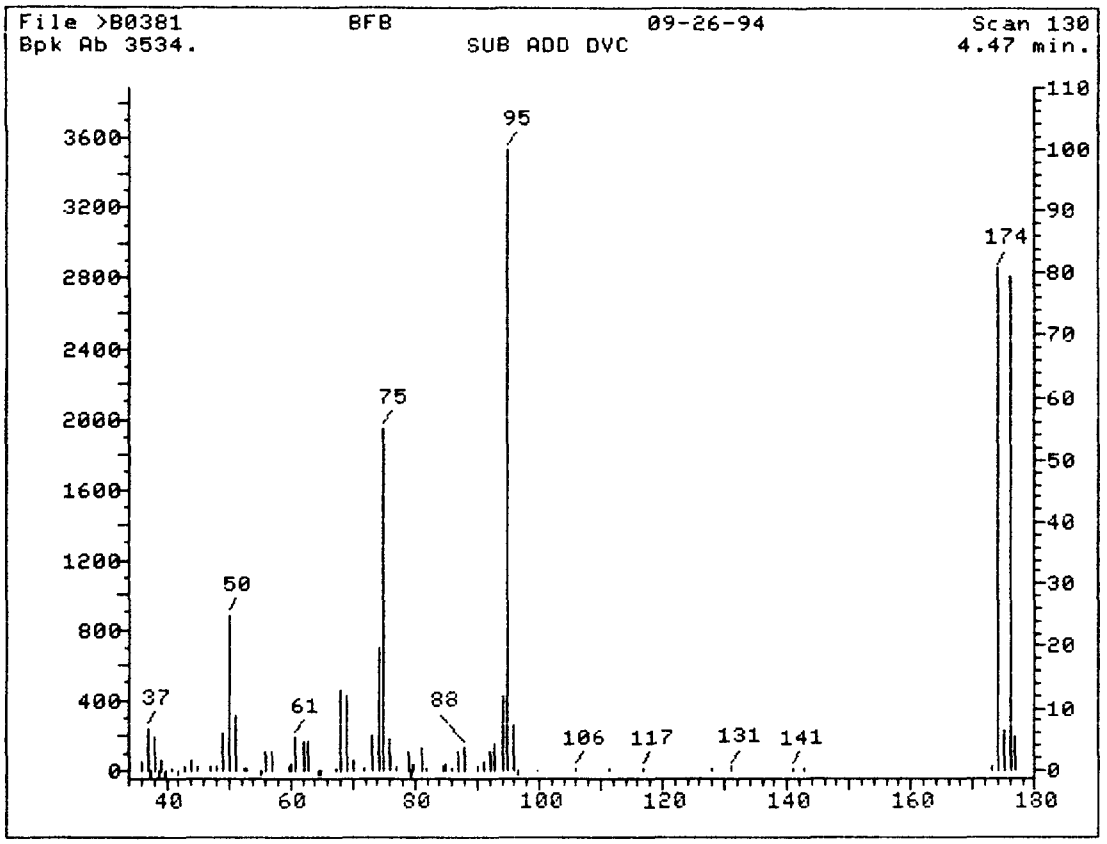
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	25.05	25.05	Ok
75	30-60% of mass 95	55.21	55.21	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.44	7.44	Ok
173	Less than 2% of mass 174	.44	.55	Ok
174	Greater than 50% of mass 95	80.77	80.77	Ok
175	5-9% of mass 174	6.54	8.09	Ok
176	95-101% of mass 174	79.36	98.26	Ok
177	5-9% of mass 176	5.27	6.64	Ok

Injection Date: 09/26/94
Injection Time: 09:54
Data File: >B0381
Scan: 130

MS data file header from : >B0381::D2

Sample: BFB Operator: ZIYAD SUPER GRP. 9/26/94 9:54
Misc : 09-26-94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: BFB#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	200.	0.	0.	0.
Chromatographic times, min. :	0.0	7.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	15.0	0.0	0.0	.1	0.0



MS data file header from : >B0381::D2

Sample: BFB Operator: ZIYAD SUPER GRP. 9/26/94 9:54
Misc : 09-26-94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: BFB#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	200.	0.	0.	0.
Chromatographic times, min. :	0.0	7.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	15.0	0.0	0.0	.1	0.0

>B0381 BFB 09-26-94
130 SUB ADD DVC

File: >B0381 Scan #: 130 Retn. time: 4.47

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.	46.67	49.	215.67	67.	10.67	85.	19.67	106.	12.00
37.	242.00	50.	885.33	68.	453.00	85.	28.00	111.	9.00
37.	-38.00	51.	306.67	69.	424.00	86.	9.67	117.	11.33
38.	185.67	53.	8.33	70.	61.33	87.	108.33	128.	10.67
39.	-36.00	53.	9.67	72.	13.67	88.	131.67	131.	21.67
39.	54.67	55.	-28.00	73.	207.00	90.	18.00	141.	11.00
39.	18.67	56.	111.33	74.	705.67	91.	46.67	143.	9.67
40.	-54.00	57.	110.33	75.	1951.00	91.	10.67	173.	15.67
41.	12.67	60.	16.00	76.	184.00	92.	105.33	174.	2854.00
42.	-22.00	60.	39.33	77.	20.33	93.	159.00	175.	231.00
43.	22.67	61.	191.67	79.	107.00	94.	425.67	176.	2804.33
44.	52.67	62.	170.00	79.	-35.00	95.	3533.67	177.	186.33
45.	18.00	63.	162.67	80.	28.33	96.	263.00	207.	-15.00
47.	25.67	64.	-26.00	81.	130.67	97.	-31.00	245.	6.67
48.	20.33	65.	-22.00	82.	13.33	100.	-1.33	264.	7.67

MS data file header from : >B0381::D2

Sample: BFB Operator: ZIYAD SUPER GRP. 9/26/94 9:54
Misc : 09-26-94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: BFB#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	200.	0.	0.	0.
Chromatographic times, min. :	0.0	7.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	15.0	0.0	0.0	.1	0.0

6A
VOLATILE 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 MSD#2 Calibration Date(s): 09/26/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF001= >B0384 RRF002= >B0383
RRF005= >B0385 RRF010= >B0382 RRF025= >B0386

COMPOUND	RRF001	RRF002	RRF005	RRF010	RRF025	$\overline{RRF}$	RSD
Chloromethane	.395	.390	.363	.335	.396	.376	7.1
Vinyl chloride	.328	.425	.423	.434	.384	.399	11.0
Bromomethane	.330	.294	.288	.248	.298	.292	10.1
Chloroethane	.325	.283	.291	.290	.252	.288	9.0
Trichlorofluoromethane	.419	.496	.491	.460	.543	.482	9.5
1,1-Dichloroethene	.320	.334	.331	.330	.386	.340	7.7
Acetone	.061	.050	.039	.037	.036	.045	24.6
Carbon disulfide	1.381	1.339	1.384	1.372	1.596	1.414	7.3
Methylene chloride	.517	.328	.310	.310	.322	.357	25.1
trans-1,2-Dichloroethene	.426	.382	.378	.379	.417	.396	5.9
1,1-Dichloroethane	.882	.730	.735	.737	.825	.782	8.8
cis-1,2-Dichloroethene	.446	.356	.362	.376	.399	.388	9.4
2-Butanone	.055	.041	.036	.037	.037	.041	19.8
Bromochloromethane	.165	.120	.123	.129	.135	.135	13.6
Chloroform	.881	.706	.714	.723	.791	.763	9.7
1,1,1-Trichloroethane	.909	.883	.870	.837	.952	.890	4.9
Carbon tetrachloride	.511	.557	.610	.603	.725	.602	13.3
Benzene	1.933	1.618	1.571	1.584	1.756	1.692	9.1
1,2-Dichloroethane	.581	.399	.399	.393	.419	.438	18.3
Trichloroethene	.603	.554	.556	.534	.596	.569	5.2
1,2-Dichloropropane	.431	.337	.326	.337	.359	.358	11.8
Bromodichloromethane	.662	.509	.518	.515	.571	.555	11.7
cis-1,3-Dichloropropene	.583	.467	.455	.489	.529	.505	10.4
Toluene	2.133	1.772	1.754	1.760	1.989	1.882	9.1
4-Methyl-2-pentanone	.144	.107	.090	.097	.099	.107	19.8
trans-1,3-Dichloropropene	.387	.316	.320	.339	.369	.346	9.0
Tetrachloroethene	.545	.506	.523	.533	.575	.536	4.8
1,1,2-Trichloroethane	.209	.176	.166	.170	.178	.180	9.4
2-Hexanone	.091	.070	.058	.064	.068	.070	17.9
Dibromochloromethane	.308	.238	.248	.254	.285	.267	10.8
1,2-Dibromoethane	.251	.182	.181	.183	.192	.198	15.2
Chlorobenzene	1.202	.950	.958	.969	1.047	1.025	10.4
Ethylbenzene	2.147	1.921	1.970	1.976	2.235	2.050	6.6

6A-1
VOLATILE 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 MSD#2 Calibration Date(s): 09/26/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF001= >B0384 RRF002= >B0383
RRF005= >B0385 RRF010= >B0382 RRF025= >B0386

COMPOUND	RRF001	RRF002	RRF005	RRF010	RRF025	$\overline{RRF}$	RSD
m &/or p-Xylene	.785	.693	.689	.702	.793	.732	7.1
o-Xylene	.734	.624	.609	.626	.708	.660	8.6
Styrene	1.106	.902	.933	.981	1.089	1.002	9.1
Bromoform	.387	.306	.313	.320	.350	.335	10.0
1,1,2,2-Tetrachloroethane	.223	.165	.150	.157	.171	.173	16.6
1,3-Dichlorobenzene	2.497	1.887	1.945	2.003	2.095	2.085	11.6
1,4-Dichlorobenzene	2.495	1.853	1.906	1.909	2.038	2.040	12.9
1,2-Dichlorobenzene	2.000	1.537	1.525	1.519	1.661	1.648	12.4
1,2-Dibromo-3-chloropropane	.146	.093	.070	.070	.079	.091	34.7
BENZENE-D6	1.700	1.660	1.644	1.662	1.660	1.665	1.3
p-BROMOFLUOROBENZENE	.314	.309	.314	.332	.330	.320	3.2
TOLUENE-D8	1.546	1.566	1.592	1.563	1.565	1.566	1.1

Calibration Report

Title: CALIBRATION FILE FOR OLC01
Calibrated: 940927 09:19

Compound	Files: >B0384 RF 1.00	>B0383 RF 2.00	>B0385 RF 5.00	>B0382 RF 10.00	>B0386 RF 25.00	$\overline{RRT}$	$\overline{RF}$	% RSD	
Dichlorodifluoromethane	.21883	.34662	.35124	.34311	.28959	.429	.30988	18.301	
Chloromethane	.39534	.38954	.36254	.33459	.39617	.457	.37564	7.117	
Vinyl chloride	.32791	.42497	.42283	.43439	.38428	.473	.39888	11.046	
Bromomethane	.33007	.29352	.28844	.24779	.29795	.519	.29155	10.079	
Chloroethane	.32466	.28298	.29100	.29020	.25206	.531	.28818	8.972	
Trichlorofluoromethane	.41867	.49559	.49097	.45971	.54271	.563	.48153	9.550	
Diethyl ether	-	-	-	-	-	-	-	-	(Conc=5.00,10.0,25.0,50.0,125.0)
Acrolein	-	.00981	.00770	.00794	.00813	.612	.00840	11.436	(Conc=5.00,10.0,25.0,50.0,125.0)
1,1-Dichloroethene	.32033	.33424	.33122	.33039	.38616	.626	.34047	7.658	
Acetone	.06137	.05015	.03906	.03687	.03562	.628	.04461	24.630	(Conc=5.00,10.0,25.0,50.0,125.0)
Carbon disulfide	1.38122	1.33913	1.38366	1.37155	1.59605	.658	1.41432	7.292	
Methylene chloride	.51662	.32766	.30964	.30950	.32241	.680	.35717	25.055	
trans-1,2-Dichloroethene	.42625	.38184	.37778	.37903	.41746	.715	.39647	5.908	
Acrylonitrile	.04123	.02899	.02661	.03031	.02926	.707	.03128	18.299	(Conc=5.00,10.0,25.0,50.0,125.0)
1,1-Dichloroethane	.88223	.72957	.73542	.73713	.82511	.764	.78189	8.776	
Vinyl acetate	.04164	.04299	.05386	.06108	.09903	.764	.05972	39.162	(Conc=2.00,4.00,10.0,20.0,50.0)
2,2-Dichloropropane	.64863	.60884	.64030	.65828	.75593	.838	.66240	8.376	
cis-1,2-Dichloroethene	.44613	.35597	.36239	.37572	.39937	.836	.38792	9.420	
2-Butanone	.05546	.04086	.03551	.03709	.03742	.834	.04127	19.801	(Conc=5.00,10.0,25.0,50.0,125.0)
Bromochloromethane	.16548	.11976	.12275	.12923	.13544	.868	.13453	13.623	
Chloroform	.88114	.70601	.71373	.72262	.79149	.874	.76300	9.737	
1,2-Dichloroethane	.58080	.39925	.39926	.39298	.41907	.954	.43827	18.317	
p-BROMOFLUOROBENZENE	.31387	.30928	.31366	.33154	.33001	1.695	.31967	3.226	(Conc=5.00,5.00,5.00,5.00,5.00)
1,1,1-Trichloroethane	.90862	.88269	.86980	.83659	.95185	.612	.88991	4.861	
Carbon tetrachloride	.51117	.55739	.61026	.60345	.72535	.628	.60152	13.280	
1,1-Dichloropropene	.71393	.71629	.73153	.70663	.81714	.626	.73710	6.194	
BENZENE-D6	1.70035	1.65992	1.64438	1.66206	1.65982	.642	1.66531	1.251	(Conc=5.00,5.00,5.00,5.00,5.00)
Benzene	1.93285	1.61769	1.57144	1.58387	1.75617	.646	1.69240	9.052	
TOLUENE-D8	1.54573	1.56632	1.59172	1.56281	1.56530	.831	1.56638	1.050	(Conc=5.00,5.00,5.00,5.00,5.00)
Trichloroethene	.60310	.55395	.55641	.53420	.59598	.705	.56873	5.191	
1,2-Dichloropropane	.43057	.33651	.32639	.33650	.35912	.728	.35782	11.850	
Dibromomethane	.21573	.16723	.15941	.16817	.17080	.740	.17627	12.743	
2-Chloroethyl vinylether	-	.06114	.06205	.06260	.07763	.781	.06586	11.956	
Bromodichloromethane	.66154	.50895	.51776	.51455	.57061	.754	.55468	11.662	
cis-1,3-Dichloropropene	.58322	.46671	.45484	.48948	.52939	.801	.50473	10.359	(Conc=1.06,2.12,5.30,10.6,26.5)
Toluene	2.13309	1.77207	1.75380	1.76024	1.98895	.839	1.88163	9.121	
4-Methyl-2-pentanone	.14375	.10746	.08959	.09724	.09881	.814	.10737	19.844	(Conc=2.00,4.00,10.0,20.0,50.0)
trans-1,3-Dichloropropene	.38678	.31606	.31952	.33947	.36947	.860	.34626	8.964	(Conc=.940,1.88,4.70,9.40,23.5)
Tetrachloroethene	.54517	.50625	.52309	.53270	.57524	.902	.53649	4.829	

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Calibration Report

Title: CALIBRATION FILE FOR OLC01
Calibrated: 940927 09:19

Compound	Files: >B0384 RF 1.00	>B0383 RF 2.00	>B0385 RF 5.00	>B0382 RF 10.00	>B0386 RF 25.00	$\overline{RRT}$	$\overline{RF}$	% RSD	
1,1,2-Trichloroethane	.20918	.17551	.16636	.17032	.17835	.882	.17994	9.439	
1,3-Dichloropropane	.43687	.30245	.30744	.32925	.33673	.902	.34255	15.955	
2-Hexanone	.09137	.07012	.05814	.06434	.06797	.908	.07039	17.866	(Conc=2.00,4.00,10.0,20.0,50.0)
Dibromochloromethane	.30779	.23838	.24842	.25381	.28486	.930	.26665	10.805	
1,2-Dibromoethane	.25111	.18245	.18095	.18333	.19186	.946	.19794	15.170	
Chlorobenzene	1.20205	.94964	.95785	.96946	1.04709	1.004	1.02522	10.358	
1,1,1,2-Tetrachloroethane	.38901	.30291	.32002	.32412	.35976	1.012	.33917	10.231	
Ethylbenzene	2.14744	1.92083	1.97023	1.97623	2.23545	1.015	2.05004	6.562	
m &/or p-Xylene	.78470	.69273	.68900	.70221	.79343	1.029	.73241	7.104	(Conc=2.00,4.00,10.0,20.0,50.0)
o-Xylene	.73395	.62393	.60871	.62554	.70767	1.080	.65996	8.592	
Styrene	1.10571	.90186	.93343	.98137	1.08917	1.081	1.00231	9.132	
Isopropylbenzene	2.00023	1.88561	1.96156	1.95085	2.23034	1.126	2.00572	6.590	
Bromobenzene	.46772	.37313	.36551	.37701	.40790	1.169	.39825	10.559	
1,2,3-Trichloropropane	.26006	.18817	.17362	.17079	.18785	1.170	.19610	18.679	
1,1,2,2-Tetrachloroethane	.22253	.16481	.14963	.15731	.17068	1.164	.17299	16.648	
n-Propylbenzene	.48561	.46666	.48556	.48326	.55238	1.181	.49469	6.712	
2-Chlorotoluene	.45626	.40398	.41667	.41494	.46358	1.194	.43109	6.238	
4-Chlorotoluene	.49996	.38881	.40847	.40864	.46312	1.208	.43380	10.649	
1,3,5-Trimethylbenzene	1.84079	1.69227	1.69635	1.68208	1.97353	1.204	1.77701	7.195	
tert-Butylbenzene	1.44964	1.53733	1.57495	1.58004	1.79938	1.249	1.58827	8.126	
1,2,4-Trimethylbenzene	1.93600	1.63499	1.69081	1.67718	1.94364	1.255	1.77653	8.472	
sec-Butylbenzene	2.10526	2.09514	2.20674	2.16586	2.55508	1.279	2.22561	8.525	
Bromoform	.38745	.30636	.31254	.32046	.34953	.814	.33527	10.002	
1,3-Dichlorobenzene	2.49704	1.88692	1.94531	2.00256	2.09461	.954	2.08529	11.634	
1,4-Dichlorobenzene	2.49540	1.85343	1.90585	1.90894	2.03806	.963	2.04034	12.906	
p-Isopropyltoluene	4.85265	4.45887	4.71359	4.72417	5.25393	.956	4.80064	6.059	
1,2-Dichlorobenzene	2.00007	1.53654	1.52534	1.51922	1.66127	1.002	1.64849	12.439	
n-Butylbenzene	5.15853	4.85575	5.31471	5.18816	6.03730	.999	5.31089	8.278	
1,2-Dibromo-3-chloropropane	.14570	.09254	.06981	.06994	.07900	1.084	.09140	34.729	
1,2,4-Trichlorobenzene	1.57446	1.17054	1.14597	1.15875	1.28236	1.174	1.26642	14.259	
Naphthalene	1.58630	1.30544	1.09003	1.16408	1.23379	1.203	1.27593	14.976	
Hexachlorobutadiene	1.20971	1.12155	1.20603	1.15041	1.32607	1.192	1.20275	6.520	
1,2,3-Trichlorobenzene	1.22056	.92843	.89457	.90349	.96138	1.231	.98169	13.856	

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

```
FMGR : CBCAL,CBB006,IDB025,,A

Calib File: CBB006::D1
     Title: CALIBRATION FILE FOR OLC01
     Units:  ug/L
 Last Edit: 940901 09:49
Last Calib: 940927 09:19

   ID File: IDB025::D1
     Title: ID FILE FOR OLC01, INST.#2
     Units:  ug/L
 Last Edit: 940926 11:06
Last Calib: 940926 15:59

Correct Files ? Y

Calibrating...

  1) Dichlorodifluoromethane          Avg RF:  .30988
  2) Chloromethane                    Avg RF:  .37564
  3) Vinyl chloride                   Avg RF:  .39888
  4) Bromomethane                     Avg RF:  .29155
  5) Chloroethane                     Avg RF:  .28818
  6) Trichlorofluoromethane           Avg RF:  .48153
No data points in Calib file for:  Diethyl ether
  8) Acrolein                         Avg RF:  .00840
  9) 1,1-Dichloroethene               Avg RF:  .34047
 10) Acetone                          Avg RF:  .04461
 11) Carbon disulfide                 Avg RF: 1.41432
 12) Methylene chloride               Avg RF:  .35717
 13) trans-1,2-Dichloroethene         Avg RF:  .39647
 14) Acrylonitrile                    Avg RF:  .03128
 15) 1,1-Dichloroethane               Avg RF:  .78189
 16) Vinyl acetate                    Avg RF:  .05972
 17) 2,2-Dichloropropane              Avg RF:  .66240
 18) cis-1,2-Dichloroethene           Avg RF:  .38792
 19) 2-Butanone                       Avg RF:  .04127
 20) Bromochloromethane               Avg RF:  .13453
 21) Chloroform                       Avg RF:  .76300
 22) 1,2-Dichloroethane               Avg RF:  .43827
 23) p-BROMOFLUOROBENZENE             Avg RF:  .31967
 24) 1,1,1-Trichloroethane            Avg RF:  .88991
 25) Carbon tetrachloride             Avg RF:  .60152
 26) 1,1-Dichloropropene              Avg RF:  .73710
 27) BENZENE-D6                       Avg RF: 1.66531
 28) Benzene                          Avg RF: 1.69240
 29) TOLUENE-D8                       Avg RF: 1.56638
 30) Trichloroethene                  Avg RF:  .56873
 31) 1,2-Dichloropropane              Avg RF:  .35782
 32) Dibromomethane                   Avg RF:  .17627
 33) 2-Chloroethyl vinylether         Avg RF:  .06586
 34) Bromodichloromethane             Avg RF:  .55468
 35) cis-1,3-Dichloropropene          Avg RF:  .50473
 36) Toluene                          Avg RF: 1.88163
 37) 4-Methyl-2-pentanone             Avg RF:  .10737
 38) trans-1,3-Dichloropropene        Avg RF:  .34626
 39) Tetrachloroethene                Avg RF:  .53649
 40) 1,1,2-Trichloroethane            Avg RF:  .17994
 41) 1,3-Dichloropropane              Avg RF:  .34255
 42) 2-Hexanone                       Avg RF:  .07039
 43) Dibromochloromethane             Avg RF:  .26665
 44) 1,2-Dibromoethane                Avg RF:  .19794
 45) Chlorobenzene                    Avg RF: 1.02522
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[illegible]	[illegible]loroethane	[illegible]
47)	Ethylbenzene	Avg RF: [illegible]
48)	m &/or p-Xylene	Avg RF: .73241
49)	o-Xylene	Avg RF: .65996
50)	Styrene	Avg RF: 1.00231
51)	Isopropylbenzene	Avg RF: 2.00572
52)	Bromobenzene	Avg RF: .39825
53)	1,2,3-Trichloropropane	Avg RF: .19610
54)	1,1,2,2-Tetrachloroethane	Avg RF: .17299
55)	n-Propylbenzene	Avg RF: .49469
56)	2-Chlorotoluene	Avg RF: .43109
57)	4-Chlorotoluene	Avg RF: .43380
58)	1,3,5-Trimethylbenzene	Avg RF: 1.77701
59)	tert-Butylbenzene	Avg RF: 1.58827
60)	1,2,4-Trimethylbenzene	Avg RF: 1.77653
61)	sec-Butylbenzene	Avg RF: 2.22561
62)	Bromoform	Avg RF: .33527
63)	1,3-Dichlorobenzene	Avg RF: 2.08529
64)	1,4-Dichlorobenzene	Avg RF: 2.04034
65)	p-Isopropyltoluene	Avg RF: 4.80064
66)	1,2-Dichlorobenzene	Avg RF: 1.64849
67)	n-Butylbenzene	Avg RF: 5.31089
68)	1,2-Dibromo-3-chloropropane	Avg RF: .09140
69)	1,2,4-Trichlorobenzene	Avg RF: 1.26642
70)	Naphthalene	Avg RF: 1.27593
71)	Hexachlorobutadiene	Avg RF: 1.20275
72)	1,2,3-Trichlorobenzene	Avg RF: .98169

Calibration Time Stamp Updated: 940927 09:56

FMGR : IDLST,IDB025

Quant ID File: IDB025::D1

Title: ID FILE FOR OLC01, INST.#2

Last EDIT Date: 940926 11:06 Last Calib Date: 940927 09:56
Last Qcal Date: <none> Calib File: CBB006::D1
Qcal File: <none>

RT Window (+min -%) :	.5000	Subtraction Method :	2
Max Hits/Compound :	1	Ignore max check :	NO
Minimum Area :	1000	Auto Qdel Method :	5
Peak/Base Peak Ratio :	35.00 %	Quantitate Using :	AREA
Up Slope Sensitivity :	-.500000	Units of Conc :	ug/L
Down Slope Sensitivity:	.0000000	Bunching :	1

Number of Compounds: 75

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*1,4-DIFLUOROBENZENE	(I)	9.19	(1.000)	1.00000	5.00	**
2)	Dichlorodifluoromethane	(T)	3.94	(.429)	.30988	5.00	**
3)	Chloromethane	(T)	4.20	(.457)	.37564	5.00	
4)	Vinyl chloride	(T)	4.35	(.473)	.39888	5.00	**
5)	Bromomethane	(T)	4.77	(.519)	.29155	5.00	
6)	Chloroethane	(T)	4.88	(.531)	.28818	5.00	**
7)	Trichlorofluoromethane	(T)	5.18	(.563)	.48153	5.00	
8)	Diethyl ether	(T)	5.72	(.623)	.11690	25.00	
9)	Acrolein	(T)	5.62	(.612)	.00840	25.00	
10)	1,1-Dichloroethene	(M)	5.75	(.626)	.34047	5.00	
11)	Acetone	(T)	5.77	(.628)	.04461	25.00	**
12)	Carbon disulfide	(T)	6.05	(.658)	1.41432	5.00	**
13)	Methylene chloride	(T)	6.25	(.680)	.35717	5.00	
14)	trans-1,2-Dichloroethene	(T)	6.57	(.715)	.39647	5.00	
15)	Acrylonitrile	(T)	6.50	(.707)	.03128	25.00	
16)	1,1-Dichloroethane	(T)	7.02	(.764)	.78189	5.00	
17)	Vinyl acetate	(T)	7.02	(.764)	.05972	10.00	
18)	2,2-Dichloropropane	(T)	7.70	(.838)	.66240	5.00	
19)	cis-1,2-Dichloroethene	(T)	7.68	(.836)	.38792	5.00	
20)	2-Butanone	(T)	7.66	(.834)	.04127	25.00	**
21)	Bromochloromethane	(T)	7.97	(.868)	.13453	5.00	**
22)	Chloroform	(T)	8.03	(.874)	.76300	5.00	**
23)	1,2-Dichloroethane	(T)	8.77	(.954)	.43827	5.00	**
24)	p-BROMOFLUOROBENZENE	(S)	15.58	(1.695)	.31967	5.00	**
25)	*CHLOROBENZENE-D5	(I)	13.58	(1.000)	1.00000	5.00	
26)	1,1,1-Trichloroethane	(T)	8.31	(.612)	.88991	5.00	**
27)	Carbon tetrachloride	(T)	8.52	(.628)	.60152	5.00	**
28)	1,1-Dichloropropene	(T)	8.51	(.626)	.73710	5.00	
29)	BENZENE-D6	(S)	8.72	(.642)	1.66531	5.00	
30)	Benzene	(M)	8.77	(.646)	1.69240	5.00	
31)	TOLUENE-D8	(S)	11.29	(.831)	1.56638	5.00	**
32)	Trichloroethene	(M)	9.58	(.705)	.56873	5.00	
33)	1,2-Dichloropropane	(T)	9.89	(.728)	.35782	5.00	**
34)	Dibromomethane	(T)	10.05	(.740)	.17627	5.00	**
35)	2-Chloroethyl vinylether	(T)	10.61	(.781)	.06586	5.00	
36)	Bromodichloromethane	(T)	10.23	(.754)	.55468	5.00	
37)	cis-1,3-Dichloropropene	(T)	10.87	(.801)	.50473	5.30	**
38)	Toluene	(M)	11.39	(.839)	1.88163	5.00	
39)	4-Methyl-2-pentanone	(T)	11.06	(.814)	.10737	10.00	
40)	trans-1,3-Dichloropropene	(T)	11.68	(.860)	.34626	4.70	
41)	Tetrachloroethene	(T)	12.25	(.902)	.53649	5.00	

42)	1,1,2-Trichloroethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
43)	1,3-Dichloropropane	(T)	12.25(	.902)	.34255	5.00	
44)	2-Hexanone	(T)	12.33(	.908)	.07039	10.00	**
45)	Dibromochloromethane	(T)	12.63(	.930)	.26665	5.00	**
46)	1,2-Dibromoethane	(T)	12.85(	.946)	.19794	5.00	**
47)	Chlorobenzene	(M)	13.64(	1.004)	1.02522	5.00	
48)	1,1,1,2-Tetrachloroethane	(T)	13.75(	1.012)	.33917	5.00	**
49)	Ethylbenzene	(T)	13.79(	1.015)	2.05004	5.00	**
50)	m &/or p-Xylene	(T)	13.98(	1.029)	.73241	10.00	**
51)	o-Xylene	(T)	14.67(	1.080)	.65996	5.00	
52)	Styrene	(T)	14.68(	1.081)	1.00231	5.00	
53)	Isopropylbenzene	(T)	15.30(	1.126)	2.00572	5.00	**
54)	Bromobenzene	(T)	15.88(	1.169)	.39825	5.00	**
55)	1,2,3-Trichloropropane	(T)	15.90(	1.170)	.19610	5.00	**
56)	1,1,2,2-Tetrachloroethane	(T)	15.80(	1.164)	.17299	5.00	**
57)	n-Propylbenzene	(T)	16.03(	1.181)	.49469	5.00	**
58)	2-Chlorotoluene	(T)	16.22(	1.194)	.43109	5.00	**
59)	4-Chlorotoluene	(T)	16.41(	1.208)	.43380	5.00	**
60)	1,3,5-Trimethylbenzene	(T)	16.35(	1.204)	1.77701	5.00	
61)	tert-Butylbenzene	(T)	16.96(	1.249)	1.58827	5.00	
62)	1,2,4-Trimethylbenzene	(T)	17.04(	1.255)	1.77653	5.00	
63)	sec-Butylbenzene	(T)	17.37(	1.279)	2.22561	5.00	
64)	*1,2-DICHLOROBENZENE-D4	(I)	18.44(	1.000)	1.00000	5.00	**
65)	Bromoform	(T)	15.02(	.814)	.33527	5.00	**
66)	1,3-Dichlorobenzene	(T)	17.60(	.954)	2.08529	5.00	**
67)	1,4-Dichlorobenzene	(T)	17.76(	.963)	2.04034	5.00	**
68)	p-Isopropyltoluene	(T)	17.63(	.956)	4.80064	5.00	
69)	1,2-Dichlorobenzene	(T)	18.48(	1.002)	1.64849	5.00	
70)	n-Butylbenzene	(T)	18.42(	.999)	5.31089	5.00	
71)	1,2-Dibromo-3-chloropropane	(T)	19.99(	1.084)	.09140	5.00	**
72)	1,2,4-Trichlorobenzene	(T)	21.65(	1.174)	1.26642	5.00	**
73)	Naphthalene	(T)	22.18(	1.203)	1.27593	5.00	
74)	Hexachlorobutadiene	(T)	21.99(	1.192)	1.20275	5.00	**
75)	1,2,3-Trichlorobenzene	(T)	22.70(	1.231)	.98169	5.00	**

* Compound is ISTD
** Compound uses different Quant parameters

QUANT REPORT

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940926 14:55
Output File: ^B0384::QT Injected at: 940926 11:53
Data File: >B0384::D2 Dilution Factor: 1.00000
Name: 0926IC01 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	50792	5.00	ug/L	94
2)	Dichlorodifluoromethane	3.94	85.0	2223	.626	ug/L	96
3)	Chloromethane	4.20	50.0	4016	.711	ug/L	96
4)	Vinyl chloride	4.35	62.0	3331	.656	ug/L	97
5)	Bromomethane	4.77	94.0	3353	1.49	ug/L	90
6)	Chloroethane	4.88	64.0	3298	1.30	ug/L	99
7)	Trichlorofluoromethane	5.18	101.0	4253	.872	ug/L	99
10)	1,1-Dichloroethene	5.76	96.0	3254	.936	ug/L	98
11)	Acetone	5.77	43.0	3117	8.33	ug/L	98
12)	Carbon disulfide	6.05	76.0	14031	1.13	ug/L	96
13)	Methylene chloride	6.25	84.0	5248	1.79	ug/L	94
14)	trans-1,2-Dichloroethene	6.57	96.0	4330	1.07	ug/L	92
15)	Acrylonitrile	6.50	53.0	2094	6.40	ug/L	79
16)	1,1-Dichloroethane	7.02	63.0	8962	1.22	ug/L	98
17)	Vinyl acetate	7.02	43.0	846M	5.12	ug/L	100
18)	2,2-Dichloropropane	7.70	77.0	6589	1.01	ug/L	99
19)	cis-1,2-Dichloroethene	7.69	96.0	4532	1.02	ug/L	96
20)	2-Butanone	7.66	43.0	2817	6.40	ug/L	86
21)	Bromochloromethane	7.98	128.0	1681	1.09	ug/L	89
22)	Chloroform	8.03	83.0	8951	1.19	ug/L	95
23)	1,2-Dichloroethane	8.77	62.0	5900	1.64	ug/L	92
24)	p-BROMOFLUOROBENZENE	15.59	174.0	15942	4.14	ug/L	89
25)	*CHLOROBENZENE-D5	13.58	117.0	39703	5.00	ug/L	98
26)	1,1,1-Trichloroethane	8.30	97.0	7215	1.04	ug/L	95
27)	Carbon tetrachloride	8.51	117.0	4059	.885	ug/L	90
28)	1,1-Dichloropropene	8.50	75.0	5669	.897	ug/L	98
29)	BENZENE-D6	8.72	84.0	67509	5.46	ug/L	97
30)	Benzene	8.77	78.0	15348	.969	ug/L	99
31)	TOLUENE-D8	11.29	98.0	61370	5.31	ug/L	95
32)	Trichloroethene	9.57	95.0	4789	.896	ug/L	85
33)	1,2-Dichloropropane	9.89	63.0	3419	.977	ug/L	99
34)	Dibromomethane	10.05	174.0	1713	.934	ug/L	95
36)	Bromodichloromethane	10.24	83.0	5253	1.27	ug/L	98
37)	cis-1,3-Dichloropropene	10.87	75.0	4909	1.15	ug/L	91
38)	Toluene	11.39	91.0	16938	.989	ug/L	96
39)	4-Methyl-2-pentanone	11.06	43.0	2283	2.19	ug/L	88
40)	trans-1,3-Dichloropropene	11.68	75.0	2887	1.16	ug/L	94
41)	Tetrachloroethene	12.25	166.0	4329	.758	ug/L	95
42)	1,1,2-Trichloroethane	11.97	97.0	1661	1.05	ug/L	81
43)	1,3-Dichloropropane	12.25	76.0	3469	1.23	ug/L	97

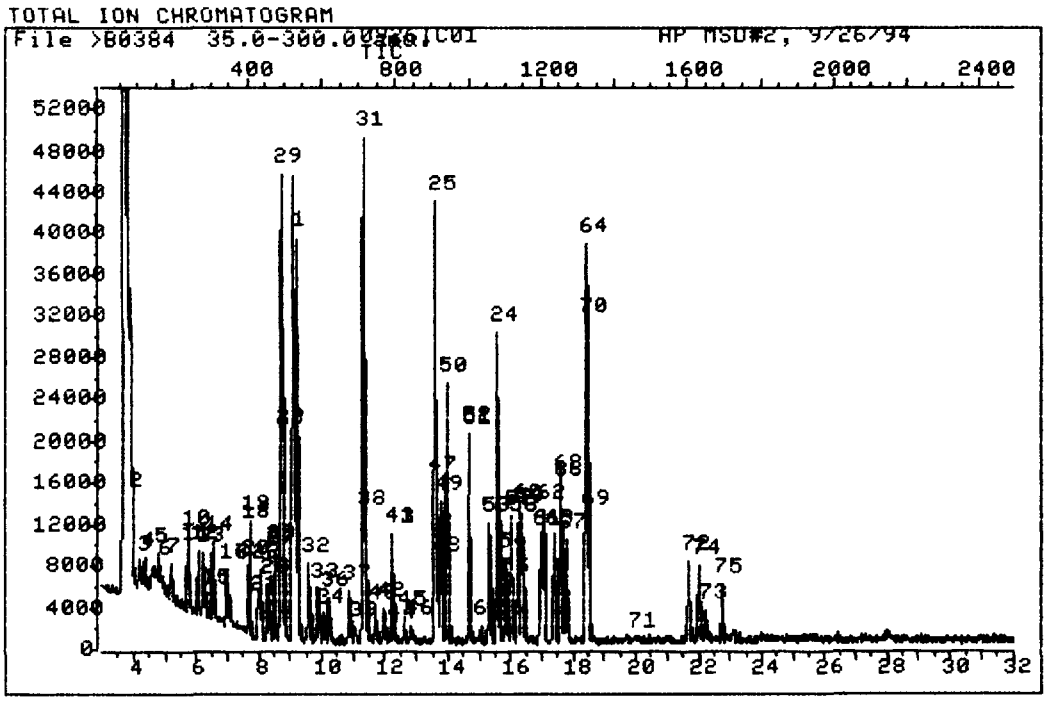
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940926 14:55
Output File: ^B0384::QT Injected at: 940926 11:53
Data File: >B0384::D2 Dilution Factor: 1.00000
Name: 0926IC01 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	2-Hexanone	12.34	43.0	1451M	2.23	ug/L	
45)	Dibromochloromethane	12.63	129.0	2444	1.13	ug/L	96
46)	1,2-Dibromoethane	12.85	107.0	1994	1.20	ug/L	93
47)	Chlorobenzene	13.63	112.0	9545	.990	ug/L	94
48)	1,1,1,2-Tetrachloroethane	13.74	131.0	3089	1.02	ug/L	95
49)	Ethylbenzene	13.78	91.0	17052	.903	ug/L	96
50)	m &/or p-Xylene	13.98	106.0	12462	1.76	ug/L	99
51)	o-Xylene	14.67	106.0	5828	.927	ug/L	94
52)	Styrene	14.68	104.0	8780	.914	ug/L	95
53)	Isopropylbenzene	15.29	105.0	15883	.822	ug/L	98
54)	Bromobenzene	15.88	156.0	3714	.916	ug/L	93
55)	1,2,3-Trichloropropane	15.90	75.0	2065	1.40	ug/L	86
56)	1,1,2,2-Tetrachloroethane	15.81	83.0	1767	1.20	ug/L	84
57)	n-Propylbenzene	16.03	120.0	3856M	.747	ug/L	
58)	2-Chlorotoluene	16.22	126.0	3623M	.817	ug/L	96
59)	4-Chlorotoluene	16.40	126.0	3970	.894	ug/L	96
60)	1,3,5-Trimethylbenzene	16.34	105.0	14617	.859	ug/L	96
61)	tert-Butylbenzene	16.96	119.0	11511	.752	ug/L	94
62)	1,2,4-Trimethylbenzene	17.04	105.0	15373	.902	ug/L	97
63)	sec-Butylbenzene	17.37	105.0	16717	.712	ug/L	97
64)	*1,2-DICHLOROBENZENE-D4	18.44	152.0	15202	5.00	ug/L	96
65)	Bromoform	15.02	173.0	1178M	1.07	ug/L	
66)	1,3-Dichlorobenzene	17.59	146.0	7592	.989	ug/L	96
67)	1,4-Dichlorobenzene	17.75	146.0	7587	1.00	ug/L	98
68)	p-Isopropyltoluene	17.63	119.0	14754	.853	ug/L	99
69)	1,2-Dichlorobenzene	18.49	146.0	6081	1.04	ug/L	93
70)	n-Butylbenzene	18.42	91.0	15684	.859	ug/L	96
71)	1,2-Dibromo-3-chloropropane	19.97	75.0	443M	2.05	ug/L	
72)	1,2,4-Trichlorobenzene	21.68	180.0	4787	.972	ug/L	93
73)	Naphthalene	22.22	128.0	4823	1.29	ug/L	100
74)	Hexachlorobutadiene	22.02	225.0	3678	.521	ug/L	98
75)	1,2,3-Trichlorobenzene	22.74	180.0	3711	.991	ug/L	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0384::D2 Quant Output File: ^B0384::QT
Name: 0926IC01 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

Operator ID: ZIYAD
Quant Time : 940926 14:55
Injected at: 940926 11:53

QUANT REPORT

Operator ID: ZIYAD
Output File: ^B0383::QT
Data File: >B0383::D2
Name: 0926IC02
Misc: HP MSD#2, 9/26/94

Quant Rev: 7
Quant Time: 940926 15:13
Injected at: 940926 11:01
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08
Last Qcal Time: 940926 11:53

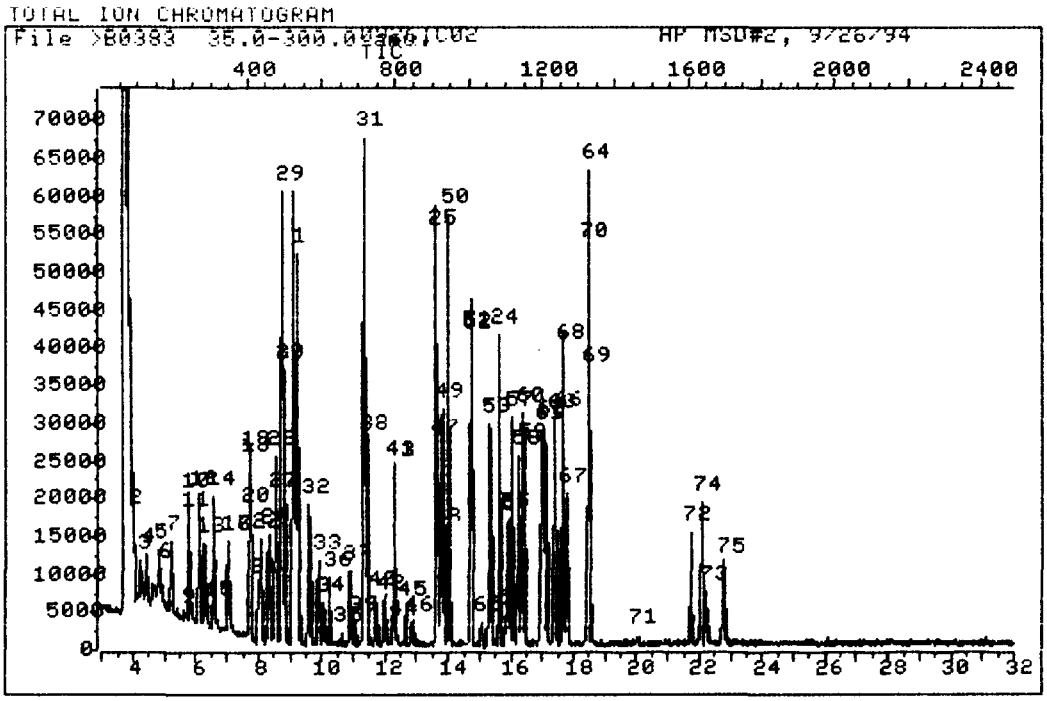
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.20	114.0	69493	5.00	ug/L	91
2)	Dichlorodifluoromethane	3.96	85.0	9635	1.98	ug/L	92
3)	Chloromethane	4.20	50.0	10828	1.40	ug/L	97
4)	Vinyl chloride	4.36	62.0	11813	1.70	ug/L	99
5)	Bromomethane	4.78	94.0	8159	2.65	ug/L	96
6)	Chloroethane	4.89	64.0	7866	2.26	ug/L	97
7)	Trichlorofluoromethane	5.19	101.0	13776	2.07	ug/L	96
9)	Acrolein	5.63	56.0	1364	46.58	ug/L	96
10)	1,1-Dichloroethene	5.76	96.0	9291	1.95	ug/L	96
11)	Acetone	5.78	43.0	6970	13.62	ug/L	94
12)	Carbon disulfide	6.06	76.0	37224	2.20	ug/L	99
13)	Methylene chloride	6.26	84.0	9108	2.26	ug/L	93
14)	trans-1,2-Dichloroethene	6.58	96.0	10614	1.92	ug/L	94
15)	Acrylonitrile	6.51	53.0	4029	9.00	ug/L	89
16)	1,1-Dichloroethane	7.03	63.0	20280	2.01	ug/L	96
17)	Vinyl acetate	7.03	43.0	2390M	10.58	ug/L	100
18)	2,2-Dichloropropane	7.71	77.0	16924	1.89	ug/L	96
19)	cis-1,2-Dichloroethene	7.68	96.0	9895	1.63	ug/L	96
20)	2-Butanone	7.67	43.0	5679	9.43	ug/L	89
21)	Bromochloromethane	7.98	128.0	3329	1.58	ug/L	99
22)	Chloroform	8.05	83.0	19625	1.91	ug/L	95
23)	1,2-Dichloroethane	8.78	62.0	11098	2.26	ug/L	92
24)	p-BROMOFLUOROBENZENE	15.59	174.0	21493	4.08	ug/L	87
25)	*CHLOROBENZENE-D5	13.58	117.0	53728	5.00	ug/L	96
26)	1,1,1-Trichloroethane	8.31	97.0	18970	2.03	ug/L	96
27)	Carbon tetrachloride	8.54	117.0	11979	1.93	ug/L	96
28)	1,1-Dichloropropene	8.51	75.0	15394	1.80	ug/L	98
29)	BENZENE-D6	8.73	84.0	89184	5.33	ug/L	99
30)	Benzene	8.78	78.0	34766	1.62	ug/L	98
31)	TOLUENE-D8	11.30	98.0	84155	5.38	ug/L	95
32)	Trichloroethene	9.58	95.0	11905	1.65	ug/L	92
33)	1,2-Dichloropropane	9.90	63.0	7232	1.53	ug/L	96
34)	Dibromomethane	10.05	174.0	3594	1.45	ug/L	98
35)	2-Chloroethyl vinylether	10.61	63.0	1314	1.78	ug/L	87
36)	Bromodichloromethane	10.24	83.0	10938	1.96	ug/L	99
37)	cis-1,3-Dichloropropene	10.88	75.0	10632	1.83	ug/L	93
38)	Toluene	11.39	91.0	38084	1.64	ug/L	93
39)	4-Methyl-2-pentanone	11.07	43.0	4619	3.27	ug/L	89
40)	trans-1,3-Dichloropropene	11.68	75.0	6385	1.90	ug/L	97
41)	Tetrachloroethene	12.25	166.0	10880	1.41	ug/L	97

Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940926 15:13
Output File: ^B0383::QT Injected at: 940926 11:01
Data File: >B0383::D2 Dilution Factor: 1.00000
Name: 0926IC02 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
42)	1,1,2-Trichloroethane	11.97	97.0	3772	1.76	ug/L	98
43)	1,3-Dichloropropane	12.25	76.0	6500	1.71	ug/L	99
44)	2-Hexanone	12.34	43.0	3014	3.43	ug/L	96
45)	Dibromochloromethane	12.64	129.0	5123	1.75	ug/L	96
46)	1,2-Dibromoethane	12.85	107.0	3921	1.75	ug/L	98
47)	Chlorobenzene	13.64	112.0	20409	1.56	ug/L	90
48)	1,1,1,2-Tetrachloroethane	13.75	131.0	6510	1.58	ug/L	93
49)	Ethylbenzene	13.79	91.0	41281	1.62	ug/L	97
50)	m &/or p-Xylene	13.98	106.0	29775	3.10	ug/L	99
51)	o-Xylene	14.67	106.0	13409	1.58	ug/L	95
52)	Styrene	14.69	104.0	19382	1.49	ug/L	94
53)	Isopropylbenzene	15.30	105.0	40524	1.55	ug/L	98
54)	Bromobenzene	15.88	156.0	8019	1.46	ug/L	88
55)	1,2,3-Trichloropropane	15.89	75.0	4044	2.02	ug/L	78
56)	1,1,2,2-Tetrachloroethane	15.81	83.0	3542	1.77	ug/L	92
57)	n-Propylbenzene	16.04	120.0	10029M	1.44	ug/L	
58)	2-Chlorotoluene	16.22	126.0	8682	1.45	ug/L	99
59)	4-Chlorotoluene	16.42	126.0	8356	1.39	ug/L	94
60)	1,3,5-Trimethylbenzene	16.35	105.0	36369	1.58	ug/L	96
61)	tert-Butylbenzene	16.95	119.0	33039	1.59	ug/L	99
62)	1,2,4-Trimethylbenzene	17.05	105.0	35138	1.52	ug/L	98
63)	sec-Butylbenzene	17.37	105.0	45027	1.42	ug/L	97
64)	*1,2-DICHLOROBENZENE-D4	18.45	152.0	21127	5.00	ug/L	94
65)	Bromoform	15.02	173.0	2589	1.70	ug/L	84
66)	1,3-Dichlorobenzene	17.60	146.0	15946	1.49	ug/L	97
67)	1,4-Dichlorobenzene	17.76	146.0	15663	1.49	ug/L	94
68)	p-Isopropyltoluene	17.63	119.0	37681	1.57	ug/L	99
69)	1,2-Dichlorobenzene	18.48	146.0	12985	1.60	ug/L	99
70)	n-Butylbenzene	18.42	91.0	41035	1.62	ug/L	96
71)	1,2-Dibromo-3-chloropropane	20.01	75.0	782	2.60	ug/L	80
72)	1,2,4-Trichlorobenzene	21.69	180.0	9892	1.45	ug/L	97
73)	Naphthalene	22.22	128.0	11032	2.13	ug/L	100
74)	Hexachlorobutadiene	22.03	225.0	9478	.966	ug/L	98
75)	1,2,3-Trichlorobenzene	22.75	180.0	7846	1.51	ug/L	90

* Compound is ISTD



Data File: >B0383::D2
Name: 0926IC02
Misc: HP MSD#2, 9/26/94

Quant Output File: ^B0383::QT
Instrument ID: HP MS #7

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08

Last Qcal Time: 940926 11:53

Operator ID: ZIYAD
Quant Time : 940926 15:13
Injected at: 940926 11:01

QUANT REPORT

Operator ID: ZIYAD
Output File: ^B0385::QT
Data File: >B0385::D2
Name: 0926IC05
Misc: HP MSD#2, 9/26/94

Quant Rev: 7
Quant Time: 940926 15:07
Injected at: 940926 12:30
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08
Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	60757	5.00	ug/L	97
2)	Dichlorodifluoromethane	3.94	85.0	21340	5.02	ug/L	99
3)	Chloromethane	4.20	50.0	22027	3.26	ug/L	98
4)	Vinyl chloride	4.35	62.0	25690	4.23	ug/L	95
5)	Bromomethane	4.77	94.0	17525	6.51	ug/L	99
6)	Chloroethane	4.87	64.0	17680	5.82	ug/L	97
7)	Trichlorofluoromethane	5.18	101.0	29830	5.12	ug/L	91
9)	Acrolein	5.62	56.0	2340	91.39	ug/L	93
10)	1,1-Dichloroethene	5.75	96.0	20124	4.84	ug/L	99
11)	Acetone	5.77	43.0	11867	26.53	ug/L	91
12)	Carbon disulfide	6.04	76.0	84067	5.68	ug/L	99
13)	Methylene chloride	6.25	84.0	18813	5.35	ug/L	93
14)	trans-1,2-Dichloroethene	6.57	96.0	22953	4.76	ug/L	92
15)	Acrylonitrile	6.50	53.0	8083	20.65	ug/L	81
16)	1,1-Dichloroethane	7.02	63.0	44682	5.07	ug/L	97
17)	Vinyl acetate	7.02	43.0	6545M	33.14	ug/L	100
18)	2,2-Dichloropropane	7.70	77.0	38903	4.97	ug/L	95
19)	cis-1,2-Dichloroethene	7.69	96.0	22018	4.14	ug/L	98
20)	2-Butanone	7.66	43.0	10786M	20.49	ug/L	87
21)	Bromochloromethane	7.97	128.0	7458	4.05	ug/L	98
22)	Chloroform	8.04	83.0	43364	4.83	ug/L	94
23)	1,2-Dichloroethane	8.77	62.0	24258	5.64	ug/L	98
24)	p-BROMOFLUOROBENZENE	15.58	174.0	19057	4.14	ug/L	93
25)	*CHLOROBENZENE-D5	13.58	117.0	46929	5.00	ug/L	98
26)	1,1,1-Trichloroethane	8.31	97.0	40819	4.99	ug/L	98
27)	Carbon tetrachloride	8.53	117.0	28639	5.28	ug/L	94
28)	1,1-Dichloropropene	8.50	75.0	34330	4.60	ug/L	99
29)	BENZENE-D6	8.71	84.0	77169	5.28	ug/L	99
30)	Benzene	8.77	78.0	73746	3.94	ug/L	99
31)	TOLUENE-D8	11.29	98.0	74698	5.47	ug/L	94
32)	Trichloroethene	9.58	95.0	26112	4.13	ug/L	89
33)	1,2-Dichloropropane	9.89	63.0	15317	3.70	ug/L	95
34)	Dibromomethane	10.04	174.0	7481	3.45	ug/L	97
35)	2-Chloroethyl vinylether	10.60	63.0	2912	4.52	ug/L	98
36)	Bromodichloromethane	10.23	83.0	24298	4.98	ug/L	94
37)	cis-1,3-Dichloropropene	10.87	75.0	22626	4.47	ug/L	94
38)	Toluene	11.40	91.0	82304	4.06	ug/L	93
39)	4-Methyl-2-pentanone	11.06	43.0	8409	6.81	ug/L	90
40)	trans-1,3-Dichloropropene	11.68	75.0	14095	4.79	ug/L	96
41)	Tetrachloroethene	12.25	166.0	24548	3.64	ug/L	94

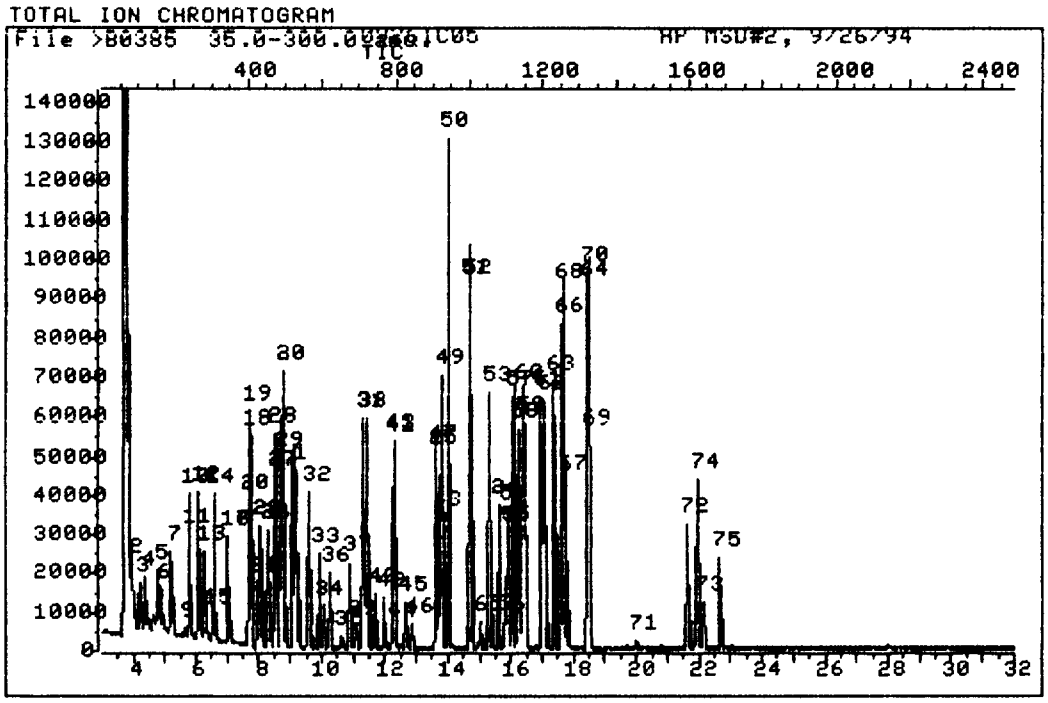
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940926 15:07
Output File: ^B0385::QT Injected at: 940926 12:30
Data File: >B0385::D2 Dilution Factor: 1.00000
Name: 0926IC05 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
42)	1,1,2-Trichloroethane	11.98	97.0	7807	4.17	ug/L	91
43)	1,3-Dichloropropane	12.26	76.0	14428	4.34	ug/L	98
44)	2-Hexanone	12.33	43.0	5457	7.11	ug/L	99
45)	Dibromochloromethane	12.63	129.0	11658	4.56	ug/L	95
46)	1,2-Dibromoethane	12.84	107.0	8492	4.33	ug/L	98
47)	Chlorobenzene	13.64	112.0	44951	3.94	ug/L	92
48)	1,1,1,2-Tetrachloroethane	13.74	131.0	15018	4.18	ug/L	95
49)	Ethylbenzene	13.79	91.0	92461	4.14	ug/L	99
50)	m &/or p-Xylene	13.97	106.0	64668	7.71	ug/L	98
51)	o-Xylene	14.66	106.0	28566	3.84	ug/L	91
52)	Styrene	14.68	104.0	43805	3.86	ug/L	96
53)	Isopropylbenzene	15.30	105.0	92054	4.03	ug/L	98
54)	Bromobenzene	15.87	156.0	17153	3.58	ug/L	91
55)	1,2,3-Trichloropropane	15.90	75.0	8148	4.67	ug/L	92
56)	1,1,2,2-Tetrachloroethane	15.80	83.0	7022	4.03	ug/L	94
57)	n-Propylbenzene	16.03	120.0	22787M	3.74	ug/L	
58)	2-Chlorotoluene	16.21	126.0	19554	3.73	ug/L	99
59)	4-Chlorotoluene	16.41	126.0	19169	3.65	ug/L	97
60)	1,3,5-Trimethylbenzene	16.34	105.0	79608	3.96	ug/L	99
61)	tert-Butylbenzene	16.96	119.0	73911	4.08	ug/L	96
62)	1,2,4-Trimethylbenzene	17.04	105.0	79348	3.94	ug/L	98
63)	sec-Butylbenzene	17.37	105.0	103560	3.73	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.44	152.0	18449	5.00	ug/L	99
65)	Bromoform	15.02	173.0	5766	4.33	ug/L	95
66)	1,3-Dichlorobenzene	17.60	146.0	35889	3.85	ug/L	95
67)	1,4-Dichlorobenzene	17.75	146.0	35161	3.84	ug/L	95
68)	p-Isopropyltoluene	17.62	119.0	86961	4.14	ug/L	98
69)	1,2-Dichlorobenzene	18.48	146.0	28141	3.98	ug/L	96
70)	n-Butylbenzene	18.42	91.0	98051	4.42	ug/L	96
71)	1,2-Dibromo-3-chloropropane	19.98	75.0	1288M	4.90	ug/L	77
72)	1,2,4-Trichlorobenzene	21.60	180.0	21142	3.54	ug/L	93
73)	Naphthalene	22.12	128.0	20110	4.45	ug/L	100
74)	Hexachlorobutadiene	21.94	225.0	22250	2.60	ug/L	93
75)	1,2,3-Trichlorobenzene	22.66	180.0	16504	3.63	ug/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0385::D2 Quant Output File: ^B0385::QT
Name: 0926IC05 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

Operator ID: ZIYAD
Quant Time : 940926 15:07
Injected at: 940926 12:30

QUANT REPORT

Operator ID: ZIYAD
Output File: ^B0382::QT
Data File: >B0382::D2
Name: 0926IC10
Misc: HP MSD#2, 9/26/94

Quant Rev: 7
Quant Time: 940926 15:16
Injected at: 940926 10:23
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08

Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.17	114.0	68285	5.00	ug/L	92
2)	Dichlorodifluoromethane	3.91	85.0	46858	9.81	ug/L	95
3)	Chloromethane	4.17	50.0	45695	6.02	ug/L	97
4)	Vinyl chloride	4.32	62.0	59324	8.68	ug/L	99
5)	Bromomethane	4.74	94.0	33840	11.18	ug/L	97
6)	Chloroethane	4.86	64.0	39633	11.61	ug/L	96
7)	Trichlorofluoromethane	5.15	101.0	62782	9.58	ug/L	97
9)	Acrolein	5.60	56.0	5423	188.45	ug/L	91
10)	1,1-Dichloroethene	5.73	96.0	45121	9.66	ug/L	98
11)	Acetone	5.76	43.0	25175	50.07	ug/L	94
12)	Carbon disulfide	6.02	76.0	187313	11.26	ug/L	99
13)	Methylene chloride	6.23	84.0	42269	10.70	ug/L	93
14)	trans-1,2-Dichloroethene	6.55	96.0	51764	9.54	ug/L	98
15)	Acrylonitrile	6.48	53.0	20697	47.05	ug/L	91
16)	1,1-Dichloroethane	7.02	63.0	100670	10.16	ug/L	99
17)	Vinyl acetate	7.02	43.0	16683M	75.16	ug/L	100
18)	2,2-Dichloropropane	7.69	77.0	89901	10.21	ug/L	97
19)	cis-1,2-Dichloroethene	7.67	96.0	51312	8.58	ug/L	98
20)	2-Butanone	7.65	43.0	25330	42.82	ug/L	85
21)	Bromochloromethane	7.96	128.0	17649	8.53	ug/L	99
22)	Chloroform	8.02	83.0	98688	9.78	ug/L	95
23)	1,2-Dichloroethane	8.75	62.0	53669	11.11	ug/L	98
24)	p-BROMOFLUOROBENZENE	15.58	174.0	22639	4.38	ug/L	87
25)	*CHLOROBENZENE-D5	13.58	117.0	54347	5.00	ug/L	97
26)	1,1,1-Trichloroethane	8.30	97.0	90932	9.61	ug/L	98
27)	Carbon tetrachloride	8.51	117.0	65591	10.45	ug/L	95
28)	1,1-Dichloropropene	8.50	75.0	76806	8.88	ug/L	99
29)	BENZENE-D6	8.71	84.0	90328	5.34	ug/L	99
30)	Benzene	8.77	78.0	172157	7.94	ug/L	99
31)	TOLUENE-D8	11.29	98.0	84934	5.37	ug/L	97
32)	Trichloroethene	9.57	95.0	58064	7.94	ug/L	87
33)	1,2-Dichloropropane	9.89	63.0	36576	7.64	ug/L	96
34)	Dibromomethane	10.04	174.0	18279	7.28	ug/L	97
35)	2-Chloroethyl vinylether	10.60	63.0	6804	9.13	ug/L	95
36)	Bromodichloromethane	10.22	83.0	55928	9.89	ug/L	97
37)	cis-1,3-Dichloropropene	10.87	75.0	56396	9.62	ug/L	95
38)	Toluene	11.39	91.0	191328	8.16	ug/L	94
39)	4-Methyl-2-pentanone	11.05	43.0	21139	14.78	ug/L	90
40)	trans-1,3-Dichloropropene	11.67	75.0	34684	10.18	ug/L	97
41)	Tetrachloroethene	12.24	166.0	57901	7.41	ug/L	99

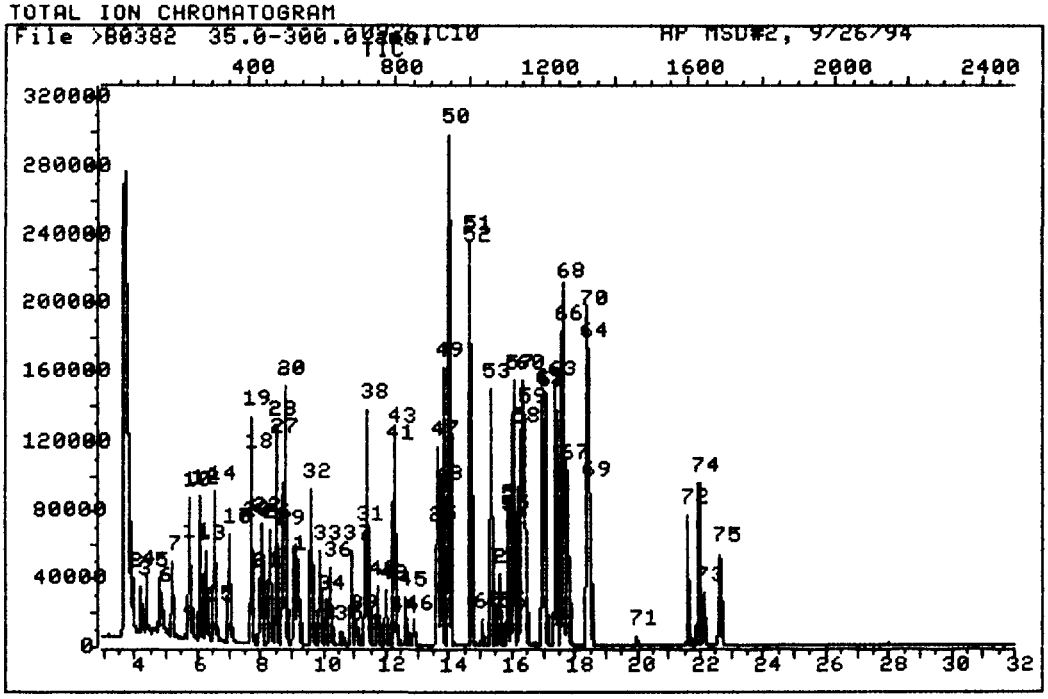
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940926 15:16
Output File: ^B0382::QT Injected at: 940926 10:23
Data File: >B0382::D2 Dilution Factor: 1.00000
Name: 0926IC10 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
42)	1,1,2-Trichloroethane	11.97	97.0	18513	8.53	ug/L	94
43)	1,3-Dichloropropane	12.25	76.0	35787	9.30	ug/L	97
44)	2-Hexanone	12.32	43.0	13986	15.74	ug/L	92
45)	Dibromochloromethane	12.63	129.0	27588	9.32	ug/L	99
46)	1,2-Dibromoethane	12.85	107.0	19927	8.77	ug/L	93
47)	Chlorobenzene	13.63	112.0	105375	7.98	ug/L	95
48)	1,1,1,2-Tetrachloroethane	13.75	131.0	35230	8.46	ug/L	96
49)	Ethylbenzene	13.78	91.0	214804	8.31	ug/L	98
50)	m &/or p-Xylene	13.98	106.0	152651	15.72	ug/L	99
51)	o-Xylene	14.67	106.0	67992	7.90	ug/L	93
52)	Styrene	14.68	104.0	106669	8.11	ug/L	92
53)	Isopropylbenzene	15.30	105.0	212046	8.01	ug/L	99
54)	Bromobenzene	15.87	156.0	40979	7.39	ug/L	96
55)	1,2,3-Trichloropropane	15.89	75.0	18564	9.19	ug/L	86
56)	1,1,2,2-Tetrachloroethane	15.80	83.0	17099	8.47	ug/L	93
57)	n-Propylbenzene	16.03	120.0	52527M	7.44	ug/L	
58)	2-Chlorotoluene	16.21	126.0	45101	7.43	ug/L	99
59)	4-Chlorotoluene	16.41	126.0	44417	7.31	ug/L	97
60)	1,3,5-Trimethylbenzene	16.35	105.0	182832	7.85	ug/L	97
61)	tert-Butylbenzene	16.95	119.0	171741	8.20	ug/L	99
62)	1,2,4-Trimethylbenzene	17.04	105.0	182299	7.82	ug/L	98
63)	sec-Butylbenzene	17.36	105.0	235416	7.32	ug/L	98
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	21096	5.00	ug/L	96
65)	Bromoform	15.02	173.0	13521	8.88	ug/L	98
66)	1,3-Dichlorobenzene	17.60	146.0	84492	7.93	ug/L	99
67)	1,4-Dichlorobenzene	17.76	146.0	80542M	7.69	ug/L	98
68)	p-Isopropyltoluene	17.62	119.0	199322	8.30	ug/L	99
69)	1,2-Dichlorobenzene	18.47	146.0	64099	7.93	ug/L	98
70)	n-Butylbenzene	18.40	91.0	218899	8.63	ug/L	97
71)	1,2-Dibromo-3-chloropropane	19.95	75.0	2951M	9.82	ug/L	
72)	1,2,4-Trichlorobenzene	21.58	180.0	48890	7.15	ug/L	95
73)	Naphthalene	22.10	128.0	49115	9.50	ug/L	100
74)	Hexachlorobutadiene	21.91	225.0	48538	4.96	ug/L	97
75)	1,2,3-Trichlorobenzene	22.61	180.0	38120	7.33	ug/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0382::D2
Name: 0926IC10
Misc: HP MSD#2, 9/26/94

Quant Output File: ^B0382::QT
Instrument ID: HP MS #7

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08

Last Qcal Time: 940926 11:53

Operator ID: ZIYAD
Quant Time : 940926 15:16
Injected at: 940926 10:23

QUANT REPORT

Operator ID: ZIYAD
Output File: ^B0386::QT
Data File: >B0386::D2
Name: 0926IC25
Misc: HP MSD#2, 9/26/94

Quant Rev: 7
Quant Time: 940926 15:10
Injected at: 940926 13:08
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08
Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.20	114.0	57689	5.00	ug/L	92
2)	Dichlorodifluoromethane	3.97	85.0	83531	20.71	ug/L	97
3)	Chloromethane	4.23	50.0	114273	17.82	ug/L	97
4)	Vinyl chloride	4.38	62.0	110845	19.21	ug/L	98
5)	Bromomethane	4.79	94.0	85941	33.62	ug/L	99
6)	Chloroethane	4.90	64.0	72706	25.20	ug/L	98
7)	Trichlorofluoromethane	5.20	101.0	156543	28.27	ug/L	98
9)	Acrolein	5.64	56.0	11729	482.45	ug/L	95
10)	1,1-Dichloroethene	5.77	96.0	111385	28.22	ug/L	97
11)	Acetone	5.79	43.0	51375	120.95	ug/L	97
12)	Carbon disulfide	6.07	76.0	460374	32.77	ug/L	99
13)	Methylene chloride	6.27	84.0	92997	27.86	ug/L	93
14)	trans-1,2-Dichloroethene	6.59	96.0	120413	26.27	ug/L	95
15)	Acrylonitrile	6.52	53.0	42201	113.55	ug/L	85
16)	1,1-Dichloroethane	7.04	63.0	238000	28.45	ug/L	99
17)	Vinyl acetate	7.04	43.0	57127M	304.64	ug/L	100
18)	2,2-Dichloropropane	7.72	77.0	218045	29.31	ug/L	98
19)	cis-1,2-Dichloroethene	7.70	96.0	115195	22.81	ug/L	97
20)	2-Butanone	7.68	43.0	53961	107.97	ug/L	86
21)	Bromochloromethane	7.99	128.0	39066	22.35	ug/L	99
22)	Chloroform	8.05	83.0	228301	26.77	ug/L	96
23)	1,2-Dichloroethane	8.78	62.0	120878	29.61	ug/L	98
24)	p-BROMOFLUOROBENZENE	15.58	174.0	19038	4.36	ug/L	80
25)	*CHLOROBENZENE-D5	13.59	117.0	45788	5.00	ug/L	96
26)	1,1,1-Trichloroethane	8.33	97.0	217917	27.32	ug/L	98
27)	Carbon tetrachloride	8.54	117.0	166062	31.40	ug/L	96
28)	1,1-Dichloropropene	8.51	75.0	187077	25.67	ug/L	98
29)	BENZENE-D6	8.73	84.0	76000	5.33	ug/L	99
30)	Benzene	8.78	78.0	402058	22.01	ug/L	99
31)	TOLUENE-D8	11.30	98.0	71672	5.38	ug/L	94
32)	Trichloroethene	9.59	95.0	136444	22.13	ug/L	89
33)	1,2-Dichloropropane	9.90	63.0	82217	20.38	ug/L	94
34)	Dibromomethane	10.06	174.0	39104	18.49	ug/L	98
35)	2-Chloroethyl vinylether	10.61	63.0	17773	28.30	ug/L	98
36)	Bromodichloromethane	10.24	83.0	130636	27.43	ug/L	98
37)	cis-1,3-Dichloropropene	10.88	75.0	128470	26.00	ug/L	95
38)	Toluene	11.40	91.0	455350	23.04	ug/L	91
39)	4-Methyl-2-pentanone	11.07	43.0	45241	37.55	ug/L	91
40)	trans-1,3-Dichloropropene	11.68	75.0	79511	27.70	ug/L	99
41)	Tetrachloroethene	12.26	166.0	131695	20.00	ug/L	98

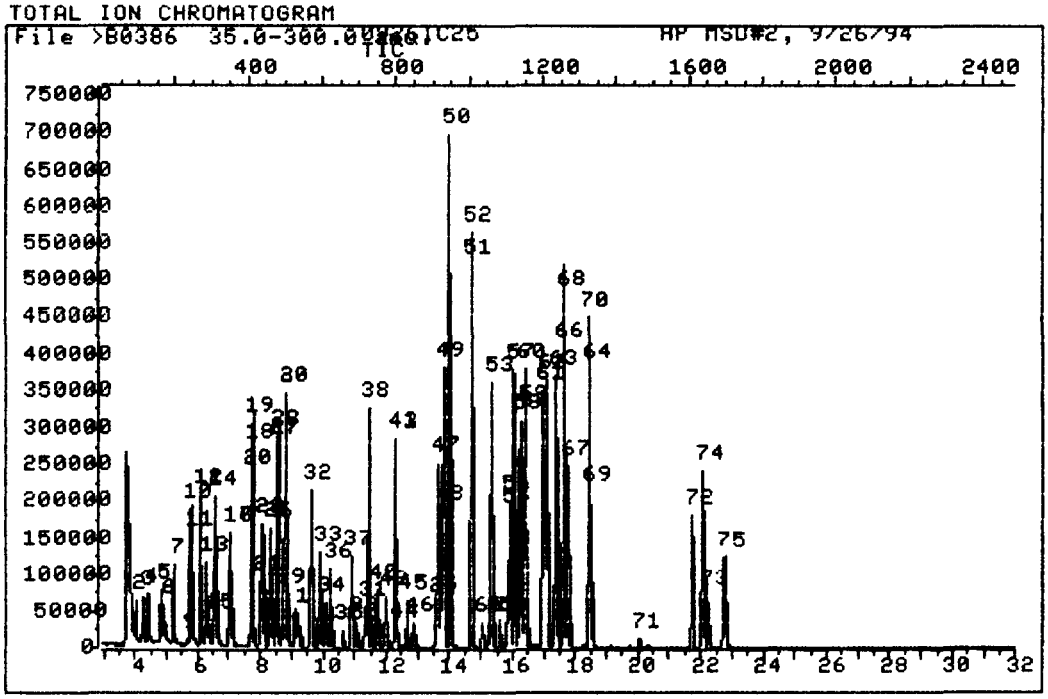
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940926 15:10
Output File: ^B0386::QT Injected at: 940926 13:08
Data File: >B0386::D2 Dilution Factor: 1.00000
Name: 0926IC25 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940926 11:53

	Compound	R.T.	Q ion	Area	Conc	Units	q
42)	1,1,2-Trichloroethane	11.99	97.0	40831	22.33	ug/L	93
43)	1,3-Dichloropropane	12.26	76.0	77090	23.79	ug/L	97
44)	2-Hexanone	12.34	43.0	31124	41.57	ug/L	95
45)	Dibromochloromethane	12.63	129.0	65215	26.14	ug/L	98
46)	1,2-Dibromoethane	12.85	107.0	43925	22.95	ug/L	98
47)	Chlorobenzene	13.64	112.0	239720	21.56	ug/L	91
48)	1,1,1,2-Tetrachloroethane	13.75	131.0	82364	23.49	ug/L	97
49)	Ethylbenzene	13.80	91.0	511785	23.51	ug/L	98
50)	m &/or p-Xylene	13.98	106.0	363294	44.40	ug/L	97
51)	o-Xylene	14.67	106.0	162015	22.34	ug/L	95
52)	Styrene	14.68	104.0	249354	22.50	ug/L	93
53)	Isopropylbenzene	15.30	105.0	510615	22.91	ug/L	99
54)	Bromobenzene	15.88	156.0	93384	19.98	ug/L	90
55)	1,2,3-Trichloropropane	15.90	75.0	43006	25.27	ug/L	84
56)	1,1,2,2-Tetrachloroethane	15.80	83.0	39075	22.97	ug/L	96
57)	n-Propylbenzene	16.04	120.0	126461M	21.25	ug/L	
58)	2-Chlorotoluene	16.22	126.0	106131	20.74	ug/L	98
59)	4-Chlorotoluene	16.41	126.0	106026	20.71	ug/L	97
60)	1,3,5-Trimethylbenzene	16.35	105.0	451821	23.03	ug/L	99
61)	tert-Butylbenzene	16.96	119.0	411951	23.33	ug/L	98
62)	1,2,4-Trimethylbenzene	17.05	105.0	444978	22.65	ug/L	98
63)	sec-Butylbenzene	17.37	105.0	584960	21.59	ug/L	96
64)	*1,2-DICHLOROBENZENE-D4	18.44	152.0	18632	5.00	ug/L	98
65)	Bromoform	15.02	173.0	32562	24.21	ug/L	94
66)	1,3-Dichlorobenzene	17.60	146.0	195134	20.73	ug/L	98
67)	1,4-Dichlorobenzene	17.76	146.0	189866	20.52	ug/L	98
68)	p-Isopropyltoluene	17.64	119.0	489456	23.08	ug/L	98
69)	1,2-Dichlorobenzene	18.49	146.0	154764	21.68	ug/L	98
70)	n-Butylbenzene	18.42	91.0	562435	25.12	ug/L	96
71)	1,2-Dibromo-3-chloropropane	20.01	75.0	7360	27.73	ug/L	81
72)	1,2,4-Trichlorobenzene	21.69	180.0	119465	19.79	ug/L	98
73)	Naphthalene	22.22	128.0	114940	25.16	ug/L	100
74)	Hexachlorobutadiene	22.03	225.0	123537	14.28	ug/L	98
75)	1,2,3-Trichlorobenzene	22.74	180.0	89562	19.50	ug/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0386::D2
Name: 0926IC25
Misc: HP MSD#2, 9/26/94

Quant Output File: ^B0386::QT
Instrument ID: HP MS #7

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08

Last Qcal Time: 940926 11:53

Operator ID: ZIYAD
Quant Time : 940926 15:10
Injected at: 940926 13:08

8A
VOLATILE 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): >B0385 Date Analyzed: 09/26/94

Instrument ID: HP MSD#2 Time Analyzed: 12:30

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(DFB) AREA #	RT	IS2(CLB) AREA #	RT	IS3(DCB) AREA #	RT
	12 HOUR STD	60757	9.19	46929	13.58	18449	18.44
	UPPER LIMIT	85060	9.52	65701	13.91	25829	18.77
	LOWER LIMIT	36454	8.86	28157	13.25	11069	18.11
	EPA SAMPLE NO.						
1	LAB BLANK	37987	9.18	30654	13.59	11504	18.43
2	94ZB19S01	61623	9.19	47780	13.60	16950	18.43
3	94ZB19S02	48366	9.19	36695	13.60	13458	18.43
4	94ZB19S03	52155	9.19	39829	13.59	14553	18.44
5	94ZB19S05	51537	9.18	38545	13.59	14033	18.43
6	94ZB19S06	49016	9.19	37346	13.59	13654	18.43
7	94ZB19R07	49337	9.17	37373	13.59	13236	18.43
8	94ZB19S08	49700	9.18	37833	13.60	13501	18.43
9	94ZB19R09	48704	9.19	38731	13.60	13727	18.44
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DFB) = 1,4-DIFLUOROBENZENE
IS2 (CLB) = CHLOROBENZENE-D5
IS3 (DCB) = 1,2-DICHLOROBENZENE-D4

UPPER LIMIT = + 40% of internal standard area.
LOWER LIMIT = - 40% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII VOA 1/87 Rev

QUANT REPORT

Operator ID: ZIYAD
Output File: ^B0389::D1
Data File: >B0389::D2
Name: 0926VBLK2
Misc: HP MSD#2, 9/26/94

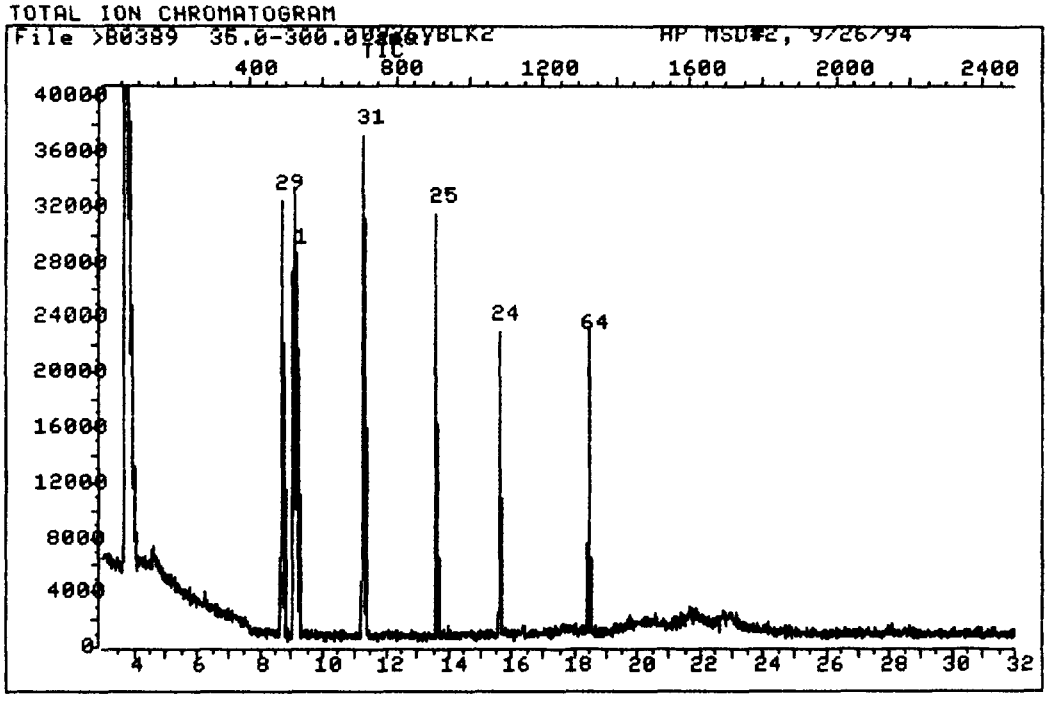
Quant Rev: 7
Quant Time: 940927 10:05
Injected at: 940926 15:01
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.18	114.0	37987	5.00	ug/L	94
24)	p-BROMOFLUOROBENZENE	15.60	174.0	12070	4.97	ug/L	90
25)	*CHLOROBENZENE-D5	13.59	117.0	30654	5.00	ug/L	94
29)	BENZENE-D6	8.71	84.0	49341	4.83	ug/L	98
31)	TOLUENE-D8	11.29	98.0	45978	4.79	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	11504	5.00	ug/L	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0389::D2 Quant Output File: ^B0389::D1
Name: 0926VBLK2 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:05
Injected at: 940926 15:01

MS data file header from : >B0389::D2

Sample: 0926VBLK2 Operator: ZIYAD SUPER GRP. 9/26/94 15:01
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0389 0926VBLK2 HP MSD#2, 9/26/94
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 8046. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0389 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	9.06	512	519	521	16384	24979	21302	100.00	100.000

Sum of corrected areas: 21302.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	99319.	9.18	6.50 - 11.39
2	5.0	108826.	13.59	11.39 - 16.01
3	5.0	80459.	18.43	16.01 - 32.01

Dilution Factor = 1.00 This sample was 25.0000 g or mL

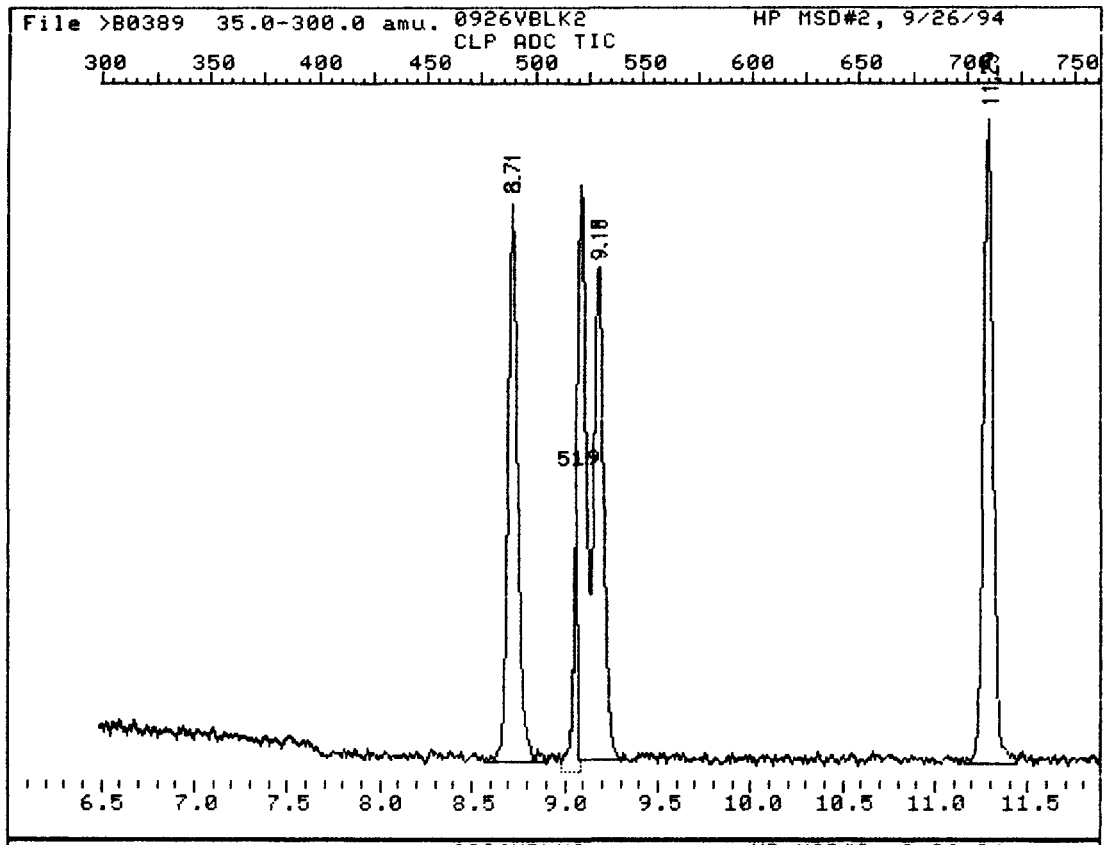
Correction Factor = 1.00

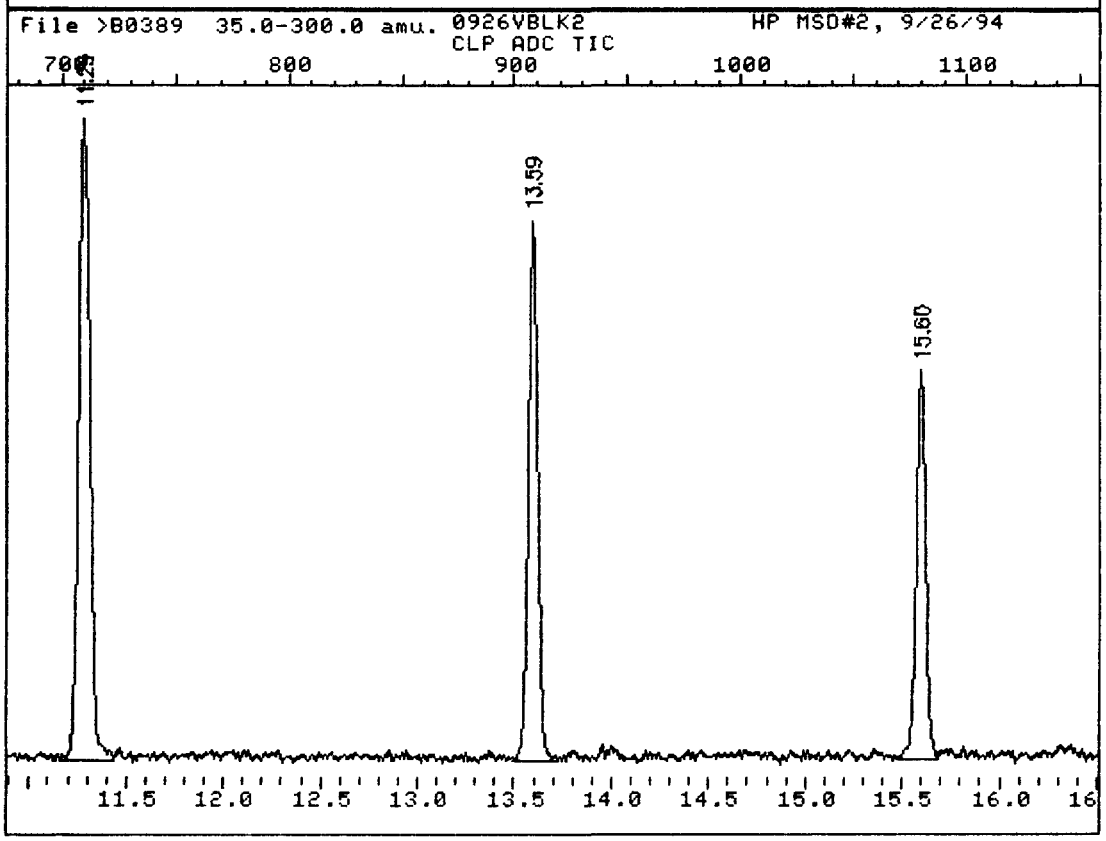
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

11:15 AM TUE., 27 SEPT, 1994

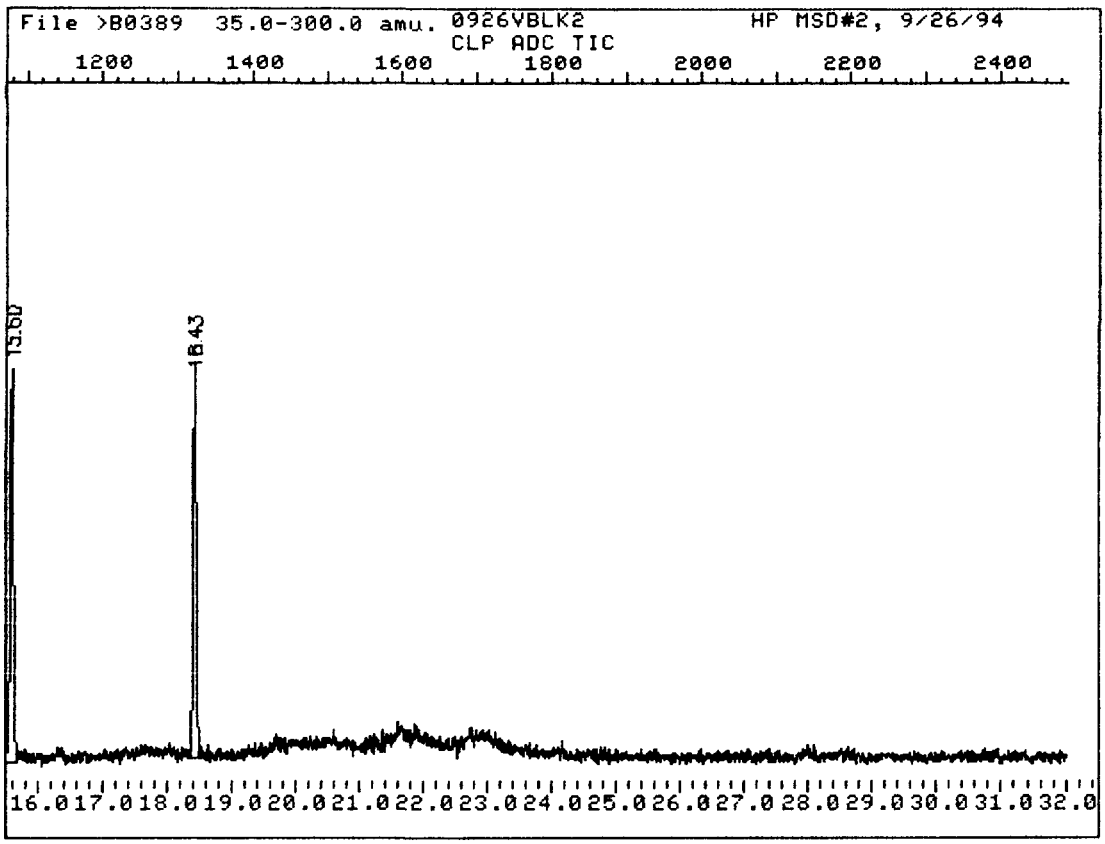
No TICs found

ag 9/28/94

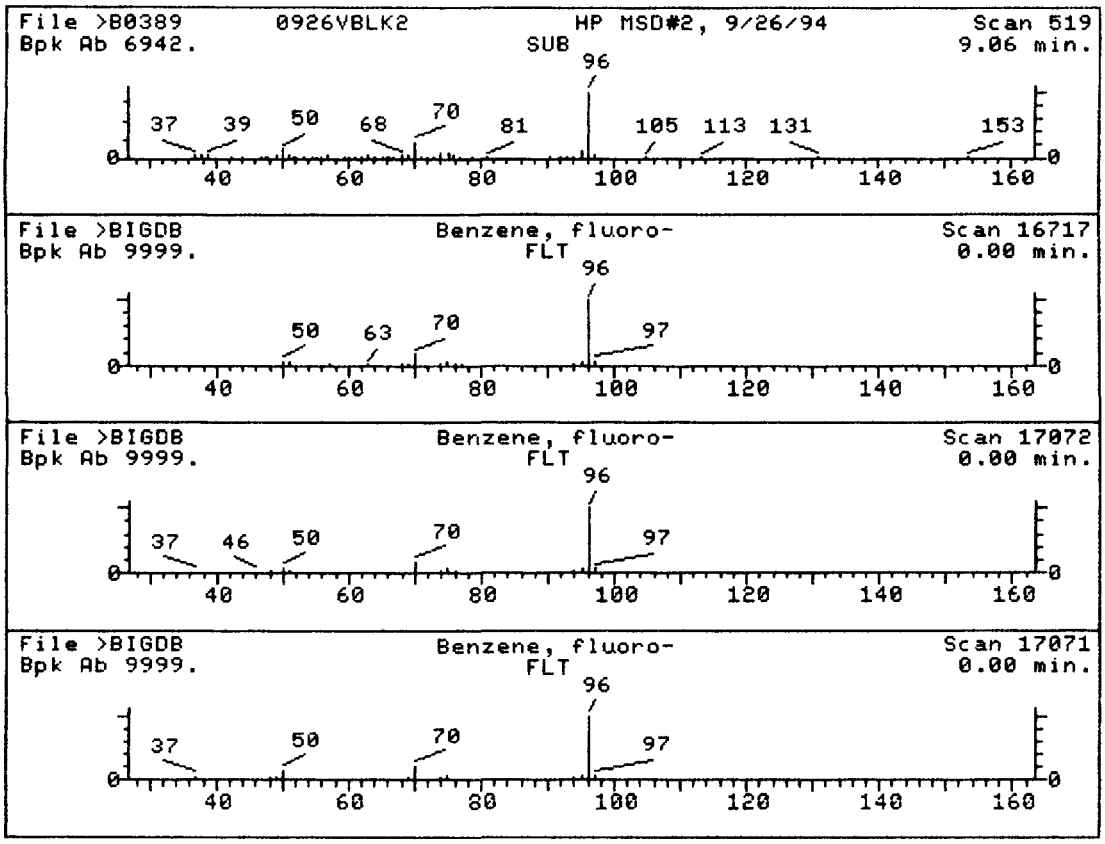




Instrument ID: HP MS Analyzed on: 9/26/94 15:01



Instrument ID: HP MS Analyzed on: 9/26/94 15:01



Instrument ID: HP MS Analyzed on: 9/26/94 15:01
Result 1 in PBM results file: LB0389
Retention Time: 9.06 Area: 21302 Tentative Conc: 1.00
The unknown area is 21.45% of the nearest internal standard

1.	Benzene, fluoro-	96	C6H5F
2.	Benzene, fluoro-	96	C6H5F
3.	Benzene, fluoro-	96	C6H5F
4.	Furan, 2,5-dimethyl-	96	C6H8O
5.	4H-Pyran-4-one	96	C5H4O2
6.	Furan, 2,5-dimethyl-	96	C6H8O

IS

Sample file: >B0389 Spectrum #: 519
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	462066	16717	"BIGDB	68	8	0	0	98	8	68	96
2.	88*	462066	17072	"BIGDB	56	27	1	0	100	5	65	55
3.	84*	462066	17071	"BIGDB	71	20	2	0	88	7	55	63
4.	52*	625865	17079	"BIGDB	37	67	3	0	100	19	20	13
5.	43*	108974	17067	"BIGDB	26	57	2	0	67	24	17	14
6.	41*	625865	16719	"BIGDB	24	74	3	0	100	22	17	12

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S01

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0390

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S01

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0390

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

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: ^B0390::D1
Data File: >B0390::D3
Name: 94ZB19S01
Misc: HP MSD#2, 9/26/94

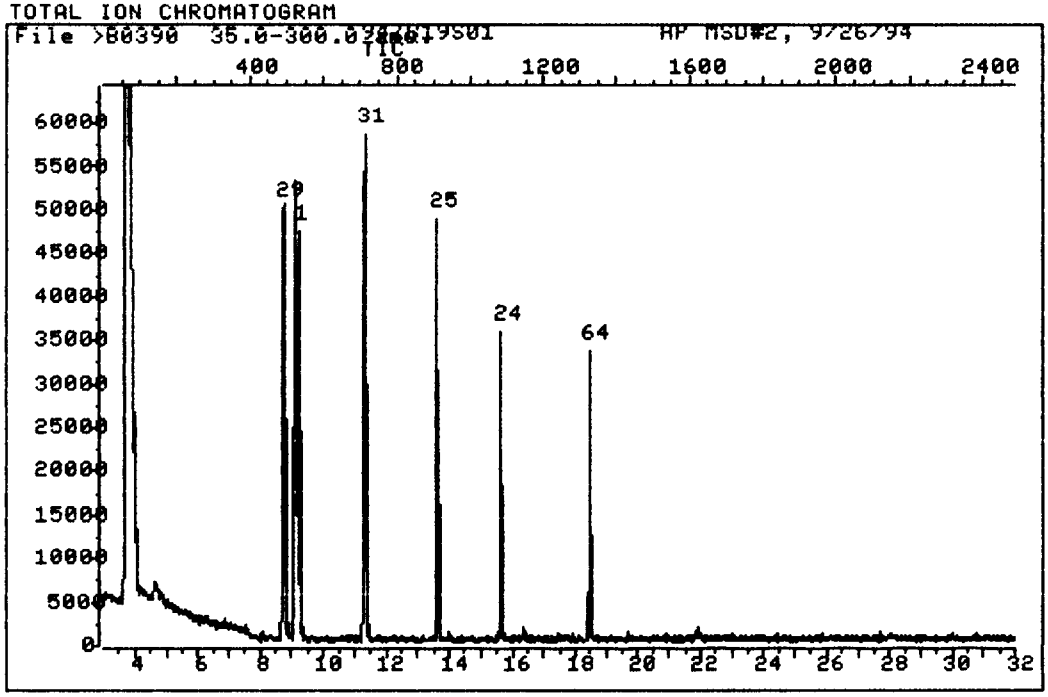
Quant Rev: 7
Quant Time: 940927 10:08
Injected at: 940926 15:39
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	61623	5.00	ug/L	95
24)	p-BROMOFLUOROBENZENE	15.60	174.0	18522	4.70	ug/L	90
25)	*CHLOROBENZENE-D5	13.60	117.0	47780	5.00	ug/L	98
29)	BENZENE-D6	8.72	84.0	78088	4.91	ug/L	99
31)	TOLUENE-D8	11.29	98.0	73854	4.93	ug/L	94
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	16950	5.00	ug/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0390::D3 Quant Output File: ^B0390::D1
Name: 94ZB19S01 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:08
Injected at: 940926 15:39

MS data file header from : >B0390::D3

Sample: 94ZB19S01 Operator: ZIYAD SUPER GRP. 9/26/94 15:39
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0390 94ZB19S01 HP MSD#2, 9/26/94
35.0| 300.0 CLP TIC
Upslope: .2000 Area Reject: 11823. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0390 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	9.08	515	521	523	38098	55700	51240	100.00	100.000

Sum of corrected areas: 51240.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	162265.	9.19	6.50 - 11.40
2	5.0	170087.	13.60	11.40 - 16.02
3	5.0	118233.	18.43	16.02 - 32.01

Dilution Factor = 1.00 This sample was 25.0000 g or mL

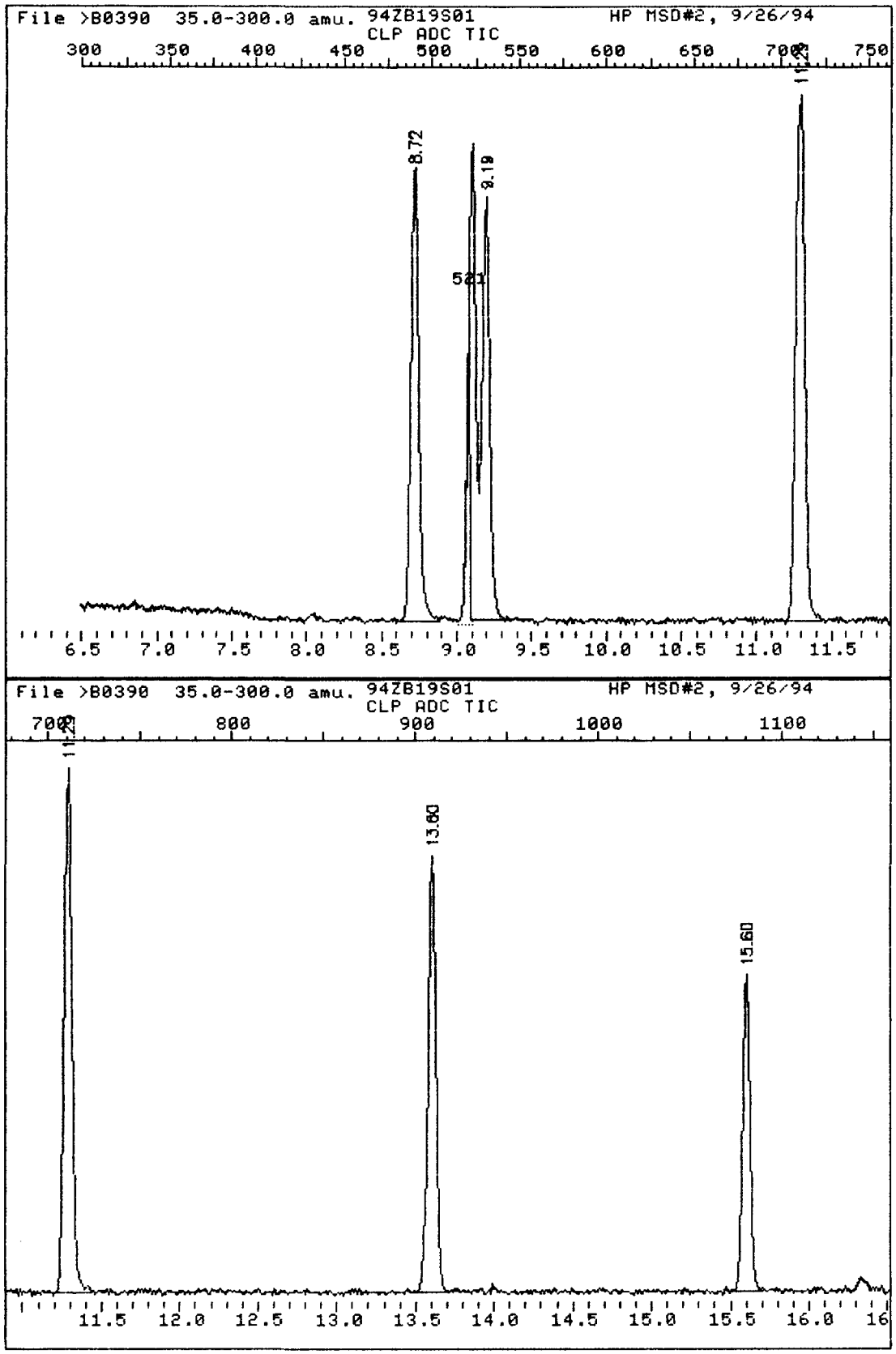
Correction Factor = 1.00

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

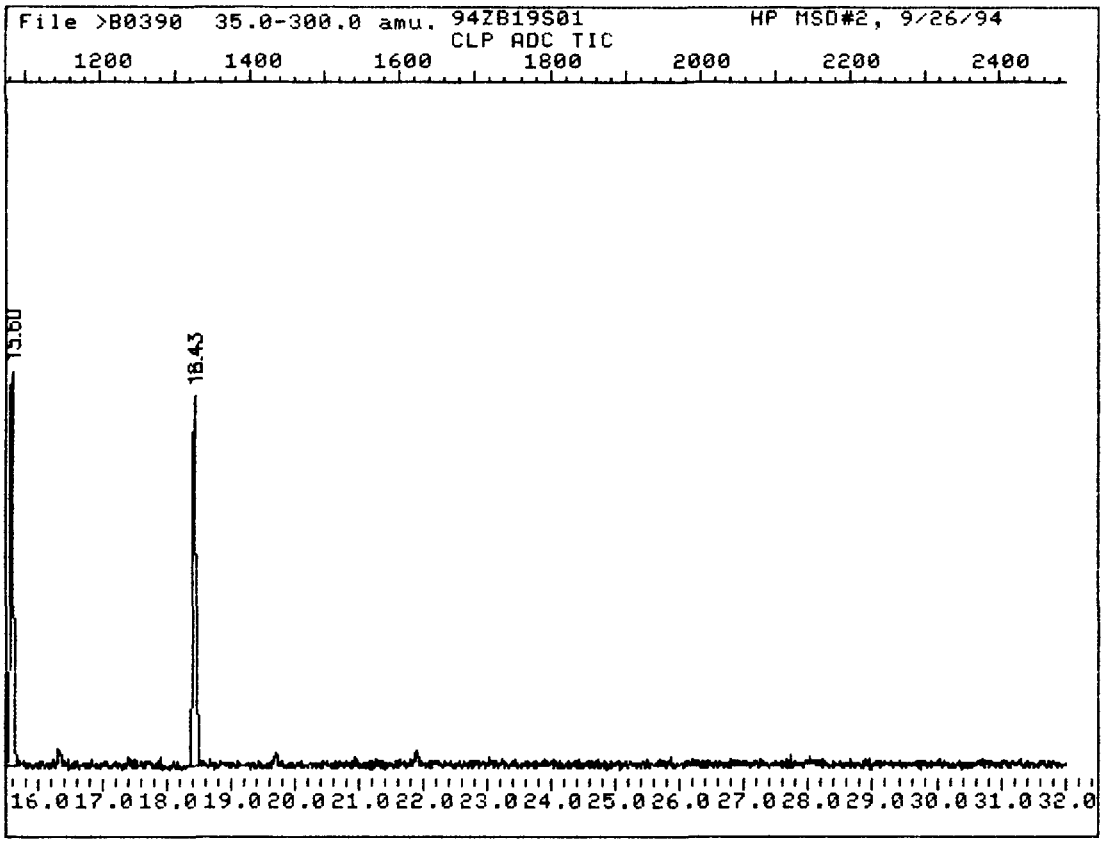
11:27 AM TUE., 27 SEPT, 1994

No TICs found

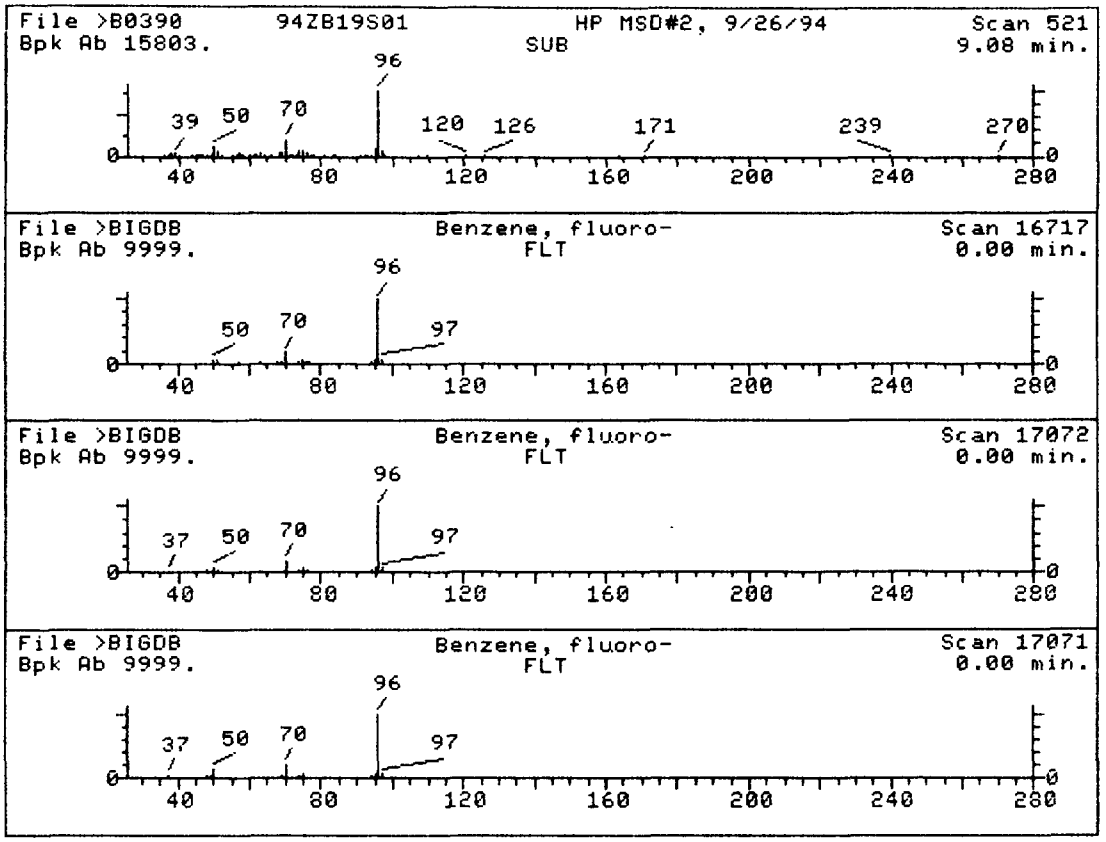
ag 9/28/94



Instrument ID: HP MS Analyzed on: 9/26/94 15:39



Instrument ID: HP MS Analyzed on: 9/26/94 15:39



Instrument ID: HP MS Analyzed on: 9/26/94 15:39
Result 1 in PBM results file: LB0390
Retention Time: 9.08 Area: 51240 Tentative Conc: 2.00
The unknown area is 31.58% of the nearest internal standard

1.	Benzene, fluoro-	96	C6H5F
2.	Benzene, fluoro-	96	C6H5F
3.	Benzene, fluoro-	96	C6H5F
4.	2-Furancarboxaldehyde	96	C5H4O2
5.	4-HYDROXYPYRIDINE	96	C5H6NO
6.	2-Furancarboxaldehyde	96	C5H4O2

IS

Sample file: >B0390 Spectrum #: 521
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	462066	16717	"BIGDB	63	13	0	0	100	10	68	95
2.	89*	462066	17072	"BIGDB	61	22	1	0	100	5	66	69
3.	88*	462066	17071	"BIGDB	65	26	2	0	100	5	65	54
4.	36*	98011	17060	"BIGDB	31	76	3	0	100	30	14	13
5.	31*	0	16710	"BIGDB	29	51	3	0	100	35	12	14
6.	30*	98011	17062	"BIGDB	25	65	3	0	100	33	12	13

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S02

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0391

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S02

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0391

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0391::D1
Data File: >B0391::D3
Name: 94ZB19S02
Misc: HP MSD#2, 9/26/94

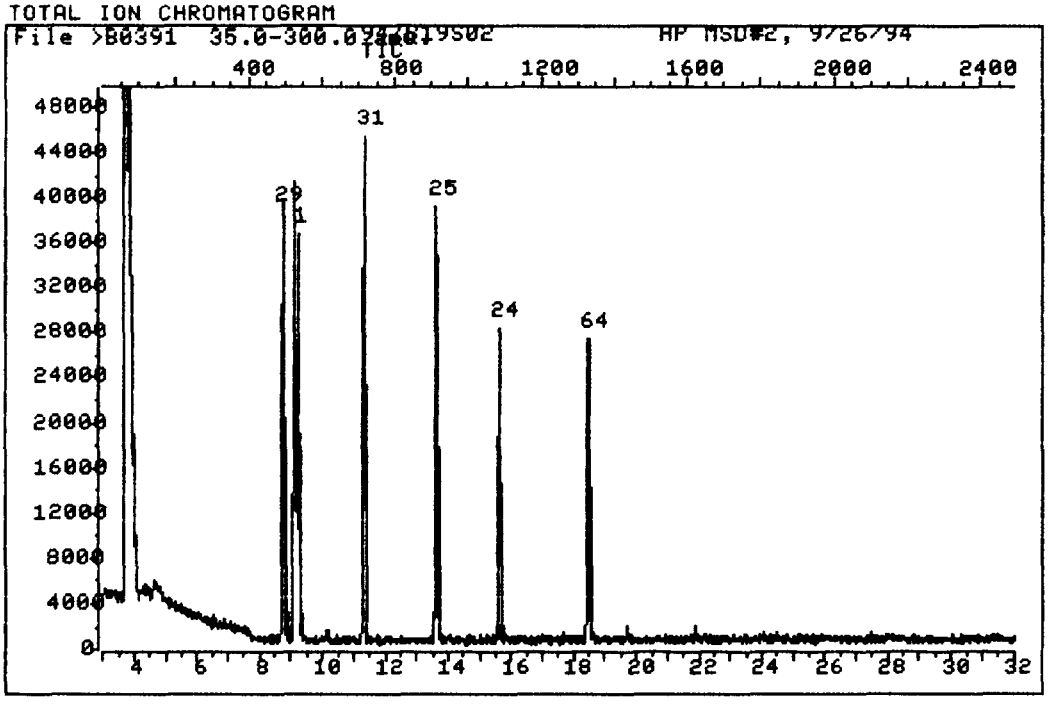
Quant Rev: 7
Quant Time: 940927 10:10
Injected at: 940926 16:16
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	48366	5.00	ug/L	95
24)	p-BROMOFLUOROBENZENE	15.60	174.0	14838	4.80	ug/L	85
25)	*CHLOROBENZENE-D5	13.60	117.0	36695	5.00	ug/L	98
29)	BENZENE-D6	8.72	84.0	60174	4.92	ug/L	97
31)	TOLUENE-D8	11.29	98.0	58172	5.06	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	13458	5.00	ug/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0391::D3 Quant Output File: ^B0391::D1
Name: 94ZB19S02 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:10
Injected at: 940926 16:16

MS data file header from : >B0391::D3

Sample: 94ZB19S02 Operator: ZIYAD SUPER GRP. 9/26/94 16:16
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0391 94ZB19S02 HP MSD#2, 9/26/94
35.0| 300.0 CLP TIC
Upslope: .2000 Area Reject: 9826. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0391 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	9.08	515	522	524	31576	47959	43943	100.00	100.000

Sum of corrected areas: 43943.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	126839.	9.19	6.50 - 11.40
2	5.0	134944.	13.60	11.40 - 16.02
3	5.0	98256.	18.43	16.02 - 32.05

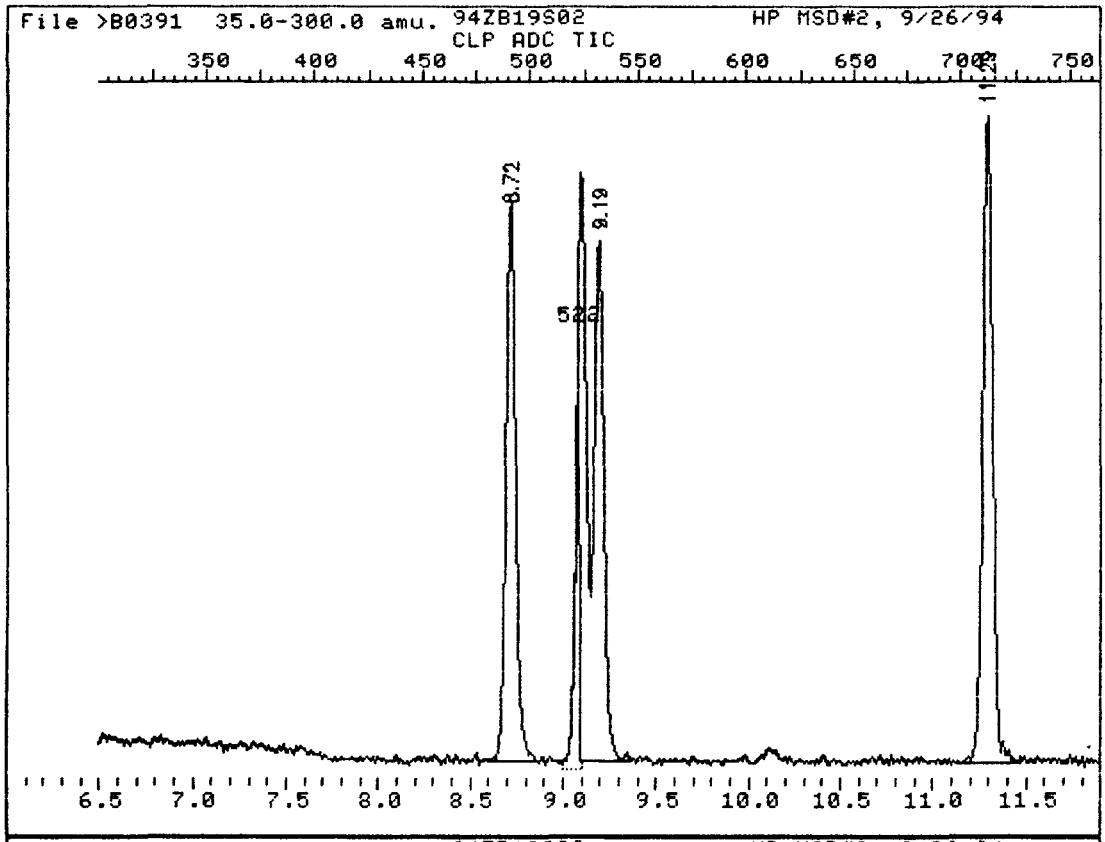
Dilution Factor = 1.00 This sample was 25.0000 g or mL

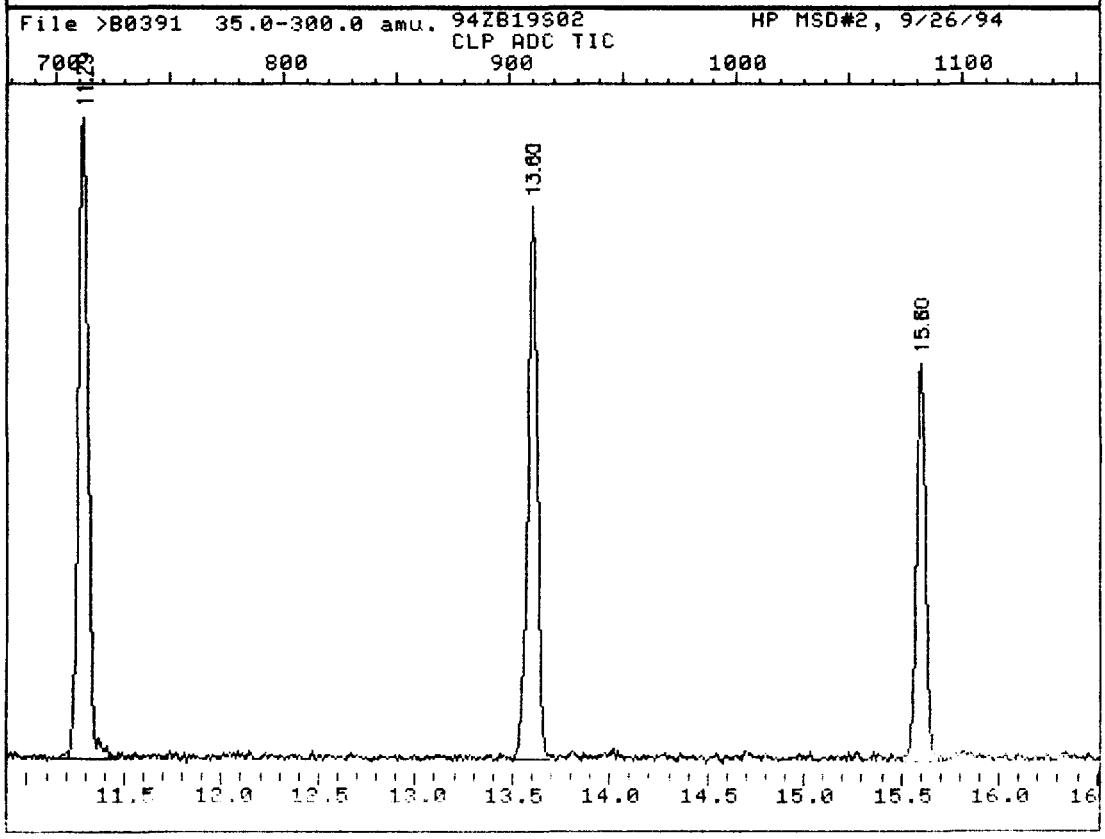
Correction Factor = 1.00

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

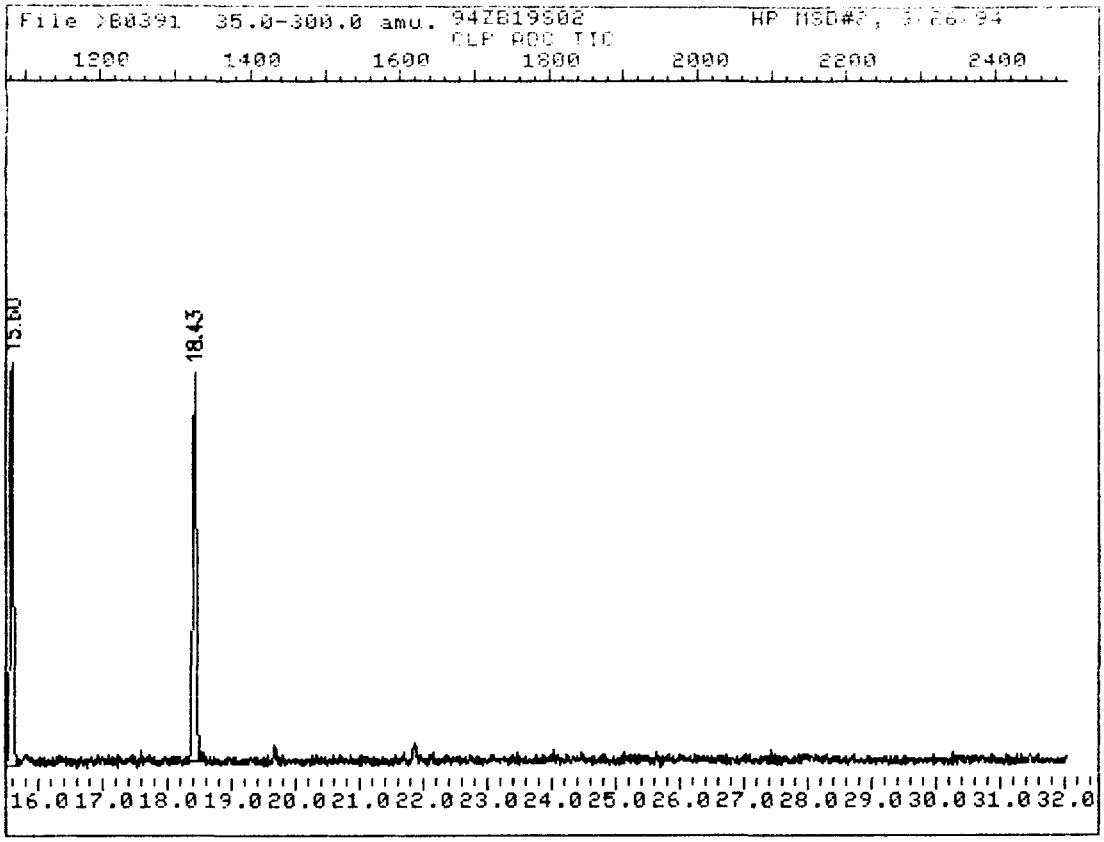
11:39 AM TUE., 27 SEPT, 1994

No TICs found ag 9/28/94

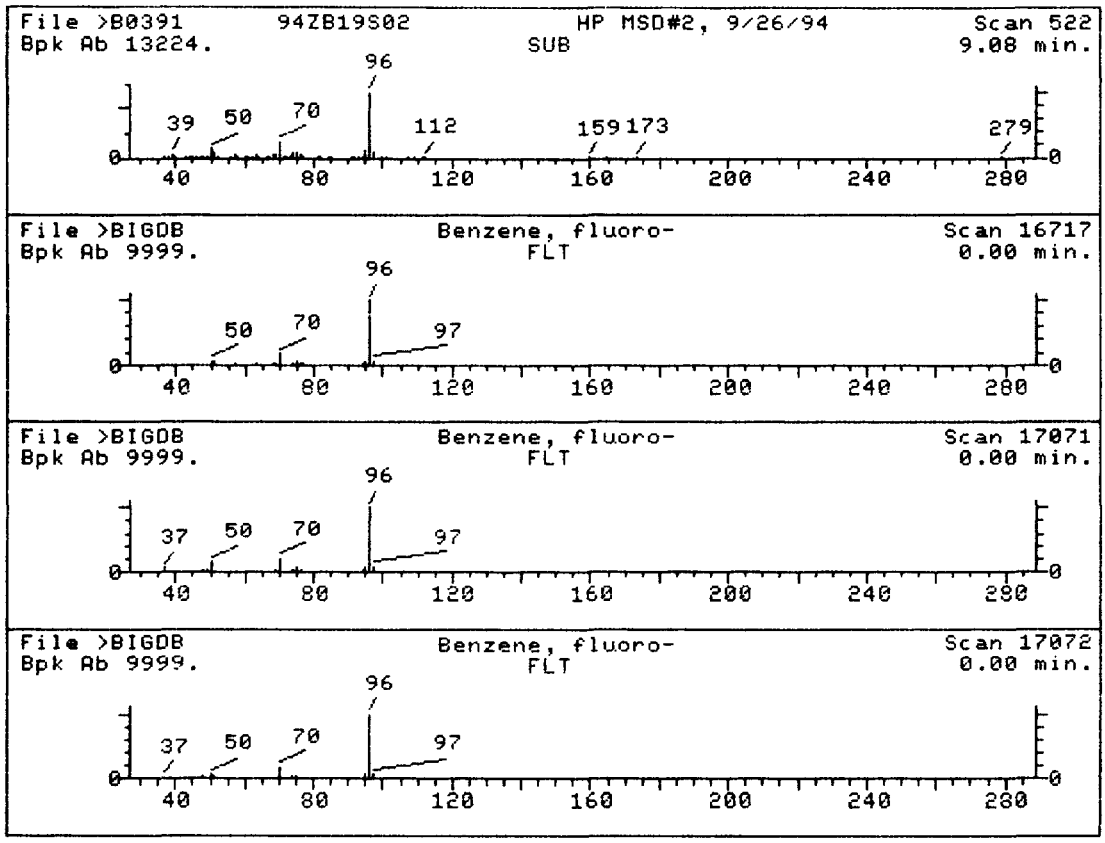




Instrument ID: HP MS Analyzed on: 9/26/94 16:16



Instrument ID: HP MS Analyzed on: 9/26/94 16:16



Instrument ID: HP MS Analyzed on: 9/26/94 16:16
Result 1 in PBM results file: LB0391
Retention Time: 9.08 Area: 43943 Tentative Conc: 2.00
The unknown area is 34.64% of the nearest internal standard

1.	Benzene, fluoro-	96	C6H5F
2.	Benzene, fluoro-	96	C6H5F
3.	Benzene, fluoro-	96	C6H5F
4.	4-HYDROXYPYRIDINE	96	C5H6NO
5.	2-Furancarboxaldehyde	96	C5H4O2
6.	2-Furancarboxaldehyde	96	C5H4O2

IS

Sample file: >B0391 Spectrum #: 522
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	462066	16717	"BIGDB	63	13	0	0	100	10	68	95
2.	88*	462066	17071	"BIGDB	65	26	2	0	98	5	65	54
3.	88*	462066	17072	"BIGDB	56	27	1	0	100	5	65	55
4.	37*	0	16710	"BIGDB	29	51	3	0	100	28	14	14
5.	36*	98011	17062	"BIGDB	25	65	3	0	100	26	14	13
6.	36*	98011	17061	"BIGDB	31	73	3	0	100	26	14	13

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S03

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0392

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

1A-2

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S03

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0392

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0392::D1
Data File: >B0392::D3
Name: 94ZB19S03
Misc: HP MSD#2, 9/26/94

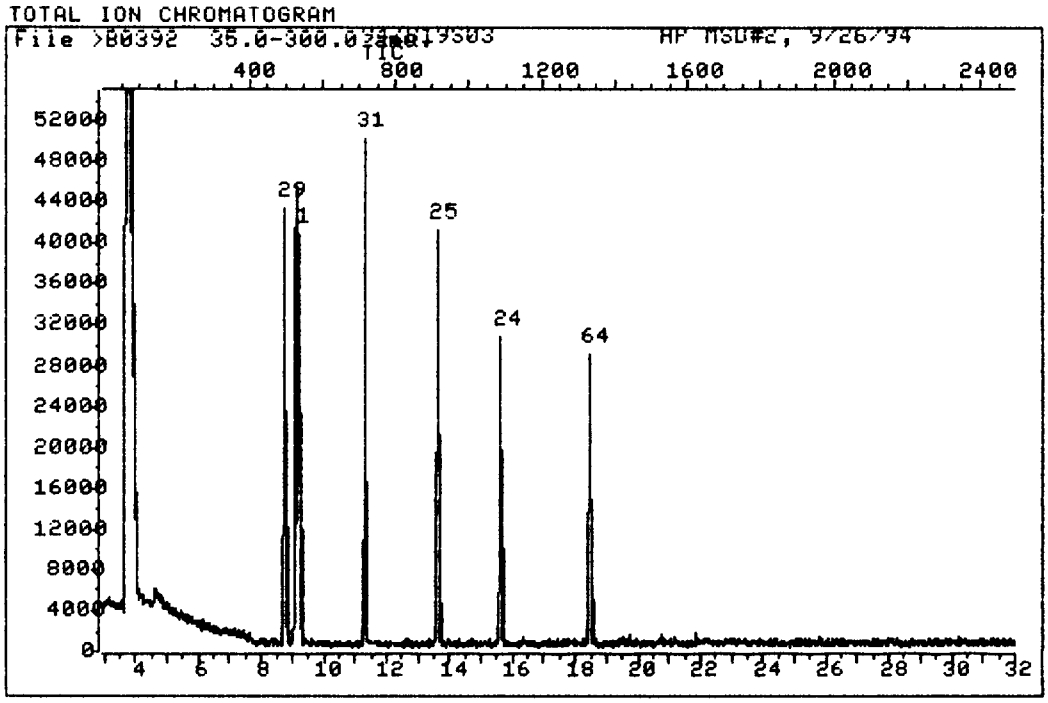
Quant Rev: 7
Quant Time: 940927 10:13
Injected at: 940926 16:53
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	52155	5.00	ug/L	96
24)	p-BROMOFLUOROBENZENE	15.59	174.0	15547	4.66	ug/L	89
25)	*CHLOROBENZENE-D5	13.59	117.0	39829	5.00	ug/L	98
29)	BENZENE-D6	8.72	84.0	64061	4.83	ug/L	99
31)	TOLUENE-D8	11.28	98.0	62140	4.98	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.44	152.0	14553	5.00	ug/L	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0392::D3 Quant Output File: ^B0392::D1
Name: 94ZB19S03 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:13
Injected at: 940926 16:53

MS data file header from : >B0392::D3

Sample: 94ZB19S03 Operator: ZIYAD SUPER GRP. 9/26/94 16:53
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0392 94ZB19S03 HP MSD#2, 9/26/94
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 10213. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0392 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	9.07	516	524	526	28974	43286	37852	100.00	100.000

Sum of corrected areas: 37852.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	141784.	9.19	6.50 - 11.39
2	5.0	143916.	13.59	11.39 - 16.01
3	5.0	102135.	18.44	16.01 - 32.03

Dilution Factor = 1.00 This sample was 25.0000 g or mL

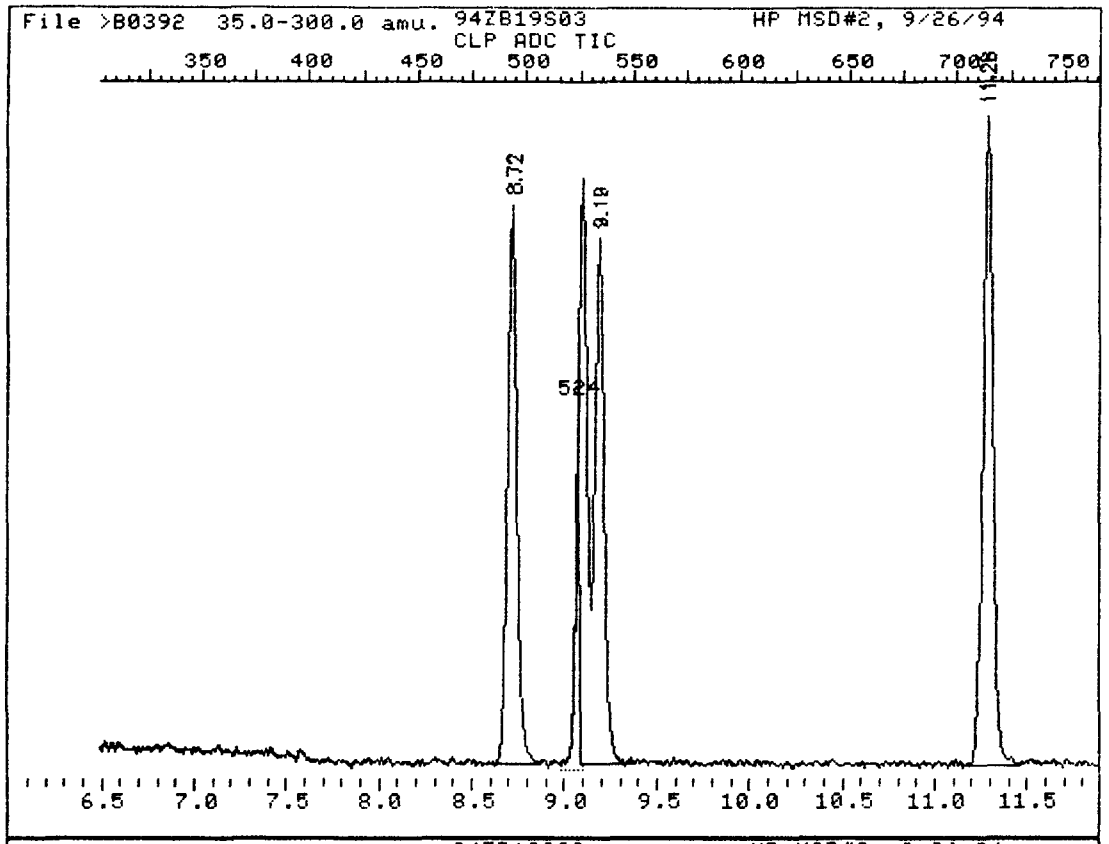
Correction Factor = 1.00

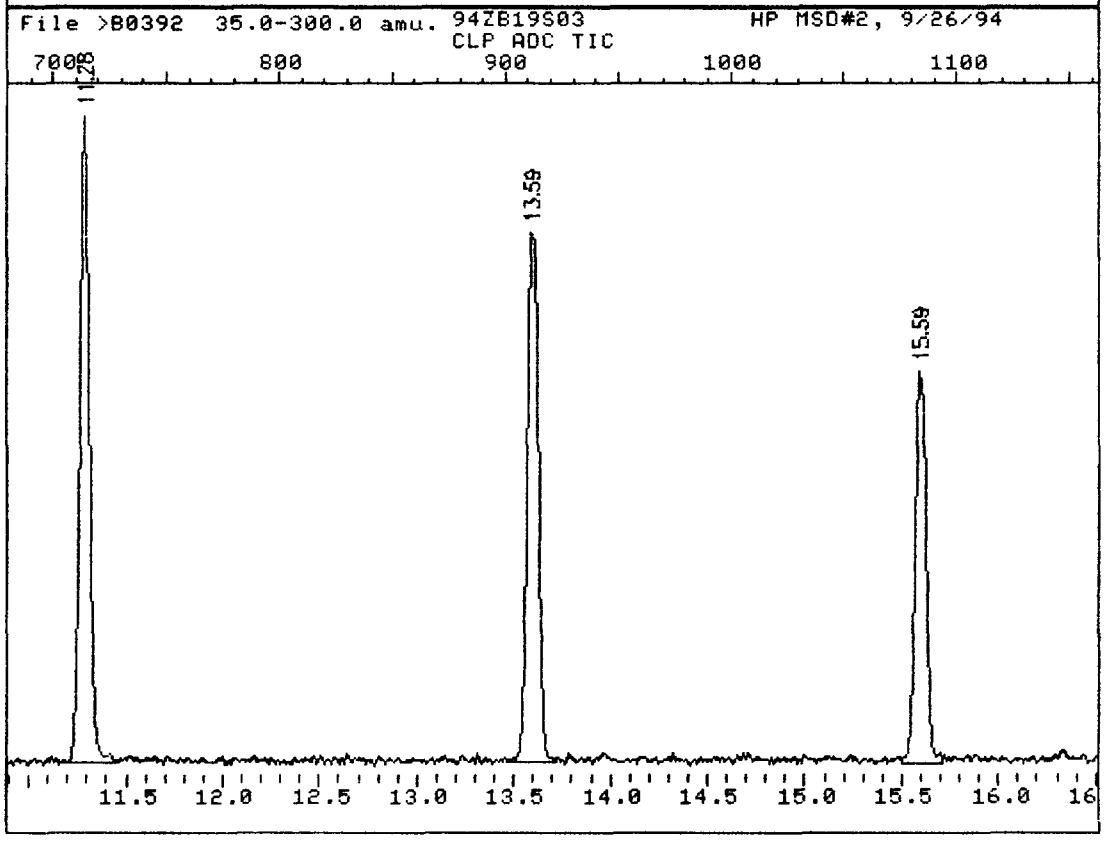
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

11:51 AM TUE., 27 SEPT, 1994

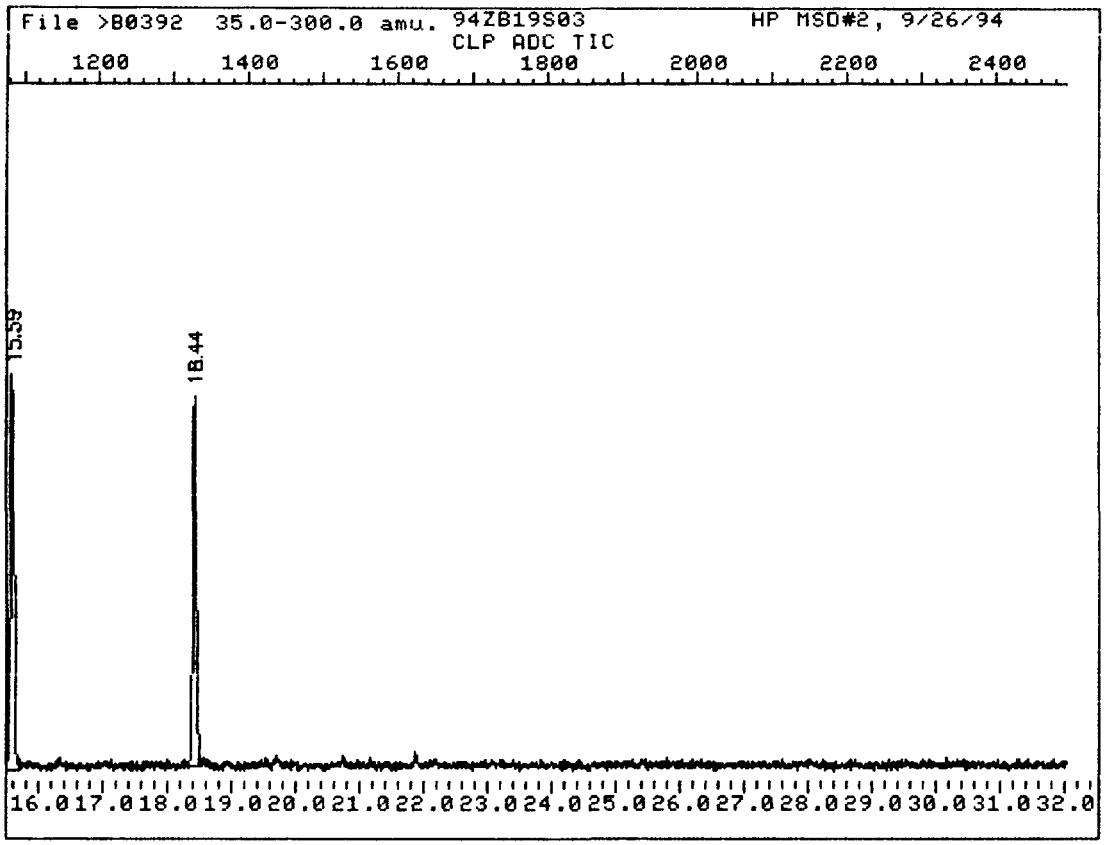
No TICs found

ag 9/28/94

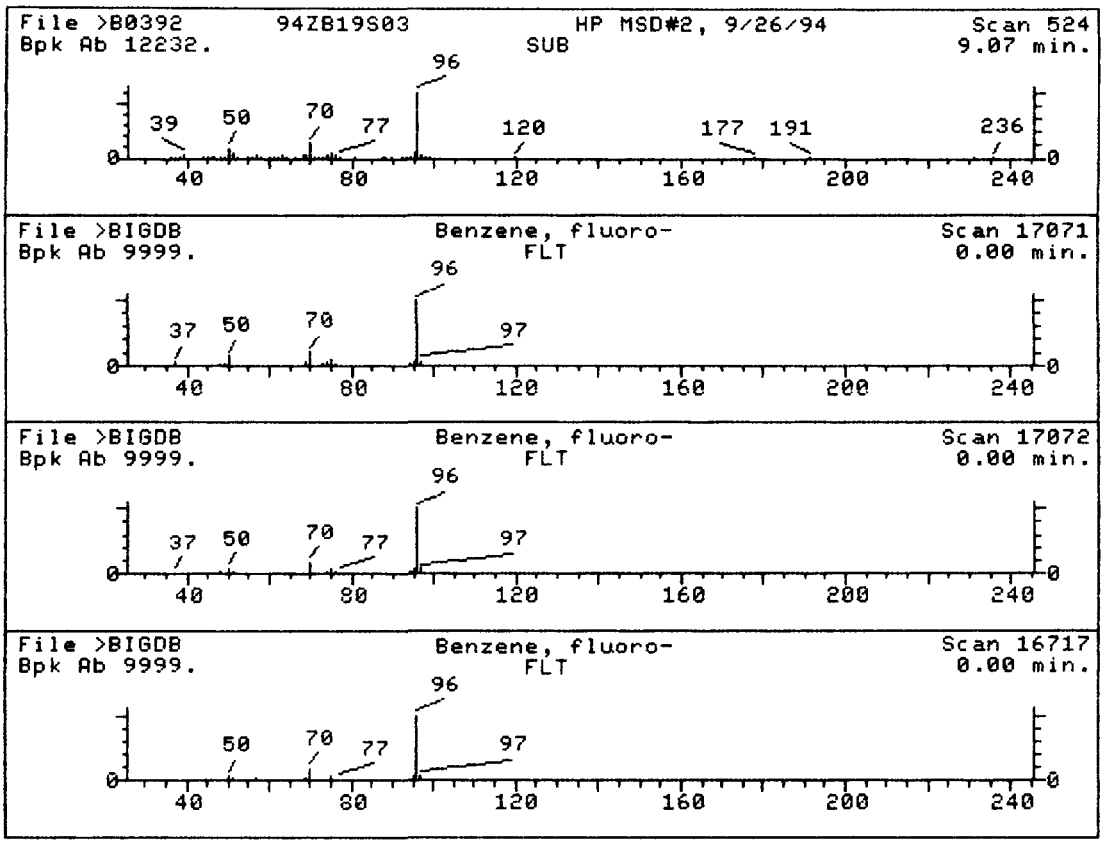




Instrument ID: HP MS Analyzed on: 9/26/94 16:53



Instrument ID: HP MS Analyzed on: 9/26/94 16:53



Instrument ID: HP MS Analyzed on: 9/26/94 16:53
Result 1 in PBM results file: LB0392
Retention Time: 9.07 Area: 37852 Tentative Conc: 1.00
The unknown area is 26.70% of the nearest internal standard

1.	Benzene, fluoro-	96	C6H5F
2.	Benzene, fluoro-	96	C6H5F
3.	Benzene, fluoro-	96	C6H5F
4.	4H-Pyran-4-one	96	C5H4O2
5.	2-Furancarboxaldehyde	96	C5H4O2
6.	4-HYDROXYPYRIDINE	96	C5H6NO

Sample file: >B0392 Spectrum #: 524
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88*	462066	17071	"BIGDB	65	26	2	0	99	5	65	54
2.	88*	462066	17072	"BIGDB	56	27	1	0	100	5	65	55
3.	87*	462066	16717	"BIGDB	58	18	0	0	97	12	55	89
4.	41*	108974	16707	"BIGDB	23	65	3	0	100	21	17	12
5.	36*	98011	17060	"BIGDB	26	81	3	0	100	30	14	13
6.	31*	0	16710	"BIGDB	29	51	3	0	100	35	12	14

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S05

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0393

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

1A-2

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S05

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0393

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0393::D1
Data File: >B0393::D3
Name: 94ZB19S05
Misc: HP MSD#2, 9/26/94

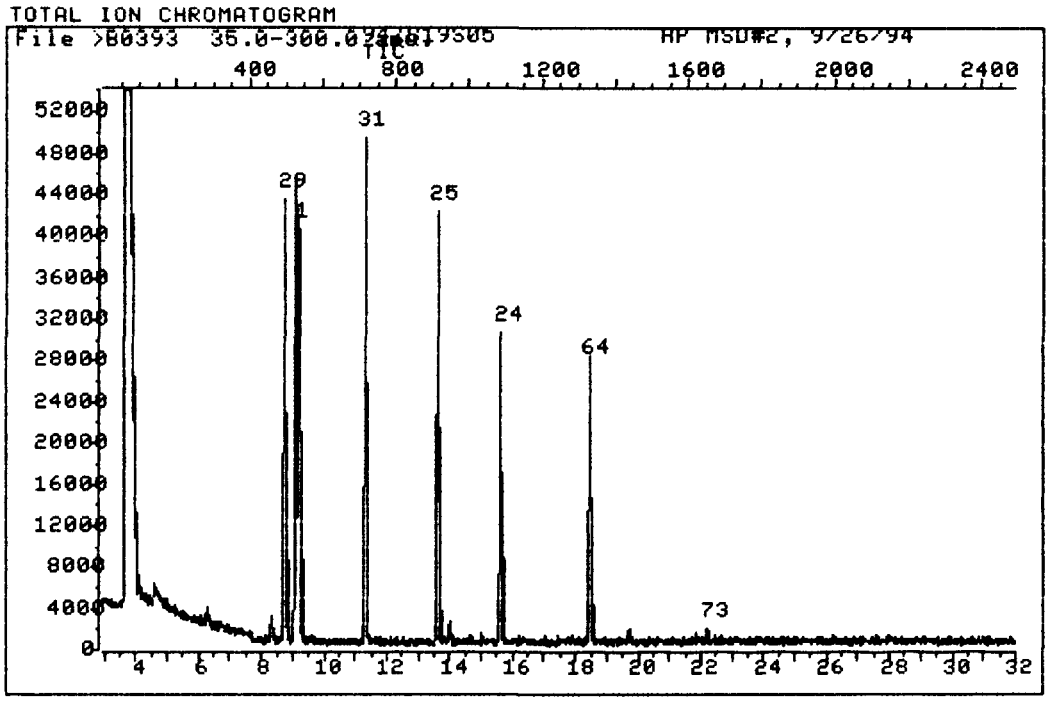
Quant Rev: 7
Quant Time: 940927 10:17
Injected at: 940926 17:31
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.18	114.0	51537	5.00	ug/L	94
24)	p-BROMOFLUOROBENZENE	15.60	174.0	15128	4.59	ug/L	89
25)	*CHLOROBENZENE-D5	13.59	117.0	38545	5.00	ug/L	96
29)	BENZENE-D6	8.71	84.0	64090	4.99	ug/L	98
31)	TOLUENE-D8	11.29	98.0	62684	5.19	ug/L	96
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	14033	5.00	ug/L	93
73)	Naphthalene	22.19	128.0	1968	.550	ug/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

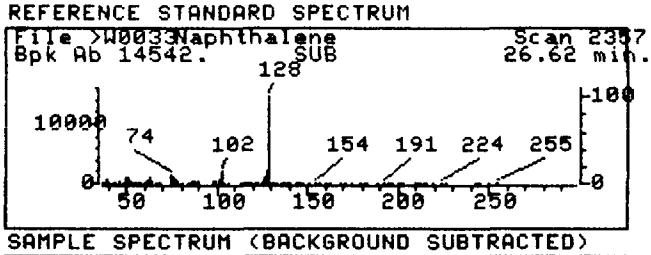


Data File: >B0393::D3 Quant Output File: ^B0393::D1
Name: 94ZB19S05 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

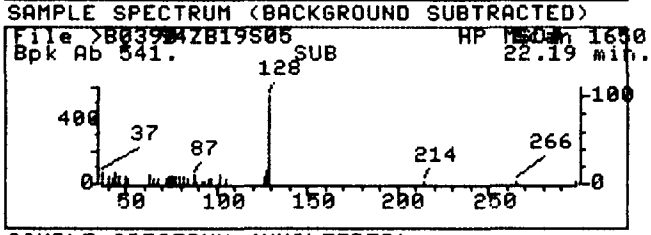
Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:17
Injected at: 940926 17:31

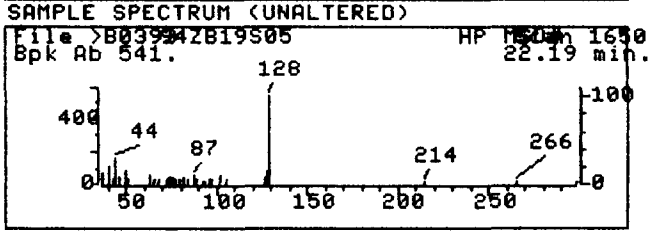
REFERENCE STANDARD SPECTRUM

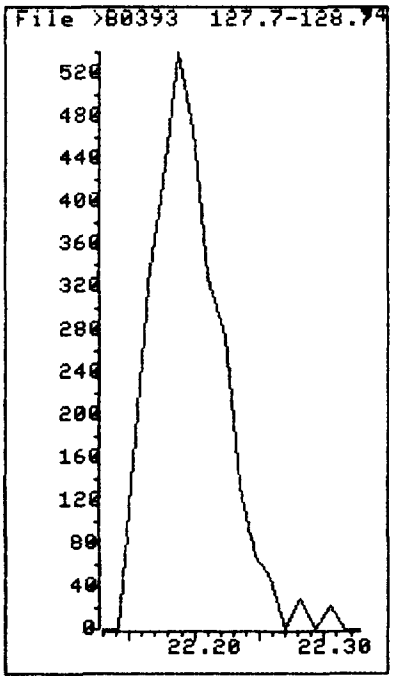


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B0393::D3
Name: 94ZB19S05
Misc: HP MSD#2, 9/26/94
Quant Time: 940927 10:17
Injected at: 940926 17:31
Last Qcal Time: <none>

Quant Output File: ^B0393::D1
Instrument ID: HP MS #7

Quant ID File: IDB025::D1
Last Calibration: 940927 09:56

Compound No : 73
Compound Name : Naphthalene
Scan Number : 1650
Retention Time: 22.19 min.
Quant Ion : 128.0
Area : 1968
Concentration : .550 ug/L
q-value : 100

Naphthalene is a non-target analyte for this sample.

ag 9/28/94

MS data file header from : >B0393::D3

Sample: 94ZB19S05 Operator: ZIYAD SUPER GRP. 9/26/94 17:31
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0393 94ZB19S05 HP MSD#2, 9/26/94
35.0| 300.0 CLP TIC
Upslope: .2000 Area Reject: 10196. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0393 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	8.29	451	457	469	2751	21900	13481	100.00	100.000

BQL

Sum of corrected areas: 13481.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	145231.	9.18	6.50 - 11.38
2	5.0	144626.	13.59	11.38 - 16.01
3	5.0	101959.	18.43	16.01 - 32.03

Dilution Factor = 1.00 This sample was 25.0000 g or mL

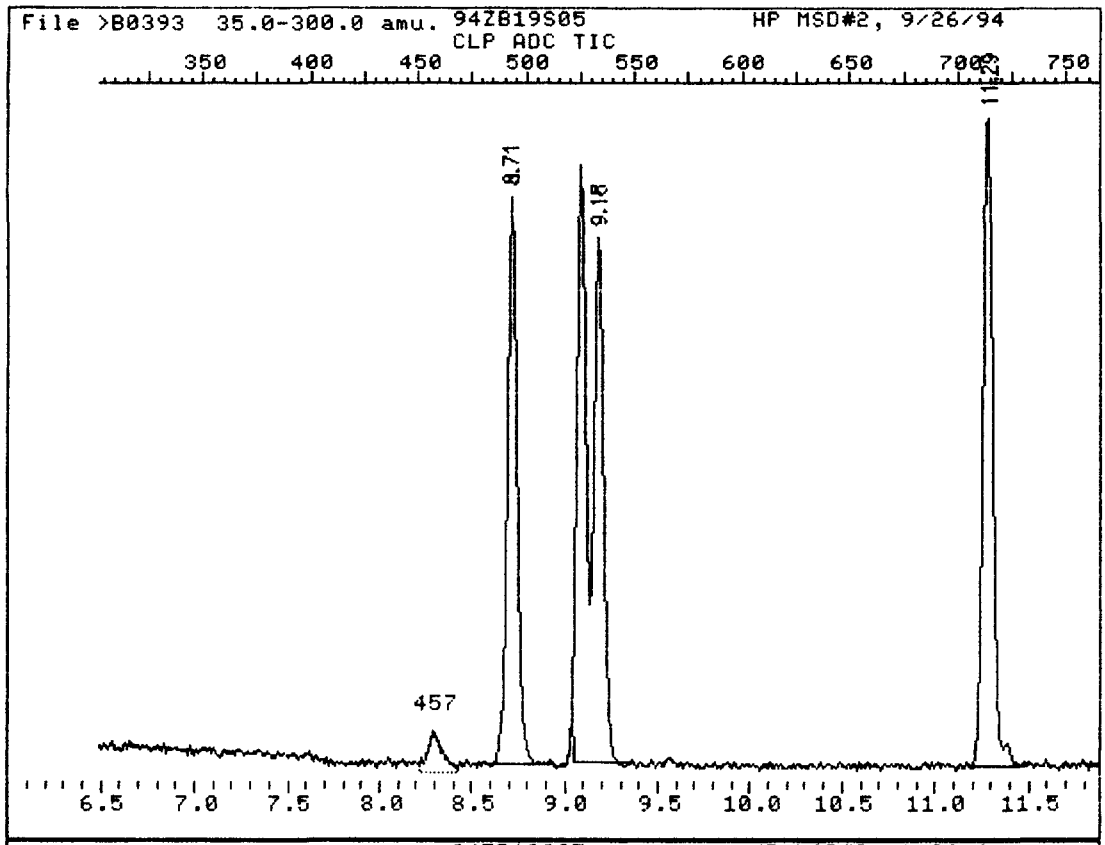
Correction Factor = 1.00

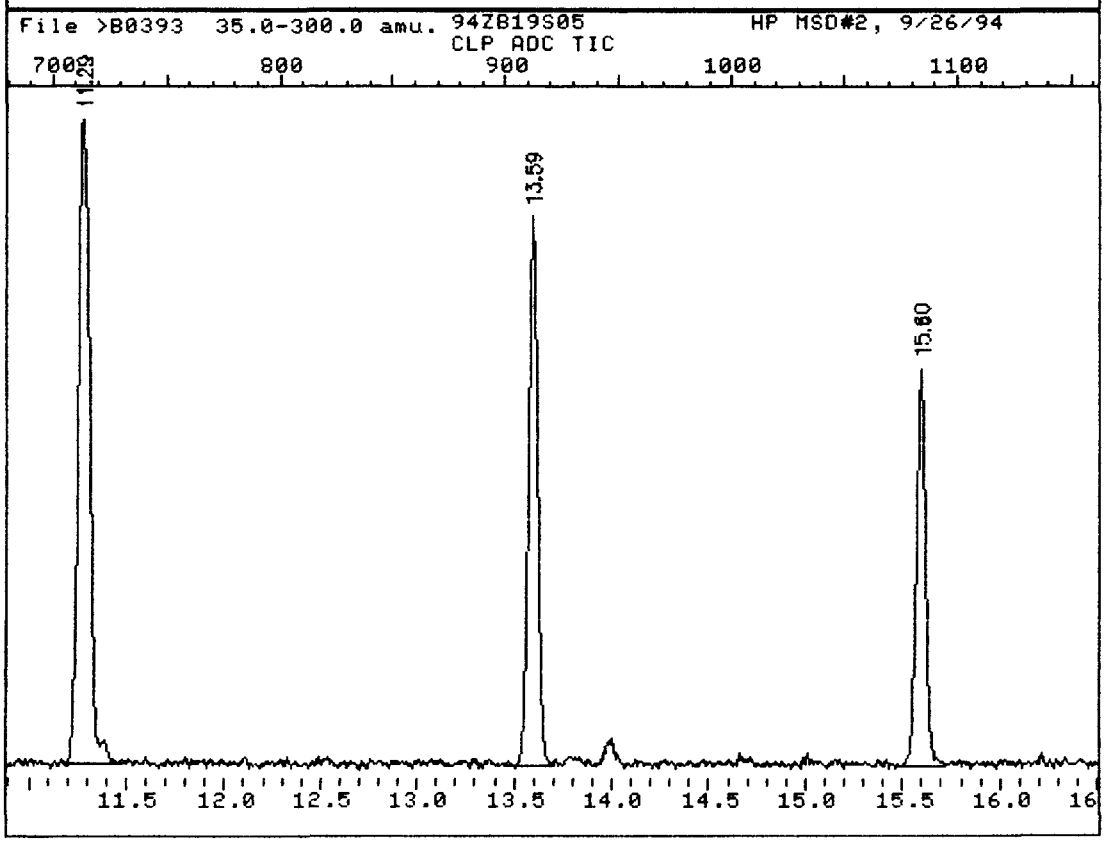
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:03 PM TUE., 27 SEPT, 1994

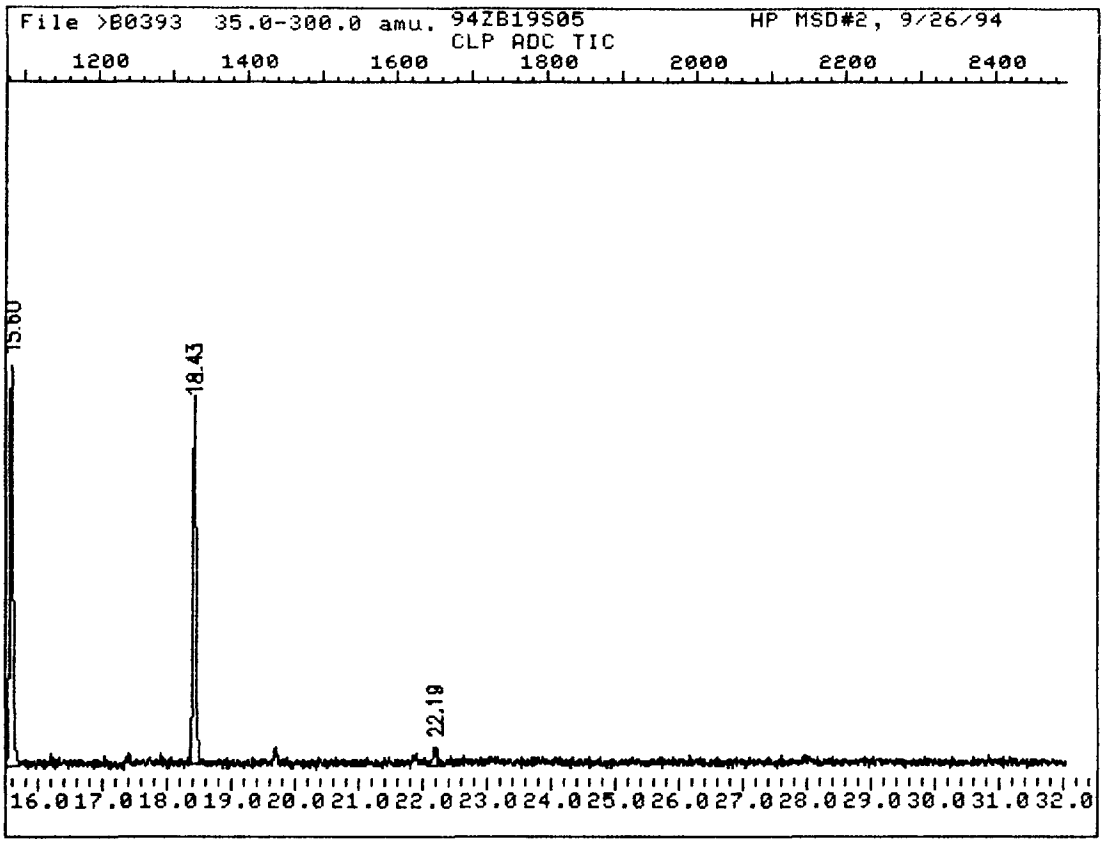
No TICs found

ag 9/28/94





Instrument ID: HP MS Analyzed on: 9/26/94 17:31



Instrument ID: HP MS Analyzed on: 9/26/94 17:31

Instrument ID: HP MS Analyzed on: 9/26/94 17:31

Retention Time: 8.29 Area: 13481 Tentative Conc: .50

The unknown area is 9.28% 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.

BQL

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S06

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0394

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

1A-2

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S06

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0394

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0394::D1
Data File: >B0394::D3
Name: 94ZB19S06
Misc: HP MSD#2, 9/26/94

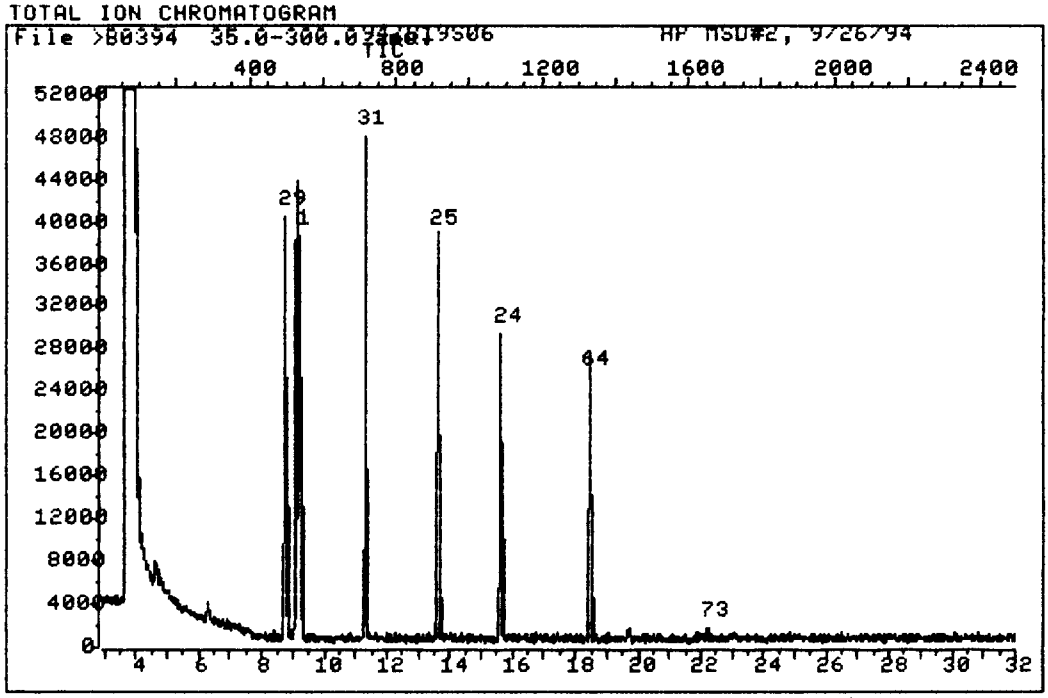
Quant Rev: 7
Quant Time: 940927 10:20
Injected at: 940926 18:08
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	49016	5.00	ug/L	96
24)	p-BROMOFLUOROBENZENE	15.60	174.0	14668	4.68	ug/L	84
25)	*CHLOROBENZENE-D5	13.59	117.0	37346	5.00	ug/L	98
29)	BENZENE-D6	8.72	84.0	61380	4.93	ug/L	98
31)	TOLUENE-D8	11.28	98.0	59080	5.05	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	13654	5.00	ug/L	84
73)	Naphthalene	22.20	128.0	1772	.509	ug/L	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM

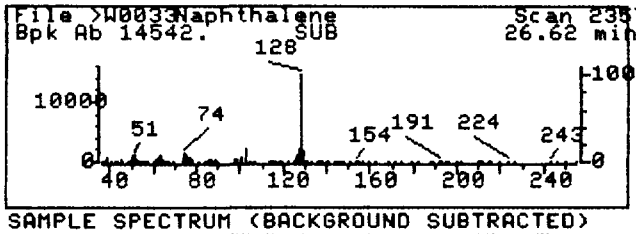


Data File: >B0394::D3 Quant Output File: ^B0394::D1
Name: 94ZB19S06 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

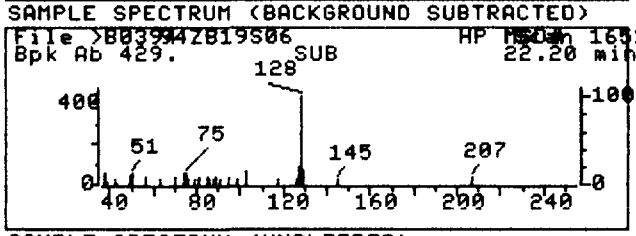
Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:20
Injected at: 940926 18:08

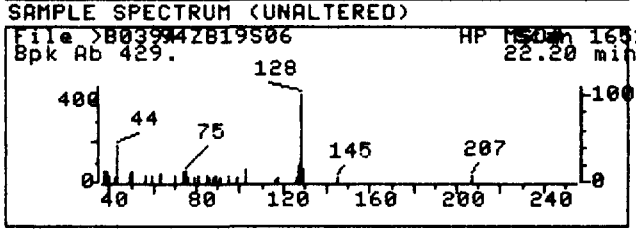
REFERENCE STANDARD SPECTRUM

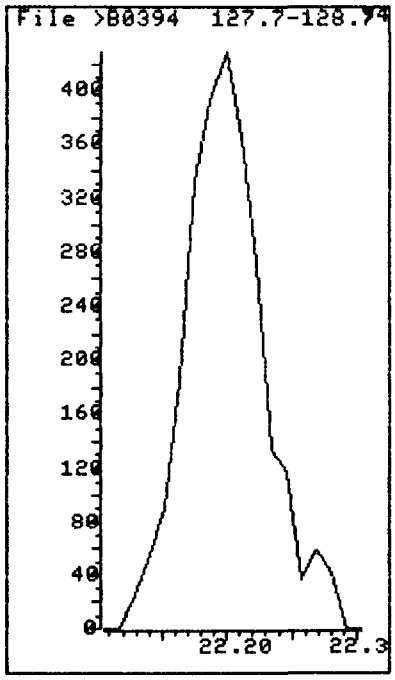


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B0394::D3
Name: 94ZB19S06
Misc: HP MSD#2, 9/26/94
Quant Time: 940927 10:20
Injected at: 940926 18:08
Last Qcal Time: <none>

Quant Output File: ^B0394::D1
Instrument ID: HP MS #7

Quant ID File: IDB025::D1
Last Calibration: 940927 09:56

Compound No : 73
Compound Name : Naphthalene
Scan Number : 1651
Retention Time: 22.20 min.
Quant Ion : 128.0
Area : 1772
Concentration : .509 ug/L
q-value : 100

Naphthalene is a non-target analyte for this sample.

Ag 9/28/94

MS data file header from : >B0394::D3

Sample: 94ZB19S06 Operator: ZIYAD SUPER GRP. 9/26/94 18:08
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0394 94ZB19S06 HP MSD#2, 9/26/94
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 9599. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0394 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	9.08	518	525	527	37485	62512	57506	100.00	100.000

Sum of corrected areas: 57506.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	138256.	9.19	6.50 - 11.39
2	5.0	135489.	13.59	11.39 - 16.01
3	5.0	95990.	18.43	16.01 - 32.03

Dilution Factor = 1.00 This sample was 25.0000 g or mL

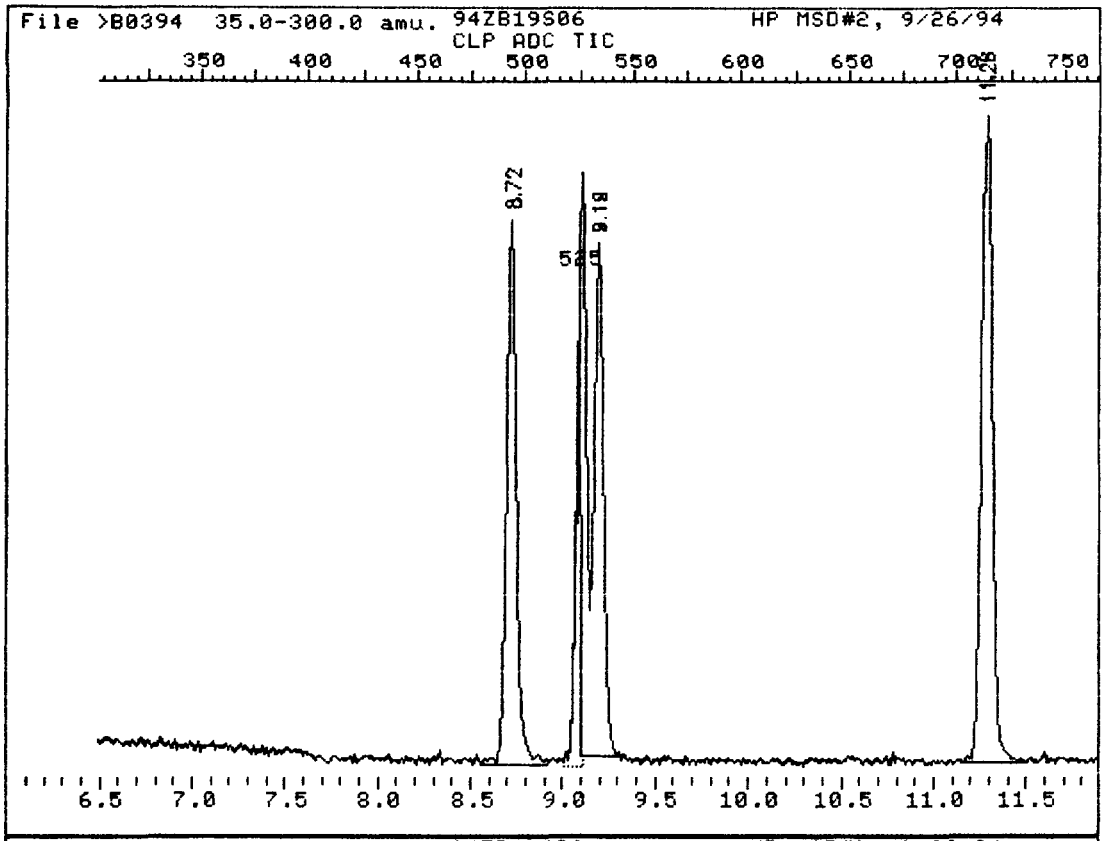
Correction Factor = 1.00

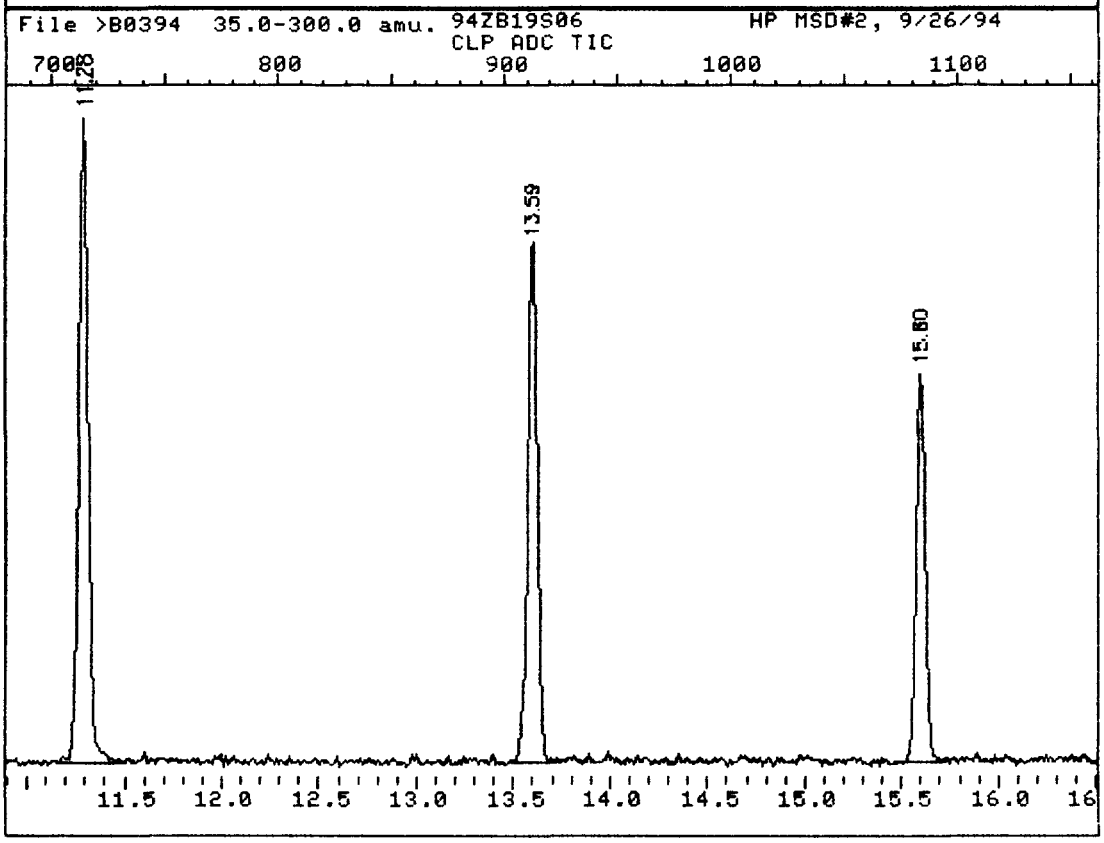
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:12 PM TUE., 27 SEPT, 1994

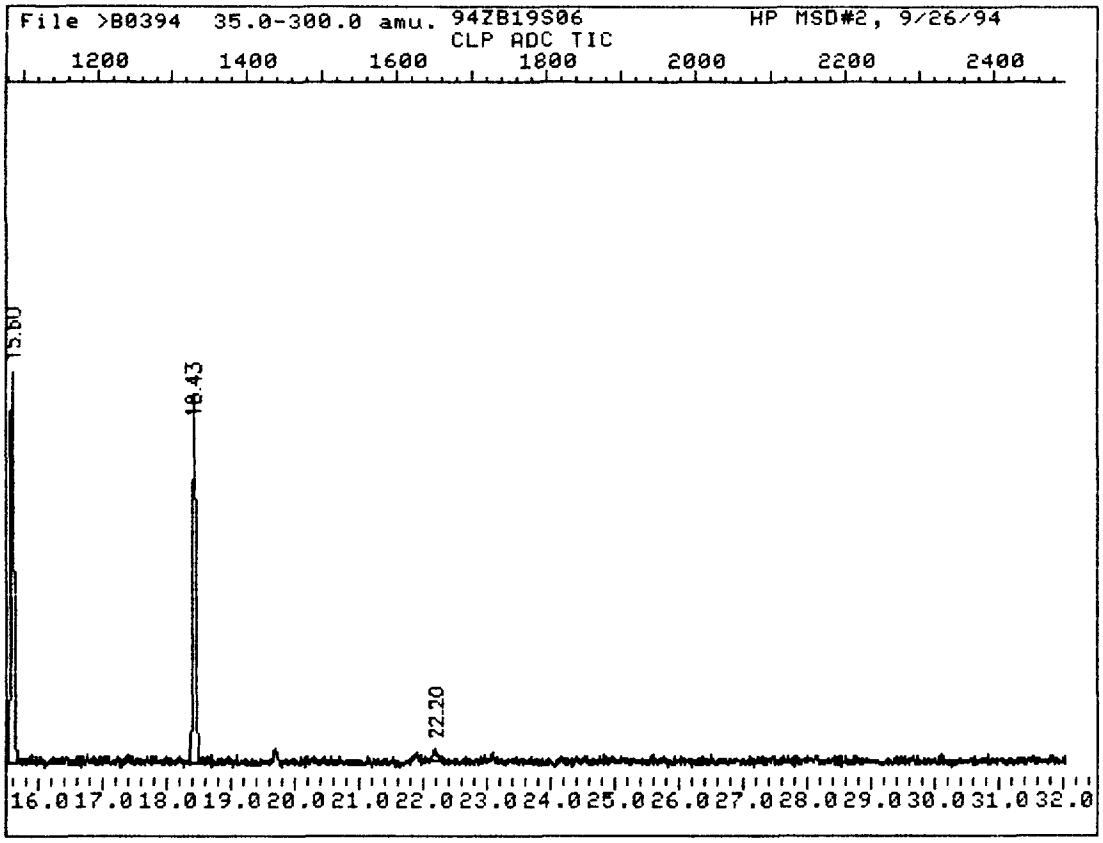
No TICs found

ag 9/28/94

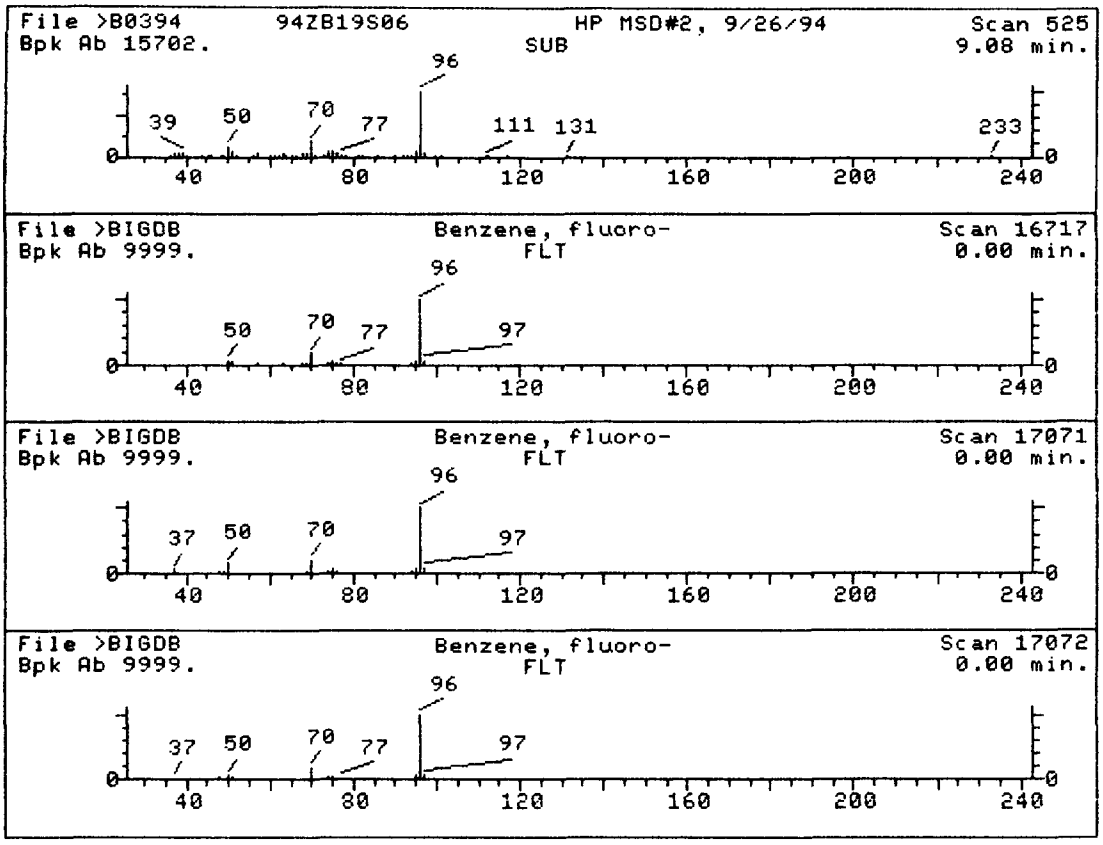




Instrument ID: HP MS Analyzed on: 9/26/94 18:08



Instrument ID: HP MS Analyzed on: 9/26/94 18:08



Instrument ID: HP MS Analyzed on: 9/26/94 18:08
Result 1 in PBM results file: LB0394
Retention Time: 9.08 Area: 57506 Tentative Conc: 2.00
The unknown area is 41.59% of the nearest internal standard

1. Benzene, fluoro-		96 C6H5F
2. Benzene, fluoro-		96 C6H5F
3. Benzene, fluoro-	IS	96 C6H5F
4. 2-Furancarboxaldehyde		96 C5H4O2
5. 2-Furancarboxaldehyde		96 C5H4O2
6. 2-Furancarboxaldehyde		96 C5H4O2

Sample file: >B0394 Spectrum #: 525
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	462066	16717	"BIGDB	58	18	0	0	94	14	55	89
2.	81*	462066	17071	"BIGDB	60	31	2	0	100	7	53	46
3.	76*	462066	17072	"BIGDB	46	37	1	0	97	10	45	29
4.	36*	98011	17060	"BIGDB	26	81	3	0	100	29	14	13
5.	30*	98011	17066	"BIGDB	27	77	3	0	100	33	12	13
6.	30*	98011	17061	"BIGDB	25	79	3	0	100	33	12	13

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19R07

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0395

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	5.	
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19R07

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0395

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0395::D1
Data File: >B0395::D3
Name: 94ZB19R07
Misc: HP MSD#2, 9/26/94

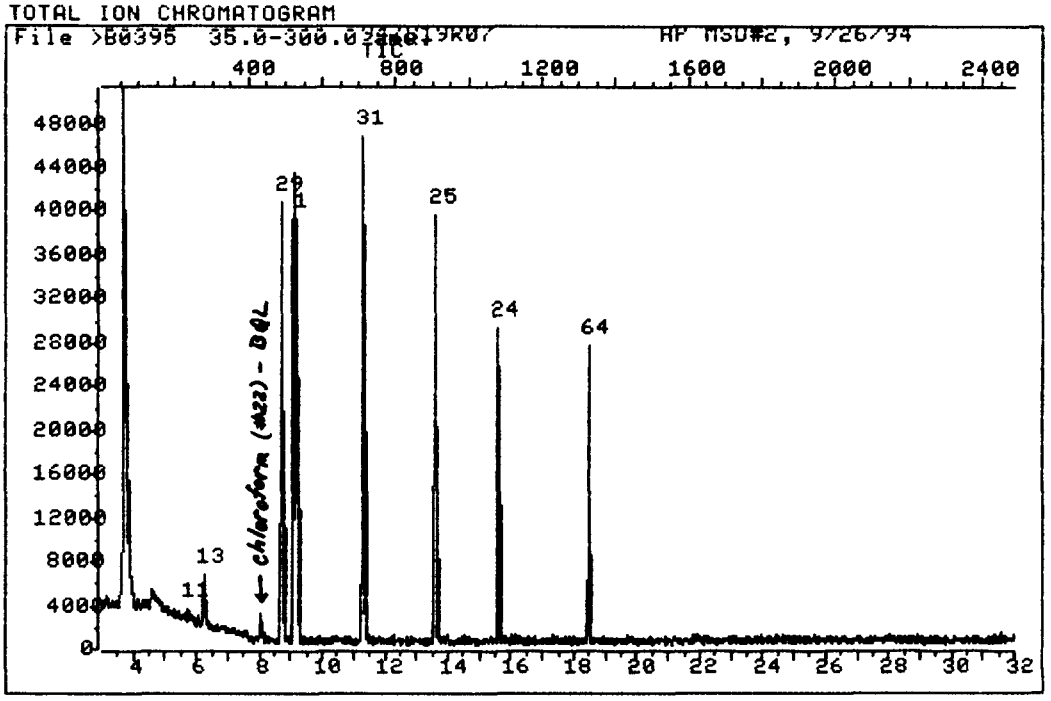
Quant Rev: 7
Quant Time: 940927 10:22
Injected at: 940926 18:45
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.17	114.0	49337	5.00	ug/L	94
11)	Acetone	5.75	43.0	2254	5.12	ug/L ✓	92
13)	Methylene chloride	6.22	84.0	3764	1.07	ug/L ✓	89
24)	p-BROMOFLUOROBENZENE	15.59	174.0	14711	4.66	ug/L	89
25)	*CHLOROBENZENE-D5	13.59	117.0	37373	5.00	ug/L	98
29)	BENZENE-D6	8.71	84.0	61421	4.93	ug/L	98
31)	TOLUENE-D8	11.28	98.0	57916	4.95	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	13236	5.00	ug/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



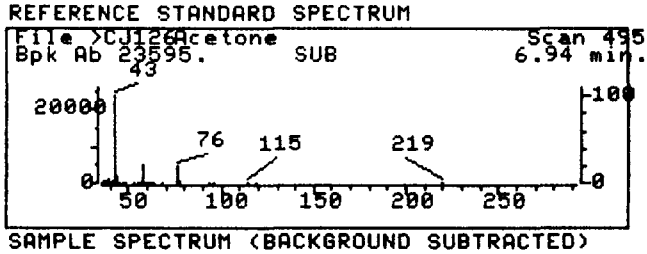
ag
9/28/94

Data File: >B0395::D3 Quant Output File: ^B0395::D1
Name: 94ZB19R07 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

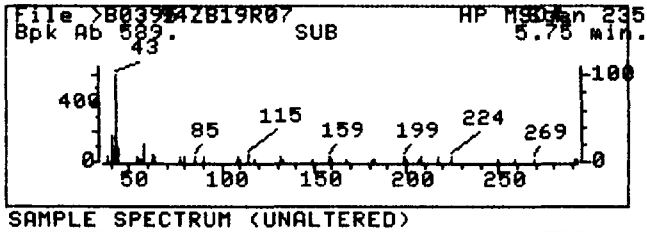
Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:22
Injected at: 940926 18:45

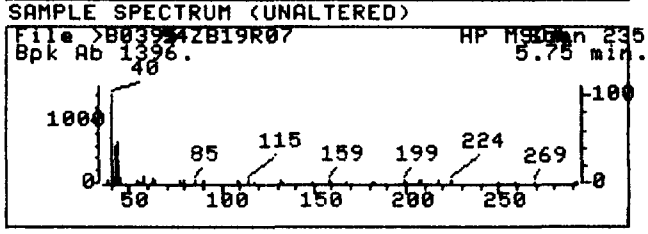
REFERENCE STANDARD SPECTRUM

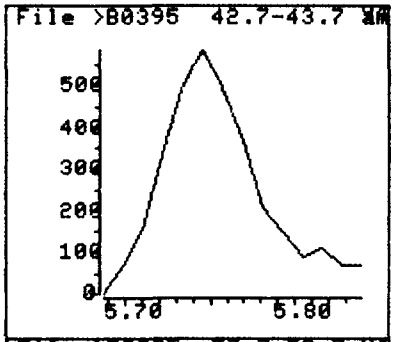


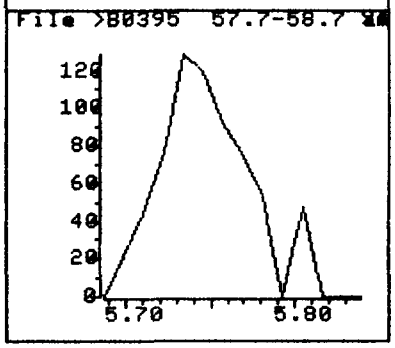
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B0395::D3
Name: 94ZB19R07
Misc: HP MSD#2, 9/26/94
Quant Time: 940927 10:22
Injected at: 940926 18:45
Last Qcal Time: <none>

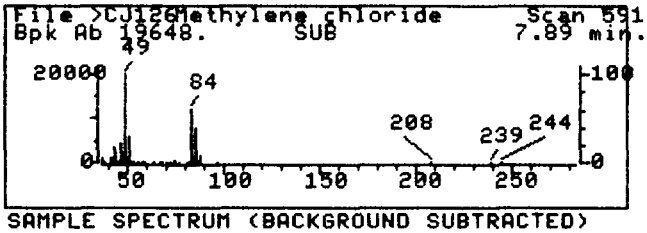
Quant Output File: ^B0395::D1
Instrument ID: HP MS #7

Quant ID File: IDB025::D1
Last Calibration: 940927 09:56

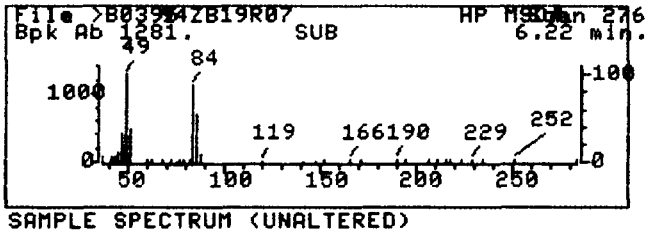
Compound No : 11
Compound Name : Acetone
Scan Number : 235
Retention Time: 5.75 min.
Quant Ion : 43.0
Area : 2254
Concentration : 5.12 ug/L
q-value : 92

✓

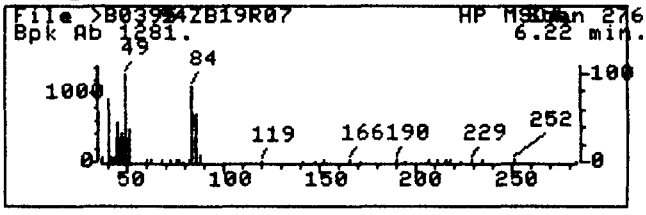
REFERENCE STANDARD SPECTRUM

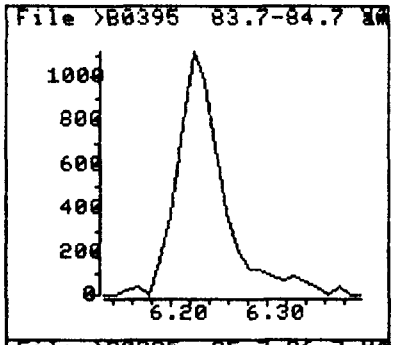


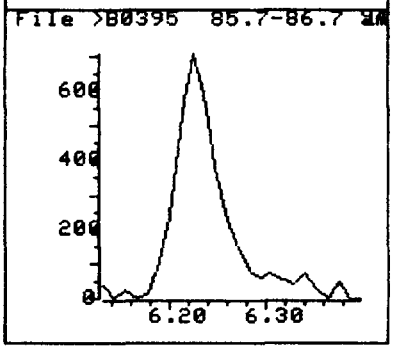
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B0395::D3
Name: 94ZB19R07
Misc: HP MSD#2, 9/26/94
Quant Time: 940927 10:22
Injected at: 940926 18:45
Last Qcal Time: <none>

Quant Output File: ^B0395::D1
Instrument ID: HP MS #7

Quant ID File: IDB025::D1
Last Calibration: 940927 09:56

Compound No : 13
Compound Name : Methylene chloride
Scan Number : 276
Retention Time: 6.22 min.
Quant Ion : 84.0
Area : 3764
Concentration : 1.07 ug/L
q-value : 89

✓

MS data file header from : >B0395::D3

Sample: 94ZB19R07 Operator: ZIYAD SUPER GRP. 9/26/94 18:45
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0395 94ZB19R07 HP MSD#2, 9/26/94
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 9704. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0395 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
BQL	~~1~~	~~8.01~~	423	429	442	2676	20447	12015	19.31	16.183
IS	2	9.07	511	520	522	38756	66700	62228	100.00	83.817

Sum of corrected areas: 74243.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	135773.	9.17	6.50 - 11.38
2	5.0	135315.	13.59	11.38 - 16.01
3	5.0	97037.	18.43	16.01 - 32.01

Dilution Factor = 1.00 This sample was 25.0000 g or mL

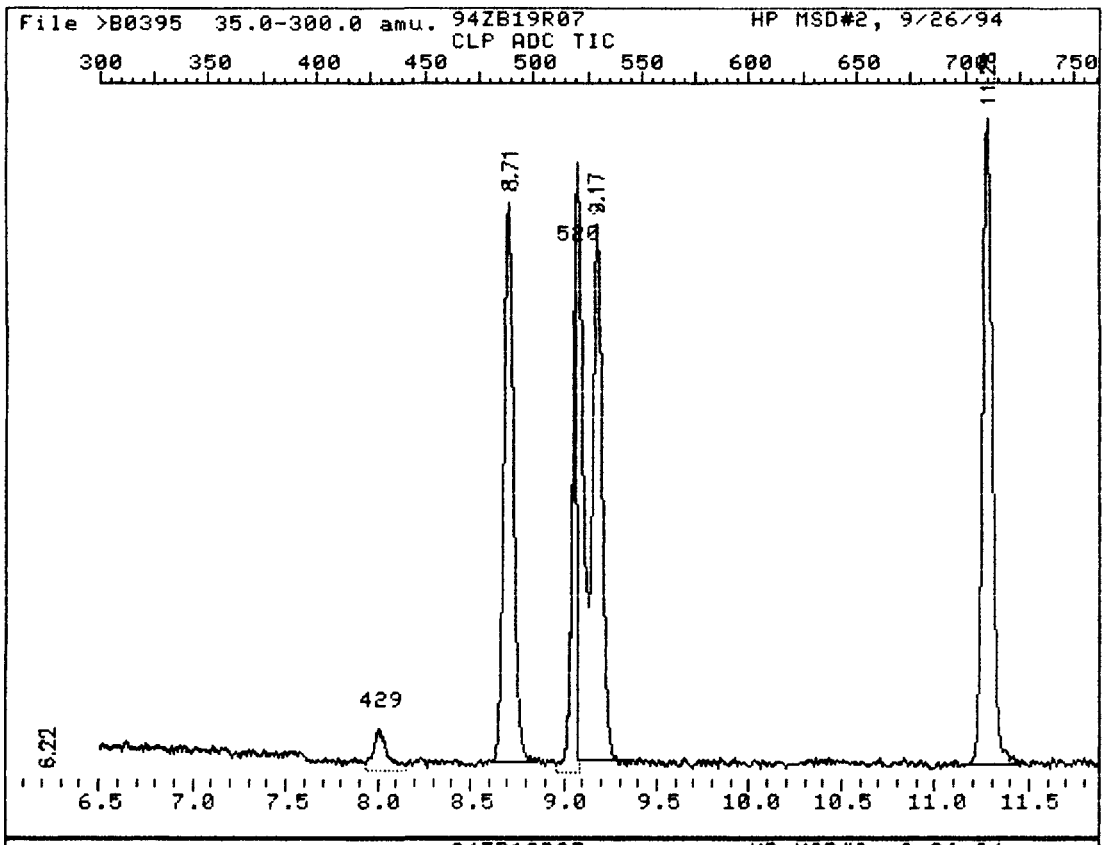
Correction Factor = 1.00

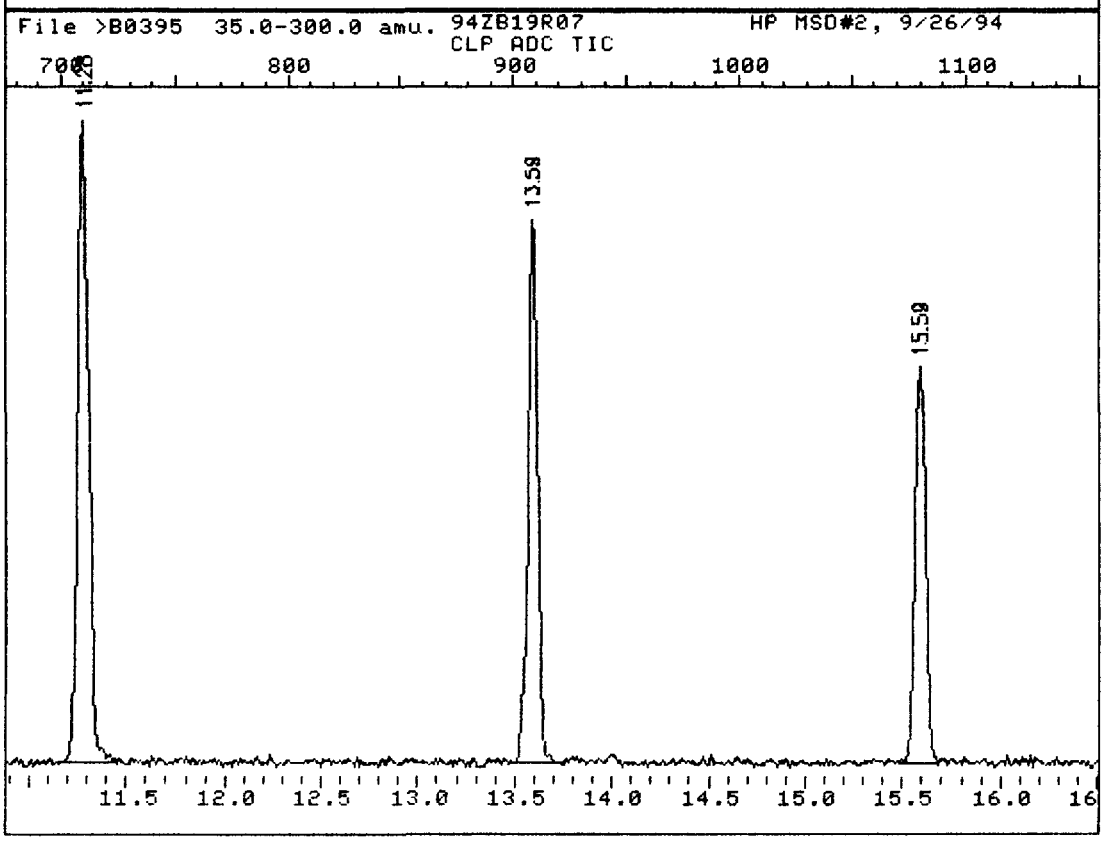
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:25 PM TUE., 27 SEPT, 1994

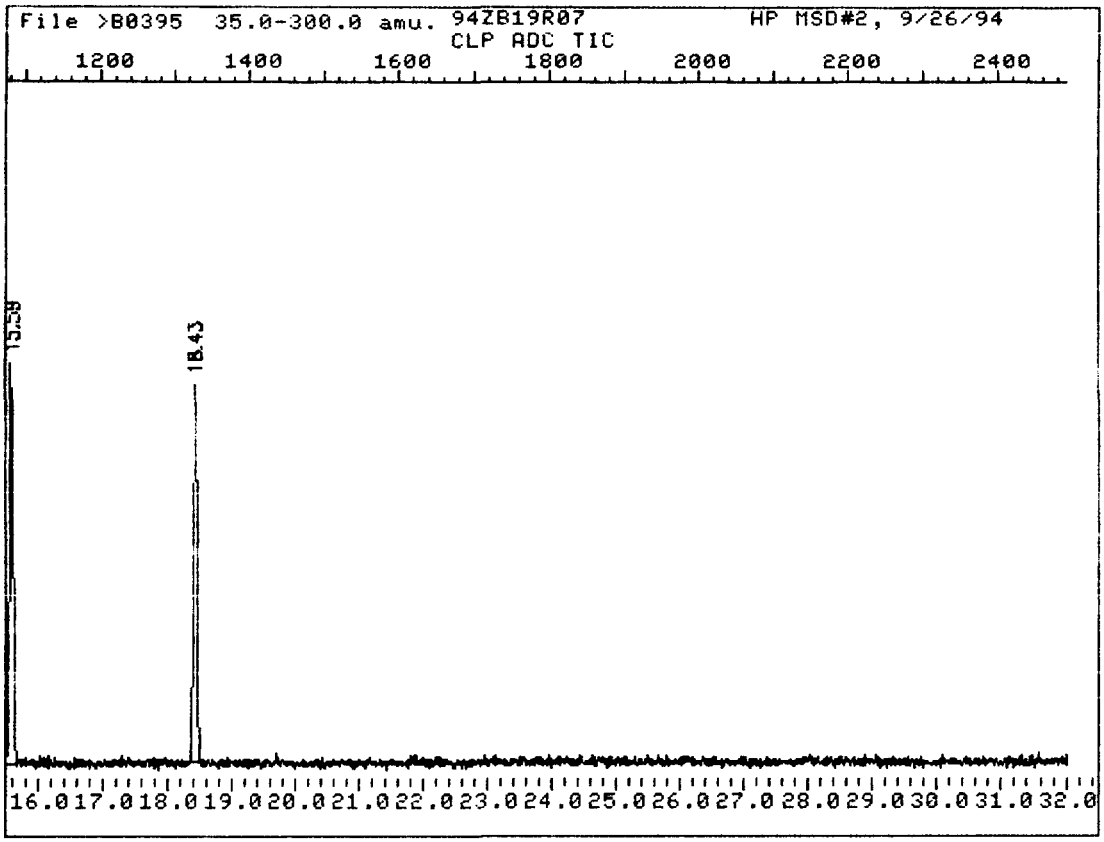
No TICs found

ag 9/28/94





Instrument ID: HP MS Analyzed on: 9/26/94 18:45



Instrument ID: HP MS Analyzed on: 9/26/94 18:45

Instrument ID: HP MS Analyzed on: 9/26/94 18:45

Retention Time: 8.01 Area: 12015 Tentative Conc: .40

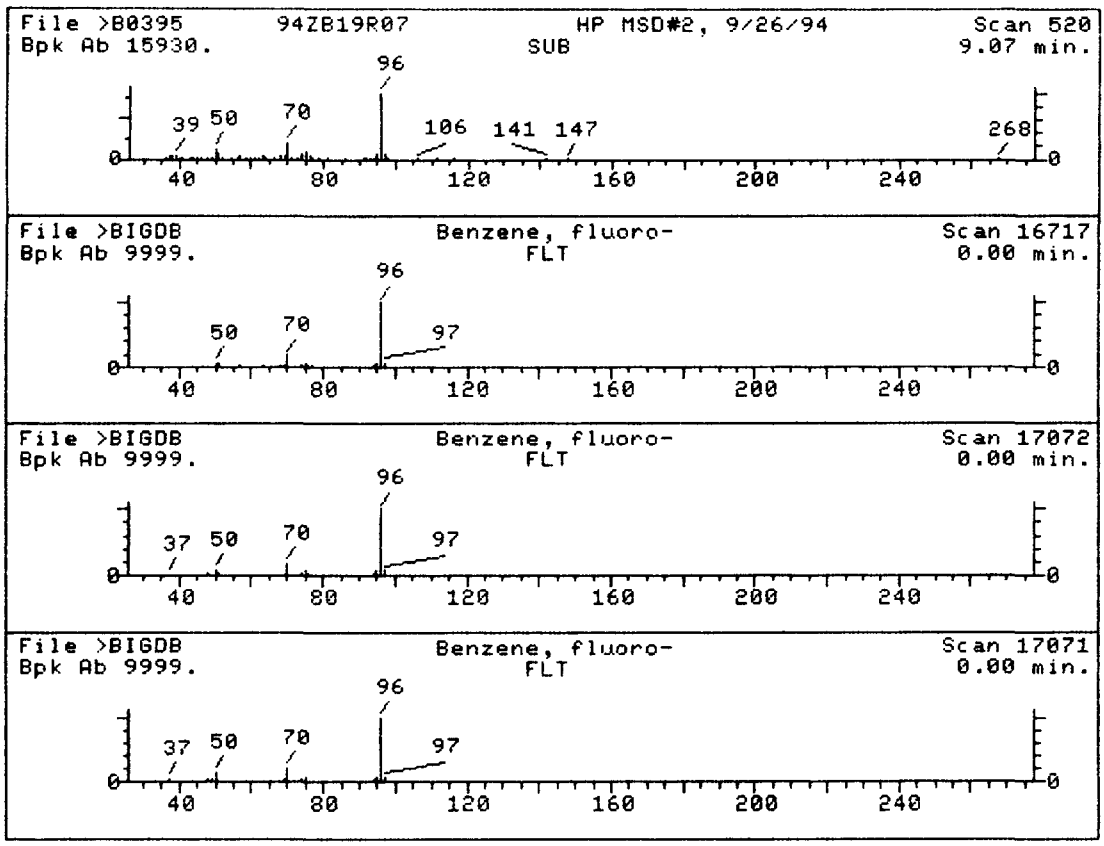
The unknown area is 8.85% of the nearest internal standard

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

No library search has been performed on this peak.

BQL

ag 9/28/94



Instrument ID: HP MS Analyzed on: 9/26/94 18:45
Result 1 in PBM results file: LB0395
Retention Time: 9.07 Area: 62228 Tentative Conc: 2.00
The unknown area is 45.83% of the nearest internal standard

1. Benzene, fluoro-	96	C6H5F
2. Benzene, fluoro-	96	C6H5F
3. Benzene, fluoro-	96	C6H5F
4. 4-HYDROXYPYRIDINE	96	C5H6NO
5. 2-Furancarboxaldehyde	96	C5H4O2
6. 2-Furancarboxaldehyde	96	C5H4O2

IS

Sample file: >B0395 Spectrum #: 520
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	462066	16717	"BIGDB	58	18	0	0	99	13	55	89
2.	83*	462066	17072	"BIGDB	56	27	1	0	100	6	54	55
3.	76*	462066	17071	"BIGDB	59	32	1	0	74	11	40	53
4.	31*	0	16710	"BIGDB	29	51	3	0	100	35	12	14
5.	30*	98011	17061	"BIGDB	31	73	3	0	100	32	12	13
6.	30*	98011	17064	"BIGDB	25	71	3	0	100	32	12	13

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S08

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0396

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19S08

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

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

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0396

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0396::D1
Data File: >B0396::D3
Name: 94ZB19S08
Misc: HP MSD#2, 9/26/94

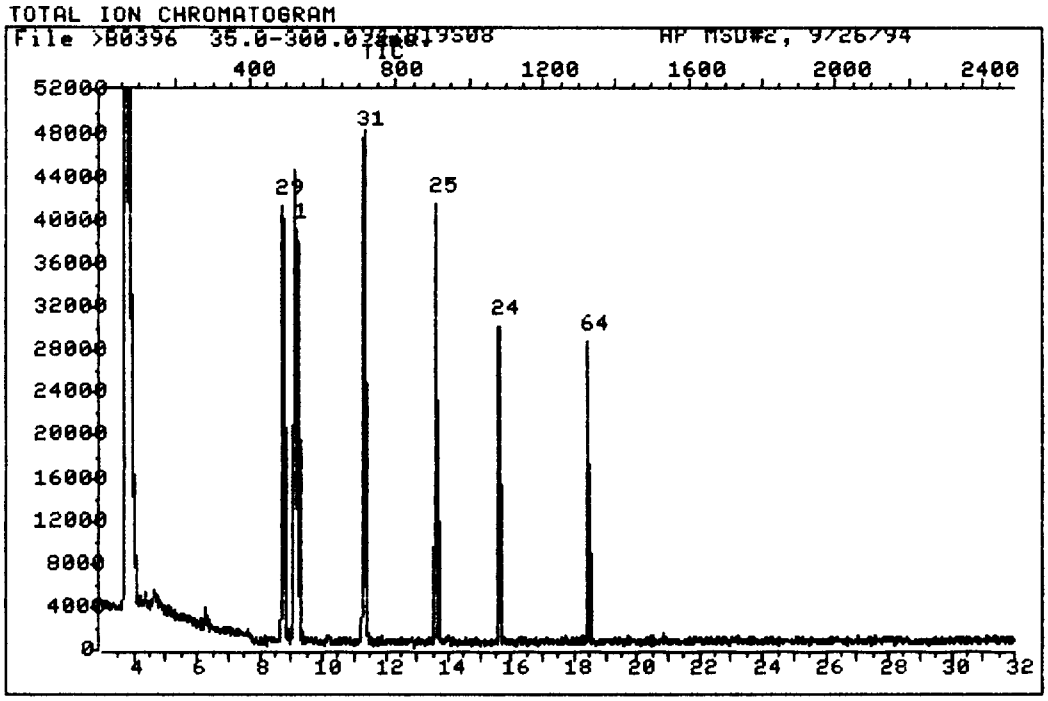
Quant Rev: 7
Quant Time: 940927 10:28
Injected at: 940926 19:23
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.18	114.0	49700	5.00	ug/L	93
24)	p-BROMOFLUOROBENZENE	15.59	174.0	15134	4.76	ug/L	88
25)	*CHLOROBENZENE-D5	13.60	117.0	37833	5.00	ug/L	98
29)	BENZENE-D6	8.72	84.0	62913	4.99	ug/L	98
31)	TOLUENE-D8	11.28	98.0	60435	5.10	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	18.43	152.0	13501	5.00	ug/L	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0396::D3 Quant Output File: ^B0396::D1
Name: 94ZB19S08 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:28
Injected at: 940926 19:23

MS data file header from : >B0396::D3

Sample: 94ZB19S08 Operator: ZIYAD SUPER GRP. 9/26/94 19:23
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0396 94ZB19S08 HP MSD#2, 9/26/94
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 10149. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0396 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
IS	1	9.08	511	521	523	35465	55445	50352	100.00	100.000

Sum of corrected areas: 50352.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	134554.	9.18	6.50 - 11.39
2	5.0	140823.	13.60	11.39 - 16.02
3	5.0	101491.	18.43	16.02 - 32.02

Dilution Factor = 1.00 This sample was 25.0000 g or mL

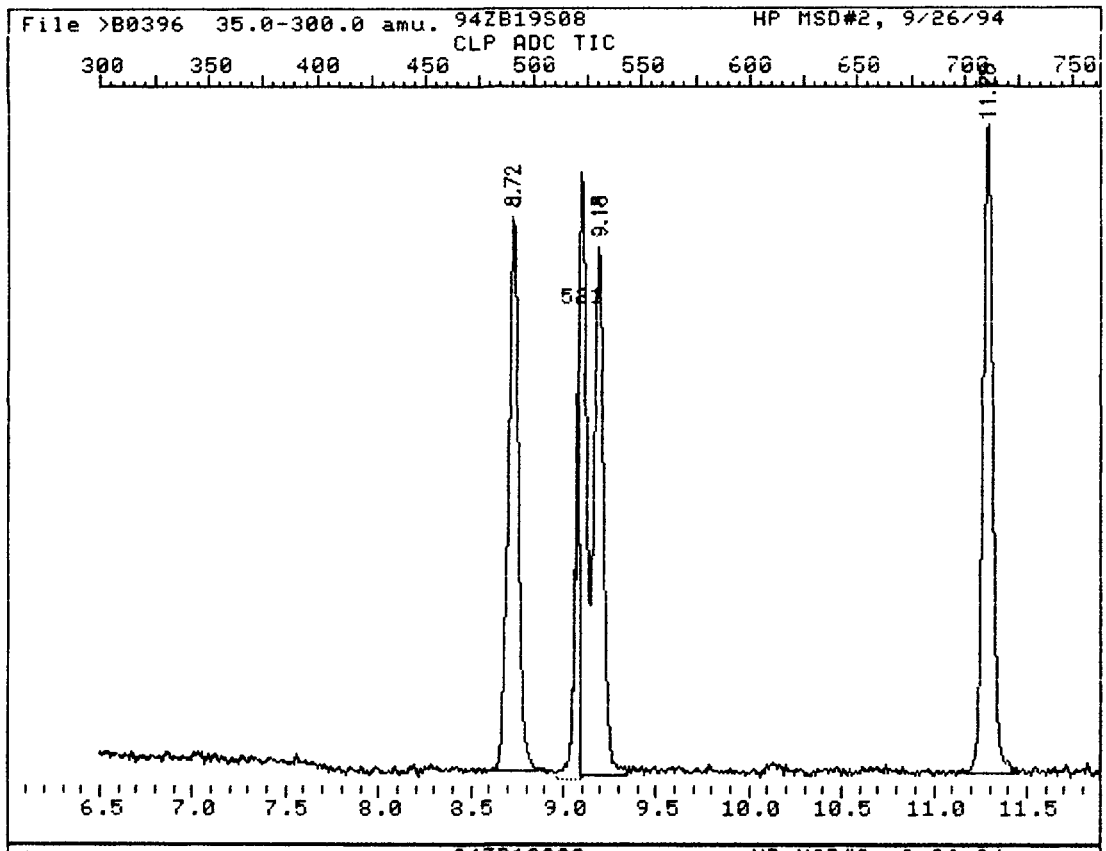
Correction Factor = 1.00

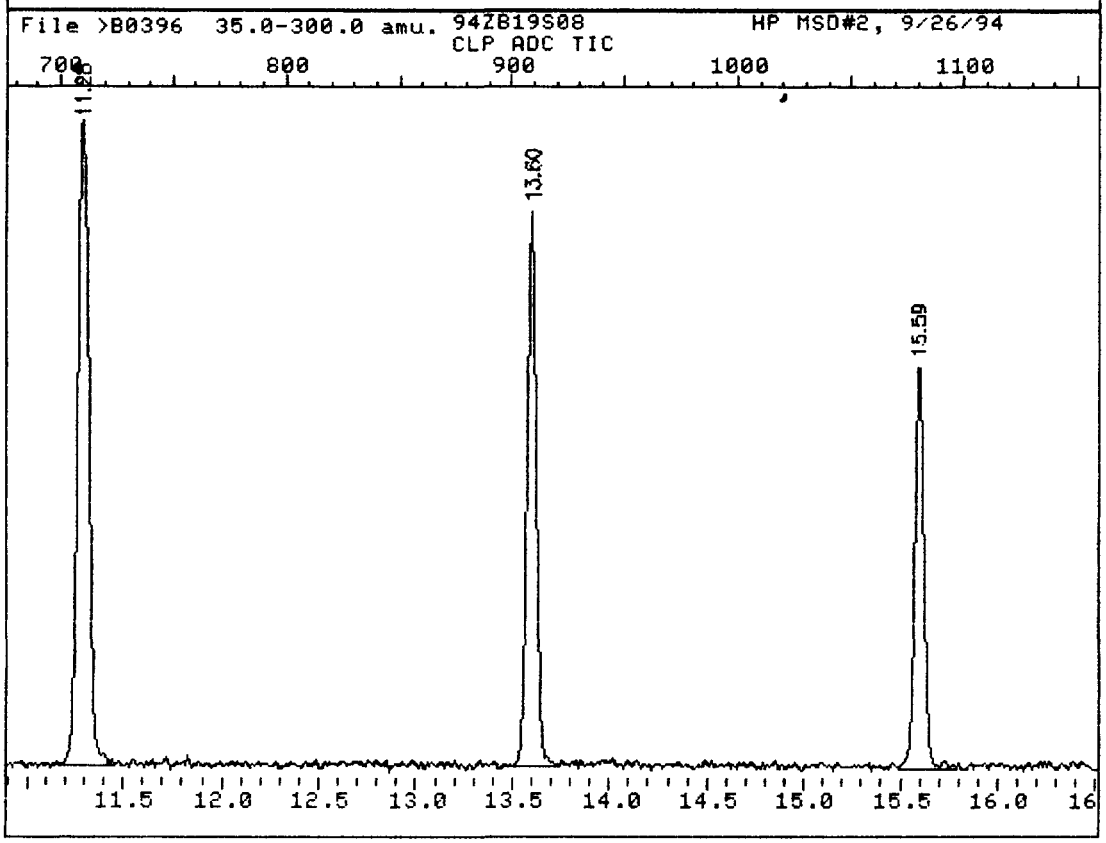
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:37 PM TUE., 27 SEPT, 1994

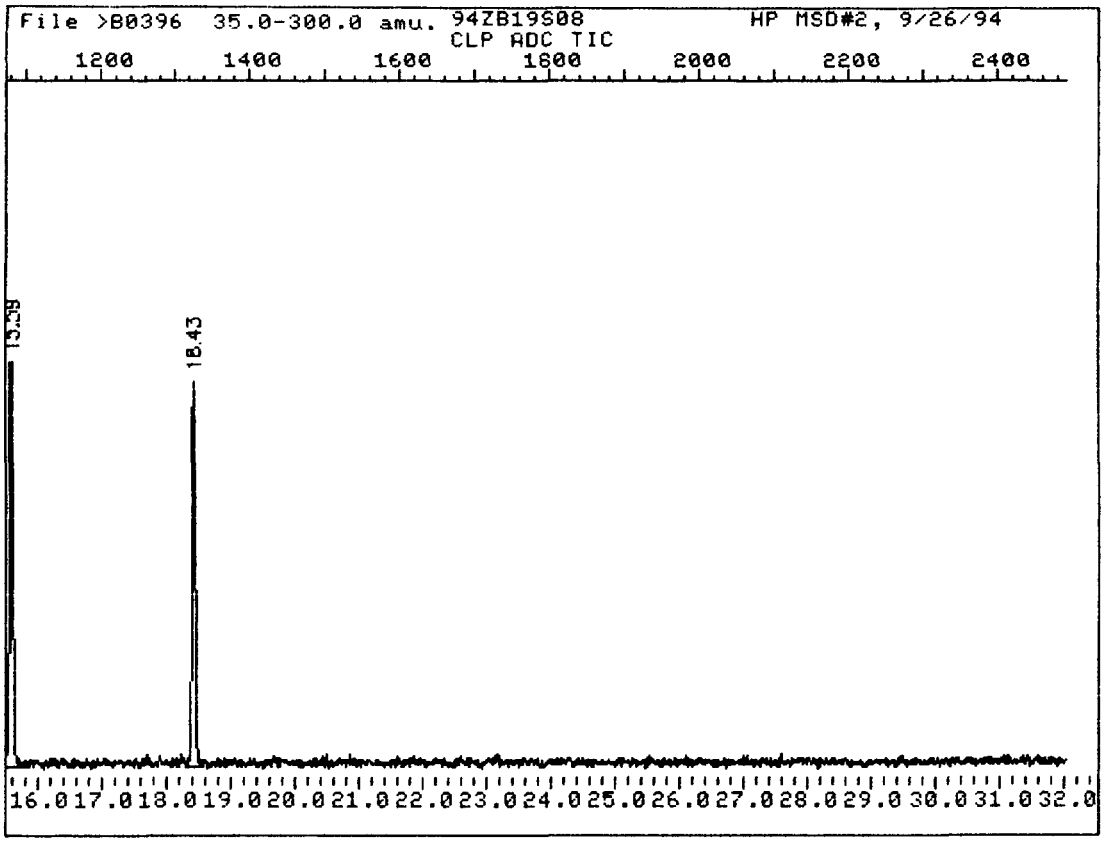
No TICs found

ag 9/28/94

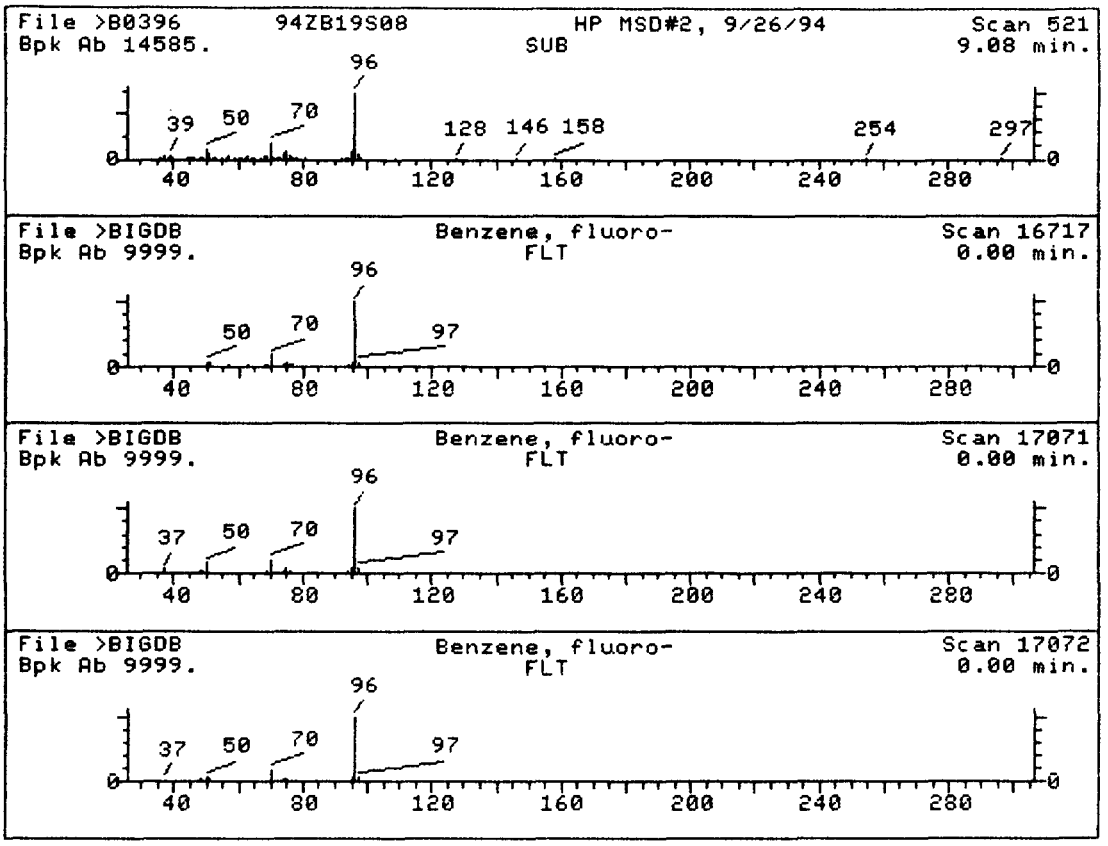




Instrument ID: HP MS Analyzed on: 9/26/94 19:23



Instrument ID: HP MS Analyzed on: 9/26/94 19:23



Instrument ID: HP MS Analyzed on: 9/26/94 19:23
Result 1 in PBM results file: LB0396
Retention Time: 9.08 Area: 50352 Tentative Conc: 2.00
The unknown area is 37.42% of the nearest internal standard

1.	Benzene, fluoro-	96	C6H5F
2.	Benzene, fluoro-	96	C6H5F
3.	Benzene, fluoro-	96	C6H5F
4.	4-HYDROXYPYRIDINE	96	C5H6NO
5.	2-Furancarboxaldehyde	96	C5H4O2
6.	2-Furancarboxaldehyde	96	C5H4O2

IS

Sample file: >B0396 Spectrum #: 521
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	462066	16717	"BIGDB	63	13	0	0	100	10	68	95
2.	88*	462066	17071	"BIGDB	65	26	2	0	100	5	65	54
3.	88*	462066	17072	"BIGDB	56	27	1	0	100	5	65	55
4.	31*	0	16710	"BIGDB	29	51	3	0	100	35	12	14
5.	30*	98011	17066	"BIGDB	32	72	3	0	100	33	12	13
6.	30*	98011	17062	"BIGDB	25	65	3	0	100	33	12	13

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19R09

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19R09

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0397

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	5.	
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	.9	J
156-60-5	trans-1,2-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	U
56-23-5	Carbon tetrachloride	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

94ZB19R09

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: 94ZB19R09

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0397

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	1.	UJ

FORM I-2 VOA 1/89 Rev.

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: ^B0397::D1
Data File: >B0397::D3
Name: 94ZB19R09
Misc: HP MSD#2, 9/26/94

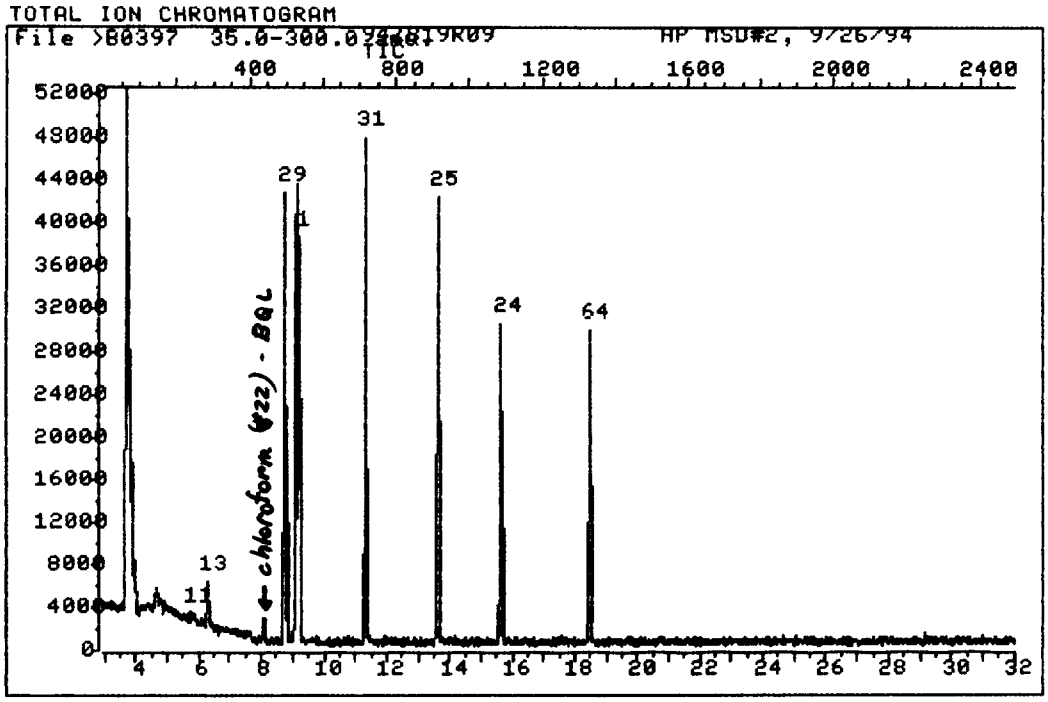
Quant Rev: 7
Quant Time: 940927 10:31
Injected at: 940926 20:00
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	48704	5.00	ug/L	95
11)	Acetone	5.77	43.0	2372	5.46	ug/L ✓	98
13)	Methylene chloride	6.25	84.0	3220	.926	ug/L ✓	95
24)	p-BROMOFLUOROBENZENE	15.60	174.0	14953	4.80	ug/L	85
25)	*CHLOROBENZENE-D5	13.60	117.0	38731	5.00	ug/L	97
29)	BENZENE-D6	8.72	84.0	62706	4.86	ug/L	99
31)	TOLUENE-D8	11.29	98.0	58862	4.85	ug/L	94
64)	*1,2-DICHLOROBENZENE-D4	18.44	152.0	13727	5.00	ug/L	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM



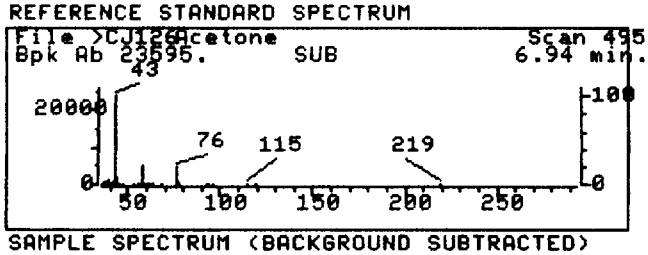
ag 9/28/94

Data File: >B0397::D3 Quant Output File: ^B0397::D1
Name: 94ZB19R09 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

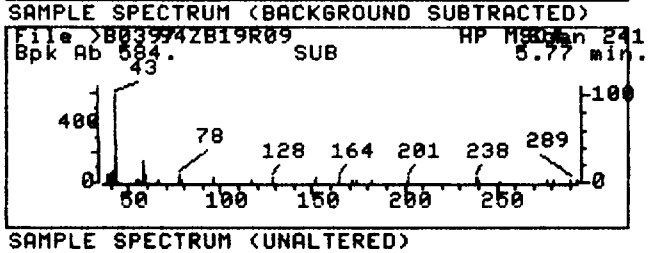
Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:31
Injected at: 940926 20:00

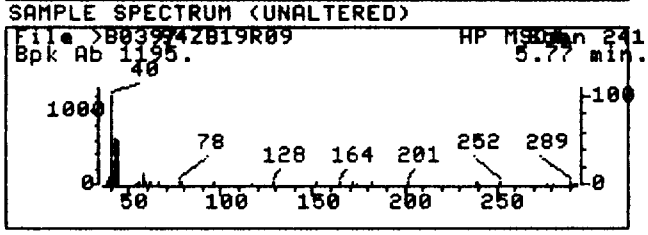
REFERENCE STANDARD SPECTRUM

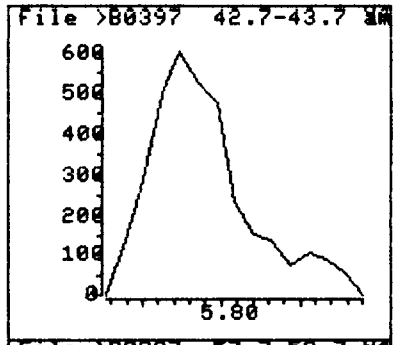


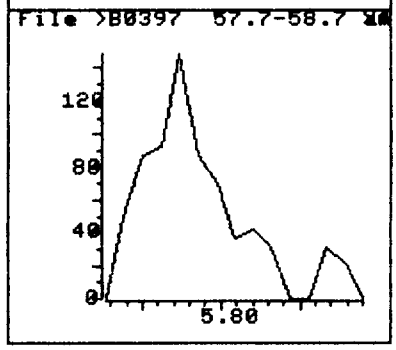
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







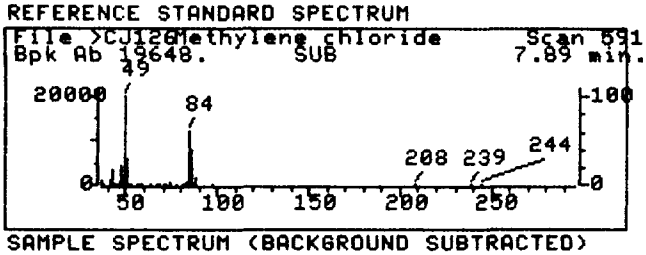
Data File: >B0397::D3
Name: 94ZB19R09
Misc: HP MSD#2, 9/26/94
Quant Time: 940927 10:31
Injected at: 940926 20:00
Last Qcal Time: <none>

Quant Output File: ^B0397::D1
Instrument ID: HP MS #7

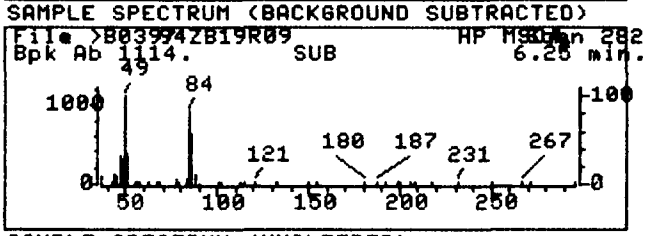
Quant ID File: IDB025::D1
Last Calibration: 940927 09:56

Compound No : 11
Compound Name : Acetone
Scan Number : 241
Retention Time: 5.77 min.
Quant Ion : 43.0
Area : 2372
Concentration : 5.46 ug/L
q-value : 98

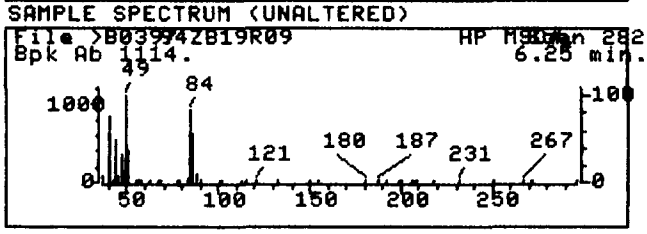
REFERENCE STANDARD SPECTRUM

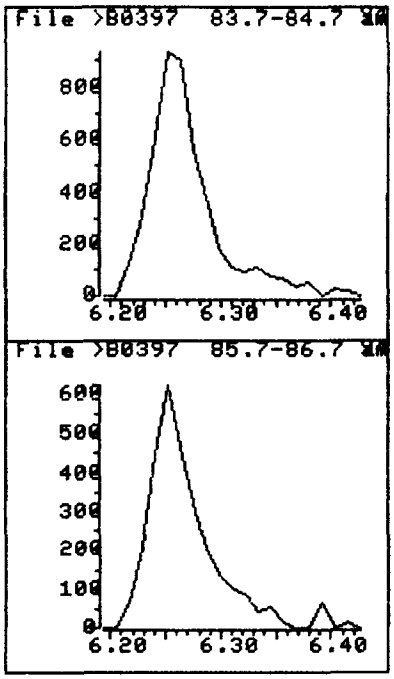


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B0397::D3
Name: 94ZB19R09
Misc: HP MSD#2, 9/26/94
Quant Time: 940927 10:31
Injected at: 940926 20:00
Last Qcal Time: <none>

Quant Output File: ^B0397::D1
Instrument ID: HP MS #7
Quant ID File: IDB025::D1
Last Calibration: 940927 09:56

Compound No : 13
Compound Name : Methylene chloride
Scan Number : 282
Retention Time: 6.25 min.
Quant Ion : 84.0
Area : 3220
Concentration : .926 ug/L
q-value : 95

✓

MS data file header from : >B0397::D3

Sample: 94ZB19R09 Operator: ZIYAD SUPER GRP. 9/26/94 20:00
Misc : HP MSD#2, 9/26/94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: VOA#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	45.	200.	0.	0.	0.
Chromatographic times, min. :	2.0	11.5	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	.1	0.0

>B0397 94ZB19R09 HP MSD#2, 9/26/94
35.01 300.0 CLP TIC
Upslope: .2000 Area Reject: 10147. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB0397 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
IS 1	9.08	518	525	527	39983	67298	62619	100.00	100.000

Sum of corrected areas: 62619.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	5.0	132264.	9.19	6.50 - 11.40
2	5.0	145216.	13.60	11.40 - 16.02
3	5.0	101474.	18.44	16.02 - 32.05

Dilution Factor = 1.00 This sample was 1000.00 g or mL

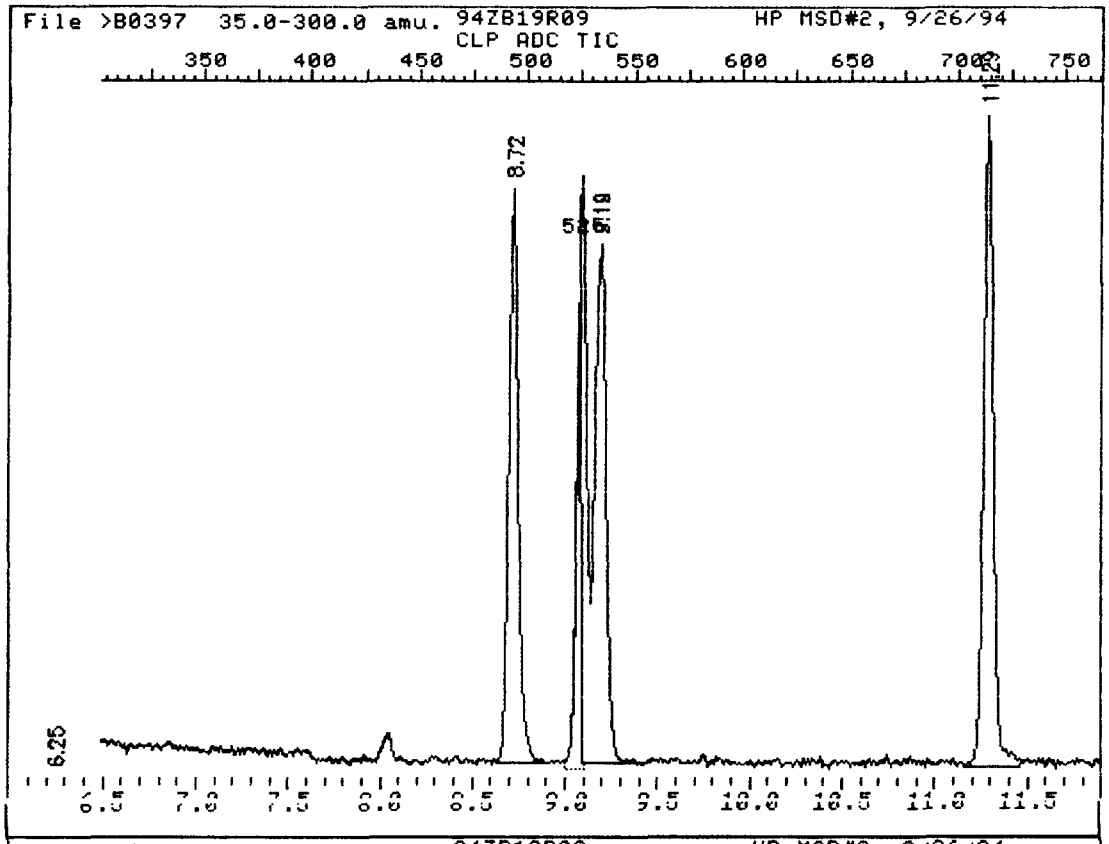
Correction Factor = 1.00

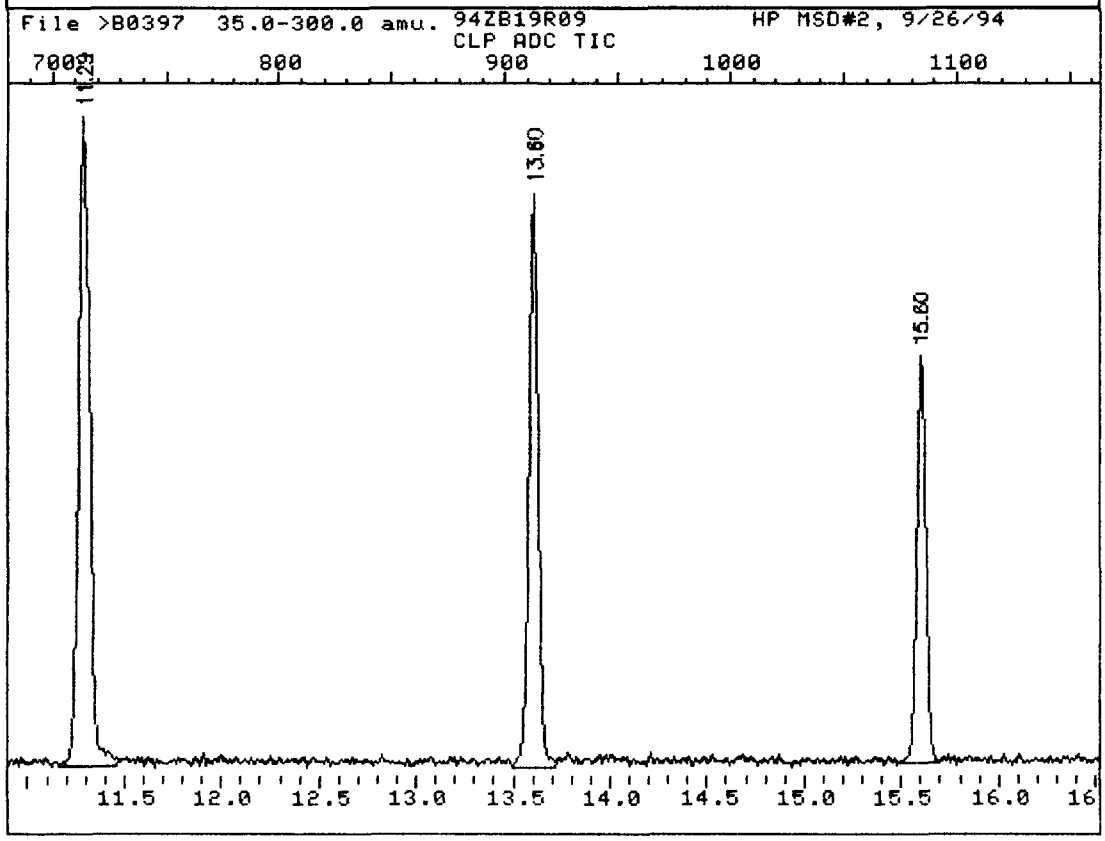
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

10:58 AM TUE., 27 SEPT, 1994

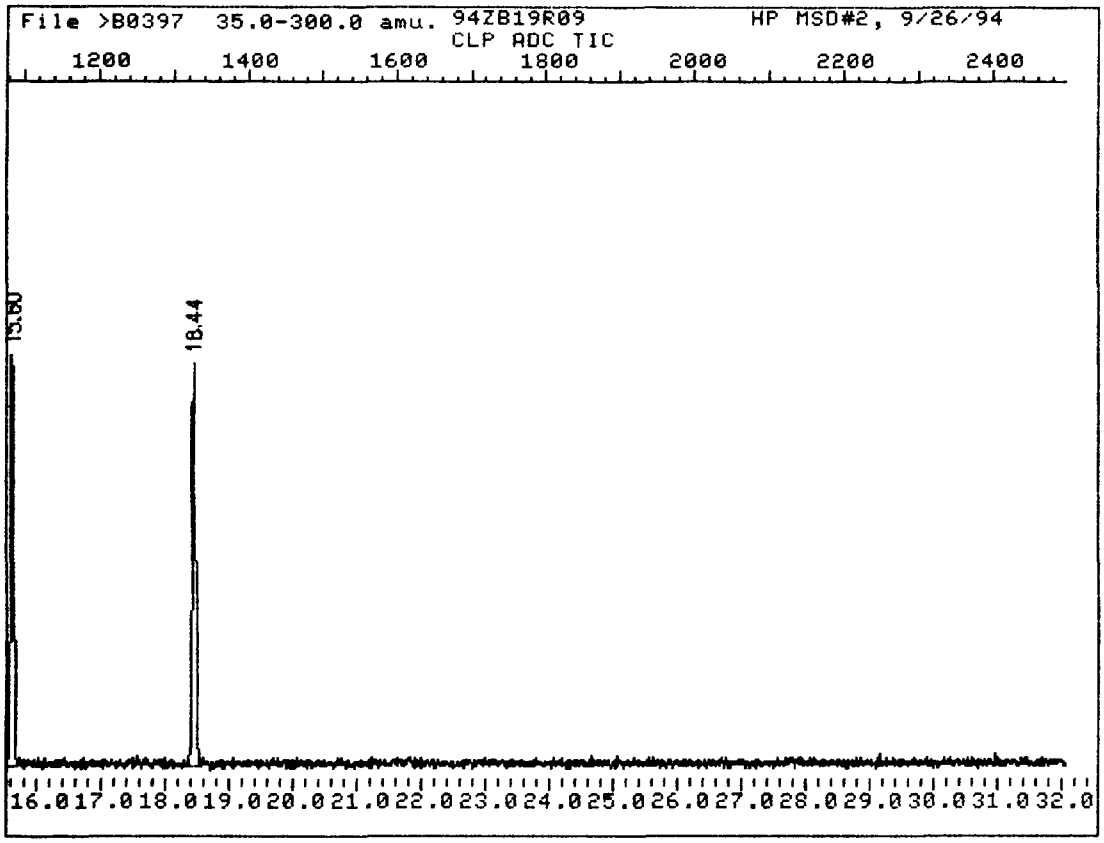
No TICs found

ag 9/28/94

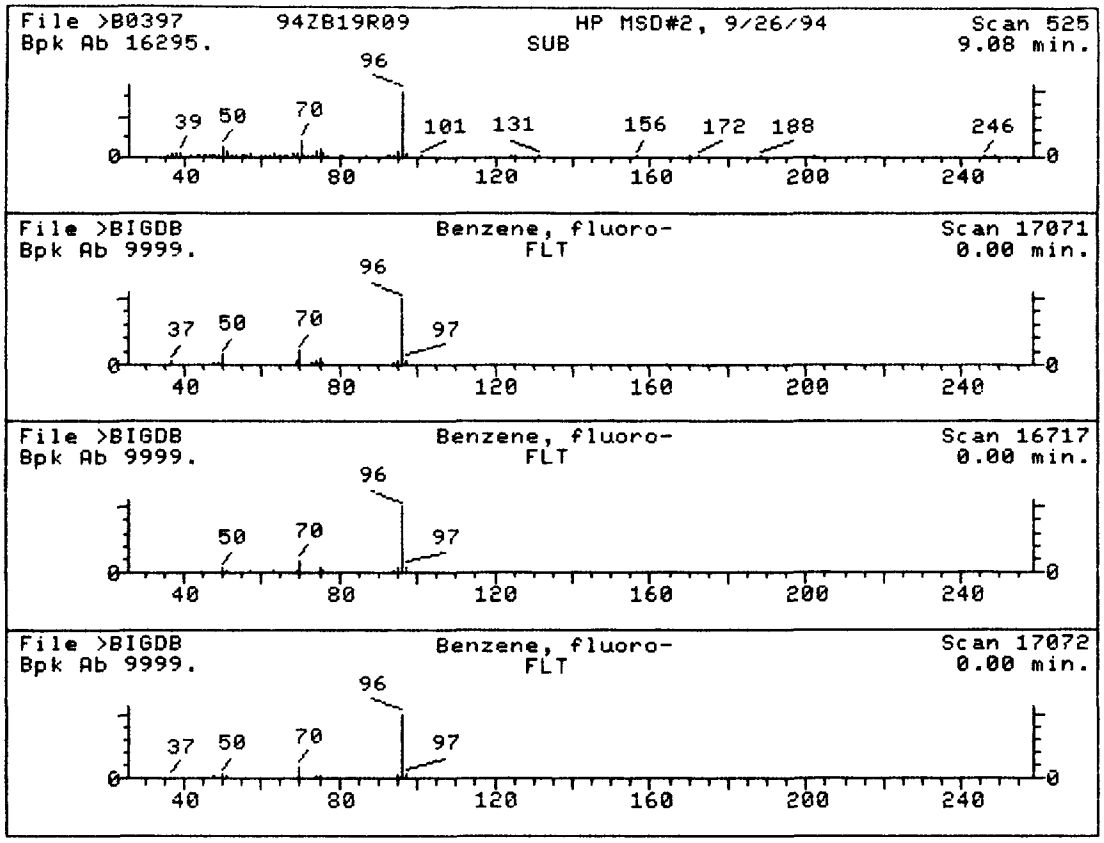




Instrument ID: HP MS Analyzed on: 9/26/94 20:00



Instrument ID: HP MS Analyzed on: 9/26/94 20:00



Instrument ID: HP MS Analyzed on: 9/26/94 20:00
Result 1 in PBM results file: LB0397
Retention Time: 9.08 Area: 62619 Tentative Conc: 2.00
The unknown area is 47.34% of the nearest internal standard

1. Benzene, fluoro-		96 C6H5F
2. Benzene, fluoro-	I δ	96 C6H5F
3. Benzene, fluoro-		96 C6H5F
4. 4-HYDROXYPYRIDINE		96 C5H6NO
5. 2-Furancarboxaldehyde		96 C5H4O2
6. 2-Furancarboxaldehyde		96 C5H4O2

Sample file: >B0397 Spectrum #: 525
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83*	462066	17071	"BIGDB	65	26	2	0	100	6	54	54
2.	75*	462066	16717	"BIGDB	47	29	0	0	93	20	35	66
3.	67*	462066	17072	"BIGDB	39	44	1	0	96	15	34	22
4.	31*	0	16710	"BIGDB	29	51	3	0	100	35	12	14
5.	30*	98011	17066	"BIGDB	25	79	3	0	100	32	12	13
6.	27*	98011	17062	"BIGDB	25	65	3	0	100	38	10	13

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

PE/LCS

	EPA SAMPLE NO.	S1 (BEN)#	S2 (BFB)#	S3 (TOL)#	S4 ( )#	TOT OUT
01	LAB BLANK	101	102	102		0
02	LAB SPIKE	96	114	101		0
03	PES PX648	97	115	102		0
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1 (BEN)	= BENZENE-D6	(70-130)
S2 (BFB)	= p-BROMOFLUOROBENZENE	(80-120)
S3 (TOL)	= TOLUENE-D8	(70-130)

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

FORM II VOA-1 1/87 Rev

11A
VOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LAB SPIKE

Lab Name: CRL REGION V Contract: LOCKHEED/ESA

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

Matrix: (soil/water) WATER Lab Sample ID: LAB SPIKE

Sample wt/vol: 25 (g/ml) ML Lab File ID: >B0375

Level: (low/med) LOW Date Received: 09/16/94

% Moisture: not dec. Date Analyzed: 09/16/94

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

COMPOUND	Conc	Spike	Recovery
Vinyl chloride	4	5	74
Carbon tetrachloride	5	5	95
Benzene	5	5	91
1,2-Dichloroethane	5	5	109
Trichloroethene	5	5	106
1,2-Dichloropropane	5	5	101
cis-1,3-Dichloropropene	5	5	94
Tetrachloroethene	5	5	98
1,1,2-Trichloroethane	5	5	102
1,2-Dibromoethane	5	5	104
Bromoform	5	5	102
1,4-Dichlorobenzene	4	5	85

QC LIMIT: 60 - 140%

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

Lab File ID: >B0373 Lab Sample ID: LAB BLANK

Date Analyzed: 09/16/94 Time Analyzed: 16:55

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

Instrument ID: HP MSD#2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	LAB SPIKE	LAB SPIKE	>B0375	18:11
2	PES PX648	PES PX648	>B0378	20:05
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
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22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: _____.

FORM IV VOA 1/87 Rev.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

Lab File ID: >B0368 BFB Injection Date: 9/16/94

Instrument ID: HP MSD#2 BFB Injection Time: 13:53

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.6
75	30.0 - 66.0% of mass 95	47.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	.7 (.7)1
174	50.0 -120.0% of mass 95	89.7
175	4.0 - 9.0% of mass 174	7.2 (8.1)1
176	93.0 - 101.0% of mass 174	85.5 (95.4)1
177	5.0 - 9.0% of mass 176	5.9 (6.9)2

1-Value is % of mass 174 2-Value is % of mass 176

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	0916CC05	0916CC05	>B0369	09/16/94	14:25
02	LAB BLANK	LAB BLANK	>B0373	09/16/94	16:55
03	LAB SPIKE	LAB SPIKE	>B0375	09/16/94	18:11
04	PES PX648	PES PX648	>B0378	09/16/94	20:05
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA 1/87 Rev.

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

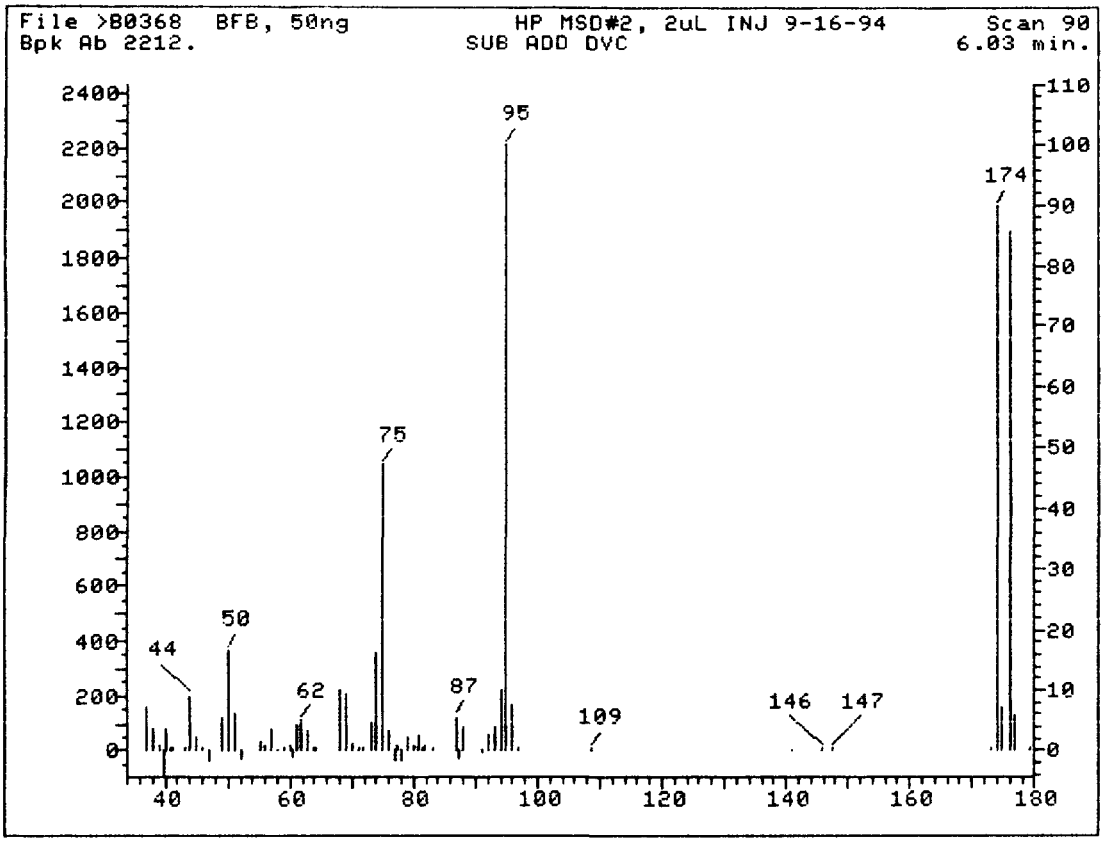
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	8-40% of mass 95	16.57	16.57	Ok
75	30-66% of mass 95	47.11	47.11	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.68	7.68	Ok
173	Less than 2% of mass 174	.66	.74	Ok
174	50-120% of mass 95	89.69	89.69	Ok
175	4-9% of mass 174	7.25	8.08	Ok
176	93-101% of mass 174	85.54	95.36	Ok
177	5-9% of mass 176	5.94	6.94	Ok

Injection Date: 09/16/94
Injection Time: 13:53
Data File: >B0368
Scan: 90

MS data file header from : >B0368::D6

Sample: BFB, 50ng Operator: TONY REG. GRP. 9/16/94 13:53
Misc : HP MSD#2, 2uL INJ 9-16-94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: BFB#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	200.	0.	0.	0.
Chromatographic times, min. :	0.0	7.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	15.0	0.0	0.0	.1	0.0



MS data file header from : >B0368::D6

Sample: BFB, 50ng Operator: TONY REG. GRP. 9/16/94 13:53
Misc : HP MSD#2, 2uL INJ 9-16-94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: BFB#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	200.	0.	0.	0.
Chromatographic times, min. :	0.0	7.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	15.0	0.0	0.0	.1	0.0

>B0368 BFB, 50ng HP MSD#2, 2uL INJ 9-16-94
90 SUB ADD DVC

File: >B0368 Scan #: 90 Retn. time: 6.03

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.	156.67	52.	-28.00	69.	209.00	82.	20.00	146.	7.67
38.	80.67	55.	22.67	70.	28.67	83.	8.67	148.	10.00
39.	22.33	55.	36.67	71.	9.00	87.	120.33	173.	14.67
40.	-100.00	56.	15.33	72.	8.00	87.	-27.00	174.	1984.33
40.	82.33	57.	77.67	73.	103.33	88.	89.67	175.	160.33
41.	13.33	58.	7.00	74.	358.33	91.	-4.33	176.	1892.33
41.	13.00	59.	7.33	75.	1042.33	92.	54.33	177.	131.33
43.	14.33	60.	16.67	76.	71.00	93.	89.67	179.	9.33
44.	200.33	60.	-20.00	77.	-33.33	94.	222.67	207.	-18.67
45.	51.00	61.	92.67	77.	19.00	95.	2212.33	231.	8.67
46.	9.00	62.	108.33	78.	-39.00	96.	170.00	253.	7.00
47.	-37.67	63.	70.00	79.	53.00	97.	10.00	269.	26.67
49.	118.00	64.	7.33	80.	19.33	109.	7.67	270.	6.67
50.	366.67	64.	9.67	81.	54.67	141.	7.00	281.	44.00
51.	132.67	68.	223.33	81.	9.67				

MS data file header from : >B0368::D6

Sample: BFB, 50ng Operator: TONY REG. GRP. 9/16/94 13:53
Misc : HP MSD#2, 2uL INJ 9-16-94
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: HP MS #7
Method file: BFB#2 Tuning file: MTMSD2 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	200.	0.	0.	0.
Chromatographic times, min. :	0.0	7.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	15.0	0.0	0.0	.1	0.0

6A
VOLATILE 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 MSD#2 Calibration Date(s): 09/08/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF001= >B0246 RRF002= >B0248
RRF005= >B0249 RRF010= >B0250 RRF025= >B0251

COMPOUND	RRF001	RRF002	RRF005	RRF010	RRF025	$\overline{RRF}$	RSD
Dichlorodifluoromethane	.302	.222	.266	.330	.293	.283	14.5
Chloromethane	.412	.406	.505	.567	.486	.475	14.2
Vinyl chloride	.383	.402	.336	.450	.397	.394	10.4
Bromomethane	.276	.245	.246	.239	.150	.231	20.6
Chloroethane	.227	.224	.193	.253	.192	.218	11.8
Trichlorofluoromethane	.382	.376	.383	.404	.336	.376	6.6
Diethyl ether	.116	.124	.127	.113	.101	.116	8.8
Acrolein	---	---	.003	.003	.002	.003	18.2
1,1-Dichloroethene	.304	.329	.288	.260	.237	.284	12.8
Acetone	.052	.047	.043	.035	.032	.042	20.2
Carbon disulfide	1.092	1.151	1.087	1.136	1.071	1.107	3.1
Methylene chloride	.272	.310	.288	.291	.257	.283	7.1
trans-1,2-Dichloroethene	.323	.353	.331	.330	.304	.328	5.4
Acrylonitrile	.028	.037	.041	.036	.035	.036	12.8
1,1-Dichloroethane	.649	.702	.713	.725	.665	.691	4.7
Vinyl acetate	---	---	.007	.007	.007	.007	4.2
2,2-Dichloropropane	.395	.469	.475	.506	.497	.469	9.4
cis-1,2-Dichloroethene	.378	.430	.414	.400	.359	.396	7.1
2-Butanone	.050	.066	.064	.060	.054	.059	11.1
Bromochloromethane	.135	.145	.149	.146	.128	.141	6.5
Chloroform	.638	.726	.731	.729	.667	.698	6.1
1,1,1-Trichloroethane	.628	.672	.638	.674	.653	.653	3.1
Carbon tetrachloride	.326	.376	.391	.447	.472	.402	14.5
1,1-Dichloropropene	.657	.697	.622	.686	.646	.662	4.6
Benzene	1.750	1.787	1.702	1.805	1.697	1.748	2.8
1,2-Dichloroethane	.382	.398	.396	.376	.331	.377	7.2
Trichloroethene	.567	.586	.570	.601	.566	.578	2.6
1,2-Dichloropropane	.397	.419	.427	.459	.431	.427	5.2
Dibromomethane	.186	.199	.188	.188	.169	.186	5.8
2-Chloroethyl vinylether	---	.029	.060	.081	.089	.065	41.3
Bromodichloromethane	.427	.494	.465	.510	.486	.476	6.7
cis-1,3-Dichloropropene	.450	.509	.500	.543	.506	.502	6.6
Toluene	1.825	1.975	1.840	1.913	1.819	1.874	3.6
4-Methyl-2-pentanone	.143	.165	.167	.171	.160	.161	6.7

6A-1
VOLATILE 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 MSD#2 Calibration Date(s): 09/08/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF001= >B0246 RRF002= >B0248
RRF005= >B0249 RRF010= >B0250 RRF025= >B0251

COMPOUND	RRF001	RRF002	RRF005	RRF010	RRF025	$\overline{RRF}$	RSD
trans-1,3-Dichloropropene	.275	.319	.319	.343	.337	.319	8.3
Tetrachloroethene	.589	.605	.532	.552	.497	.555	7.8
1,1,2-Trichloroethane	.181	.212	.196	.203	.187	.196	6.3
1,3-Dichloropropane	.327	.394	.363	.371	.330	.357	8.0
2-Hexanone	.082	.107	.100	.109	.105	.100	10.7
Dibromochloromethane	.204	.253	.258	.268	.259	.248	10.3
1,2-Dibromoethane	.193	.216	.210	.214	.205	.208	4.5
Chlorobenzene	1.018	1.112	1.040	1.111	1.003	1.057	4.9
1,1,1,2-Tetrachloroethane	.280	.335	.320	.333	.307	.315	7.1
Ethylbenzene	1.993	2.157	2.003	2.117	1.967	2.047	4.1
m &/or p-Xylene	.753	.792	.722	.748	.660	.735	6.6
o-Xylene	.666	.718	.667	.680	.600	.666	6.4
Styrene	.969	1.116	1.065	1.074	.957	1.036	6.7
Bromoform	.266	.338	.363	.381	.377	.345	13.6
Isopropylbenzene	1.899	2.043	1.878	1.961	1.833	1.923	4.2
Bromobenzene	.417	.456	.429	.424	.380	.421	6.5
1,2,3-Trichloropropane	.178	.219	.207	.208	.187	.200	8.5
1,1,2,2-Tetrachloroethane	.183	.213	.192	.194	.171	.190	8.1
n-Propylbenzene	.504	.544	.490	.521	.476	.507	5.3
2-Chlorotoluene	.431	.463	.426	.441	.406	.433	4.9
4-Chlorotoluene	.434	.460	.424	.448	.404	.434	5.0
1,3,5-Trimethylbenzene	1.625	1.803	1.682	1.734	1.587	1.686	5.1
tert-Butylbenzene	1.518	1.474	1.538	1.618	1.480	1.526	3.8
1,2,4-Trimethylbenzene	1.718	1.754	1.648	1.718	1.580	1.683	4.1
sec-Butylbenzene	2.197	2.363	2.121	2.271	2.090	2.209	5.0
1,3-Dichlorobenzene	2.108	2.199	2.115	2.141	1.905	2.094	5.3
1,4-Dichlorobenzene	2.059	2.156	2.132	2.163	2.022	2.107	3.0
p-Isopropyltoluene	4.382	4.545	4.458	4.810	4.395	4.518	3.9
1,2-Dichlorobenzene	1.618	1.728	1.715	1.759	1.646	1.693	3.5
n-Butylbenzene	4.947	5.089	5.074	5.567	5.346	5.205	4.8
1,2-Dibromo-3-chloropropane	.066	.091	.088	.096	.095	.087	14.3
1,2,4-Trichlorobenzene	1.376	1.490	1.499	1.558	1.421	1.469	4.8
Naphthalene	1.267	1.302	1.384	1.497	1.423	1.375	6.7
Hexachlorobutadiene	1.838	1.940	1.779	1.843	1.638	1.808	6.1

6A-2
VOLATILE 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 MSD#2 Calibration Date(s): 09/08/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0

LAB FILE ID: RRF001= >B0246 RRF002= >B0248
RRF005= >B0249 RRF010= >B0250 RRF025= >B0251

COMPOUND	RRF001	RRF002	RRF005	RRF010	RRF025	$\overline{RRF}$	RSD
1,2,3-Trichlorobenzene	1.122	1.178	1.183	1.198	1.097	1.156	3.8
BENZENE-D6	1.651	1.613	1.581	1.647	1.619	1.622	1.7
p-BROMOFLUOROBENZENE	.379	.390	.383	.364	.343	.372	5.0
TOLUENE-D8	1.465	1.461	1.444	1.484	1.513	1.473	1.8

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

Instrument ID: HP MSD#2 Calibration Date: 09/16/94 Time: 14:25

Lab File ID: >B0369 Init. Calib. Date(s): 09/08/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF005 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 30%

COMPOUND	$\overline{RRF}$	RRF005	%D
Dichlorodifluoromethane	.283	.350	23.7
Chloromethane	.475	.556	17.0
Vinyl chloride	.394	.500	27.1
Bromomethane	.231	.222	4.1
Chloroethane	.218	.250	14.7
Trichlorofluoromethane	.376	.480	27.6
Diethyl ether	.116	.117	.6
Acrolein	.003	.002	25.2
1,1-Dichloroethene	.284	.342	20.6
Acetone	.042	.037	11.6
Carbon disulfide	1.107	1.218	10.0
Methylene chloride	.283	.289	2.1
trans-1,2-Dichloroethene	.328	.397	21.0
Acrylonitrile	.036	.032	9.3
1,1-Dichloroethane	.691	.725	5.0
Vinyl acetate	.007	.016	134.7
2,2-Dichloropropane	.469	.645	37.6
cis-1,2-Dichloroethene	.396	.438	10.5
2-Butanone	.059	.043	26.5
Bromochloromethane	.141	.152	7.8
Chloroform	.698	.739	5.9
1,1,1-Trichloroethane	.653	.871	33.3
Carbon tetrachloride	.402	.577	43.5
1,1-Dichloropropene	.662	.796	20.2
Benzene	1.748	1.994	14.1
1,2-Dichloroethane	.377	.354	6.1
Trichloroethene	.578	.673	16.5
1,2-Dichloropropane	.427	.441	3.3
Dibromomethane	.186	.231	24.3
2-Chloroethyl vinylether	.065	.069	6.0
Bromodichloromethane	.476	.520	9.2
cis-1,3-Dichloropropene	.502	.540	7.6
Toluene	1.874	2.158	15.1
4-Methyl-2-pentanone	.161	.132	18.3
trans-1,3-Dichloropropene	.319	.313	1.6

7A-1
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CRL REGION V Contract: LOCKHEED/ESAT

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

Instrument ID: HP MSD#2 Calibration Date: 09/16/94 Time: 14:25

Lab File ID: >B0369 Init. Calib. Date(s): 09/08/94

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF005 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 30%

COMPOUND	$\overline{RRF}$	RRF005	%D
Tetrachloroethene	.555	.719	29.6
1,1,2-Trichloroethane	.196	.200	2.1
1,3-Dichloropropane	.357	.354	.8
2-Hexanone	.100	.082	18.5
Dibromochloromethane	.248	.272	9.6
1,2-Dibromoethane	.208	.209	.5
Chlorobenzene	1.057	1.214	14.9
1,1,1,2-Tetrachloroethane	.315	.383	21.6
Ethylbenzene	2.047	2.377	16.1
m &/or p-Xylene	.735	.893	21.5
o-Xylene	.666	.792	18.8
Styrene	1.036	1.210	16.8
Bromoform	.345	.361	4.6
Isopropylbenzene	1.923	2.434	26.6
Bromobenzene	.421	.510	21.2
1,2,3-Trichloropropane	.200	.186	6.9
1,1,2,2-Tetrachloroethane	.190	.186	2.5
n-Propylbenzene	.507	.650	28.2
2-Chlorotoluene	.433	.559	29.0
4-Chlorotoluene	.434	.559	28.9
1,3,5-Trimethylbenzene	1.686	2.143	27.1
tert-Butylbenzene	1.526	1.928	26.4
1,2,4-Trimethylbenzene	1.683	2.145	27.4
sec-Butylbenzene	2.209	2.959	34.0
1,3-Dichlorobenzene	2.094	2.526	20.6
1,4-Dichlorobenzene	2.107	2.483	17.9
p-Isopropyltoluene	4.518	5.691	26.0
1,2-Dichlorobenzene	1.693	1.916	13.1
n-Butylbenzene	5.205	6.009	15.5
1,2-Dibromo-3-chloropropane	.087	.071	18.2
1,2,4-Trichlorobenzene	1.469	1.620	10.3
Naphthalene	1.375	1.226	10.8
Hexachlorobutadiene	1.808	2.321	28.4
1,2,3-Trichlorobenzene	1.156	1.232	6.6
BENZENE-D6	1.622	1.556	4.1
p-BROMOFLUOROBENZENE	.372	.379	1.9
TOLUENE-D8	1.473	1.455	1.2

Calibration Check Report

Title: CALIBRATION FILE FOR OLC01
Calibrated: 940926 12:15

Check Standard Data File: >B0369
Injection Time: 940916 14:25

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
Dichlorodifluoromethane	.28266	.34966	23.70	Average	
Chloromethane	.47509	.55571	16.97	Average	
Vinyl chloride	.39354	.50021	27.10	Average	
Bromomethane	.23096	.22155	4.07	Average	
Chloroethane	.21802	.25001	14.67	Average	
Trichlorofluoromethane	.37622	.47988	27.55	Average	
Diethyl ether	.11622	.11690	.58	Average	(Conc=25.00)
Acrolein	.00282	.00211	25.17	Average	(Conc=25.00)
1,1-Dichloroethene	.28362	.34213	20.63	Average	
Acetone	.04166	.03682	11.63	Average	(Conc=25.00)
Carbon disulfide	1.10729	1.21762	9.96	Average	
Methylene chloride	.28335	.28936	2.12	Average	
trans-1,2-Dichloroethene	.32820	.39723	21.03	Average	
Acrylonitrile	.03550	.03221	9.27	Average	(Conc=25.00)
1,1-Dichloroethane	.69074	.72518	4.98	Average	
Vinyl acetate	.00692	.01625	134.73	Average	(Conc=10.00)
2,2-Dichloropropane	.46858	.64470	37.59	Average	
cis-1,2-Dichloroethene	.39598	.43769	10.53	Average	
2-Butanone	.05891	.04332	26.47	Average	(Conc=25.00)
Bromochloromethane	.14057	.15152	7.79	Average	
Chloroform	.69826	.73924	5.87	Average	
1,2-Dichloroethane	.37666	.35385	6.06	Average	
p-BROMOFLUOROBENZENE	.37176	.37864	1.85	Average	(Conc=5.00)
1,1,1-Trichloroethane	.65317	.87096	33.34	Average	
Carbon tetrachloride	.40239	.57744	43.50	Average	
1,1-Dichloropropene	.66172	.79570	20.25	Average	
BENZENE-D6	1.62216	1.55631	4.06	Average	(Conc=5.00)
Benzene	1.74811	1.99442	14.09	Average	
TOLUENE-D8	1.47334	1.45544	1.22	Average	(Conc=5.00)
Trichloroethene	.57790	.67313	16.48	Average	
1,2-Dichloropropane	.42669	.44063	3.27	Average	
Dibromomethane	.18580	.23089	24.27	Average	
2-Chloroethyl vinylether	.06469	.06859	6.02	Average	
Bromodichloromethane	.47636	.52005	9.17	Average	
cis-1,3-Dichloropropene	.50167	.53958	7.56	Average	(Conc=5.30)
Toluene	1.87433	2.15783	15.13	Average	
4-Methyl-2-pentanone	.16102	.13156	18.30	Average	(Conc=10.00)
trans-1,3-Dichloropropene	.31864	.31348	1.62	Average	(Conc=4.70)
Tetrachloroethene	.55467	.71889	29.61	Average	
1,1,2-Trichloroethane	.19563	.19967	2.07	Average	

RF - Response Factor from daily standard file at 5.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

Calibration Check Report

Title: CALIBRATION FILE FOR OLC01
Calibrated: 940926 12:15

Check Standard Data File: >B0369
Injection Time: 940916 14:25

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
1,3-Dichloropropane	.35669	.35385	.80	Average	
2-Hexanone	.10031	.08176	18.49	Average	(Conc=10.00)
Dibromochloromethane	.24848	.27238	9.62	Average	
1,2-Dibromoethane	.20783	.20896	.55	Average	
Chlorobenzene	1.05674	1.21436	14.92	Average	
1,1,1,2-Tetrachloroethane	.31490	.38296	21.62	Average	
Ethylbenzene	2.04722	2.37718	16.12	Average	
m &/or p-Xylene	.73503	.89341	21.55	Average	(Conc=10.00)
o-Xylene	.66629	.79181	18.84	Average	
Styrene	1.03638	1.21015	16.77	Average	
Isopropylbenzene	1.92291	2.43401	26.58	Average	
Bromobenzene	.42110	.51043	21.21	Average	
1,2,3-Trichloropropane	.19961	.18587	6.88	Average	
1,1,2,2-Tetrachloroethane	.19041	.18572	2.46	Average	
n-Propylbenzene	.50696	.64983	28.18	Average	
2-Chlorotoluene	.43320	.55869	28.97	Average	
4-Chlorotoluene	.43379	.55898	28.86	Average	
1,3,5-Trimethylbenzene	1.68615	2.14275	27.08	Average	
tert-Butylbenzene	1.52560	1.92791	26.37	Average	
1,2,4-Trimethylbenzene	1.68341	2.14530	27.44	Average	
sec-Butylbenzene	2.20864	2.95857	33.95	Average	
Bromoform	.34512	.36099	4.60	Average	
1,3-Dichlorobenzene	2.09379	2.52590	20.64	Average	
1,4-Dichlorobenzene	2.10651	2.48307	17.88	Average	
p-Isopropyltoluene	4.51809	5.69054	25.95	Average	
1,2-Dichlorobenzene	1.69326	1.91576	13.14	Average	
n-Butylbenzene	5.20452	6.00863	15.45	Average	
1,2-Dibromo-3-chloropropane	.08706	.07123	18.19	Average	
1,2,4-Trichlorobenzene	1.46866	1.61992	10.30	Average	
Naphthalene	1.37453	1.22582	10.82	Average	
Hexachlorobutadiene	1.80755	2.32113	28.41	Average	
1,2,3-Trichlorobenzene	1.15584	1.23223	6.61	Average	

RF - Response Factor from daily standard file at 5.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

8A
VOLATILE 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): >B0369 Date Analyzed: 09/16/94

Instrument ID: HP MSD#2 Time Analyzed: 14:25

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(DFB) AREA #	RT	IS2(CLB) AREA #	RT	IS3(DCB) AREA #	RT
	12 HOUR STD	42238	10.98	33695	15.58	14826	20.67
	UPPER LIMIT	59133	11.31	47173	15.91	20756	21.00
	LOWER LIMIT	25343	10.65	20217	15.25	8896	20.34
	EPA SAMPLE NO.						
1	LAB BLANK	36892	10.99	29194	15.58	13755	20.65
2	LAB SPIKE	39299	11.01	32747	15.60	16578	20.66
3	PES PX648	38927	11.25	32460	15.71	15481	20.66
4							
5							
6							
7							
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12							
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14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DFB) = 1,4-DIFLUOROBENZENE
IS2 (CLB) = CHLOROBENZENE-D5
IS3 (DCB) = 1,2-DICHLOROBENZENE-D4

UPPER LIMIT = + 40% of internal standard area.
LOWER LIMIT = - 40% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII VOA 1/87 Rev

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LAB BLANK

Site Name: ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: LAB BLANK

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0373

Level: (low/med) LOW Date Received: 09/16/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.	U
74-87-3	Chloromethane	2.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	1.	U
75-00-3	Chloroethane	1.	U
75-69-4	Trichlorofluoromethane	1.	U
60-29-7	Diethyl ether	2.	U
107-64-1	Acrolein	50.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
107-13-1	Acrylonitrile	3.	U
75-34-3	1,1-Dichloroethane	1.	U
108-05-4	Vinyl acetate	10.	UJ
594-20-7	2,2-Dichloropropane	1.	UJ
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	UJ
56-23-5	Carbon tetrachloride	1.	UJ
563-58-6	1,1-Dichloropropene	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	1.	U
78-87-5	1,2-Dichloropropane	1.	U
74-95-3	Dibromomethane	1.	U
110-75-8	2-Chloroethyl vinylether	5.	UJ
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
127-18-4	Tetrachloroethene	.8	U
79-00-5	1,1,2-Trichloroethane	3.	U

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LAB BLANK

Site Name: ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: LAB BLANK

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0373

Level: (low/med) LOW Date Received: 09/16/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
142-28-9	1,3-Dichloropropane	1.	U
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
630-20-6	1,1,1,2-Tetrachloroethane	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	1.	U
75-25-2	Bromoform	1.	U
98-82-8	Isopropylbenzene	1.	U
108-86-1	Bromobenzene	1.	U
96-18-4	1,2,3-Trichloropropane	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
103-65-1	n-Propylbenzene	1.	U
95-49-8	2-Chlorotoluene	1.	U
106-43-4	4-Chlorotoluene	1.	U
108-67-8	1,3,5-Trimethylbenzene	1.	U
98-06-6	tert-Butylbenzene	1.	U
95-63-6	1,2,4-Trimethylbenzene	1.	U
135-98-8	sec-Butylbenzene	1.	UJ
541-73-1	1,3-Dichlorobenzene	1.	U
106-46-7	1,4-Dichlorobenzene	1.	U
99-87-6	p-Isopropyltoluene	1.	U
95-50-1	1,2-Dichlorobenzene	1.	U
104-51-8	n-Butylbenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	3.	U
120-82-1	1,2,4-Trichlorobenzene	1.	U
91-20-3	Naphthalene	1.	U
87-68-3	Hexachlorobutadiene	1.	U
87-61-6	1,2,3-Trichlorobenzene	1.	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: TONY
Output File: ^B0373::QT
Data File: >B0373::D6
Name: LAB BLANK
Misc: HP MSD#2, 9/16/94

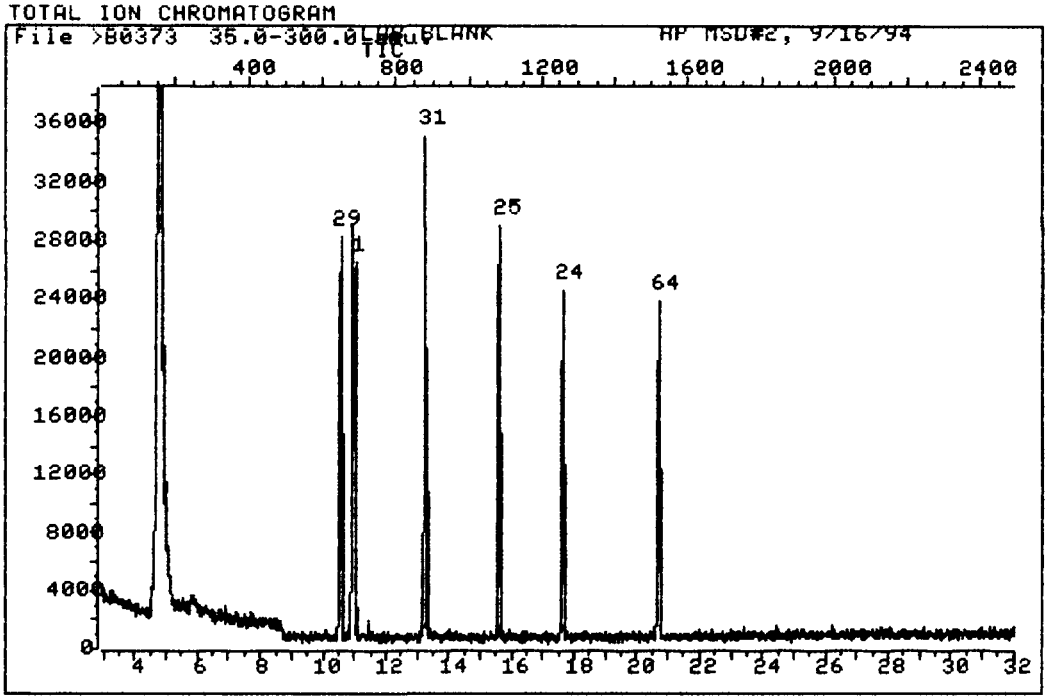
Quant Rev: 7
Quant Time: 940919 10:11
Injected at: 940916 16:55
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08
Last Qcal Time: 940916 14:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	10.99	114.0	36892	5.00	ug/L	90
24)	p-BROMOFLUOROBENZENE	17.62	174.0	14309	5.12	ug/L	75
25)	*CHLOROBENZENE-D5	15.58	117.0	29194	5.00	ug/L	95
29)	BENZENE-D6	10.51	84.0	45835	5.04	ug/L	97
31)	TOLUENE-D8	13.23	98.0	43288	5.09	ug/L	95
64)	*1,2-DICHLOROBENZENE-D4	20.65	152.0	13755	5.00	ug/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0373::D6
Name: LAB BLANK
Misc: HP MSD#2, 9/16/94

Quant Output File: ^B0373::QT
Instrument ID: HP MS #7

Id File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08

Last Qcal Time: 940916 14:25

Operator ID: TONY
Quant Time : 940919 10:11
Injected at: 940916 16:55

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

PES PX648

Site Name: ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: PES PX648

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0378

Level: (low/med) LOW Date Received: 09/08/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.	U
74-87-3	Chloromethane	2.	U
75-01-4	Vinyl chloride	1.	U
74-83-9	Bromomethane	6.	
75-00-3	Chloroethane	1.	U
75-69-4	Trichlorofluoromethane	1.	U
60-29-7	Diethyl ether	2.	U
107-64-1	Acrolein	50.	U
75-35-4	1,1-Dichloroethene	1.	U
67-64-1	Acetone	3.	U
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	1.	U
156-60-5	trans-1,2-Dichloroethene	1.	U
107-13-1	Acrylonitrile	3.	U
75-34-3	1,1-Dichloroethane	1.	U
108-05-4	Vinyl acetate	10.	UJ
594-20-7	2,2-Dichloropropane	1.	UJ
156-59-2	cis-1,2-Dichloroethene	1.	U
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	1.	U
67-66-3	Chloroform	1.	U
71-55-6	1,1,1-trichloroethane	1.	UJ
56-23-5	Carbon tetrachloride	1.	UJ
563-58-6	1,1-Dichloropropene	1.	U
71-43-2	Benzene	1.	U
107-06-2	1,2-Dichloroethane	1.	U
79-01-6	Trichloroethene	3.	
78-87-5	1,2-Dichloropropane	1.	U
74-95-3	Dibromomethane	1.	U
110-75-8	2-Chloroethyl vinylether	5.	UJ
75-27-4	Bromodichloromethane	1.	U
10061-01-5	cis-1,3-dichloropropene	1.	U
108-88-3	Toluene	1.	U
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	3.	
127-18-4	Tetrachloroethene	.8	U
79-00-5	1,1,2-Trichloroethane	3.	U

Are there any TICs ? (Please check a box) YES |_X_| NO |__|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

PES PX648

Site Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: PES PX648

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0378

Level: (low/med) LOW Date Received: 09/08/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
142-28-9	1,3-Dichloropropane	1.	U
591-78-6	2-Hexanone	42.	
124-48-1	Dibromochloromethane	1.	U
106-93-4	1,2-Dibromoethane	1.	U
108-90-7	Chlorobenzene	1.	U
630-20-6	1,1,1,2-Tetrachloroethane	1.	U
100-41-4	Ethylbenzene	1.	U
1083836423	m &/or p-Xylene	1.	U
95-47-6	o-Xylene	1.	U
100-42-5	Styrene	13.	
75-25-2	Bromoform	1.	U
98-82-8	Isopropylbenzene	1.	U
108-86-1	Bromobenzene	1.	U
96-18-4	1,2,3-Trichloropropane	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	
103-65-1	n-Propylbenzene	1.	U
95-49-8	2-Chlorotoluene	1.	U
106-43-4	4-Chlorotoluene	1.	U
108-67-8	1,3,5-Trimethylbenzene	1.	U
98-06-6	tert-Butylbenzene	1.	U
95-63-6	1,2,4-Trimethylbenzene	1.	U
135-98-8	sec-Butylbenzene	1.	UJ
541-73-1	1,3-Dichlorobenzene	11.	
106-46-7	1,4-Dichlorobenzene	4.	
99-87-6	p-Isopropyltoluene	1.	U
95-50-1	1,2-Dichlorobenzene	2.	
104-51-8	n-Butylbenzene	1.	U
96-12-8	1,2-Dibromo-3-chloropropane	13.	
120-82-1	1,2,4-Trichlorobenzene	1.	U
91-20-3	Naphthalene	1.	U
87-68-3	Hexachlorobutadiene	1.	U
87-61-6	1,2,3-Trichlorobenzene	1.	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.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PES PX648

Lab Name: ALCO STEEL SERVICE Contract: LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: PES PX648

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0378

Level: (low/med) LOW Date Received: 9/08/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

Column: CAP 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. 67630	2-PROPANOL	7.85	16	J
2.				
3.				
4.				
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28.				
29.				
30.				

EPA SAMPLE NUMBER: PX648

Lab Name: CRL REGION 5 Contract: ESAT
Lab Code: CRL Case No: 94152 SAS No: SDG No:
Lab Sample ID: PES PX648 Date Received: 09/16/94
Lab File ID: >B0378 Date Analyzed: 09/16/94

TCL HITS

BROMOMETHANE	Action Low	6.330
TRANS-1,3-DICHLOROPROPENE	In Window	3.400
2-HEXANONE	Warning High	41.950
1,1,2,2-TETRACHLOROETHANE	Warning Low	7.360
STYRENE	In Window	13.110
1,3-DICHLOROBENZENE	Warning Low	10.670
1,4-DICHLOROBENZENE	In Window	3.960
1,2-DICHLOROBENZENE	In Window	2.180
1,2-DIBROMO-3-CHLOROPROPANE	In Window	13.430

TCL MISSES

TCL CONTAMINANTS

TRICHLOROETHENE		2.720

TIC HITS

2-PROPANOL		J

TIC MISSES

TIC CONTAMINANTS

■Á

QUANT REPORT

Operator ID: TONY
Output File: ^B0378::QT
Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2

Quant Rev: 7
Quant Time: 940919 10:35
Injected at: 940916 20:05
Dilution Factor: 1.00000
Instrument ID: HP MS #7

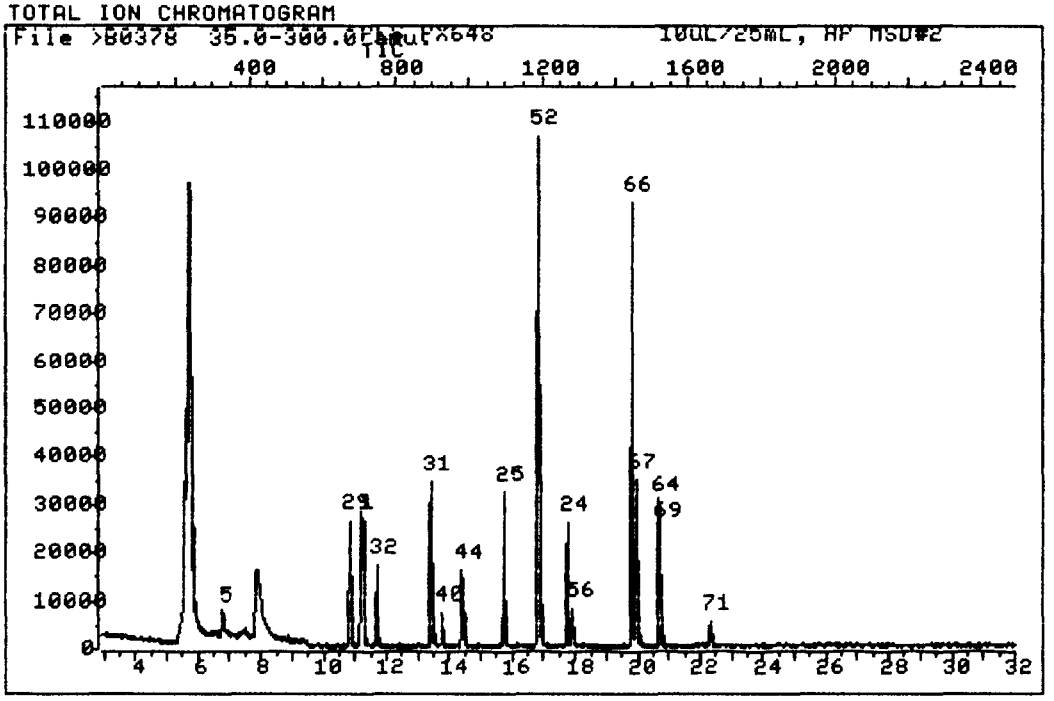
ID File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08

Last Qcal Time: 940916 14:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	11.25	114.0	38927	5.00	ug/L	91
5)	Bromomethane	6.74	94.0	10919M	6.33	ug/L	
24)	p-BROMOFLUOROBENZENE	17.71	174.0	16885	5.73	ug/L	73
25)	*CHLOROBENZENE-D5	15.71	117.0	32460	5.00	ug/L	96
29)	BENZENE-D6	10.80	84.0	48974	4.85	ug/L	99
31)	TOLUENE-D8	13.40	98.0	48138	5.09	ug/L	95
32)	Trichloroethene	11.67	95.0	11873	2.72	ug/L	94
40)	trans-1,3-Dichloropropene	13.75	75.0	6925	3.40	ug/L	98
44)	2-Hexanone	14.38	43.0	22265	41.95	ug/L	92
52)	Styrene	16.79	104.0	102973	13.11	ug/L	83
56)	1,1,2,2-Tetrachloroethane	17.90	83.0	8870	7.36	ug/L	96
64)	*1,2-DICHLOROBENZENE-D4	20.66	152.0	15481	5.00	ug/L	98
66)	1,3-Dichlorobenzene	19.77	146.0	83481	10.67	ug/L	97
67)	1,4-Dichlorobenzene	19.93	146.0	30423M	3.96	ug/L	97
69)	1,2-Dichlorobenzene	20.69	146.0	12935	2.18	ug/L	96
71)	1,2-Dibromo-3-chloropropane	22.31	75.0	2961M	13.43	ug/L	

* Compound is ISTD

TOTAL ION CHROMATOGRAM

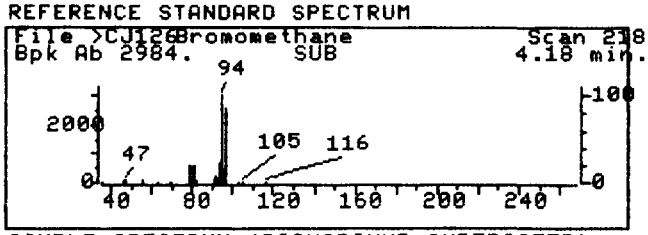


Data File: >B0378::D5 Quant Output File: ^B0378::QT
Name: PES PX648 Instrument ID: HP MS #7
Misc: 10uL/25mL, HP MSD#2

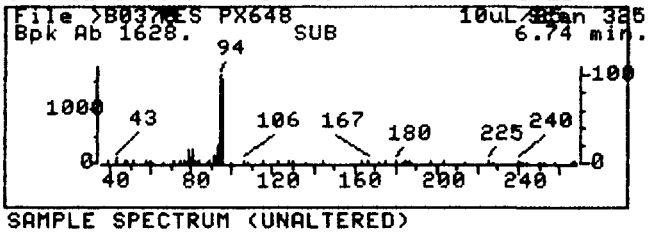
Id File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940916 14:25

Operator ID: TONY
Quant Time : 940919 10:35
Injected at: 940916 20:05

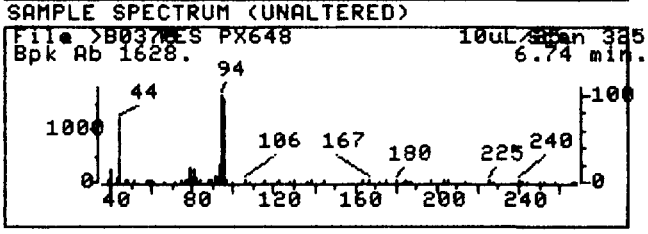
REFERENCE STANDARD SPECTRUM

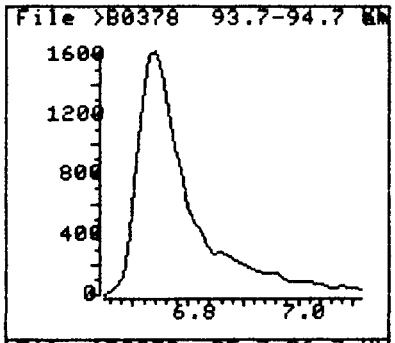


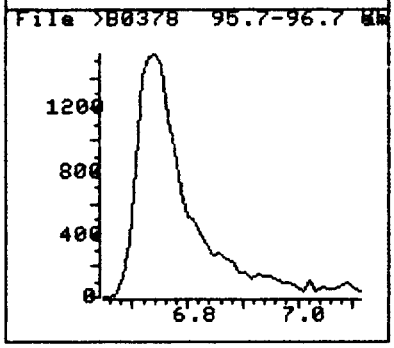
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







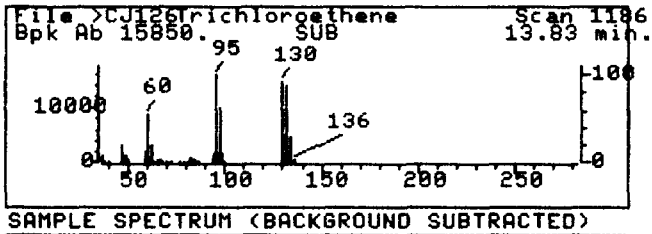
Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7

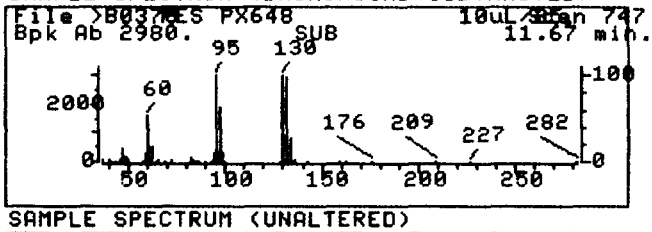
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 5
Compound Name : Bromomethane
Scan Number : 325
Retention Time: 6.74 min.
Quant Ion : 94.0
Area : 10919M
Concentration : 6.33 ug/L

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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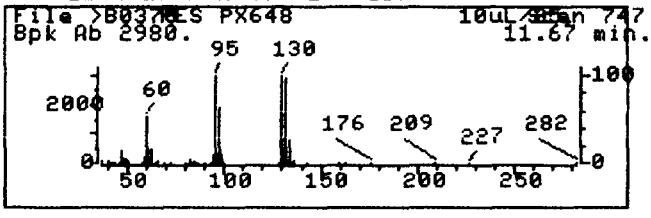
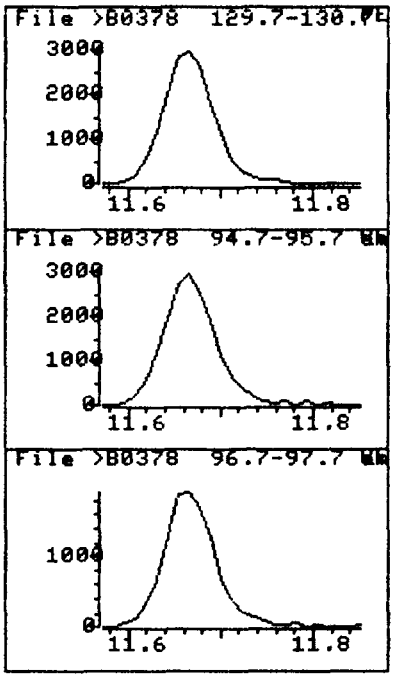




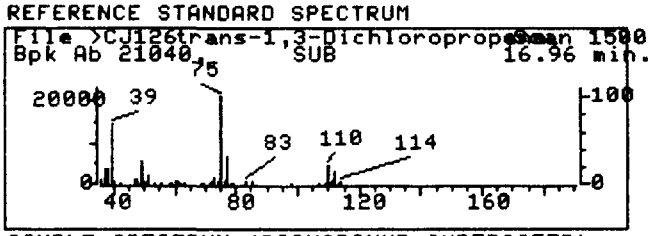
Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7

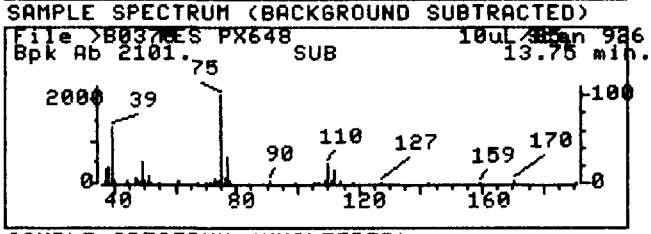
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 32
Compound Name : Trichloroethene
Scan Number : 747
Retention Time: 11.67 min.
Quant Ion : 95.0
Area : 11873
Concentration : 2.72 ug/L
q-value : 94

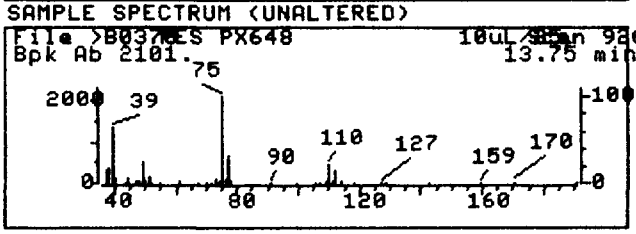
REFERENCE STANDARD SPECTRUM

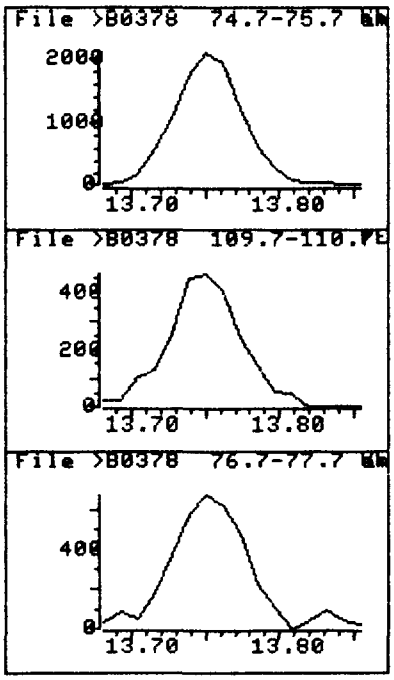


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



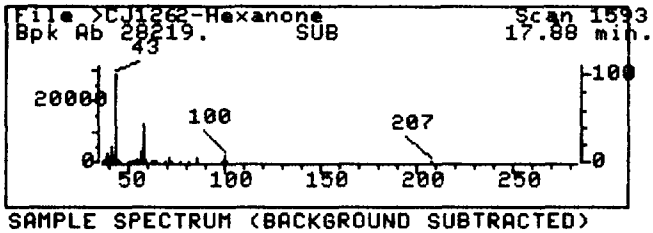


Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

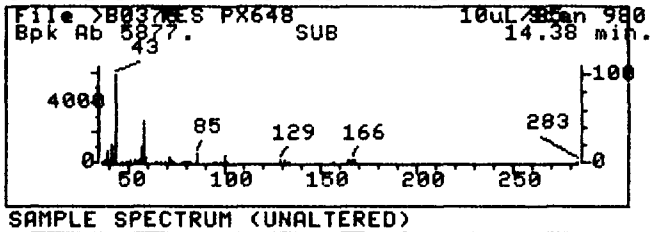
Quant Output File: ^B0378::QT
Instrument ID: HP MS #7
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 40
Compound Name : trans-1,3-Dichloropropene
Scan Number : 926
Retention Time: 13.75 min.
Quant Ion : 75.0
Area : 6925
Concentration : 3.40 ug/L
q-value : 98

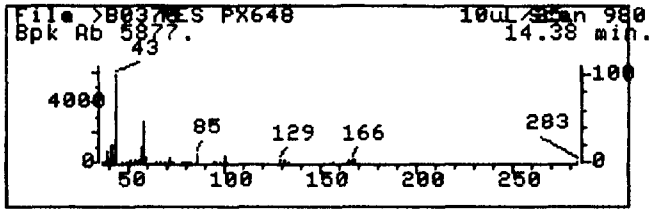
REFERENCE STANDARD SPECTRUM

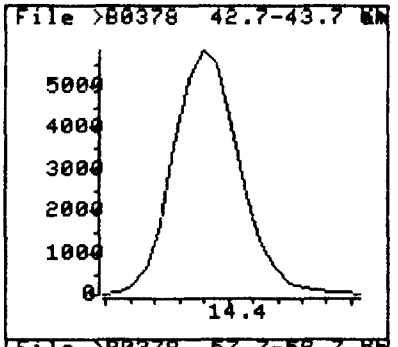


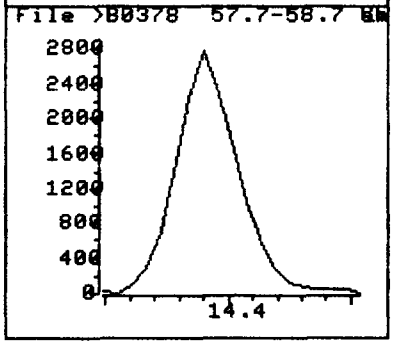
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







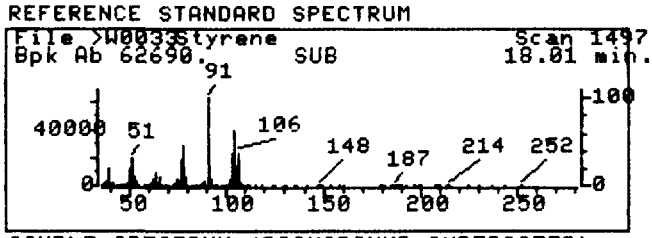
Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7

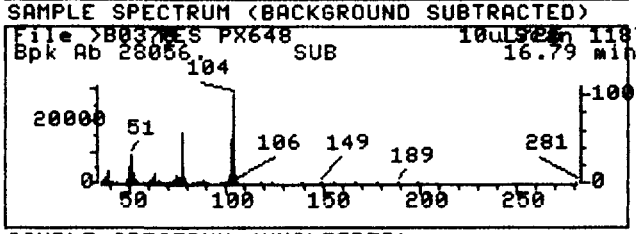
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 44
Compound Name : 2-Hexanone
Scan Number : 980
Retention Time: 14.38 min.
Quant Ion : 43.0
Area : 22265
Concentration : 41.95 ug/L
q-value : 92

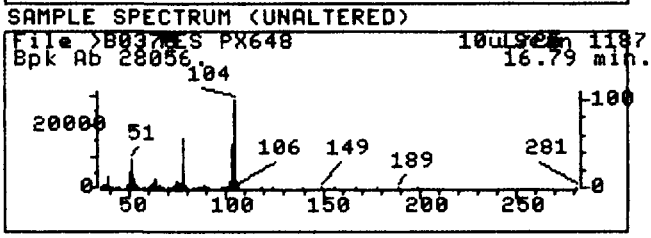
REFERENCE STANDARD SPECTRUM

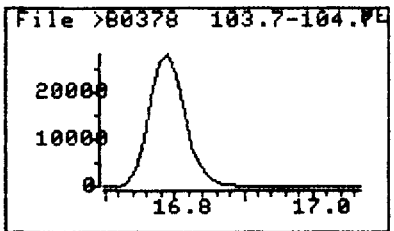


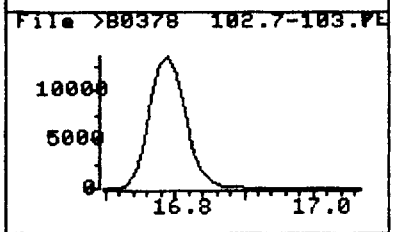
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

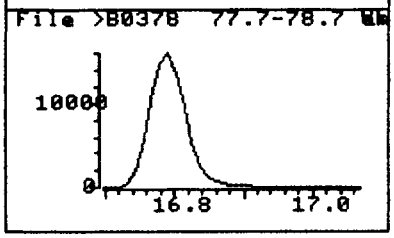


SAMPLE SPECTRUM (UNALTERED)









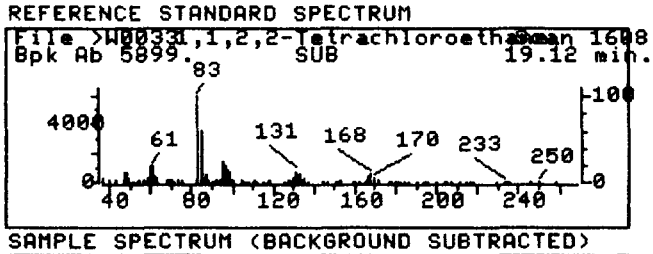
Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7

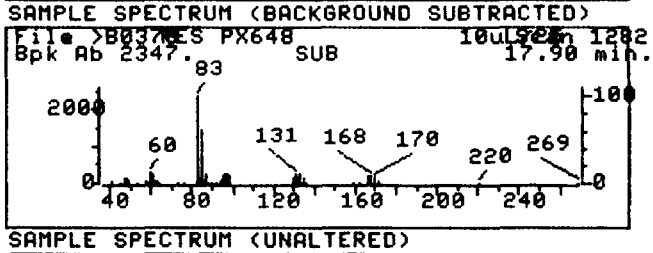
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 52
Compound Name : Styrene
Scan Number : 1187
Retention Time: 16.79 min.
Quant Ion : 104.0
Area : 102973
Concentration : 13.11 ug/L
q-value : 83

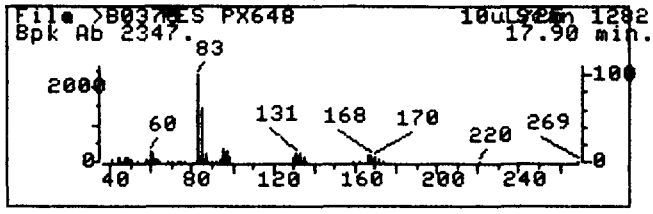
REFERENCE STANDARD SPECTRUM

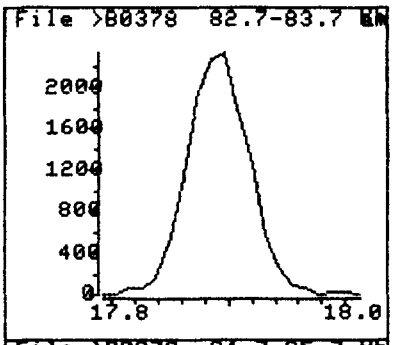


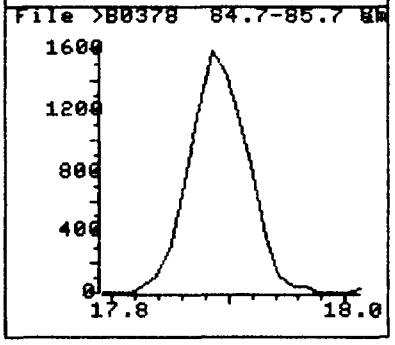
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





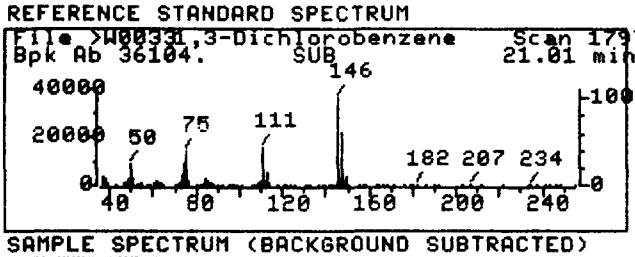


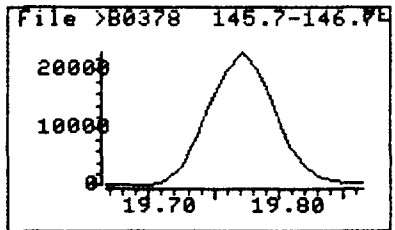
Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

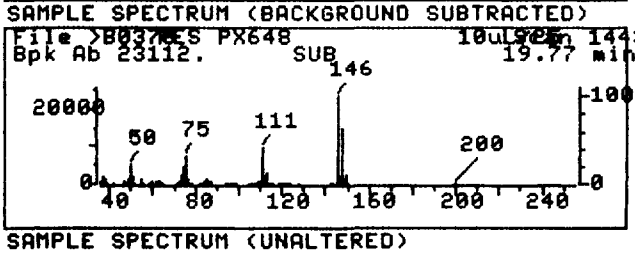
Compound No : 56
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1282
Retention Time: 17.90 min.
Quant Ion : 83.0
Area : 8870
Concentration : 7.36 ug/L
q-value : 96

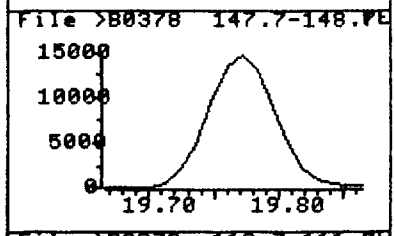
REFERENCE STANDARD SPECTRUM



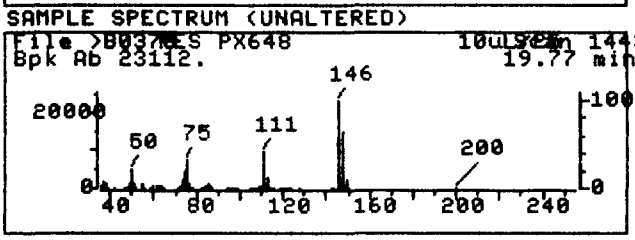


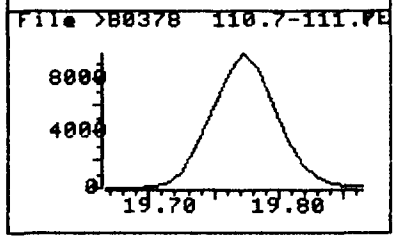
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)





SAMPLE SPECTRUM (UNALTERED)



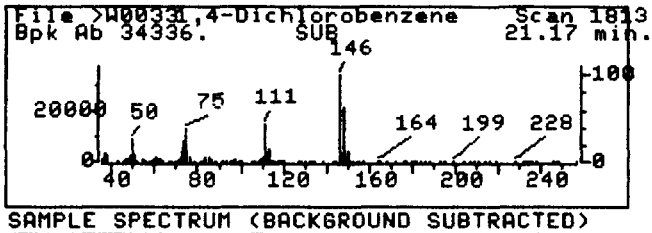


Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

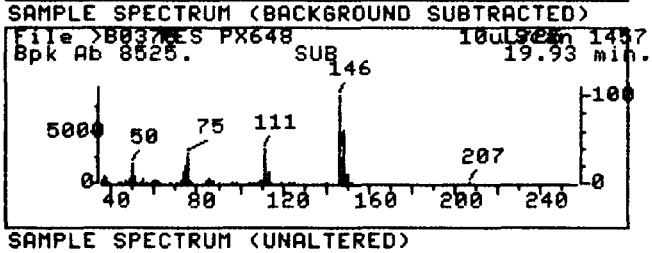
Quant Output File: ^B0378::QT
Instrument ID: HP MS #7
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 66
Compound Name : 1,3-Dichlorobenzene
Scan Number : 1443
Retention Time: 19.77 min.
Quant Ion : 146.0
Area : 83481
Concentration : 10.67 ug/L
q-value : 97

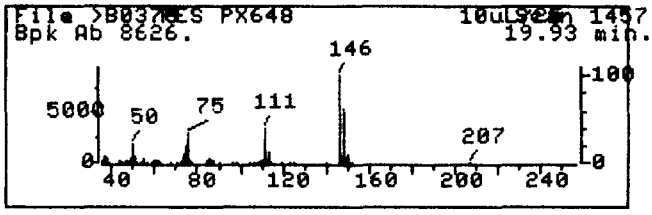
REFERENCE STANDARD SPECTRUM

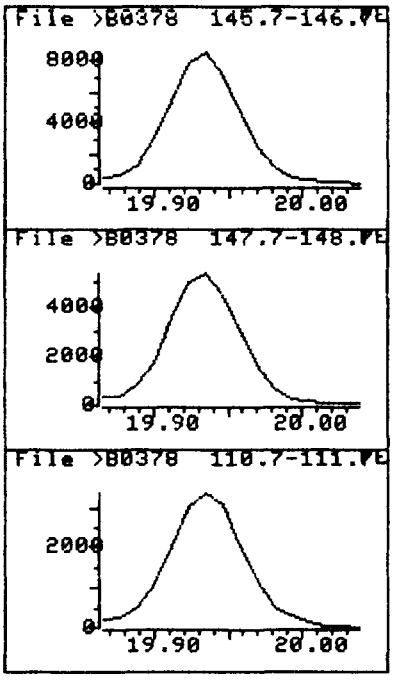


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

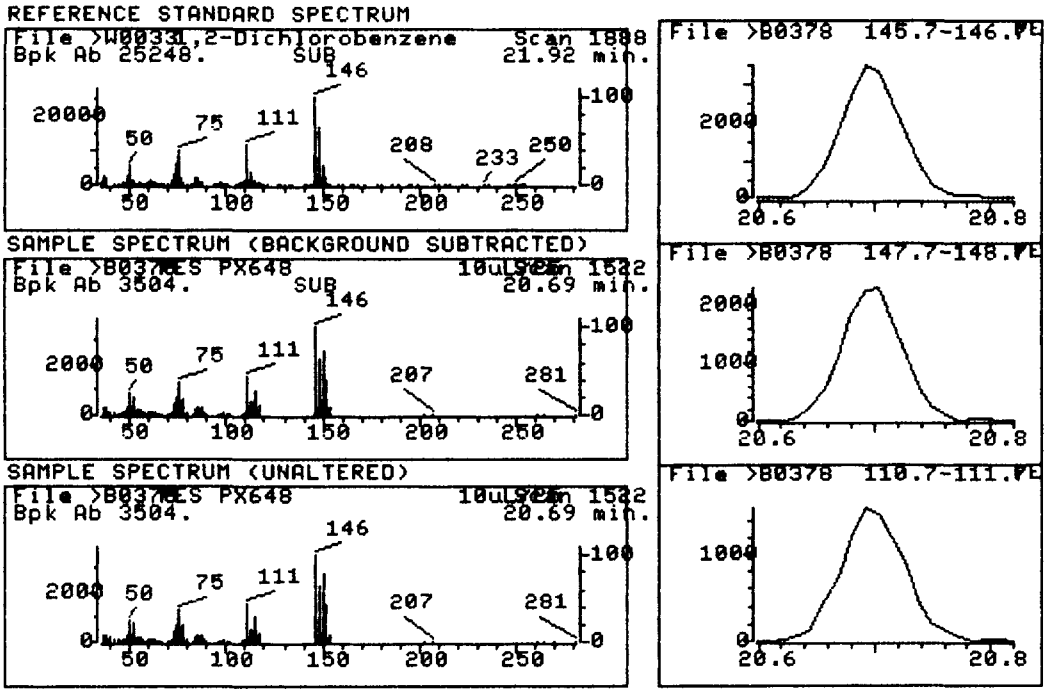




Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 67
Compound Name : 1,4-Dichlorobenzene
Scan Number : 1457
Retention Time: 19.93 min.
Quant Ion : 146.0
Area : 30423M
Concentration : 3.96 ug/L
q-value : 97

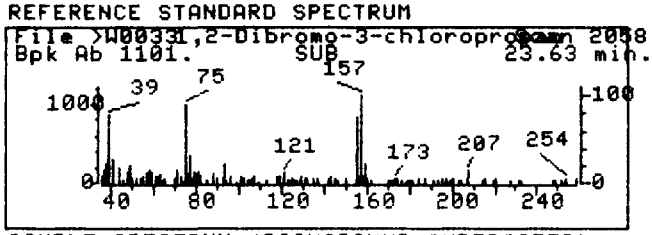


Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

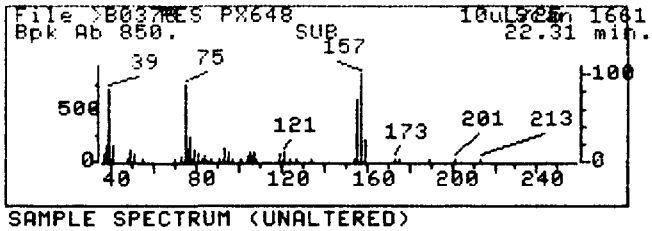
Quant Output File: ^B0378::QT
Instrument ID: HP MS #7
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 69
Compound Name : 1,2-Dichlorobenzene
Scan Number : 1522
Retention Time: 20.69 min.
Quant Ion : 146.0
Area : 12935
Concentration : 2.18 ug/L
q-value : 96

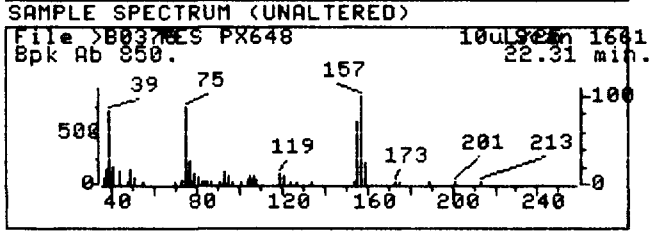
REFERENCE STANDARD SPECTRUM

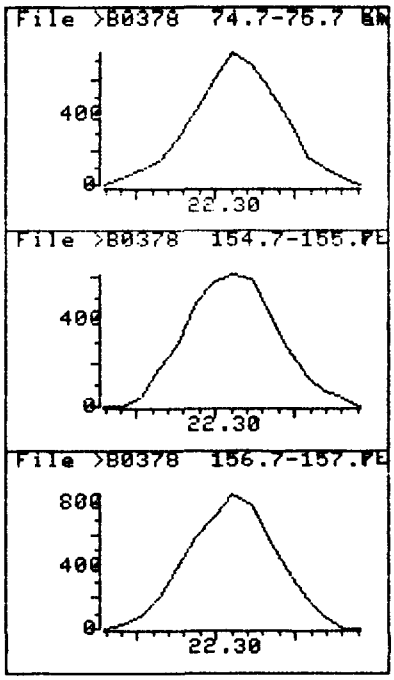


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >B0378::D5
Name: PES PX648
Misc: 10uL/25mL, HP MSD#2
Quant Time: 940919 10:35
Injected at: 940916 20:05
Last Qcal Time: 940916 14:25

Quant Output File: ^B0378::QT
Instrument ID: HP MS #7
Quant ID File: IDB024::D2
Last Calibration: 940909 10:08

Compound No : 71
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 1661
Retention Time: 22.31 min.
Quant Ion : 75.0
Area : 2961M
Concentration : 13.43 ug/L

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LAB SPIKE

Site Name: ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: LAB SPIKE

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0375

Level: (low/med) LOW Date Received: 09/16/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.	
74-87-3	Chloromethane	3.	
75-01-4	Vinyl chloride	4.	
74-83-9	Bromomethane	6.	
75-00-3	Chloroethane	5.	
75-69-4	Trichlorofluoromethane	5.	
60-29-7	Diethyl ether	2.	
107-64-1	Acrolein	50.	U
75-35-4	1,1-Dichloroethene	5.	
67-64-1	Acetone	5.	
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	5.	
156-60-5	trans-1,2-Dichloroethene	5.	
107-13-1	Acrylonitrile	3.	U
75-34-3	1,1-Dichloroethane	5.	
108-05-4	Vinyl acetate	10.	UJ
594-20-7	2,2-Dichloropropane	4.	J
156-59-2	cis-1,2-Dichloroethene	5.	
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	5.	
67-66-3	Chloroform	5.	
71-55-6	1,1,1-trichloroethane	5.	J
56-23-5	Carbon tetrachloride	5.	J
563-58-6	1,1-Dichloropropene	5.	
71-43-2	Benzene	5.	
107-06-2	1,2-Dichloroethane	5.	
79-01-6	Trichloroethene	5.	
78-87-5	1,2-Dichloropropane	5.	
74-95-3	Dibromomethane	5.	
110-75-8	2-Chloroethyl vinylether	5.	UJ
75-27-4	Bromodichloromethane	5.	
10061-01-5	cis-1,3-dichloropropene	5.	
108-88-3	Toluene	5.	
108-10-1	4-Methyl-2-pentanone	3.	U
10061-02-6	trans-1,3-Dichloropropene	6.	
127-18-4	Tetrachloroethene	5.	
79-00-5	1,1,2-Trichloroethane	5.	

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

LAB SPIKE

Site Name: ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: LAB SPIKE

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0375

Level: (low/med) LOW Date Received: 09/16/94

% Moisture: not dec.---- Date Analyzed: 9/16/94

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
142-28-9	1,3-Dichloropropane	5.	
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	6.	
106-93-4	1,2-Dibromoethane	5.	
108-90-7	Chlorobenzene	5.	
630-20-6	1,1,1,2-Tetrachloroethane	5.	
100-41-4	Ethylbenzene	5.	
1083836423	m &/or p-Xylene	9.	
95-47-6	o-Xylene	5.	
100-42-5	Styrene	5.	
75-25-2	Bromoform	5.	
98-82-8	Isopropylbenzene	4.	
108-86-1	Bromobenzene	5.	
96-18-4	1,2,3-Trichloropropane	6.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	
103-65-1	n-Propylbenzene	5.	
95-49-8	2-Chlorotoluene	5.	
106-43-4	4-Chlorotoluene	5.	
108-67-8	1,3,5-Trimethylbenzene	5.	
98-06-6	tert-Butylbenzene	5.	
95-63-6	1,2,4-Trimethylbenzene	5.	
135-98-8	sec-Butylbenzene	5.	J
541-73-1	1,3-Dichlorobenzene	4.	
106-46-7	1,4-Dichlorobenzene	4.	
99-87-6	p-Isopropyltoluene	4.	
95-50-1	1,2-Dichlorobenzene	5.	
104-51-8	n-Butylbenzene	4.	
96-12-8	1,2-Dibromo-3-chloropropane	3.	U
120-82-1	1,2,4-Trichlorobenzene	5.	
91-20-3	Naphthalene	5.	
87-68-3	Hexachlorobutadiene	5.	
87-61-6	1,2,3-Trichlorobenzene	5.	

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: TONY
Output File: ^B0375::QT
Data File: >B0375::D6
Name: LCS 9/94
Misc: HP MSD#2, 9/16/94

Quant Rev: 7
Quant Time: 940919 10:19
Injected at: 940916 18:11
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08
Last Qcal Time: 940916 14:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	11.01	114.0	39299	5.00	ug/L	92
2)	Dichlorodifluoromethane	5.06	85.0	6604	2.40	ug/L	97
3)	Chloromethane	5.37	50.0	12982	2.97	ug/L	99
4)	Vinyl chloride	5.56	62.0	14570	3.71	ug/L	97
5)	Bromomethane	6.06	94.0	10261	5.89	ug/L	97
6)	Chloroethane	6.19	64.0	9828	5.00	ug/L	96
7)	Trichlorofluoromethane	6.54	101.0	20030	5.31	ug/L	93
8)	Diethyl ether	6.87	74.0	2118	2.31	ug/L	97
10)	1,1-Dichloroethene	7.22	96.0	14181	5.27	ug/L	92
11)	Acetone	6.87	43.0	1412	4.88	ug/L	93
13)	Methylene chloride	7.79	84.0	11766	5.17	ug/L	91
14)	trans-1,2-Dichloroethene	8.13	96.0	14948	4.79	ug/L	99
16)	1,1-Dichloroethane	8.66	63.0	29313	5.14	ug/L	98
18)	2,2-Dichloropropane	9.42	77.0	20907	4.13	ug/L	94
19)	cis-1,2-Dichloroethene	9.38	96.0	17026	4.95	ug/L	98
21)	Bromochloromethane	9.71	128.0	6295	5.29	ug/L	98
22)	Chloroform	9.77	83.0	29921	5.15	ug/L	93
23)	1,2-Dichloroethane	10.58	62.0	15162	5.45	ug/L	97
24)	p-BROMOFLUOROBENZENE	17.66	174.0	16894	5.68	ug/L	79
25)	*CHLOROBENZENE-D5	15.60	117.0	32747	5.00	ug/L	94
26)	1,1,1-Trichloroethane	10.09	97.0	25721	4.51	ug/L	95
27)	Carbon tetrachloride	10.33	117.0	17995	4.76	ug/L	95
28)	1,1-Dichloropropene	10.29	75.0	24238	4.65	ug/L	96
29)	BENZENE-D6	10.54	84.0	49051	4.81	ug/L	99
30)	Benzene	10.59	78.0	59543	4.56	ug/L	98
31)	TOLUENE-D8	13.25	98.0	48123	5.05	ug/L	95
32)	Trichloroethene	11.44	95.0	23374	5.30	ug/L	93
33)	1,2-Dichloropropane	11.78	63.0	14567	5.05	ug/L	93
34)	Dibromomethane	11.97	174.0	7796	5.16	ug/L	98
36)	Bromodichloromethane	12.14	83.0	17307	5.08	ug/L	99
37)	cis-1,3-Dichloropropene	12.81	75.0	16579	4.69	ug/L	96
38)	Toluene	13.36	91.0	64480	4.56	ug/L	97
40)	trans-1,3-Dichloropropene	13.62	75.0	11705	5.70	ug/L	99
41)	Tetrachloroethene	14.24	166.0	23023	4.89	ug/L	99
42)	1,1,2-Trichloroethane	13.94	97.0	6684	5.11	ug/L	87
43)	1,3-Dichloropropane	14.23	76.0	12191	5.26	ug/L	99
45)	Dibromochloromethane	14.63	129.0	10058	5.64	ug/L	96
46)	1,2-Dibromoethane	14.87	107.0	7105	5.19	ug/L	93
47)	Chlorobenzene	15.66	112.0	38529	4.84	ug/L	94
48)	1,1,1,2-Tetrachloroethane	15.76	131.0	12134	4.84	ug/L	97

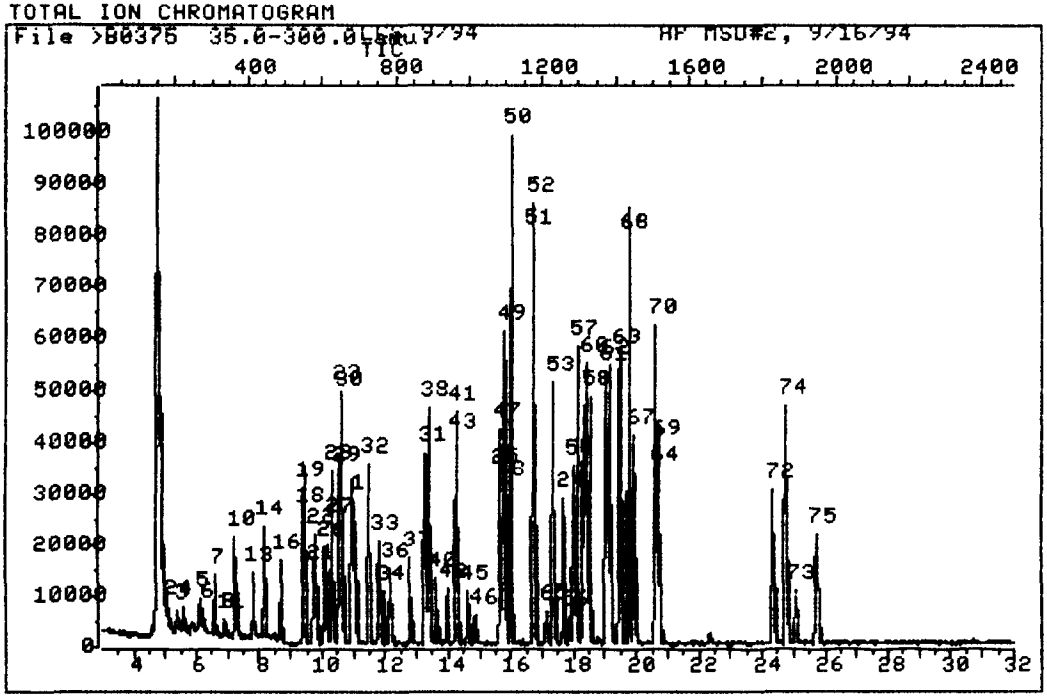
Operator ID: TONY Quant Rev: 7 Quant Time: 940919 10:19
Output File: ^B0375::QT Injected at: 940916 18:11
Data File: >B0375::D6 Dilution Factor: 1.00000
Name: LCS 9/94 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/16/94

ID File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940916 14:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
49)	Ethylbenzene	15.79	91.0	74359	4.78	ug/L	99
50)	m &/or p-Xylene	15.99	106.0	53215	9.09	ug/L	95
51)	o-Xylene	16.70	106.0	24309	4.69	ug/L	99
52)	Styrene	16.71	104.0	37992	4.79	ug/L	93
53)	Isopropylbenzene	17.34	105.0	70269	4.41	ug/L	98
54)	Bromobenzene	17.98	156.0	16620	4.97	ug/L	97
55)	1,2,3-Trichloropropane	17.98	75.0	7067	5.81	ug/L	82
56)	1,1,2,2-Tetrachloroethane	17.84	83.0	5607	4.61	ug/L	96
57)	n-Propylbenzene	18.10	120.0	19846	4.66	ug/L	97
58)	2-Chlorotoluene	18.51	126.0	17772	4.86	ug/L	96
59)	4-Chlorotoluene	18.51	126.0	17772	4.85	ug/L	96
60)	1,3,5-Trimethylbenzene	18.40	105.0	65288	4.65	ug/L	89
61)	tert-Butylbenzene	19.04	119.0	56832	4.50	ug/L	96
62)	1,2,4-Trimethylbenzene	19.14	105.0	66102	4.70	ug/L	96
63)	sec-Butylbenzene	19.47	105.0	90014	4.65	ug/L	99
64)	*1,2-DICHLOROBENZENE-D4	20.66	152.0	16578	5.00	ug/L	98
65)	Bromoform	17.11	173.0	6122	5.11	ug/L	92
66)	1,3-Dichlorobenzene	19.76	146.0	35764	4.27	ug/L	95
67)	1,4-Dichlorobenzene	19.93	146.0	35072	4.26	ug/L	93
68)	p-Isopropyltoluene	19.73	119.0	71860	3.81	ug/L	96
69)	1,2-Dichlorobenzene	20.71	146.0	29349	4.62	ug/L	95
70)	n-Butylbenzene	20.57	91.0	80093	4.02	ug/L	97
72)	1,2,4-Trichlorobenzene	24.35	180.0	26510	4.94	ug/L	98
73)	Naphthalene	25.05	128.0	20268	4.99	ug/L	100
74)	Hexachlorobutadiene	24.74	225.0	34896	4.53	ug/L	97
75)	1,2,3-Trichlorobenzene	25.72	180.0	20241	4.95	ug/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0375::D6 Quant Output File: ^B0375::QT
Name: LCS 9/94 Instrument ID: HP MS #7
Misc: HP MSD#2, 9/16/94

Id File: IDB024::D2
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940909 10:08 Last Qcal Time: 940916 14:25

Operator ID: TONY
Quant Time : 940919 10:19
Injected at: 940916 18:11

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

0926ICCHK

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: 0926ICCHK

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0387

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	7.	
75-01-4	Vinyl chloride	7.	
74-83-9	Bromomethane	8.	
75-00-3	Chloroethane	6.	
75-35-4	1,1-Dichloroethene	6.	
67-64-1	Acetone	4.	
75-15-0	Carbon disulfide	1.	U
75-09-2	Methylene chloride	5.	
156-60-5	trans-1,2-Dichloroethene	6.	
75-34-3	1,1-Dichloroethane	6.	
156-59-2	cis-1,2-Dichloroethene	6.	
78-93-3	2-Butanone	3.	U
74-97-5	Bromochloromethane	5.	
67-66-3	Chloroform	6.	
71-55-6	1,1,1-trichloroethane	6.	
56-23-5	Carbon tetrachloride	6.	
71-43-2	Benzene	5.	
107-06-2	1,2-Dichloroethane	5.	
79-01-6	Trichloroethene	6.	
78-87-5	1,2-Dichloropropane	6.	
75-27-4	Bromodichloromethane	5.	
10061-01-5	cis-1,3-dichloropropene	5.	
108-88-3	Toluene	5.	
108-10-1	4-Methyl-2-pentanone	1.	J
10061-02-6	trans-1,3-Dichloropropene	6.	
127-18-4	Tetrachloroethene	6.	
79-00-5	1,1,2-Trichloroethane	5.	
591-78-6	2-Hexanone	3.	U
124-48-1	Dibromochloromethane	6.	
106-93-4	1,2-Dibromoethane	5.	
108-90-7	Chlorobenzene	6.	
100-41-4	Ethylbenzene	6.	
1083836423	m &/or p-Xylene	11.	
95-47-6	o-Xylene	6.	
100-42-5	Styrene	5.	
75-25-2	Bromoform	6.	
79-34-5	1,1,2,2-Tetrachloroethane	5.	

Are there any TICs ? (Please check a box) YES |__| NO |_X_|

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

0926ICCHK

Site Name:ALCO STEEL SERVICE Contract:LOCKHEED/ESAT

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

Matrix: (soil/water) WATER Lab Sample ID: 0926ICCHK

Sample wt/vol: 25 (g/mL) ML Lab File ID: >B0387

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

% Moisture: not dec.---- Date Analyzed: 9/26/94

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	6.	
106-46-7	1,4-Dichlorobenzene	6.	
95-50-1	1,2-Dichlorobenzene	6.	
96-12-8	1,2-Dibromo-3-chloropropane	5.	J

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: ^B0387::D1
Data File: >B0387::D2
Name: 0926ICCHK
Misc: HP MSD#2, 9/26/94

Quant Rev: 7
Quant Time: 940927 10:01
Injected at: 940926 13:45
Dilution Factor: 1.00000
Instrument ID: HP MS #7

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DIFLUOROBENZENE	9.19	114.0	54681	5.00	ug/L	89
2)	Dichlorodifluoromethane	3.96	85.0	31728	9.36	ug/L	97
3)	Chloromethane	4.21	50.0	27209	6.62	ug/L	95
4)	Vinyl chloride	4.35	62.0	30700	7.04	ug/L	98
5)	Bromomethane	4.77	94.0	23994	7.53	ug/L	99
6)	Chloroethane	4.89	64.0	19930	6.32	ug/L	99
7)	Trichlorofluoromethane	5.19	101.0	40462	7.68	ug/L	98
10)	1,1-Dichloroethene	5.77	96.0	22172	5.95	ug/L	94
11)	Acetone	5.79	43.0	1713	3.51	ug/L	98
13)	Methylene chloride	6.27	84.0	19576	5.01	ug/L	94
14)	trans-1,2-Dichloroethene	6.57	96.0	25360	5.85	ug/L	97
16)	1,1-Dichloroethane	7.04	63.0	47415	5.55	ug/L	98
18)	2,2-Dichloropropane	7.70	77.0	40082	5.53	ug/L	98
19)	cis-1,2-Dichloroethene	7.69	96.0	24284	5.72	ug/L	99
21)	Bromochloromethane	7.98	128.0	8021	5.45	ug/L	98
22)	Chloroform	8.04	83.0	46222	5.54	ug/L	95
23)	1,2-Dichloroethane	8.77	62.0	26131	5.45	ug/L	97
24)	p-BROMOFLUOROBENZENE	15.61	174.0	17165	4.91	ug/L	92
25)	*CHLOROBENZENE-D5	13.61	117.0	43096	5.00	ug/L	97
26)	1,1,1-Trichloroethane	8.32	97.0	43857	5.72	ug/L	97
27)	Carbon tetrachloride	8.53	117.0	31216	6.02	ug/L	93
28)	1,1-Dichloropropene	8.51	75.0	38084	5.99	ug/L	99
29)	BENZENE-D6	8.73	84.0	69318	4.83	ug/L	98
30)	Benzene	8.77	78.0	78562	5.39	ug/L	98
31)	TOLUENE-D8	11.29	98.0	65662	4.86	ug/L	95
32)	Trichloroethene	9.58	95.0	27611	5.63	ug/L	89
33)	1,2-Dichloropropane	9.89	63.0	17157	5.56	ug/L	94
34)	Dibromomethane	10.06	174.0	8553	5.63	ug/L	99
36)	Bromodichloromethane	10.24	83.0	25709	5.38	ug/L	98
37)	cis-1,3-Dichloropropene	10.87	75.0	23189	5.33	ug/L	97
38)	Toluene	11.40	91.0	86125	5.31	ug/L	95
39)	4-Methyl-2-pentanone	11.07	43.0	1015	1.10	ug/L	73
40)	trans-1,3-Dichloropropene	11.68	75.0	17601	5.90	ug/L	97
41)	Tetrachloroethene	12.26	166.0	27621	5.97	ug/L	99
42)	1,1,2-Trichloroethane	11.99	97.0	8275	5.34	ug/L	99
43)	1,3-Dichloropropane	12.26	76.0	16472	5.58	ug/L	99
45)	Dibromochloromethane	12.63	129.0	13184	5.74	ug/L	99
46)	1,2-Dibromoethane	12.85	107.0	9352	5.48	ug/L	98
47)	Chlorobenzene	13.66	112.0	49514	5.60	ug/L	93
48)	1,1,1,2-Tetrachloroethane	13.76	131.0	16337	5.59	ug/L	94

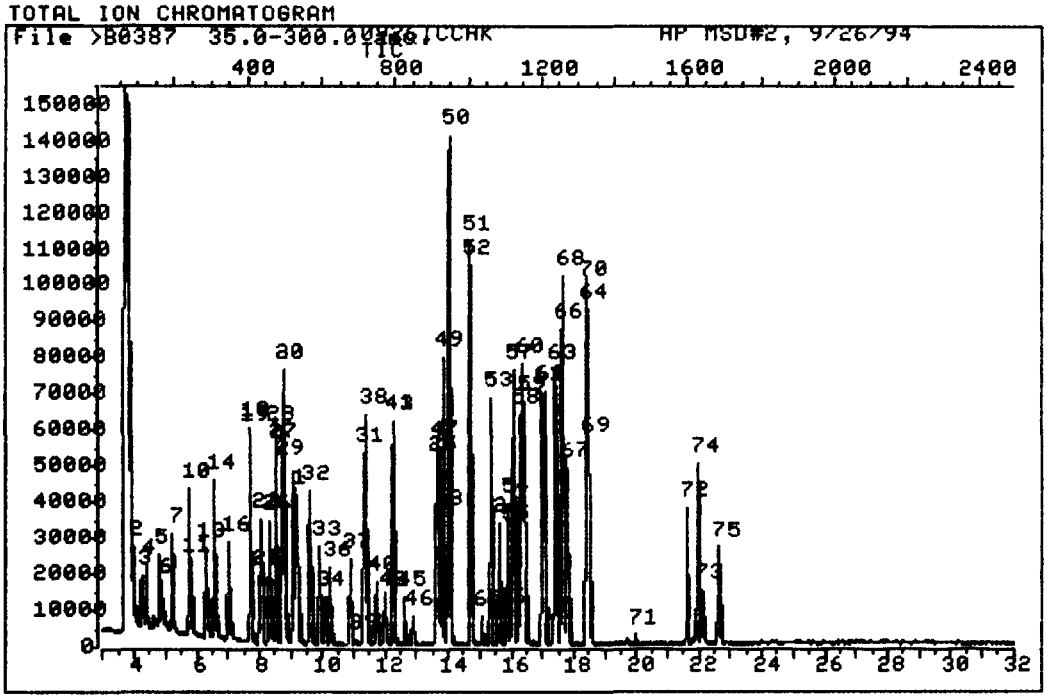
Operator ID: ZIYAD Quant Rev: 7 Quant Time: 940927 10:01
Output File: ^B0387::D1 Injected at: 940926 13:45
Data File: >B0387::D2 Dilution Factor: 1.00000
Name: 0926ICCHK Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

ID File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
49)	Ethylbenzene	13.81	91.0	105566	5.97	ug/L	99
50)	m &/or p-Xylene	14.01	106.0	70971	11.24	ug/L	97
51)	o-Xylene	14.70	106.0	31599	5.56	ug/L	95
52)	Styrene	14.71	104.0	46905	5.43	ug/L	96
53)	Isopropylbenzene	15.33	105.0	96742	5.60	ug/L	98
54)	Bromobenzene	15.90	156.0	18364	5.35	ug/L	96
55)	1,2,3-Trichloropropane	15.92	75.0	9439	5.58	ug/L	92
56)	1,1,2,2-Tetrachloroethane	15.83	83.0	8027	5.38	ug/L	96
57)	n-Propylbenzene	16.06	120.0	25520	5.99	ug/L	95
58)	2-Chlorotoluene	16.24	126.0	20882M	5.62	ug/L	95
59)	4-Chlorotoluene	16.42	126.0	21162	5.66	ug/L	95
60)	1,3,5-Trimethylbenzene	16.36	105.0	91307	5.96	ug/L	98
61)	tert-Butylbenzene	16.97	119.0	81173	5.93	ug/L	98
62)	1,2,4-Trimethylbenzene	17.06	105.0	86937	5.68	ug/L	97
63)	sec-Butylbenzene	17.38	105.0	115837	6.04	ug/L	97
64)	*1,2-DICHLOROBENZENE-D4	18.44	152.0	16588	5.00	ug/L	95
65)	Bromoform	15.05	173.0	6554	5.89	ug/L	98
66)	1,3-Dichlorobenzene	17.61	146.0	39461	5.70	ug/L	95
67)	1,4-Dichlorobenzene	17.78	146.0	37837M	5.59	ug/L	96
68)	p-Isopropyltoluene	17.64	119.0	92709	5.82	ug/L	98
69)	1,2-Dichlorobenzene	18.48	146.0	30151	5.51	ug/L	99
70)	n-Butylbenzene	18.42	91.0	103301	5.86	ug/L	96
71)	1,2-Dibromo-3-chloropropane	19.97	75.0	1601	5.28	ug/L	81
72)	1,2,4-Trichlorobenzene	21.59	180.0	23897	5.69	ug/L	98
73)	Naphthalene	22.10	128.0	23827	5.63	ug/L	100
74)	Hexachlorobutadiene	21.93	225.0	24993	6.26	ug/L	98
75)	1,2,3-Trichlorobenzene	22.62	180.0	18935	5.81	ug/L	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B0387::D2 Quant Output File: ^B0387::D1
Name: 0926ICCHK Instrument ID: HP MS #7
Misc: HP MSD#2, 9/26/94

Id File: IDB025::D1
Title: ID FILE FOR OLC01, INST.#2
Last Calibration: 940927 09:56 Last Qcal Time: <none>

Operator ID: ZIYAD
Quant Time : 940927 10:01
Injected at: 940926 13:45

```
FMGR : BLIST,BAB000

 Sequence File: BAB000::SC
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 Tune File: MTMSD2

 CR List: D2,D3,D4,D5
 CR Cut-off:  3500 blocks.
                                                   Report Data Archive
                                                  Quant | | ID Archive
 Number of samples:  17                   Sample Size | | | | Output Archive
                                         Bottle      | | | | | | |
 Samp Data File     Sample Name                |     | | | | | | |    Quant ID
  No. Method File   Misc Data                   |     | | | | | | |    Quant Output
 ---- ------------ ------------------------ -------------------  ------------
 001) >B0382        0926IC10                   0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0382::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 002) >B0383        0926IC02                   0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0383::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 003) >B0384        0926IC01                   0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0384::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 004) >B0385        0926IC05                   0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0385::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 005) >B0386        0926IC25                   0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0386::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 006) >B0387        0926ICCHK                  0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0387::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 007) >B0388        0926VBLK1                  0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0388::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 008) >B0389        0926VBLK2                  0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0389::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 009) >B0390        94ZB19S01                  0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0390::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 010) >B0391        94ZB19S02                  0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0391::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 011) >B0392        94ZB19S03                  0     3 Y M N N N    IDB025::D1
      VOA#2         HP MSD#2, 9/26/94                Dil=1.00000    ^B0392::D1
      REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
      REPRT OPTIONS: Qion replaces Scan#
 012) >B0393        94ZB19S05                  0     3 Y M N N N    IDB025::D1
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     VOA#2                                                  Dil=1.00000
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
013) >B0394        94ZB19S06                    0     3 Y M N N N    IDB025::D1
     VOA#2         HP MSD#2, 9/26/94                  Dil=1.00000    ^B0394::D1
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
014) >B0395        94ZB19R07                    0     3 Y M N N N    IDB025::D1
     VOA#2         HP MSD#2, 9/26/94                  Dil=1.00000    ^B0395::D1
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
015) >B0396        94ZB19S08                    0     3 Y M N N N    IDB025::D1
     VOA#2         HP MSD#2, 9/26/94                  Dil=1.00000    ^B0396::D1
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
016) >B0397        94ZB19R09                    0     3 Y M N N N    IDB025::D1
     VOA#2         HP MSD#2, 9/26/94                  Dil=1.00000    ^B0397::D1
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#
017) >XX398        BAKEOUT                      0     3 N N N N N    IDB025::D1
     BO#2                                             Dil=1.00000
     REPRT OPTIONS: Label Meth:4, B option, Scale time: 7.000
     REPRT OPTIONS: Qion replaces Scan#

End of sequence file.
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U.S. Environmental Protection Agency Region V

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