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UNDERGROUND STORAGE TANK SITE INVESTIGATION REPORT VOLUME 1 OF 2 NWS EARLE NJ
11/10/1996
ENVIRO-TECH, INC.

000000397

SITE INVESTIGATION REPORT

for

UNITED STATES NAVAL WEAPONS STATION - EARLE
Colts Neck, Monmouth County, New Jersey

Volume I

Prepared for:

Tom Dunn
ROICC
NWS Earle
Colts Neck, New Jersey 07722-5025

Prepared by:

Enviro-Tech, Inc.
364 Broad Street
Keyport, New Jersey 07735

November 10, 1995

SITE INVESTIGATION REPORT

for

UNITED STATES NAVAL WEAPONS STATION - EARLE
Colts Neck, Monmouth County, New Jersey

Volume I

EARLE FILES
BOX #
C18 C0088

Prepared for:

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Prepared by:

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364 Broad Street
Keyport, New Jersey 07735

November 10, 1995

UST-014
2/91

FOR STATE USE ONLY
UST # _____
Date Rec'd _____
TMS # _____
Staff _____

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028
Tel. # 609-984-3156
Fax. # 609-292-5604

Scott A. Weiner
Commissioner

Karl J. Delai
Direc

UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:14B

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS:

- *Please print legibly or type.*
- *Fill in all applicable blanks. This form will require various attachments in order to complete the Summary. The technical guidance document, Interim Closure Requirements for UST's, explains the regulatory (and technical) requirements for closure and the Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems explains the regulatory (and technical) requirements for corrective action.*
- *Return one original of the form and all required attachments to the above address.*
- *Attach a scaled site diagram of the subject facility which shows the information specified in Item IV B of this form.*
- *Explain any "No" or "N/A" response on a separate sheet.*

Date of Submission JAN. 30, 1996

UST's C17/C20-1 and C17/C20-2

0151003
FACILITY REGISTRATION #

I. FACILITY NAME AND ADDRESS

UNITED STATES NAVAL WEAPONS STATION - EARLE
COLTS NECK

County MONMOUTH

Telephone No. 908-866-2048

OWNER'S NAME AND ADDRESS, if different from above

Telephone No. _____

II. DISCHARGE REPORTING REQUIREMENTS

A. Was contamination found? X Yes ___ No If Yes, Case No. 91-5-0941-14
(Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)

B. The substance(s) discharged was(were) UNLEADED GASOLINE

C. Have any vapor hazards been mitigated? ___ Yes ___ No X N/A

III. DECOMMISSIONING OF TANK SYSTEMS Closure Approval No. NOT ISSUED

The site assessment requirements associated with tank decommissioning are explained in the Technical Guidance Document, Interim Closure Requirements for UST's, Section V. A-D. Attach complete documentation of the methods used and the results obtained for each of the steps of tank decommissioning used. Please include a site map which shows the locations of all samples and borings, the location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annotated to differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The same site map can be used to document other parts of the site assessment requirements, if it is properly and legibly annotated.

IV. SITE ASSESSMENT REQUIREMENTS

A. Excavated Soil

Any evidence of contamination in excavated soil will require that the soil be classified as either Hazardous Waste or Non-Hazardous Waste. Please include all required documentation of compliance with the requirements for handling contaminated excavated soil (if any was present) as explained in the technical guidance documents for closure and corrective action. Describe amount of soil removed, its classification, and disposal location.

B. Scaled Site Diagrams

1. Scaled site diagrams must be attached which include the following information:

a. North arrow and scale
b. The locations of the ground water monitoring wells
c. Location and depth of each soil sample and boring
d. All major surface and sub-surface structures and utilities
e. Approximate property boundaries
f. All existing or closed underground storage tank systems, including appurtenant piping
g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table
h. Locations of surface water bodies

C. Soil samples and borings (check appropriate answer)

1. Were soil samples taken from the excavation as prescribed? X Yes ___ No ___ N/A

2. Were soil borings taken at the tank system closure site as prescribed? ___ Yes ___ No X N/A

3. Attach the analytical results in tabular form and include the following information about each sample:
a. Customer sample number (keyed to the site map)
b. The depth of the soil sample
c. Soil boring logs
d. Method detection limit of the method used
e. QA/QC Information as required

D. Ground Water Monitoring 1, FLUSH MOUNT ~~FLUSH~~ SOUTH C BLDG, C-18.

1. Number of ground water monitoring wells installed ~~NONE~~

2. Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:

   a. Site diagram number for each well installed
   b. Depth of ground water surface
   c. Depth of screened interval
   d. Method detection limit of the method used
   e. Well logs
   f. Well permit numbers
   g. QA/QC Information as required

V. SOIL CONTAMINATION

A. Was soil contamination found? X Yes ___ No
If "Yes", please answer Question B-E
If "No", please answer Question B

B. The highest soil contamination still remaining in the ground has been determined to be:
1. 1,335,000 ppb total BTEX, 2,801,631 ppb total non-targeted VOC
2. N/A ppb total B/N, N/A ppb total non-targeted B/N
3. N/A ppm TPHC
4. ND ppb NOT DETECTED (for non-petroleum substance)

C. Remediation of free product contaminated soils

1. All free product contaminated soil on the property boundaries and above the water table are believed to have been removed from the subsurface ___ Yes X No
2. Free product contaminated soils are suspected to exist below the water table X Yes ___ No
3. Free product contaminated soils are suspected to exist off the property boundaries. ___ Yes X No

D. Was the vertical and horizontal extent of contamination determined? ___ Yes X No ___ N/A

E. Does soil contamination intersect ground water? X Yes ___ No ___ N/A

VI. GROUND WATER CONTAMINATION NOT APPLICABLE

A. Was ground water contamination found? ___ Yes ___ No
If "Yes", please answer Questions B-G.
If "No", please answer only Question B.

B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be:

1. ___ ppb total BTEX, ___ ppb total non-targeted VOC
2. ___ ppb total B/N, ___ ppb total non-targeted B/N
3. ___ ppb total MTBE, ___ ppb total TBA
4. ___ ppb ___ (for non-petroleum substance)
5. greatest thickness of separate phase product found ___
6. separate phase product has been delineated ___ Yes ___ No ___ N/A

C. Result(s) of well search

1. A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work. ___ Yes ___ No ___ N/A

2. The number of these wells identified is ___.

UST-014
2/91

FOR STATE USE ONLY

UST # _____
Date Rec'd _____
TMS # _____
Staff _____

State of New Jersey
Department of Environmental Protection and Energy
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Scott A. Weiner
Commissioner

Karl J. Delaney
Director

UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:14B

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS:

- *Please print legibly or type.*
- *Fill in all applicable blanks. This form will require various attachments in order to complete the Summary. The technical guidance document, Interim Closure Requirements for UST's, explains the regulatory (and technical) requirements for closure and the Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems explains the regulatory (and technical) requirements for corrective action.*
- *Return one original of the form and all required attachments to the above address.*
- *Attach a scaled site diagram of the subject facility which shows the information specified in Item IV B of this form.*
- *Explain any "No" or "N/A" response on a separate sheet.*

Date of Submission JAN. 30, 1996

UST C17/C20 - FG

0151003
FACILITY REGISTRATION #

I. FACILITY NAME AND ADDRESS

UNITED STATES NAVAL WEAPONS STATION - EARLE
COLTS NECK
County MONMOUTH
Telephone No. 908-866-2048

OWNER'S NAME AND ADDRESS, if different from above

Telephone No. _____

II. DISCHARGE REPORTING REQUIREMENTS

A. Was contamination found? X Yes ___ No If Yes, Case No. VICINITY OF 91-5-0941-14
(Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)

B. The substance(s) discharged was(were) UNLEADED GASOLINE

C. Have any vapor hazards been mitigated? ___ Yes ___ No X N/A

III. DECOMMISSIONING OF TANK SYSTEMS Closure Approval No. NOT ISSUED

The site assessment requirements associated with tank decommissioning are explained in the Technical Guidance Document, **Interim Closure Requirements for UST's**, Section V. A-D. Attach complete documentation of the methods used and the results obtained for each of the steps of tank decommissioning used. Please include a site map which shows the locations of all samples and borings, the location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annotated to differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The same site map can be used to document other parts of the site assessment requirements, if it is properly and legibly annotated.

IV. SITE ASSESSMENT REQUIREMENTS

A. Excavated Soil

Any evidence of contamination in excavated soil will require that the soil be classified as either Hazardous Waste or Non-Hazardous Waste. Please include all required documentation of compliance with the requirements for handling contaminated excavated soil (if any was present) as explained in the technical guidance documents for closure and corrective action. Describe amount of soil removed, its classification, and disposal location.

B. Scaled Site Diagrams

1. Scaled site diagrams must be attached which include the following information:

   a. North arrow and scale
   b. The locations of the ground water monitoring wells
   c. Location and depth of each soil sample and boring
   d. All major surface and sub-surface structures and utilities
   e. Approximate property boundaries
   f. All existing or closed underground storage tank systems, including appurtenant piping
   g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table
   h. Locations of surface water bodies

C. Soil samples and borings (check appropriate answer)

1. Were soil samples taken from the excavation as prescribed? X Yes ___ No ___ N/A

2. Were soil borings taken at the tank system closure site as prescribed? ___ Yes ___ No X N/A

3. Attach the analytical results in tabular form and include the following information about each sample:
   a. Customer sample number (keyed to the site map)
   b. The depth of the soil sample
   c. Soil boring logs
   d. Method detection limit of the method used
   e. QA/QC Information as required

D. Ground Water Monitoring

1. Number of ground water monitoring wells installed NONE

2. Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:

   a. Site diagram number for each well installed
   b. Depth of ground water surface
   c. Depth of screened interval
   d. Method detection limit of the method used
   e. Well logs
   f. Well permit numbers
   g. QA/QC Information as required

V. SOIL CONTAMINATION

A. Was soil contamination found? X Yes ___ No
If "Yes", please answer Question B-E
If "No", please answer Question B

B. The highest soil contamination still remaining in the ground has been determined to be:
1. 21,280 ppb total BTEX, 446,023 ppb total non-targeted VOC
2. N/A ppb total B/N, N/A ppb total non-targeted B/N
3. N/A ppm TPHC
4. 830 ppb CHLOROFORM (for non-petroleum substance)

C. Remediation of free product contaminated soils

1. All free product contaminated soil on the property boundaries and above the water table are believed to have been removed from the subsurface X Yes ___ No
2. Free product contaminated soils are suspected to exist below the water table ___ Yes X No
3. Free product contaminated soils are suspected to exist off the property boundaries. ___ Yes X No

D. Was the vertical and horizontal extent of contamination determined? ___ Yes X No ___ N/A

E. Does soil contamination intersect ground water? X Yes ___ No ___ N/A

VI. GROUND WATER CONTAMINATION NOT APPLICABLE

A. Was ground water contamination found? ___ Yes ___ No
If "Yes", please answer Questions B-G.
If "No", please answer only Question B.

B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be:

1. _____ ppb total BTEX, _____ ppb total non-targeted VOC
2. _____ ppb total B/N, _____ ppb total non-targeted B/N
3. _____ ppb total MTBE, _____ ppb total TBA
4. _____ ppb _____ (for non-petroleum substance)
5. greatest thickness of separate phase product found _____
6. separate phase product has been delineated ___ Yes ___ No ___ N/A

C. Result(s) of well search

1. A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work. ___ Yes ___ No ___ N/A

2. The number of these wells identified is _____.

UST-014
2/91

FOR STATE USE ONLY
UST # _____
Date Rec'd _____
TMS # _____
Staff _____

State of New Jersey
Department of Environmental Protection and Energy
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CN 028
Trenton, NJ 08625-0028
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Scott A. Weiner
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Karl J. Delaney
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UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:14B

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS:

- *Please print legibly or type.*
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- *Explain any "No" or "N/A" response on a separate sheet.*

Date of Submission JAN. 30, 1996

UST R6/R7-1

0151003
FACILITY REGISTRATION #

I. FACILITY NAME AND ADDRESS

UNITED STATES NAVAL WEAPONS STATION - EARLE
COLTS NECK
County MONMOUTH
Telephone No. 908-866-2048

OWNER'S NAME AND ADDRESS, if different from above

Telephone No. _____

II. DISCHARGE REPORTING REQUIREMENTS

A. Was contamination found? X Yes ___ No If Yes, Case No. 90-09-10-1044
(Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)

B. The substance(s) discharged was(were) UNLEADED GASOLINE

C. Have any vapor hazards been mitigated? ___ Yes ___ No X N/A

III. DECOMMISSIONING OF TANK SYSTEMS

Closure Approval No. NOT ISSUED

The site assessment requirements associated with tank decommissioning are explained in the Technical Guidance Document, Interim Closure Requirements for UST's, Section V. A-D. Attach complete documentation of the methods used and the results obtained for each of the steps of tank decommissioning used. Please include a site map which shows the locations of all samples and borings, the location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annotated to differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The same site map can be used to document other parts of the site assessment requirements, if it is properly and legibly annotated.

IV. SITE ASSESSMENT REQUIREMENTS

A. Excavated Soil

Any evidence of contamination in excavated soil will require that the soil be classified as either Hazardous Waste or Non-Hazardous Waste. Please include all required documentation of compliance with the requirements for handling contaminated excavated soil (if any was present) as explained in the technical guidance documents for closure and corrective action. Describe amount of soil removed, its classification and disposal location.

B. Scaled Site Diagrams

1. Scaled site diagrams must be attached which include the following information:

   a. North arrow and scale
   b. The locations of the ground water monitoring wells
   c. Location and depth of each soil sample and boring
   d. All major surface and sub-surface structures and utilities
   e. Approximate property boundaries
   f. All existing or closed underground storage tank systems, including appurtenant piping
   g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table
   h. Locations of surface water bodies

C. Soil samples and borings (check appropriate answer)

1. Were soil samples taken from the excavation as prescribed? X Yes ___ No ___ N/A

2. Were soil borings taken at the tank system closure site as prescribed? ___ Yes ___ No X N/A

3. Attach the analytical results in tabular form and include the following information about each sample:
   a. Customer sample number (keyed to the site map)
   b. The depth of the soil sample
   c. Soil boring logs
   d. Method detection limit of the method used
   e. QA/QC Information as required

D. Ground Water Monitoring

1. Number of ground water monitoring wells installed NONE

2. Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:

   a. Site diagram number for each well installed
   b. Depth of ground water surface
   c. Depth of screened interval
   d. Method detection limit of the method used
   e. Well logs
   f. Well permit numbers
   g. QA/QC Information as required

V. SOIL CONTAMINATION

A. Was soil contamination found? X Yes ___ No
If "Yes", please answer Question B-E
If "No", please answer Question B

B. The highest soil contamination still remaining in the ground has been determined to be:
1. 46,900 ppb total BTEX, 540,964 ppb total non-targeted VOC
2. N/A ppb total B/N, N/A ppb total non-targeted B/N
3. N/A ppm TPHC
4. 120 ppb ACETONE (for non-petroleum substance)

C. Remediation of free product contaminated soils

1. All free product contaminated soil on the property boundaries and above the water table are believed to have been removed from the subsurface ___ Yes X No
2. Free product contaminated soils are suspected to exist below the water table X Yes ___ No
3. Free product contaminated soils are suspected to exist off the property boundaries. ___ Yes X No

D. Was the vertical and horizontal extent of contamination determined? ___ Yes X No ___ N/A

E. Does soil contamination intersect ground water? X Yes ___ No ___ N/A

VI. GROUND WATER CONTAMINATION NOT APPLICABLE

A. Was ground water contamination found? ___ Yes ___ No
If "Yes", please answer Questions B-G.
If "No", please answer only Question B.

B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be:

1. _____ ppb total BTEX, _____ ppb total non-targeted VOC
2. _____ ppb total B/N, _____ ppb total non-targeted B/N
3. _____ ppb total MTBE, _____ ppb total TBA
4. _____ ppb _____ (for non-petroleum substance)
5. greatest thickness of separate phase product found _____
6. separate phase product has been delineated ___ Yes ___ No ___ N/A

C. Result(s) of well search

1. A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work. ___ Yes ___ No ___ N/A

2. The number of these wells identified is _____.

D. Proximity of wells and contaminant plume

1. The shallowest depth of any well noted in the well search which may be in the horizontal or vertical potential path(s) of the contaminant plume(s) is _____ feet below grade (consideration has been given for the effects of pumping, subsurface structures, etc. on the direction(s) of contaminant migration). This well is _____ feet from the source and its screening begins at a depth of _____ feet.

2. The shallowest depth to the top of the well screen for any well in the potential path of the plume(s) (as described in D1 above) is _____ feet below grade. This well is located _____ feet from the source.

3. The closest horizontal distance of a private, commercial or municipal well in the potential path of the plume (as determined in D1) is _____ feet from the source. This well is _____ feet deep and screening begins at a depth of _____ feet.

E. A plan for separate phase product recovery has been included. ___ Yes ___ No ___ N/A

F. A ground water contour map has been submitted which includes the ground water elevations for each well. ___ Yes ___ No ___ N/A

G. Delineation of contamination

1. The ground water contaminants have been delineated to MCLs or lower values at the property boundaries. ___ Yes ___ No

2. The plume is suspected to continue off the property at concentrations greater than MCLs. ___ Yes ___ No

3. Off property access (circle one): is being sought has been approved has been denied

VII. SITE ASSESSMENT CERTIFICATION [preparer of site assessment plan - N.J.A.C. 7:14B-8.3(b) &9.5(a)3]

The person signing this certification as the "Qualified Ground Water Consultant" (as defined in N.J.A.C.7:14B-1.6) responsible for the design and implementation of the site assessment plan as specified in N.J.A.C. 7:14B-8.3(a) & 9.2(b)2, must supply the name of the certifying organization and certification number.

"I certify under penalty of law that the information provided in this document is true, accurate, and complete and was obtained by procedures in compliance with N.J.A.C. 7:14B-8 and 9. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) A. LEE FANKHAUSER SIGNATURE [signature]

COMPANY NAME ENVIRO-TECH INC. DATE NOVEMBER 9, 1995
(Preparer of Site Assessment Plan)

CERTIFYING ORGANIZATION STATE OF NEW JERSEY CERTIFICATION NUMBER 0010953

VIII. TANK DECOMMISSIONING CERTIFICATION [person performing tank decommissioning portion of closure plan - N.J.A.C. 7:14B-9.5(a)4]

"I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) Arthur S. Keller SIGNATURE Arthur S. Keller

COMPANY NAME American Const. Services DATE 11/21/95
(Performer of Tank Decommissioning)

IX. CERTIFICATIONS BY THE RESPONSIBLE PARTY(IES) OF THE FACILITY

A. The following certification shall be signed by the highest ranking individual with overall responsibility for that facility [N.J.A.C. 7:14B-2.3(c)1].

"I certify under penalty of law that the information provided in this document is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

X NAME (Print or Type) A.C. Hermanni SIGNATURE

COMPANY NAME WPMSTA Earle DATE 2/5/96

B. The following certification shall be signed as follows [according to the requirements of N.J.A.C. 7:14B-2.3(C)2]:

1. For a corporation, by a principal executive officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, Federal or other public agency by either the principal executive officer or ranking elected official.
4. In cases where the highest ranking corporate partnership, governmental officer or official at the facility as required in A above is the same person as the official required to certify in B, only the certification in A need to be made. In all other cases, the certifications of A and B shall be made.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

X NAME (Print or Type) A.C. Hermanni SIGNATURE

COMPANY NAME WPMSTA Earle DATE 2/5/96

VIII. TANK DECOMMISSIONING CERTIFICATION [person performing tank decommissioning portion of closure plan - N.J.A.C. 7:14B-9.5(a)4]

"I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) Arthur S. Keller SIGNATURE Arthur S. Keller

COMPANY NAME American Const. Services DATE 11/21/95
(Performer of Tank Decommissioning)

IX. CERTIFICATIONS BY THE RESPONSIBLE PARTY(IES) OF THE FACILITY

A. The following certification shall be signed by the highest ranking individual with overall responsibility for that facility [N.J.A.C. 7:14B-2.3(c)1i].

"I certify under penalty of law that the information provided in this document is true, accurate, and complete . I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) _____ SIGNATURE _____

COMPANY NAME _____ DATE _____

B. The following certification shall be signed as follows [according to the requirements of N.J.A.C. 7:14B-2.3(C)2i]:

1. For a corporation, by a principal executive officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, Federal or other public agency by either the principal executive officer or ranking elected official.
4. In cases where the highest ranking corporate partnership, governmental officer or official at the facility as required in A above is the same person as the official required to certify in B, only the certification in A need to be made. In all other cases, the certifications of A and B shall be made.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) _____ SIGNATURE _____

COMPANY NAME _____ DATE _____

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1.0 INTRODUCTION

United States Naval Weapons Station Earle (Earle) is a United States Navy ammunition depot located in Monmouth County, New Jersey. Figure 1 is an annotated United States Geological Survey 7.5 minute series (Marlboro and Long Branch Quadrangles) map showing site location, local topography, drainage, and other features.

In light of the New Jersey Department of Environmental Protection's (NJDEP's) deadlines regarding UST upgrades, Earle decided to close a total of three (3) USTs at two (2) separate locations on their facility: two (2) 13,000 gallon concrete unleaded gasoline USTs (designated C17/C20-1 and C17/C20-2) were to be removed/closed from adjacent to buildings C-17/C-20; and a single 13,000 gallon concrete unleaded gasoline UST (designated R6/R7-1) was to be removed/closed from adjacent to buildings R-6/R-7 (UST Registration #0151003).

Earle contracted with American Construction Services, Inc. (ACSI) of Edgewood, Maryland for the removal/closure of the three (3) USTs. On January 14, 1995, a UST Closure Approval was received from the NJDEP - Bureau of Federal Case Management (BFCM) for the closure of the four (4) USTs to be closed on the Earle site. A copy of the UST Closure Approval for the removal of these USTs is included in Appendix I.

Subsequent to receipt of the UST Closure Approval for the closure of the three (3) USTs on the facility, Earle decided that they would require the removal of an additional 10,000 gallon fiberglass unleaded gasoline UST (designated C17/C20-FG) that was present adjacent to buildings C-17/C-20. Earle requested a verbal approval from Bob Marcolina of the NJDEP-BFCM to add the single UST (UST C17/C20-FG) to the UST Closure Approval that had been granted for the closure of the three (3) concrete USTs on the site. Mr. Marcolina approved of the additional UST closure. A total of four (4) USTs were then approved for closure at the Earle facility: USTs C17/C20-1, C17/C20-2, and C17/C20-FG located adjacent to buildings C-17/C20; and, UST R6/R7-1 located adjacent to building R-6/R-7.

In Novemer, 1994, Enviro-Tech, Inc. (ETI) of Keyport, New Jersey (NJDEP Closure/Subsurface Evaluation Certification #1300239) was retained by ACSI, the UST removal contractors retained by Earle, to complete the NJDEP required site investigation for the closure of the three (3) USTs at C-17/C-20 site and the single UST at the R-6/R-7 site at the Earle facility. ETI's activities at Earle included the review of the UST Closure Plan Approval Application that was submitted to the NJDEP, the completion of a Site Investigation in accordance with N.J.A.C. 7:26E-3.0, and the preparation and submittion of this Site Investigation Report (SIR) to the NJDEP. This SIR has been compiled following the requirements of the NJDEP's Technical Requirements for Site Remediation.

2.0. SITE INVESTIGATIONS

2.1 UST Decommissioning Activities

2.1.1 USTs C17/C20-1 and C17/C20-2

A total of two (2) 13,000 gallon concrete USTs were present at the Earle facility, adjacent to buildings C-17/C-20. The USTs had been utilized by Earle for the storage of unleaded gasoline and were designated by ETI as C17/C20-1 and C17/C20-2. According to Earle personnel, in

1991, the USTs were tightness tested. The results of the tank tightness tests indicated that the USTs were leaking. The NJDEP was notified of the tank tightness test failure and the area was issued NJDEP Case #91-05-0941. The locations of the two (2) USTs with respect to buildings C-17/C-20 at the Earle facility are included in Figure 2.

UST decommissioning and removal activities were conducted over the first two weeks of April, 1995 by ACSI. UST decommissioning activities included pumping the USTs free of residual product, excavating overlying soils to expose the tops of the USTs, removing the tops of the USTs to allow access to the tank interior's, and cleaning the interiors of the USTs. A total of approximately 6,407 gallons of residual product and bottom sludge was removed from the two (2) 13,000 gallon concrete USTs by Casie Ecology Oil Salvage T/A Casie/Protank (Casie) of Vineland, New Jersey as New Jersey hazardous waste X722 "Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks". The manifest for the residual product and bottom sludge disposal is included in Appendix II. Following cleaning, the USTs were demolished in place and the concrete was removed from the ground and disposed.

2.1.2 UST C17/C20-FG

A single 10,000 gallon fiberglass UST was present at the Earle facility, adjacent to buildings C-17/C-20. The UST had been utilized by Earle for the storage of unleaded gasoline and was designated by ETI as C17/C20-FG. The location of the single fiberglass UST with respect to buildings C-17/C-20 at the Earle facility is included in Figure 2.

UST decommissioning and removal activities were conducted on July 10 through 12, 1995, by ACSI. UST decommissioning activities included pumping the UST free of residual product, excavating overlying soils to expose the top of the UST, removing the top of the UST to allow access to the tank's interior, and cleaning the interior of the UST. A total of approximately 500 gallons of residual product and bottom sludge was removed from the single 10,000 gallon fiberglass UST by Casie as New Jersey hazardous waste X722 "Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks". The manifest for the residual product and bottom sludge disposal is included in Appendix II. Although most of the residual product and bottom sludge removed from this UST was disposed of, a single 55-gallon drum of tank bottoms remains on-site pending disposal.

Following cleaning, the UST was cut into pieces and removed from the ground. Following removal, the fiberglass UST sections were demolished on-site and the crushed fiberglass material was removed to a landfill.

2.1.3 UST R6/R7-1

A single 13,000 gallon concrete UST was present at the Earle facility, adjacent to buildings R-6/R-7. The UST had been utilized by Earle for the storage of unleaded gasoline and was designated by ETI as R6/R7-1. According to Earle personnel, in 1990, the USTs were tightness tested. The results of the tank tightness tests indicated that the USTs were leaking. The NJDEP was notified of the tank tightness test failure and the area was issued NJDEP Case #90-09-10-1044. The location of the single concrete UST with respect to buildings R-6/R-7 at the Earle facility is included in Figure 3.

UST decommissioning and removal activities were conducted in early May, 1995, by ACSI. UST decommissioning activities included pumping the UST free of residual product, excavating overlying soils to expose the top of the UST, removing the top of the UST to allow access to the tank's interior, and cleaning the interior of the UST. A total of approximately 2,922 gallons of residual product and bottom sludge was removed from the single 13,000 gallon concrete UST by Casie as New Jersey hazardous waste X722 "Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks". The manifest for the residual product and bottom sludge disposal is included in Appendix II. Following cleaning, the UST was demolished in place and the concrete was removed from the ground and disposed.

2.2 Soil Investigation

2.2.1 USTs C17/C20-1 and C17/C20-2

On April 13, 1995, ETI personnel (A. Lee Fankhauser - NJDEP Subsurface Evaluator Certification #0002625) was on-site to collect post-excavation soil samples from the two (2) excavations that had been created for the two (2) UST removals.

A total of two (2) excavations had been created for the removal of the two (2) concrete USTs at the C-17/C-20 site. Each of the excavations measured approximately 32' (long) X 17' (wide) X 13' (deep). The limits of the excavations created for the removal of the two (2) Earle USTs are shown in Figure 4.

Ground water was observed covering the bases of both excavations at a depth of approximately 9'8" below grade. Due to the fact that water was covering the bases of both UST excavations, ETI was forced to alter the NJDEP approved sampling plan and collect post-excavation soil samples from the sidewalls of the excavation only. A total of four (4) post-excavation soil samples were collected from the sidewalls of each of the two (2) excavations (a total of eight soil samples) from a depth of approximately 9.5' below grade. Post-excavation soil samples collected from the UST excavations created at Earle C-17/C-20 were designated PE-1 through PE-8. The locations and designations of post-excavation soil samples collected from C-17/C-20 are included on Figure 4.

Prior to the collection of post-excavation soil samples, soils remaining within the excavation were scanned for "free product contamination" in the field using a Heath Consultants, Inc. Detecto-Pack III flame ionization detector (FID). FID readings recorded during the collection of post-excavation soil samples from the two (2) UST excavations are included on Figure 4.

The FID was calibrated prior to use with 100 parts per million (ppm) methane gas.

Soils underlying the surface in the vicinity of USTs C17/C20-1 and C17/C20-2 consisted of brown-tan coarse to fine sand to a depth of 9.5' feet below grade.

Post-excavation soil samples collected from the two (2) UST excavations at C-17/C-20 were submitted to Veritech Environmental and Analytical Services (Veritech), NJDEP Certification #14622, for analysis of volatile organic compounds plus ten (10) unknown peaks (VO+10), total xylene, methyl-tert-butyl ether (MTBE) and tert-butyl alcohol (TBA).

Quality assurance quality control (QA/QC) samples for this sampling event included a field blank sample. The field blank was prepared in the field, on the day of the post-excavation soil sampling

event, by pouring laboratory supplied de-ionized water over pre-cleaned soil sampling tools and into laboratory supplied sample collection bottles. The field blank sample then accompanied the post-excavation soil samples to the laboratory for analysis of VO+10, total xylene, MTBE and TBA.

A chain of custody accompanied post-excavation soil samples from the time of collection to the time they were received by the appointed lab for analyses.

Following the collection of post-excavation soil samples from the two (2) UST excavations at C-17/C-20, the excavations were backfilled with clean fill. The manifests for the fill material used to backfill the Earle UST excavations are included in Appendix III.

2.2.2 UST C17/C20-FG

On July 12, 1995, ETI personnel (A. Lee Fankhauser - NJDEP UST Certification No.0002625) was on-site to collect post-excavation soil samples from the single excavation that had been created for the 10,000 gallon fiberglass UST removal.

A single excavation had been created for the removal of the single fiberglass UST at the C-17/C-20 site. The excavation created for the UST's removal measured approximately 32' (long) X 17' (wide) X 10' (deep). The approximate limits of the excavation created for the removal of UST C17/C20-FB are shown in Figure 4.

Ground water was observed covering the base of the UST excavation at a depth of approximately 6.0' below grade. Due to the fact that water was covering the base of the UST excavation, ETI was forced to alter the NJDEP approved sampling plan and collect post-excavation soil samples from the sidewalls of the excavation only. A total of six (6) post-excavation soil samples were collected from the sidewalls of each of the UST excavation from a depth of approximately 5.5' below grade. Post-excavation soil samples collected from the UST excavation created for the removal of UST C17/C20-FG were designated PE-13 through PE-18. The locations and designations of post-excavation soil samples collected from this UST excavation are included on Figure 4.

Prior to the collection of post-excavation soil samples, soils remaining within the excavation were scanned for "free product contamination" in the field using a Heath Consultants, Inc. Detecto-Pack III FID. FID readings recorded during the collection of post-excavation soil samples are included on Figure 4.

The FID was calibrated prior to use with 100 parts per million (ppm) methane gas.

Soils underlying the surface in the vicinity of UST C17/C20-FG consisted of brown-tan coarse to fine sand to a depth of six (6) feet below grade.

Post-excavation soil samples collected from the fiberglass UST excavation at C-17/C-20 were submitted to Veritech for analysis of VO+10, total xylene, MTBE and TBA.

QA/QC samples for this sampling event included a field blank sample. The field blank was prepared in the field, on the day of the post-excavation soil sampling event, by pouring laboratory supplied de-ionized water over pre-cleaned soil sampling tools and into laboratory supplied sample

collection bottles. The field blank sample then accompanied the post-excavation soil samples to the laboratory for analysis of VO+10, total xylene, MTBE and TBA.

A chain of custody accompanied post-excavation soil samples from the time of collection to the time they were received by the appointed lab for analyses.

Following the collection of post-excavation soil samples, the excavation was backfilled with clean fill. The manifests for the fill material used to backfill the Earle UST excavations are included in Appendix III.

2.2.3 UST R6/R7-1

On May 11, 1995, ETI personnel (A. Lee Fankhauser - NJDEP Subsurface Evaluator Certification #0002625) was on-site to collect post-excavation soil samples from the excavation that had been created for the removal of the single concrete UST (UST R6/R7-1).

The excavation for the UST removal measured approximately 36' (long) X 18' (wide) X 8' (deep). The limits of the excavation created for the removal of Earle UST are shown in Figure 5.

Ground water was observed covering the base of the UST excavation at a depth of approximately six (6) feet below grade. Due to the fact that water was covering the base of the UST excavation, ETI was forced to alter the NJDEP approved sampling plan and collect post-excavation soil samples from the sidewalls of the excavation only. A total of four (4) post-excavation soil samples were collected from the sidewalls of the excavation (designated PE-9 through PE-12) from a depth of approximately 5.5' below grade. The locations and designations of post-excavation soil samples collected from the UST at R-6/R-7 are included on Figure 5.

Prior to the collection of post-excavation soil samples, soils remaining within the excavation were scanned for "free product contamination" in the field using a Heath Consultants, Inc. Detecto-Pack III FID. FID readings recorded during the collection of post-excavation soil samples from the single UST excavation are included on Figure 5.

The FID was calibrated prior to use with 100 parts per million (ppm) methane gas.

Soils underlying the surface in the vicinity of UST R6/R7-1 consisted of white coarse to fine sand to a depth of 5.5' feet below grade.

Post-excavation soil samples collected from the UST excavation at R-6/R-7 were submitted to Veritech for analysis of VO+10, total xylene, MTBE and TBA.

QA/QC samples for this sampling event included a field blank sample. The field blank was prepared in the field, on the day of the post-excavation soil sampling event, by pouring laboratory supplied de-ionized water over pre-cleaned soil sampling tools and into laboratory supplied sample collection bottles. The field blank sample then accompanied the post-excavation soil samples to the laboratory for analysis of VO+10, total xylene, MTBE and TBA.

A chain of custody accompanied post-excavation soil samples from the time of collection to the time they were received by the appointed lab for analyses.

Following the collection of post-excavation soil samples, the excavation was backfilled with clean fill. The manifests for the fill material used to backfill the Earle UST excavations are included in Appendix III.

A total of approximately 27 yd^3 of contaminated soil remains on-site pending proper sampling and disposal.

3.0 RESULTS

3.1 Climate

According to the United States Department of Agriculture Soil Conservation Service, Soil Survey of Monmouth County, New Jersey, Monmouth County is hot in summer and rather cold in winter. Precipitation is well distributed throughout the year. In winter the average temperature is 33 degrees F, and the average daily minimum temperature is 24 degrees. The lowest temperature on record, which occurred at Freehold on Feb. 2, 1961, is -8 degrees. In summer the average temperature is 83 degrees. The highest recorded temperature, which occurred at Freehold on July 31, 1954, is 103 degrees. The total annual precipitation is 45.18 inches. Of this, 23 inches, or 50 percent, usually falls in April through September. In 2 years out of 10, the rainfall in April through September is less than 19 inches. The heaviest 1-day rainfall during the period of record (1951 through 1973) was 7.18 inches on August 28, 1971. Thunderstorms occur on about 35 days each year, and most occur in summer. The average seasonal snowfall is 25 inches. The greatest snow depth at any one time during the period of record was 26 inches. On the average, 9 days of the year have at least one inch of snow on the ground. The average relative humidity in midafternoon is about 50 percent. Humidity is higher at night, and the average at dawn is about 75 percent. The sun shines 60 percent of the time possible in summer and 50 percent in winter. The prevailing wind is from the south. Average windspeed is highest, 10 knots, in spring.

3.2 Setting and Regional Geology

According to the United States Department of Agriculture Soil Conservation Service, Soil Survey of Monmouth County, New Jersey, Monmouth County is located in the east-central part of New Jersey. It is bounded by Raritan Bay on the north, the Atlantic Ocean on the east, Middlesex and Mercer Counties on the west, and Burlington and Ocean Counties on the south. The total land area is 304,640 acres. The elevation ranges from sea level along the coast to 380 feet at Crawford Hill, in Holmdel. The population of Monmouth County in 1980 was 493,313 but has been expanding constantly to the present day.

Monmouth County lies within the Atlantic Coastal Plain physiographic province. The parent material of the soils is unconsolidated sediments of Mesozoic and Cenozoic age. The sediments are of marine and continental origin and consist mainly of sand, clay, and greensand (glauconite) and interspaced gravel beds. Strata of iron-cemented sandstone are in some areas. A thin layer of sand, clay, and gravel deposits of Quaternary age overlie the Coastal Plain sediments. This layer was deposited by outwash or melt water from the glacier that once covered the northern part of New Jersey. Quaternary beds are the most recent deposits and are generally surficial. They consist of Pennsauken deposits and Cape May deposits. Pennsauken deposits, which have gravel, are a thin mantle on scattered hilltops in the county. Sassafras, Downer, Hammonton, Fallsington, and Woodstown soils formed in this material. Cape May deposits, which are very sandy, are along the eastern edge of the county and along some of the larger streams.

3.3 Site Specific Geology

Due to the large extent of the Earle facility, it is not possible to describe the site as being composed of one or two specific types of soil, because it is, in fact, made up of a number of different soil types.

It appears that the most common type of soil within the Earle facility is described by the United States Department of Agriculture Soil Conservation Service, Soil Survey of Monmouth County, New Jersey, as Atsion Sand (At). Atsion sand is a nearly level, poorly drained soil in depressional areas and on broad flats.

Typically, the surface layer is 8 inches thick. The uppermost 2 inches is matted, partly decomposed organic material and roots, and below that, it is black sand. The subsurface layer is grayish brown sand 14 inches thick. The subsoil is 18 inches thick. It is dark reddish, brown loamy sand to a depth of 30 inches. Below that, it is mottled, brown sand to a depth of 40 inches. The substratum is mottled, yellowish brown fine sand to a depth of 60 inches or more.
Included with this soil in mapping are areas of Humaquepts and Manahawkin, Lakehurst, and Klej soils. Also included, in the vicinity of Holmeson and Turkey Swamp, are areas of soils that have a glauconitic substratum.

Permeability of the Atsion soil is moderately rapid or rapid in the subsoil and rapid in the substratum. The available water capacity is low. Runoff is very slow. Erosion is a slight hazard. Organic matter content is moderate. In unlimed areas reaction is extremely acid or very strongly acid.

3.4 Chemical Analysis of Soil

3.4.1 USTs C17/C20-1 and C17/C-20-2

A total of eight (8) post-excavation soil samples (post-excavation soil sample designations PE-1 through PE-8) were collected from the bases of the two (2) UST excavations from a depth of approximately 9.5 feet below grade. The analytical results of the post-excavation soil samples collected from these sample locations indicated a number of target VO compounds were present within the soils surrounding the former UST locations.

The laboratory analytical data for post-excavation soil sample **PE-1** reported total xylene at a concentration of 36,000 parts per billion (ppb). No other target VO compound was reported for this sample. VO tentatively identified compounds (TICs) were reported at a total concentration of 147,674 ppb. MTBE and TBA were both reported as non-detectable (ND).

The laboratory analytical data for post-excavation soil sample **PE-2** reported benzene at a concentration of 15,000 ppb, toluene at a concentration of 320,000 ppb, ethylbenzene at a concentration of 160,000 ppb, and total xylene at a concentration of 840,000 ppb. VO TICs were reported at a total concentration of 2,801,631 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-3** reported total xylene at a concentration of 437 ppb. No other target VO compound was reported for this sample. VO TICs

were reported at a total concentration of 9,317 ppb. MTBE was reported at a concentration of 130 ppb and TBA was reported at a concentration of 110 ppb.

The laboratory analytical data for post-excavation soil sample **PE-4** reported total xylene at a concentration of 20,600 ppb. No other target VO compound was reported for this sample. VO TICs were reported at a total concentration of 268,678 ppb. MTBE and TBA were reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-5** reported toluene at a concentration of 25,000 ppb, ethylbenzene at a concentration of 2,900 ppb, and total xylene at a concentration of 640,000 ppb. VO TICs were reported at a total concentration of 1,833,333 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-6** reported total xylene at a concentration of 40,000 ppb. VO TICs were reported at a total concentration of 276,966 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-7** reported benzene at a concentration of 3,300 ppb, toluene at a concentration of 39,000 ppb, ethylbenzene at a concentration of 20,000 ppb, and total xylene at a concentration of 118,000 ppb. VO TICs were reported at a total concentration of 427,083 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-8** reported ethylbenzene at a concentration of 16 ppb, and total xylene at a concentration of 26 ppb. VO TICs were reported at a total concentration of 1,835 ppb. MTBE was reported at a concentration of 82 ppb and TBA was reported as ND.

The **field blank** that accompanied the post-excavation soil samples from the field to the laboratory was reported to contain chloroform at a concentration of 1 ppb. No other target VO compounds were reported for this sample. VO TICs were reported as ND. MTBE and TBA were both reported as ND.

Results of the post-excavation soil sampling program for the two (2) concrete USTs at C-17/C-20 are included in Table 1. The laboratory analytical package for this site investigation is included in Appendix IV, No.1.

3.4.2 UST C17/C20-FG

A total of six (6) post-excavation soil samples (post-excavation soil sample designations PE-13 through PE-18) were collected from the sidewalls of the UST excavation created for the removal of UST C17/C20-FG from a depth of approximately 5.5 feet below grade. The analytical results of the post-excavation soil samples collected from these sample locations indicated a number of target VO compounds were present within the soils surrounding the former UST locations.

The laboratory analytical data for post-excavation soil sample **PE-13** reported acetone at a concentration of 360 ppb, ethylbenzene at a concentration of 69 ppb, and total xylene at a concentration of 13 ppb. No other target VO compounds were reported for this sample. VO TICs

were reported at a total concentration of 1,244 ppb. MTBE was reported at a concentration of 75 ppb and TBA was reported as non-detectable (ND).

The laboratory analytical data for post-excavation soil sample **PE-14** reported acetone at a concentration of 520 ppb, benzene at a concentration of 9 ppb, toluene at a concentration of 12 ppb, ethylbenzene at a concentration of 830 ppb, and total xylene at a concentration of 1,155 ppb. VO TICs were reported at a total concentration of 10,690 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-15** reported acetone at a concentration of 230 ppb, benzene at a concentration of 8 ppb, ethylbenzene at a concentration of 230 ppb, and total xylene at a concentration of 77 ppb. No other target VO compound was reported for this sample. VO TICs were reported at a total concentration of 1,587 ppb. MTBE was reported at a concentration of 310 ppb. TBA was reported at a ND concentration.

The laboratory analytical data for post-excavation soil sample **PE-16** reported acetone at a concentration of 64 ppb. No other target VO compound was reported for this sample. VO TICs were reported at a total concentration of 3,878 ppb. MTBE was reported at a concentration of 19 ppb. TBA was reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-17** reported chloroform at a concentration of 830 ppb, toluene at a concentration of 380 ppb, ethylbenzene at a concentration of 14,000 ppb, and total xylene at a concentration of 6,900 ppb. VO TICs were reported at a total concentration of 446,023 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-18** reported no detectable concentration of target VO compounds. VO TICs were reported at a total concentration of 6 ppb. MTBE and TBA were both reported as ND.

The **field blank** that accompanied the post-excavation soil samples from the field to the laboratory was reported to contain carbon disulfide at a concentration of 4 ppb. No other target VO compounds were reported for this sample. VO TICs were reported as ND. MTBE and TBA were both reported as ND.

Results of the post-excavation soil sampling program for the single fiberglass UST closure at C-17/C-20 are included in Table 2. The laboratory analytical package for this site investigation is included in Appendix IV, No.2.

3.4.3 UST R6/R7-1

A total of four (4) post-excavation soil samples (post-excavation soil sample designations PE-9 through PE-12) were collected from the sidewalls of the UST excavation created for the removal of UST R6/R7-1 adjacent to buildings R-6/R-7 from a depth of approximately 5.5 feet below grade. The analytical results of the post-excavation soil samples collected from these sample locations indicated a number of target VO compounds were present within the soils surrounding the former UST locations.

The laboratory analytical data for post-excavation soil sample **PE-9** reported no detectable concentration of target VO compounds. No other target VO compounds were reported for this sample. VO TICs were reported at a total concentration of 60,4942 ppb. MTBE and TBA were reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-10** reported acetone at a concentration of 120 ppb, 2-butanone at a concentration of 22 ppb, benzene at a concentration of 540 ppb, toluene at a concentration of 120 ppb, ethylbenzene at a concentration of 440 ppb, and total xylene at a concentration of 1,400 ppb. No other target VO compounds were reported for this sample. VO TICs were reported at a total concentration of 1,900 ppb. MTBE and TBA were both reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-11** reported toluene at a concentration of 1,500 ppb, ethylbenzene at a concentration of 9,400 ppb, and total xylene at a concentration of 36,000 ppb. No other target VO compounds were reported for this sample. VO TICs were reported at a total concentration of 540,964 ppb. MTBE and TBA were reported as ND.

The laboratory analytical data for post-excavation soil sample **PE-12** reported acetone at a concentration of 11 ppb. No other target VO compounds were reported for this sample. VO TICs were reported at a total concentration of 5 ppb. MTBE and TBA were reported as ND.

The **field blank** that accompanied the post-excavation soil samples from the field to the laboratory was reported to contain acetone at a concentration of 19 ppb. No other target VO compounds were reported for this sample. VO TICs were reported as ND. MTBE was reported at a concentration of 5 ppb. TBA was reported as ND.

Results of the post-excavation soil sampling program for the single concrete UST closure at R-6/R-7 are included in Table 3. The laboratory analytical package for this site investigation is included in Appendix IV, No. 3.

4.0 CONCLUSIONS

After reviewing the data collected during Earle's Site Investigation, the following conclusions may be made:

- Two (2) 13,000 gallon concrete USTs (C17/C20-1 and C17/C20-2) that had been utilized at the Earle facility for the storage of unleaded gasoline were removed from the ground adjacent to buildings C-17/C-20 in April, 1995;
- A single 13,000 gallon concrete UST (R6/R7-1) that had been utilized at the Earle facility for the storage of unleaded gasoline were removed from the ground adjacent to buildings R-6/R-7 in May, 1995;
- A single 10,000 gallon fiberglass UST (C17/C20-FG) that had been utilized at the Earle facility for the storage of unleaded gasoline were removed from the ground adjacent to buildings C-17/C-20 in July, 1995;
- Soils underlying and surrounding the USTs were noted by ACSI personnel to contain indications of a discharge (i.e. staining, odors, and high OVA readings);

- Ground water was observed within the excavation created for the removal of USTs C17/C20-1 and C17/C20-2 at a depth of approximately 9.5 feet below grade;
- Ground water was observed within the excavation created for the removal of UST R6/R7-1 at a depth of approximately 5.5 feet below grade;
- Ground water was observed within the excavation created for the removal of UST C17/C20-FG at a depth of approximately 5.5 feet below grade;
- The results of the post-excavation soil sampling program completed within the excavation created for the removal of UST C17/C20-1 indicated that concentrations of benzene (PE-2), ethylbenzene (PE-2), and total xylene (PE-1, PE-2 and PE-4) remain in the ground in the vicinity of the former UST at concentrations that exceed the NJDEP's February 3, 1994 Soil Cleanup Criteria;
- The results of the post-excavation soil sampling program completed within the excavation created for the removal of UST C17/C20-2 indicated that concentrations of benzene (PE-7) and total xylene (PE-5, PE-6 and PE-7) remain in the ground in the vicinity of the former UST at concentrations that exceed the limits published in the NJDEP's February 3, 1994 Soil Cleanup Criteria;
- The results of the post-excavation soil sampling program completed within the excavation created for the removal of UST R6/R7-1 indicated that concentrations of total xylene (PE-11) remain in the ground in the vicinity of the former UST at concentrations that exceed the limits published in the NJDEP's February 3, 1994 Soil Cleanup Criteria;
- The results of the post-excavation soil sampling program completed within the excavation created for the removal of UST C17/C20-FG indicated that no concentration of any detected VO compound exceeded limits published in the NJDEP's February 3, 1994 Soil Cleanup Criteria.

The Underground Storage Tank Site Assessment Summary is attached with this report.

FIGURES

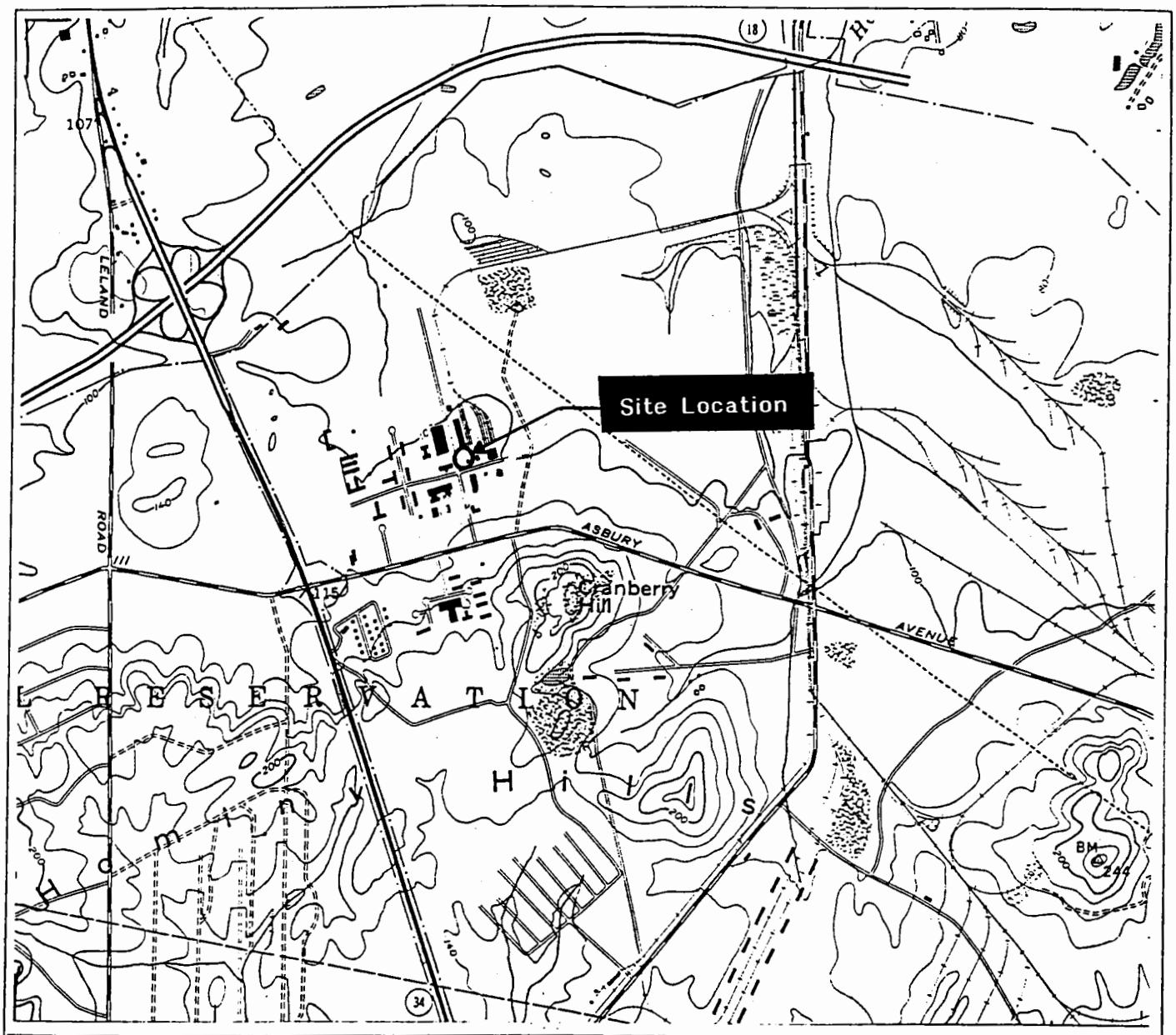

Figure 1

SITE LOCATION PLOT

C-17/C-20

United States Naval Weapons Station Earle

Colts Neck, New Jersey

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

MN GN

12° 213 MILS

0°27' 8 MILS

Enviro-Tech Inc.

364 Broad Street

Keyport, NJ 07735-1619

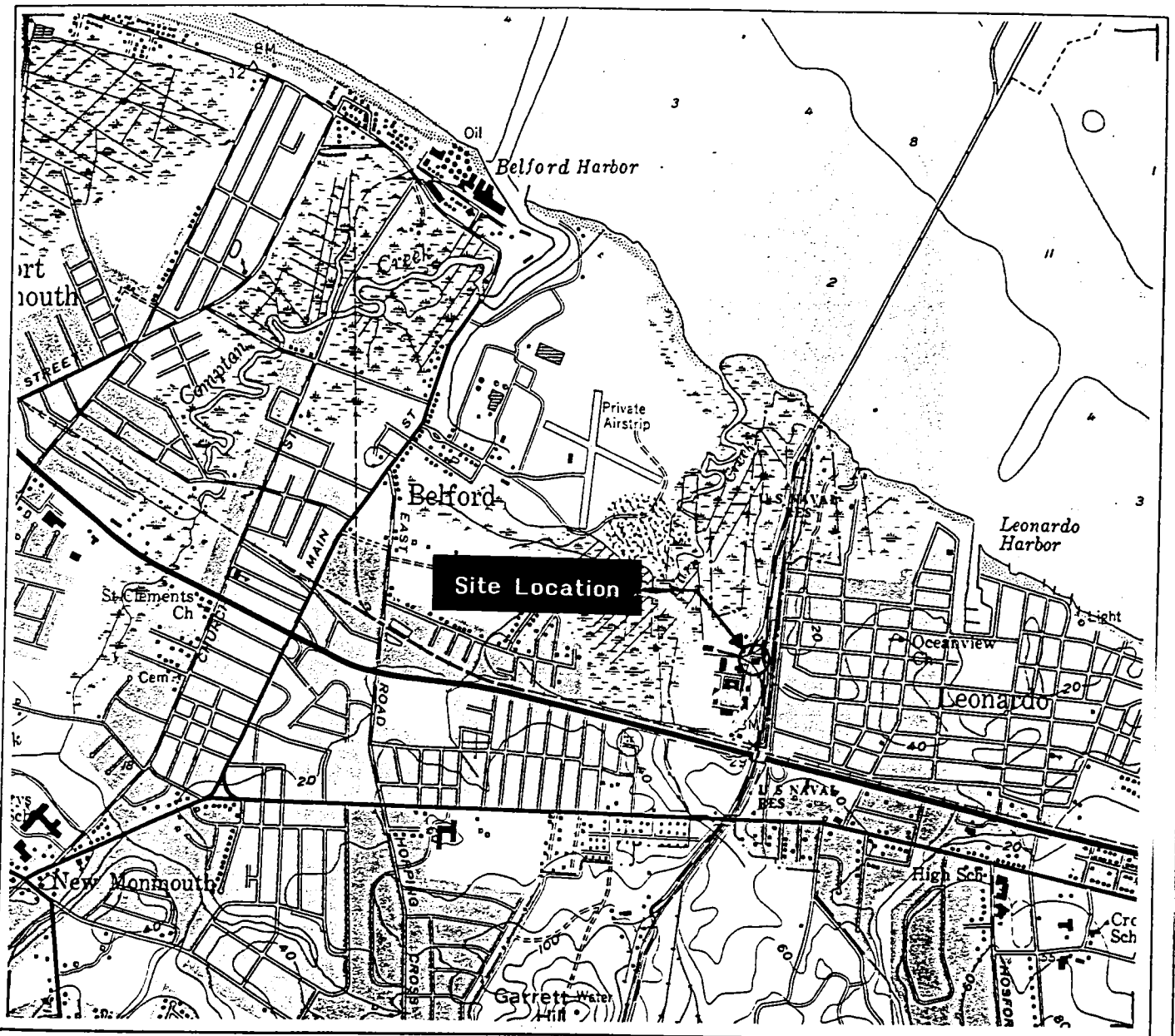

Figure 1

SITE LOCATION PLOT

R-6/R-7

USNWS - EARLE

Colts Neck, New Jersey

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

MN GN

12° 213 MILS

0°27' 8 MILS

Enviro-Tech Inc.
364 Broad Street
Keyport, NJ 07735-1619

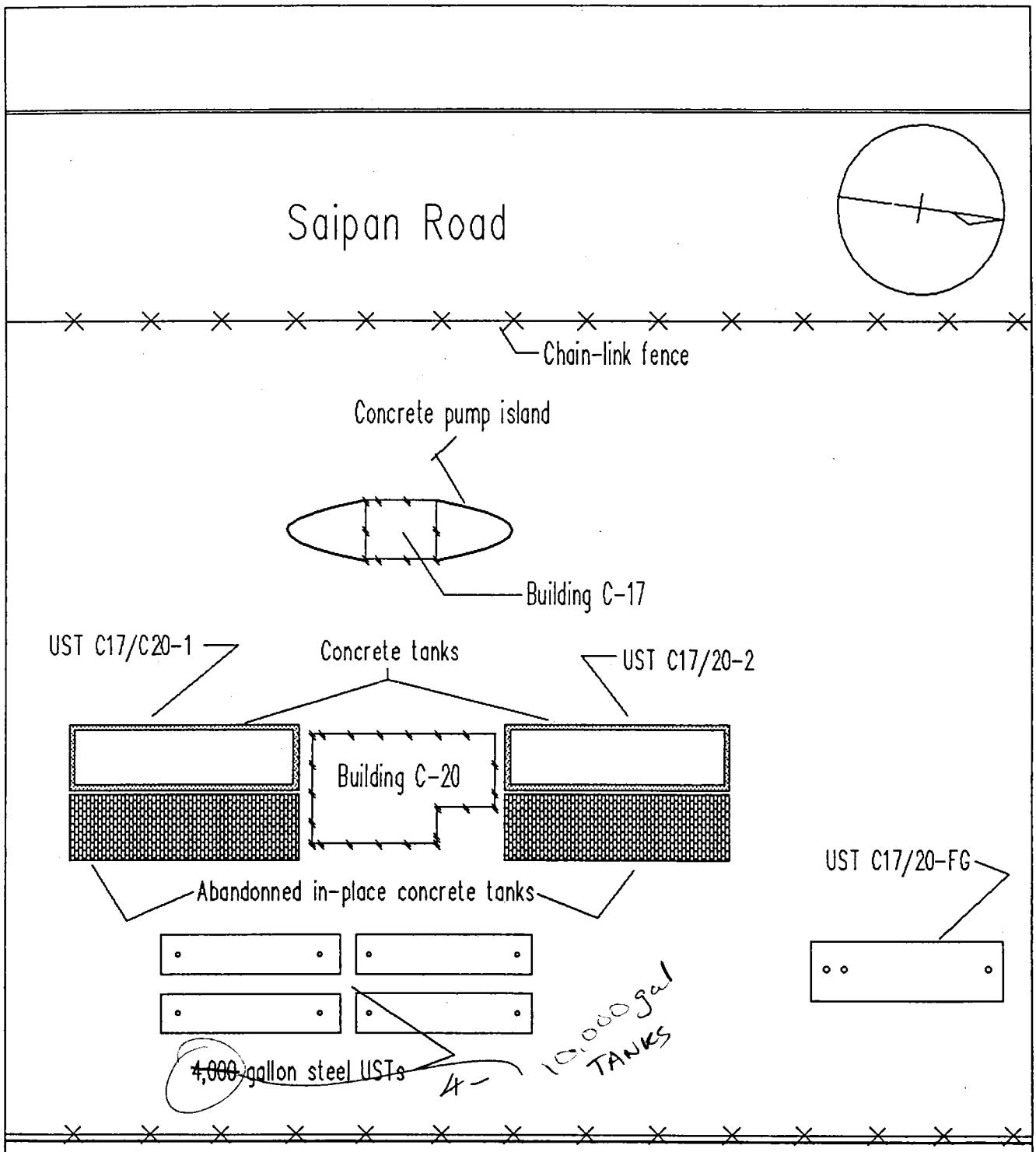

Figure 2

C-17/C-20 Site Plan

United States Naval Weapons Station Earle

Colts Neck, Monmouth County, New Jersey

Scale: 1" = 20'

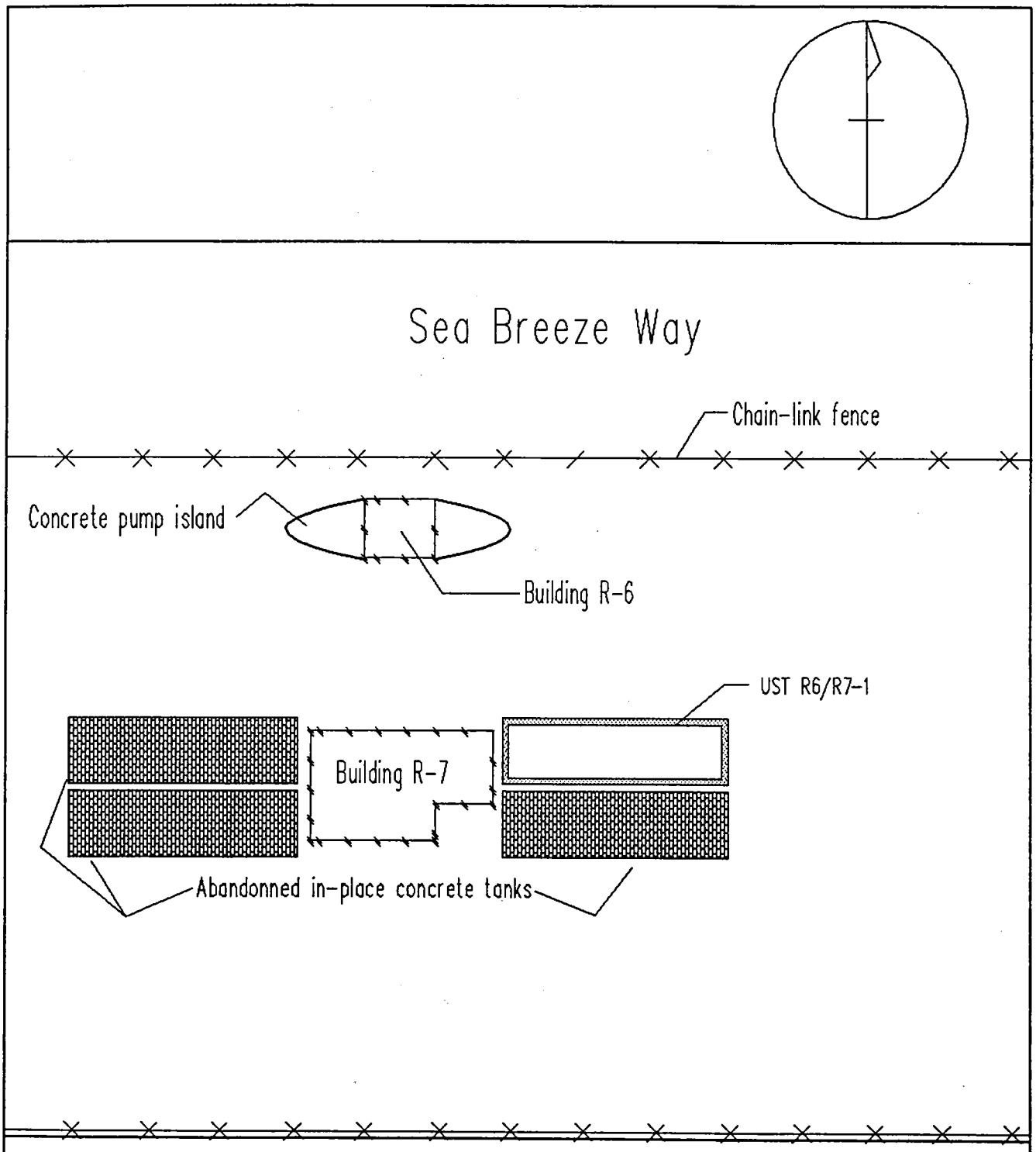

Figure 3

R-6/R-7 SITE PLAN

United States Naval Weapons Station Earle

Colts Neck, Monmouth County, New Jersey

Scale: 1" = 20'

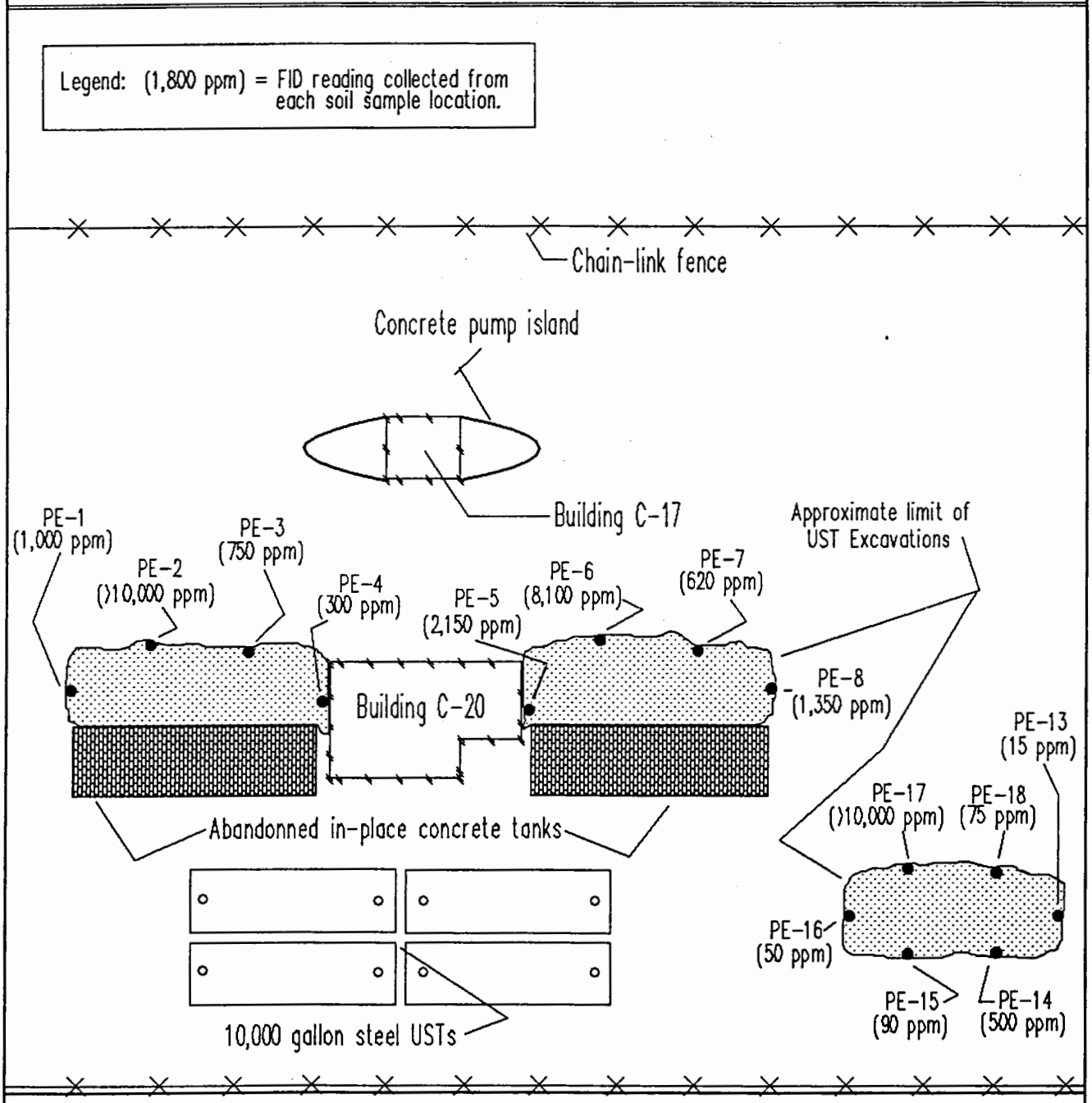

Figure 4

C-17/C-20 Post-excavation Soil Sample Location Plot

United States Naval Weapons Station Earle

Colts Neck, Monmouth County, New Jersey

Scale: 1" = 20'

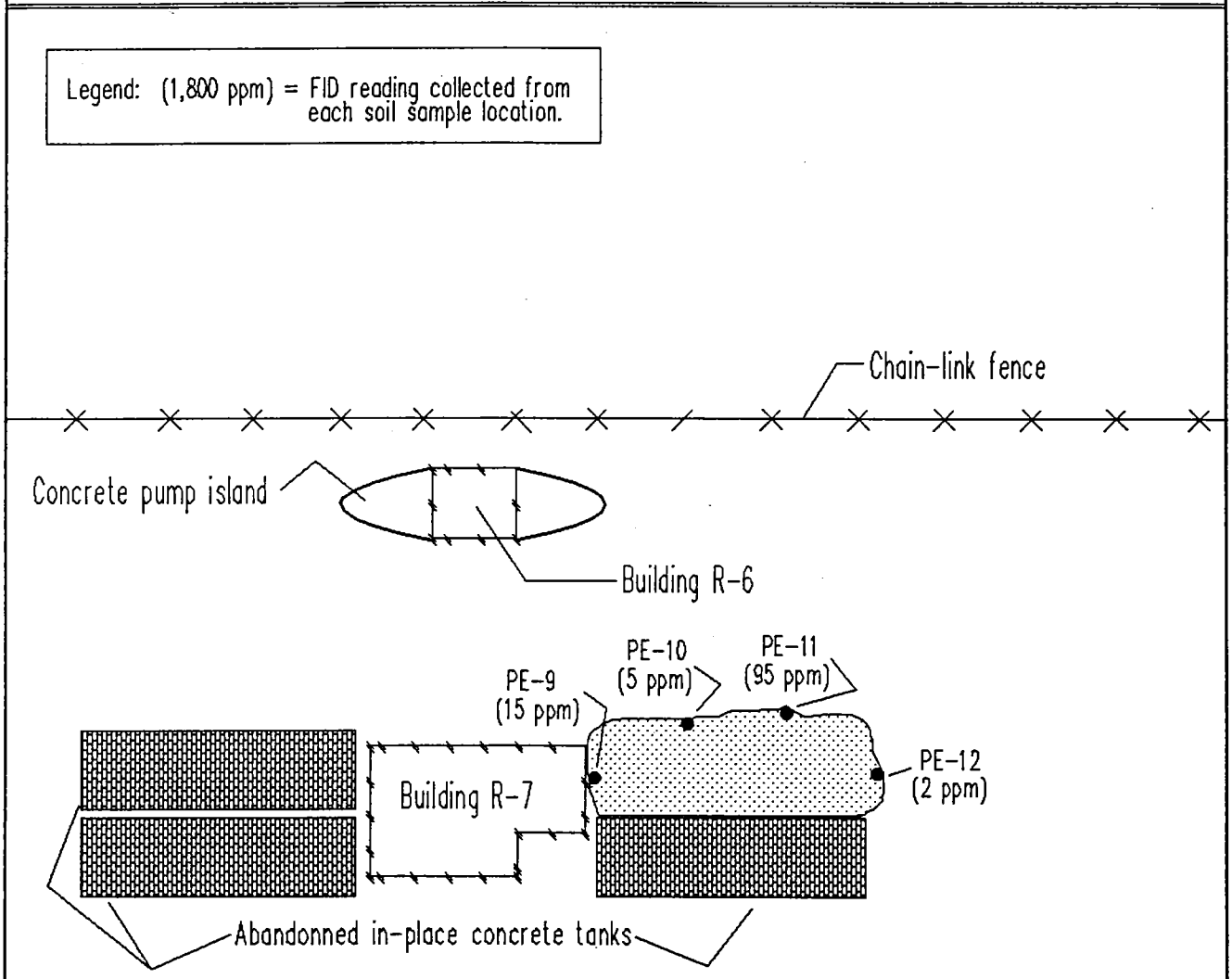

Figure 5

R-6/R-7 Post-excavation Soil Sample Location Plot

United States Naval Weapons Station Earle

Colts Neck, Monmouth County, New Jersey

Scale: 1" = 20'

TABLES

Table 1

Summary of VO Analysis for Concrete Unleaded Gasoline UST Post-excavation Soil Samples

United States Naval Weapons Station - Earle
USTs C17/C20-1 and C17/C20-2
Colts Neck, New Jersey

Sample Designation: Date Sampled: Dilution Factor:	NJDEP Cleanup Standards	PE-1 4/13/95 125	PE-2 4/13/95 2500	PE-3 4/13/95 5	PE-4 4/13/95 250	PE-5 4/13/95 2500	PE-6 4/13/95 250	PE-7 4/13/95 625	PE-8 4/13/95 5	Field Blank 4/13/95 1
Concentration (ug/kg):										
Chloromethane	10000	U	U	U	U	U	U	U	U	U
Bromomethane	1000	U	U	U	U	U	U	U	U	U
Vinyl Chloride	10000	U	U	U	U	U	U	U	U	U
Chloroethane	n	U	U	U	U	U	U	U	U	U
Methylene Chloride	1000	570JB	10000JB	49JB	1800JB	14000JB	2100JB	5000JB	43JB	4JB
Acetone	100000	U	U	130B	U	35000JB	U	24000B	320B	U
Carbon Disulfide	n	U	U	U	U	U	U	U	U	U
Trichlorofluoromethane	n	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	10000	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	10000	U	U	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	50000	U	U	U	U	U	U	U	U	U
Chloroform	1000	U	U	U	U	U	U	U	U	1J
1,2-Dichloroethane	1000	U	U	U	U	U	U	U	U	U
2-Butanone	50000	U	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	50000	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	1000	U	U	U	U	U	U	U	U	U
Vinyl Acetate	n	U	U	U	U	U	U	U	U	U
Bromodichloromethane	1000	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	n	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	1000	U	U	U	U	U	U	U	U	U
Trichloroethene	1000	U	U	U	U	U	U	U	U	U
Dibromochloromethane	1000	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	50000	U	U	U	U	U	U	U	U	U
Benzene	1000	U	15000	U	U	U	U	3300	U	U
Trans-1,3-Dichloropropene	1000	U	U	U	U	U	U	U	U	U
2-Chloroethylvinylether	n	U	U	U	U	U	U	U	U	U
Bromoform	1000	U	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	50000	U	U	U	U	U	U	U	U	U
2-Hexanone	n	U	U	U	U	U	U	U	U	U
Tetrachloroethene	1000	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	1000	U	U	U	U	U	U	U	U	U
Toluene	500000	U	320000	U	U	25000	U	39000	U	U
Chlorobenzene	1000	U	U	U	U	U	U	U	U	U
Ethylbenzene	100000	U	160000	U	U	2900	U	20000	16J	U
Styrene	100000	U	U	U	U	U	U	U	U	U
m&p-Xylene	10000 t	11000	230000	430	16000	200000	18000	32000	8J	U
o-Xylene	10000 t	25000	610000	7J	4600	440000	22000	86000	18J	U
1,3-Dichlorobenzene	100000	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	50000	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	100000	U	U	U	U	U	U	U	U	U
Total VO Concentration*	-	**36000**	**1335000**	**437**	**20600**	**667900**	**40000**	**162300**	**42**	**1**
VO TICs*	-	**147674**	**2801631**	**9317**	**268678**	**1833333**	**276966**	**427083**	**1835**	**U**
Methyl-t-butyl ether	n	U	U	130	U	U	U	U	82	U
Di-isopropyl-ether	n	U	U	U	U	U	U	U	U	U
t-Butyl Alcohol	n	U	U	110J	U	U	U	U	U	U

Notes: - NJDEP Cleanup Criteria shown are for *Impact to Ground Water Soil Cleanup Criteria* (2/3/94).
U = Indicates the compound was analyzed for but not detected.
* = "Totals" include "J" values and exlude "B" values.
J = Indicates an esitmated value used when a compound is detected at less than the specified detection limit.
n = Indicates that the cleanup criteria for this specific compound had not been published.
t = The NJDEP's Cleanup Criteria for xylene is for "total xylene".
B = Indicates the analyte was found in the laboratory method blank as well as in the sample.

Table 2

Summary of VO Analysis for Fiberglass Unleaded Gasoline UST Post-excavation Soil Samples

United States Naval Weapons Station - Earle

UST C17/C20-FG

Colts Neck, New Jersey

Sample Designation: Date Sampled: Dilution Factor:	NJDEP Cleanup Standards	PE-13 7/12/95 5	PE-14 7/12/95 5	PE-15 7/12/95 5	PE-16 7/12/95 5	PE-17 7/12/95 125	PE-18 7/12/95 1	Field Blank 7/12/95 1
Concentration (ug/kg):								
Chloromethane	10000	U	U	U	U	U	U	U
Bromomethane	1000	U	U	U	U	U	U	U
Vinyl Chloride	10000	U	U	U	U	U	U	U
Chloroethane	n	U	U	U	U	U	U	U
Methylene Chloride	1000	24JB	U	26JB	19JB	330JB	4JB	9JB
Acetone	100000	360	520	230	64J	U	U	U
Carbon Disulfide	n	U	U	U	U	U	U	4J
Trichlorofluoromethane	n	U	U	U	U	U	U	U
1,1-Dichloroethene	10000	U	U	U	U	U	U	U
1,1-Dichloroethane	10000	U	U	U	U	U	U	U
Trans-1,2-Dichloroethene	50000	U	U	U	U	U	U	U
Chloroform	1000	U	U	U	U	830	U	U
1,2-Dichloroethane	1000	U	U	U	U	U	U	U
2-Butanone	50000	U	U	U	U	U	U	U
1,1,1-Trichloroethane	50000	U	U	U	U	U	U	U
Carbon Tetrachloride	1000	U	U	U	U	U	U	U
Vinyl Acetate	n	U	U	U	U	U	U	U
Bromodichloromethane	1000	U	U	U	U	U	U	U
1,2-Dichloropropane	n	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	1000	U	U	U	U	U	U	U
Trichloroethene	1000	U	U	U	U	U	U	U
Dibromochloromethane	1000	U	U	U	U	U	U	U
1,1,2-Trichloroethane	50000	U	U	U	U	U	U	U
Benzene	1000	U	9	8	U	U	U	U
Trans-1,3-Dichloropropene	1000	U	U	U	U	U	U	U
2-Chloroethylvinylether	n	U	U	U	U	U	U	U
Bromoform	1000	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	50000	U	U	U	U	U	U	U
2-Hexanone	n	U	U	U	U	U	U	U
Tetrachloroethene	1000	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	1000	U	U	U	U	U	U	U
Toluene	500000	U	12J	U	U	380J	U	U
Chlorobenzene	1000	U	U	U	U	U	U	U
Ethylbenzene	100000	69	830	230	U	14000	U	U
Styrene	100000	U	U	U	U	U	U	U
m&p-Xylene	10000 t	13J	1100	77	U	5300	U	U
o-Xylene	10000 t	U	55	U	U	1600	U	U
1,3-Dichlorobenzene	100000	U	U	U	U	U	U	U
1,2-Dichlorobenzene	50000	U	U	U	U	U	U	U
1,4-Dichlorobenzene	100000	U	U	U	U	U	U	U
Total VO Concentration*	-	**442**	**2526**	**545**	**64**	**22110**	**U**	**4**
VO TICs*	-	**1244**	**10690**	**1587**	**3878**	**446023**	**6**	**U**
Methyl-t-butyl ether	n	75	U	310	19	U	U	U
Di-isopropyl-ether	n	U	U	U	U	U	U	U
t-Butyl Alcohol	n	U	U	U	U	U	U	U

Notes: - NJDEP Cleanup Criteria shown are for *Impact to Ground Water Soil Cleanup Criteria* (2/3/94).
U = Indicates the compound was analyzed for but not detected.
* = "Totals" include "J" values and exlude "B" values.
J = Indicates an esitmated value used when a compound is detected at less than the specified detection limit.
n = Indicates that the cleanup criteria for this specific compound had not been published.
t = The NJDEP's Cleanup Criteria for xylene is for "total xylene".
B = Indicates the analyte was found in the laboratory method blank as well as in the sample.

Table 3

Summary of VO Analysis for Concrete Unleaded Gasoline UST Post-excavation Soil Samples

United States Naval Weapons Station - Earle

UST R6/R7-1

Colts Neck, New Jersey

Sample Designation: Date Sampled: Dilution Factor:	NJDEP Cleanup Standards	PE-9 5/11/95 125	PE-10 5/11/95 5	PE-11 5/11/95 500	PE-12 5/11/95 1	Field Blank 5/11/95 1
Concentration (ug/kg):						
Chloromethane	10000	U	U	U	U	U
Bromomethane	1000	U	U	U	U	U
Vinyl Chloride	10000	U	U	U	U	U
Chloroethane	n	U	U	U	U	U
Methylene Chloride	1000	350JB	30JB	690JB	3JB	7JB
Acetone	100000	U	120J	U	11J	19J
Carbon Disulfide	n	U	U	U	U	U
Trichlorofluoromethane	n	U	U	U	U	U
1,1-Dichloroethene	10000	U	U	U	U	U
1,1-Dichloroethane	10000	U	U	U	U	U
Trans-1,2-Dichloroethene	50000	U	U	U	U	U
Chloroform	1000	U	U	U	U	U
1,2-Dichloroethane	1000	U	U	U	U	U
2-Butanone	50000	U	22J	U	U	U
1,1,1-Trichloroethane	50000	U	U	U	U	U
Carbon Tetrachloride	1000	U	U	U	U	U
Vinyl Acetate	n	U	U	U	U	U
Bromodichloromethane	1000	U	U	U	U	U
1,2-Dichloropropane	n	U	U	U	U	U
cis-1,3-Dichloropropene	1000	U	U	U	U	U
Trichloroethene	1000	U	U	U	U	U
Dibromochloromethane	1000	U	U	U	U	U
1,1,2-Trichloroethane	50000	U	U	U	U	U
Benzene	1000	U	540	U	U	U
Trans-1,3-Dichloropropene	1000	U	U	U	U	U
2-Chloroethylvinylether	n	U	U	U	U	U
Bromoform	1000	U	U	U	U	U
4-Methyl-2-Pentanone	50000	U	U	U	U	U
2-Hexanone	n	U	U	U	U	U
Tetrachloroethene	1000	U	U	U	U	U
1,1,2,2-Tetrachloroethane	1000	U	U	U	U	U
Toluene	500000	U	120	1500J	U	U
Chlorobenzene	1000	U	U	U	U	U
Ethylbenzene	100000	U	440	9400	U	U
Styrene	100000	U	U	U	U	U
m&p-Xylene	10000 t	U	1000	25000	U	U
o-Xylene	10000 t	U	400	11000	U	U
1,3-Dichlorobenzene	100000	U	U	U	U	U
1,2-Dichlorobenzene	50000	U	U	U	U	U
1,4-Dichlorobenzene	100000	U	U	U	U	U
Total VO Concentration*	-	**U**	**2642**	**46900**	**11**	**19**
VO TICs*	-	**60494**	**1900**	**540964**	**5**	**0**
Methyl-t-butyl ether	n	U	U	U	U	5
Di-isopropyl-ether	n	U	U	U	U	U
t-Butyl Alcohol	n	U	U	U	U	U

Notes: - NJDEP Cleanup Criteria shown are for *Impact to Ground Water Soil Cleanup Criteria* (2/3/94).
U = Indicates the compound was analyzed for but not detected.
* = "Totals" include "J" values and exlude "B" values.
J = Indicates an esitmated value used when a compound is detected at less than the specified detection limit.
n = Indicates that the cleanup criteria for this specific compound had not been published.
t = The NJDEP's Cleanup Criteria for xylene is for "total xylene".
B = Indicates the analyte was found in the laboratory method blank as well as in the sample.

Appendix I

UST CLOSURE APPROVALS

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
BUREAU OF FEDERAL CASE MANAGEMENT
CN-028, TRENTON, NJ 08625-0028

NJ ID# NJD170022172 UST # 0151003

Earle Naval Weapons Station
Monmouth County
New Jersey

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C.7:14b-1 et. seq:

REMOVAL OF: Removal of three (3) concrete underground storage tanks with a capacity of 12,500 gallons each. Two tanks are located adjacent to Building C-20 (Main Base). One tank is located adjacent to Building R/7 (Waterfront Area). The two tanks adjacent to C-20 formerly contained gasoline. The one tank adjacent to R/7 formerly contained diesel fuel. All the above tanks are currently registered as spill containment.

SITE ASSESSMENT: Soil samples shall be taken every five (5) feet along the centerline of each tank and one (1) every 15 feet along the appurtenant piping, if applicable. Two (2) additional samples will be taken per tank and biased to the areas of highest field screened readings. The following analyses are required for the former gasoline tanks: volatile organics using EPA Method 8240 calibrated for xylenes, plus the identification and quantification of 10 associated peaks (VO+10). For the former diesel tank: Total Petroleum Hydrocarbons (TPHC) and VO+10 analyses required on 25 percent of samples in which TPHC level in soil exceeds 1000 ppm (minimum of one sample) samples for VO analyses shall be those with the highest TPHC concentration. The sampling requirements for the additional tanks that were abandoned in place are as follows: a minimum of six samples, two on each side of the tank and one on each end of the tank. The analyses for these tanks shall be the same analyses as the diesel tank removal.

ON-SITE MANAGER:
A. Lee Fankhauser
Enviro-Tech, Inc.

TELEPHONE:
(908)-566-2277

OWNER:
John Pawlus
(NWS Earle Contact)

TELEPHONE:
(908)-866-2674

EFFECTIVE DATE: 1/14/95

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTIONS AT ALL TIMES.

ROMAN S. LUZECKY, SECTION CHIEF
BUREAU OF FEDERAL CASE MANAGEMENT

Appendix II

RESIDUAL PRODUCT AND BOTTOM SLUDGE DISPOSAL MANIFESTS

2

State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

* 2 0 1 5 3 1 9

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No 2050-0039 Expires 9-

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N J D 0 0 1 7 0 2 2 1 7 5 2 8 5 5 — Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
NWS-EARLE Code 041
Route 34, Building C33
Colts Neck NJ 07722

4. Generator's Phone (908) 577-2000

A. State Manifest Document Number **NJA 2015319**

B. State Generator's ID (Gen. Site Address) same

5. Transporter 1 Company Name: Casie Ecology Oil Salvage T/A Casie/Protank
6. US EPA ID Number: N J D 0 4 5 9 9 5 6 9 3

C. State Trans. ID-NJDEPE NJDEPS6747
Decal No.- 6068

7. Transporter 2 Company Name
8. US EPA ID Number

D. Transporter's Phone (609) 696-440

E. State Trans. ID-NJDEPE
Decal No.-

9. Designated Facility Name and Site Address
Casie Ecology Oil Salvage T/A Casie/Protank
3209 N. Mill Rd
Vineland NJ 08360
10. US EPA ID Number: N J D 0 4 5 9 9 5 6 9 3

F. Transporter's Phone ( )

G. State Facility's ID 0614D1HP03

H. Facility's Phone (609) 696-4401

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Combustible Liquid, n.o.s. (fuel oil) Combustible Liquid, NA1993, PG III	X	001	TT	12325	G	X722
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. L,T 99 %water 1 %oil/sed.
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. Filter T04 S02
b.
c.
d.

15. Special Handling Instructions and Additional Information
24 hr emergency response #609-696-4401 Greg Clifford
ERG #27 CFI #0775

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

X Printed/Typed Name: JOHN PAWLOS — Signature: John Pawlos — X Month Day Year 01 04 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JIM BISHOP — Signature: Jim Bishop — Month Day Year 01 04 95

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: Richard McCarr — Signature: R. McCarr — Month Day Year 01 10 1995

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NJ00017021751786 — Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address NWS-EARLE Code 096
Route 34 / Bldg C-33
Colts Neck NJ 07722
4. Generator's Phone (908) 577-2000

A. State Manifest Document Number NJA 1909712
B. State Generator's ID-(Gen. Site Address)

5. Transporter 1 Company Name Casie Ecology Oil Salvage T/A Casie/Protank — US EPA ID Number NJD045995693
C. State Trans. ID-NJDEPE NJDEPS6747
Decal No.- X6070
7. Transporter 2 Company Name — 8. US EPA ID Number
D. Transporter's Phone (609) 696-44
E. State Trans. ID-NJDEPE
Decal No.-
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address — 10. US EPA ID Number
Casie Ecology Oil Salvage T/A Casie/Protank
3209 N. Mill Rd
Vineland NJ 08360 NJD045995693
G. State Facility's ID 0614D11P03
H. Facility's Phone (609) 696-4401

	11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Combustible Liquid, n.o.s. (fuel oil) Combustible Liquid, NA1993, PG III	X	001	TT	X1234	G	X722
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
L,T 96 %water 4 %oil/sed.
a. c. b. d.

K. Handling Codes for Wastes Listed Above
FILTER T04
a. S02 c. b. d.

15. Special Handling Instructions and Additional Information
24 hr emergency response #609-696-4401 Greg Clifford
ERG #27 CFI ~~[illegible]~~ 0775

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

X Printed/Typed Name JOHN PAWLUS — Signature John Pawlus — X Month Day Year 12 29 94

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name JIM Bishop — Signature Jim Bishop — Month Day Year 12 29 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Craig Wood — Signature — Month Day Year 12 29 94

GENERATOR

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy - (908) 292-7172

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete. SIGNATURE AND INFORMATION MUST BE

State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

* 2 0 1 5 0 2 5

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 9-

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NJ0001702215257 — Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
NWS-EARLE Code 041
Route 34, Building C33
Colts Neck NJ 07722
4. Generator's Phone ((908)) 577-2000

A. State Manifest Document Number **NJA 2015025**
B. State Generator's ID-(Gen. Site Address) same

5. Transporter 1 Company Name: Casie Ecology Oil Salvage T/A Casie/Protank
6. US EPA ID Number: NJD045995693
C. State Trans. ID-NJDEPE NJDERS6747
Decal No.- X6070
D. Transporter's Phone ((609) 696-441

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Trans. ID-NJDEPE
Decal No.-
F. Transporter's Phone ( )

9. Designated Facility Name and Site Address
Casie Ecology Oil Salvage T/A Casie/Protank
3209 N. Mill Rd
Vineland NJ 08360
10. US EPA ID Number: NJD045995693
G. State Facility's ID 0614D1HP03
H. Facility's Phone ((609) 696-4401

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Combustible Liquid, n.o.s. (fuel oil) Combustible Liquid, NA1993, PG III	X	001	TT	X2846	G	X722
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a. L,T 98%water 2% oil/sed.
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. F1 Hor Tot 3012
b.
c.
d.

15. Special Handling Instructions and Additional Information
24 hr emergency response #609-696-4401 Greg Clifford
ERG #27 CFI #0775

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and nationa government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOHN J PAWLUS — Signature: John J Pawlus — Month Day Year 12 28 94

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jim Bishop — Signature: Jim Bishop — Month Day Year 12 28 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Darin Henne — Signature — Month Day Year 12 28 94

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete. SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy: (609) 292-7172

State of New Jerse,
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

* 2 0 1 5 3 0 8

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039 Expires 9-30

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N J 0 0 0 1 7 0 2 2 1 7 5 | Manifest Document No. 2 8 4 5

2. Page 1 of 1

Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
NWS-EARLE Code 041
Route 34, Building C33
Colts Neck NJ 07722

A. State Manifest Document Number **NJA 2015308**

B. State Generator's ID-(Gen. Site Address) same

4. Generator's Phone ((908))577-2000

5. Transporter 1 Company Name: Casie Ecology Oil Salvage T/A Casie/Protank
6. US EPA ID Number: N J D 0 4 5 9 9 5 6 9 3

C. State Trans. ID-NJDEPE NJDERS6747
Decal No.- X607.0

7. Transporter 2 Company Name
8. US EPA ID Number

D. Transporter's Phone ((609) 696-440
E. State Trans. ID-NJDEPE
Decal No.-

9. Designated Facility Name and Site Address
Casie Ecology Oil Salvage T/A Casie/Protank
3209 N. Mill Rd
Vineland NJ 08360
10. US EPA ID Number: N J D 0 4 5 9 9 5 6 9 3

F. Transporter's Phone ( )
G. State Facility's ID 0614D1HP03
H. Facility's Phone ((609) 696-4401

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No
a. Combustible Liquid, n.o.s. (fuel oil) Combustible Liquid, NA1993, PG III	X	001	TT	2922	G	X722
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
L, 99 %water / %oil/sed.
a. c.
b. d.

K. Handling Codes for Wastes Listed Above
Filter
a. T04 S02 c.
b. d.

15. Special Handling Instructions and Additional Information
24 hr emergency response #609-696-4401 Greg Clifford
ERG#27
CFI# 0775 WATER FRONT TANK CLEANOUT AT GAS STATION

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

X for WPNSTA EARLE

Printed/Typed Name: GREGORY J. GOEPFERT
Signature: Gregory J. Goepfert
Month Day Year: 0 1 0 3 9

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JIM BISHOP
Signature: Jim Bishop
Month Day Year: 0 1 0 3 9

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19
Printed/Typed Name: Richard McGarr
Signature: R McGarr
Month Day Year: 0 1 0 3 9

GENERATOR / TRANSPORTER / FACILITY

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection and Energy. (609) 292-7172

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039. Expires 8-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID Number: NJD 1700 7 2 1 7 2 8 5 0 R
Manifest Document No.
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Parle Code 41, Route 1 34, Bldg. #23, Colts Neck, New Jersey 07722
1-800-681-1699
Generator's Phone ( )
4. State Manifest Document Number: NJA 2182608
5. State Generator's Site Address (if different than mailing address)
6. Transporter 1 Company Name: [illegible] Services, Inc.
US EPA ID Number
7. State Transporter's ID
8. Transporter 2 Company Name
US EPA ID Number
9. Transporter's Phone ( )
10. State Transporter's ID
11. Designated Facility Name and Site Address: [illegible] Chem Inc., [illegible] First Street, [illegible]ch, New Jersey 07206
US EPA ID Number
12. Transporter's Phone ( )
13. State Facility's ID
14. Facility's Phone (908) 355-5800

15. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	16. Containers No.	Type	17. Total Quantity	Unit Wt/Vol	Waste No.
Waste Flammable Liquid, NOS (RCRA D001,D018) X 3 UN1993 PGII (Gasoline)	1	TT	XX500	G	D001

GENERATOR

Additional Descriptions for Materials Listed Above: [illegible] also [illegible] [illegible] C.I. [illegible]

17c. Handling Codes for Wastes Listed Above: [illegible] 100%

18. Special Handling Instructions and Additional Information: Gas. [illegible] Driver equipped with [illegible] Hazmat code - IKCO 24 hour emergency response number 908-355-5800 FROM DISPOSAL TANK CLEANOUT

19a. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] Signature: [illegible] Month Day Year: 06 30 95

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] W. Conner Signature: [illegible] Month Day Year: 06 30 95

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: [illegible] Signature: [illegible] Month Day Year: 06 30 95

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES

Appendix III

CLEAN FILL MANIFESTS

5-30-91
Date

Cust. Phone

JOHN GUIRE CO.
187 BRIGHTON AVE • LONG BRANCH, N.J. 07740
908-222-0612

32523

Driver On _____ Off _____

Customer's Name 731 AMERICAN BUILDERS FAX # 1-410-535-5336
Address 1762 MARYLAND WEAPONS EAGLE
COLTS NECK

Supplies

Product 3/4 TRAP | Price Per Ton 19.60 / 15.25

Price 313.99

T.F.

DATE TIME

Kim Taber
410-538-7162

20.59 Gross lb.
Tare lb.
TONS Net lb.

Tax —
Sub Total —
Del. Chg. —
TOTAL 313.99

Special Instructions AMERICAN CONSTRUCTION SERVICES INC
3025 PULASKI HWY
EDGEWOOD, MD 21040

All delivered prices are for street curb delivery, except where the curb and sidewalk are entirely bridged and protected and a suitable road provided to actual point of unloading inside of curb. We will assume no responsibility for any damages where delivery is made inside of curb.

Rec'd By _____
Weigher _____

Other Products Always Available
- Fuel Oil
- Hardware
- Lawn & Garden Supplies
- Mulch
- Top Soil & Fill Dirt
- Wall Stone
- Cobble Stone
- Railroad Ties

BILLING COPY

6-13-95
Date

Cust. Phone

JOHN GUIRE CO.
187 BRIGHTON AVE • LONG BRANCH, N.J. 07740
908-222-0612

33636

Driver On _____ Off _____

Customer's Name AMERICAN CONST. MATERIALS
Address 1762 MARY EAGLE
LEONARDO

Supplies

Product FILL | Price Per Ton

Price

DATE TIME

-3- TANDEM LOADS

Gross lb.
Tare lb.
Net lb.

Tax
Sub Total
Del. Chg.
TOTAL

Special Instructions

All delivered prices are for street curb delivery, except where the curb and sidewalk are entirely bridged and protected and a suitable road provided to actual point of unloading inside of curb. We will assume no responsibility for any damages where delivery is made inside of curb.

Rec'd By _____
Weigher _____

Other Products Always Available
- Fuel Oil
- Hardware
- Lawn & Garden Supplies
- Mulch
- Top Soil & Fill Dirt
- Wall Stone
- Cobble Stone
- Railroad Ties

CUSTOMER COPY

6-12-95 | 1-410-538-7162

JOHN GUIRE CO.
187 BRIGHTON AVE • LONG BRANCH, N.J. 07740
908-222-0612

33606

Date | Cust. Phone

Driver On _____ Off _____

Customer's Name: AMERICAN CONST. CO.
Address: 1201 MARY EARLE
LEONARDO

Supplies

Product: FILL | Price Per Ton: 105.00

Price

Other Products Always Available
- Fuel Oil
- Hardware
- Lawn & Garden Supplies
- Mulch
- Top Soil & Fill Dirt
- Wall Stone
- Cobble Stone
- Railroad Ties

DATE | TIME

(5) TANDEM LOADS

Gross lb.
Tare lb.
Net lb.

Tax —
Sub Total
Del. Chg.
TOTAL

Special Instructions: SEE STEVE BEFORE #1-800-681-1699.
BUILDING 6: D-6 + R-2

All delivered prices are for street curb delivery, except where the curb and sidewalk are entirely bridged and protected and a suitable road provided to actual point of unloading inside of curb. We will assume no responsibility for any damages where delivery is made inside of curb.

Rec'd By: [illegible]
Weigher

CUSTOMER COPY

5-30-95

JOHN GUIRE CO.
187 BRIGHTON AVE • LONG BRANCH, N.J. 07740
908-222-0612

32522

Date | Cust. Phone

Driver On _____ Off _____

Customer's Name: AMERICAN BUILDING
Address: 1201 MARY MEADOW EARLE
RT 34 COLTS NECK

Supplies

Product: 3/4 TRAP | Price Per Ton: 19.60 / 15.25

Price: 329.70

Other Products Always Available
- Fuel Oil
- Hardware
- Lawn & Garden Supplies
- Mulch
- Top Soil & Fill Dirt
- Wall Stone
- Cobble Stone
- Railroad Ties

B.B.

DATE — | TIME

21.62 TONS

Gross lb.
Tare lb.
Net lb.

Tax —
Sub Total —
Del. Chg. —
TOTAL 329.70

Special Instructions: CALL STEVE
1-800-681-1699
WHEN YOU GET TO GATE

All delivered prices are for street curb delivery, except where the curb and sidewalk are entirely bridged and protected and a suitable road provided to actual point of unloading inside of curb. We will assume no responsibility for any damages where delivery is made inside of curb.

Rec'd By: [illegible]
Weigher

BILLING COPY

Appendix IV

LABORATORY ANALYTICAL REPORTS

No. 1

USTs C17/C20-1 AND C17/C20-2

veritech
Division of Hampton-Clarke, Inc.
environmental and analytical services

ENVIRO-TECH, INC.
NJDEP REDUCED PKG

PROJECT: EARLE

LAB # AA30027-AA30035

NJDEP Cert. #14622, CT Cert. # PH0671
PADER Cert. #68-463, MA Cert. #NJ386
NYDOH Cert. # 11408

47 Carey Avenue • Butler, NJ 07405
Phone: (201) 492-8744 Fax: (201) 492-1815

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VERITECH LABORATORY RESULTS

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SAMPLE KEY

ENVIRO-TECH NO.	VERITECH NO.
PE-1	AA30027
PE-2	AA30028
PE-3	AA30029
PE-4	AA30030
PE-5	AA30031
PE-6	AA30032
PE-7	AA30033
PE-8	AA30034
FIELD BLANK	AA30035

Enviro-Tech Inc.

Page ___ of ___

CHAIN-OF-CUSTODY RECORD

SAMPLER: *(Signature)* _____ Date Shipped _____ Carrier _____

Phone 908-888-1300 Airbill No. _____ Cooler No. _____

SHIP TO:

ATTENTION: _____

SEND RESULTS TO:

Client Name _____

Company ENVIRO-TECH, INC.

Address 364 BROAD ST.
KEARNY, NJ

Phone 908-888-1300

PROJECT NAME EARLE NAVAL WEAPONS STN. **PROJECT NO.** _____ **P.O. NO.** _____

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date	Military Time
		4/13/95	16:02
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date	Military Time
		4/13/95	5:51 PM
Relinquished by: *(Signature)*	Received at lab by: *(Signature)*	Date	Military Time
Relinquished from lab by: *(Signature)*	Received by: *(Signature)*	Date	Military Time

ANALYSIS REQUEST

Sample ID Number	Sample Description	Date/Time Sampled		Analysis Requested	Sample Condition Upon Receipt	
PE-1	Soil	4/13/95	10:30	VOHO, TOTAL XYLENE	Cool	AA3202
PE-2			10:35			3202
PE-3			10:40			3202
PE-4			10:45			3203
PE-5			10:50			3203
PE-6			10:55			3203
PE-7			11:00			3203
PE-8			11:10			3203
FIELD BLANK	AQUEOUS		10:25			3203

Special Instructions/Comments:

NOTE: UNUSED PORTIONS OF NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Expected Analytical T.A.T.'s: _____ Immediate Attention (200% surcharge) _____ RUSH (50-100% surcharge) X Standard

Sample Custodians Chain of Custody

000 02

veritech
Division of Hampton-Clarke, Inc.
environmental and analytical services

CONDITION UPON RECEIPT FORM

Date Received 4/13/95 Filed By S. G.

Client Enviro-Tech Lab Sanple No(s) _____

CONDITION (Check Applicable Items)

_____ (1) Not enough sample sent for analysis

_____ (2) Sample(s) received broken (Specify) _____
Sample(s) received leaking (Specify) _____

_____ (3) Illegible sample number(s) or label(s) missing from bottle(s) (Specify) _____

_____ (4) Numbers on sample(s) do not correspond to information on the chain of custody record

_____ (5) No chain of custody record submitted with the samples

_____ (6) Samples received without a cooler

_____ (7) Custody seals missing or broken (circle one)

_____ (8) Holding time(s) exceeded upon receipt
(List parameters _____)

_____ (9) Samples received without proper refrigeration when deemed necessary

_____ (10) Samples received without proper preservation (see Preservation Form for actual pH readings)

_____ (11) Cooler Temperature Upon Receipt (Specify) 12°C

_____ (12) Other (Specify) _____

47 Carey Avenue • Butler, NJ 07405
Phone: (201) 492-8744 Fax: (201) 492-1815

VERITECH INTERNAL CHAIN OF CUSTODY RECORD
REFRIGERATOR # 2

PARAM-ETER	RFRG FROM	RFRG TO	SAMPLE NUMBER(S)	DATE OUT	TIME OUT	DATE IN*	TIME IN	SIGNATURE
GCMS	1	2	29597, 19598, 19639, 19649	3/31	3:12	3/31	3:24	[illegible]
"	2	2	29597, 19598 (TCLP EXT)	"	5:00	"	3:12	[illegible]
"	2	2	29616 ~ 19631, 19752	"	5:31	3/31	5:49	[illegible]
Metals	2	2	19752	4/3/95	10:32	—	—	[illegible]
GCMS	2	2	A4 19658, 19775	"		"	3:11	[illegible]
"	2	2	29619, 19597, 19712, 19637	"	3:12	"	3:35	[illegible]
"	2		19756	"	4:44			[illegible]
"	2	2	19753 ~ 19755	"	5:05	4/3/95	5:13	[illegible]
"	2		29618, 19639, 19598 (TCLP EXT)	"	5:44	"	6:01	[illegible]
Dig-Prep	2		29637	4/04/95	9:00			[illegible]
GCMS	2		29737 ~ 19736	"	4:19			[illegible]
"	2	2	29754, 19755, 29676 ~ 19678	"	5:13	4/04	5:12	[illegible]
"	2	2	19775, 19658, 19598 (TCLP EXT)	"	5:19	"	5:44	[illegible]
"	2		19619, 19612	"	5:55	"	6:10	[illegible]
"	2		19629	"	6:13			[illegible]
GCMS	2	2	29676 ~ 19630	4/5	5:10	4/05	5:14	[illegible]
"	2	2	29681 ~ 19684	"	5:17	"	5:40	[illegible]
"	2		29685, 19688	"	0:19	"	0:21	[illegible]
"	2		29731 ~ 19735	4/06	4:06			[illegible]
"	2	2	29678, 19609, 19682 ~ 19681	"	5:11	4/06	5:17	[illegible]
"	2	2	19685 ~ 19688	"	5:22	"	5:57	[illegible]
"	2		19736	4/07	11:11			[illegible]
"	2	2	19742 ~ 19745	4/07	3:32	4/07	3:55	[illegible]
"	2	2	19853	"	5:21	"	5:25	[illegible]
"	2	2	29809, 19854, 19855, 19745, 19788	"	5:51	"	6:11	[illegible]
"	2	2	19826	"	6:18	"	6:21	[illegible]
"	2		19845 ~ 19852	4/10	3:13			[illegible]
"	2	2	29854, 19809, 19732, 19745	"	3:32	4/10	3:55	[illegible]
"	2	2	19809, 19854, 19686	"	5:55	"	6:2	[illegible]
"	2	2	29878, 19879, 19668	4/11	3:35	4/11	3:50	[illegible]
"	2		~~19878, 19879~~ [illegible]	"	~~4:54~~ [illegible]	[illegible]	5:55	
"	2	2	19878, 19879	4/11	5:19	4/11	5:45	[illegible]
"	2	2	19618, 19816, 19831, 19856	"	6:11	"	6:27	[illegible]
"	2	2	29831, 19831	4/12	1:32	4/12	1:33	[illegible]
"	2	2	19831	"	3:01	"	3:07	[illegible]
"	2	2	A4 19950 ~ 19932	4/12	4:45	"	5:00	[illegible]
"	2	2	19940, 19930 ~ 30	4/17	2:33	4/17	2:51	[illegible]
"	2	2	30014, 1994, 19942	"	4:39	"	4:44	[illegible]
"	2	2	19945 ~ 19949	"	5:17	"	5:24	[illegible]
"	2	2	19930, 19932, 30014	"	5:33	"	5:44	[illegible]
"	2	2	19966, 19967, 30031	4/18	12:03			[illegible]
"	2	2	29950 ~ 19950	"	3:21	4/18	3:33	[illegible]
"	2	2	30036 ~ 30044	"	4:40	"	4:53	[illegible]
"	2	2	19953	"	4:55			[illegible]
"	2	2	19946	"	5:15	4/18	5:33	[illegible]
"	2	2	29864, 30027, 30028 (*)	4/19	3:19	4/19	3:33	[illegible]
"	2	2	30015 ~ 30052	"	4:49	"	5:10	[illegible]
"	2	2	29878, 30067, 30014	"	5:22	"	5:25	[illegible]
"	2	2	30067, 30039 ~ 30032 (*)	4/20	3:13	4/20	3:19	[illegible]
"	2	2	30035 (*)	"	5:19			[illegible]
"	2	2	30033, 30034, 30028, 30054, 30056 (*)	"	5:17	4/20	5:56	[illegible]

COMMENTS: *-Aqueous volatile samples are not logged back into the refrigerat

VERITECH INTERNAL CHAIN OF CUSTODY RECORD
REFRIGERATOR # 2

PARAM-ETER	RFRG FROM	RFRG TO	SAMPLE NUMBER(S)	DATE OUT	TIME OUT	DATE IN*	TIME IN	SIGNATURE
TCLP	2	3	30054 ~~[illegible] 30059, 30060~~	4/21	1:20			[illegible]
GCMS	2		30078 ~30081, ~~30083, 30084, 30086, 30087~~	"	2:33			[illegible]
"	2	2	30034, 30067 ⊛	"	3:55	4/21	4:05	[illegible]
"	2	2	30039 ~30031, 30033, 30056 ⊛	"	5:03	"	5:25	[illegible]
"	2	2	29967, 29966, 30061 ~30067,	"	6:40			[illegible]
"	2	2	30095, 30096	4/24	5:00	4/24	5:19	[illegible]
"	2		~~30091 ~ [illegible]~~ 30119, 30120	"	5:33	~~5:33~~	~~[illegible]~~	[illegible]
"	2		30114 ~30118	"	6:10			[illegible]
"	2	2	30095, 30096	"	3:44	4/24	6:55	[illegible]
"	2		30061 ~30063, 30081	"	7:00			[illegible]
"	2		~~[illegible] 30120, 30015, 30150 [illegible] 4/25~~	4/25	12:05	4/25		[illegible]
"	2		30120	"	12:25			[illegible]
"	2		30081 ~30085	"	1:05			[illegible]
"	2	2	30015, 30150	"	4:42	4/25	4:53	[illegible]
"	2	2	30150	"	6:08	"	6:13	[illegible]
DCB	2	3	30015	4/26	1:00			[illegible]
GCMS	2		30118, 30109 ~30110, 30108	"	5:21			[illegible]
"	2		30099 ~30107	"	6:40			[illegible]
"	2		30110, 30099, 30100, 30105, 30109	4/27	10:41			[illegible]
"	2	2	30126, 30127	4/27	5:16	4/27	5:25	[illegible]
"	2		30085 ~30088, 30103, 30108	"	6:44			[illegible]
"	2		30188 ~30193	4/28	11:30			[illegible]

COMMENTS: *-Aqueous volatile samples are not logged back into the refrigerator

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:22:58

Sample I.D. AA30027
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-1 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	86	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/19/95	YS

End of progress report on sample: AA30027

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:22:59

Sample I.D. AA30028
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-2 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	An
%SOLIDS	92	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/20/95	YS

End of progress report on sample: AA30028

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:00

Sample I.D. AA30029
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-3 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	90	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/21/95	YS

End of progress report on sample: AA30029

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:01

Sample I.D. AA30030
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-4 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	87	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/21/95	YS

End of progress report on sample: AA30030

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:02

Sample I.D. AA30031
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-5 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	An
%SOLIDS	90	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/21/95	YS

End of progress report on sample: AA30031

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:03

Sample I.D. AA30032
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-6 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	89	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/20/95	YS

End of progress report on sample: AA30032

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:04

Sample I.D. AA30033
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-7 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	84	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/21/95	YS

End of progress report on sample: AA30033

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:05

Sample I.D. AA30034
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: PE-8 SOIL

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	An
%SOLIDS	85	PERCENT	04/18/95	JK
VOLATILES + 10	Completed	ATTACHED	04/21/95	YS

End of progress report on sample: AA30034

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 05-01-1995 Time: 18:23:06

Sample I.D. AA30035
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 04/13/95
Date submitted: 04/17/95
Due date: 04/27/95
Specification checking: off
Descript: FIELD BLANK

COL.DATE: 4/13/95

Analysis	Result	Unit	Finished	Anl
VOLATILES + 10	Completed	ATTACHED	04/20/95	YS
pH (VOA VIALS)	<2	UNITS	04/18/95	AS

End of progress report on sample: AA30035

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

CLIENT: ENVIRO PROJECT: EARLE
ANALYSIS: VOLATILES

	NO	YES
1. GC/MS Tune Specifications		
a. BFB passed	___	_X_
b. DFTPP passed	___	___
2. GC/MS Tuning Frequency - performed every 12 hours	___	_X_
3. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 12 hours before sample analysis.	___	_X_
4. GC/MS Calibration Requirements		
a. Calibration Check Compounds	___	_X_
b. System Performance Check Compounds	___	_X_
5. Blank Contamination - List compounds for each fraction		
a. VOA Fraction See Form1. ___		
b. B/N Fraction ___		
c. Acid Fraction ___		
6. Surrogate Recoveries Meet Criteria (If not met; list those compounds and their recoveries which fall outside the acceptable range)	___	_X_
a. VOA Fraction ___		
b. B/N Fraction ___		
c. Acid Fraction ___		
7. Extraction Holding Time Met	___	_X_

Comments: ___

8. Analysis Holding Time Met ___ _X_

Comments: ___

Additional Comments: ___

Organics Director ___ Date: 05/01/95___

METHOD REFERENCES

Volatile Organics (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 8240.

Volatile Organics (Waters) - Federal Register, 40 CFR Part 136, October 26, 1984, Method 624.

TCLP Volatile Organics - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 1311 and 8240.

Volatile Organics (Drinking Waters) - Methods for the Determination of Organic Compounds in Drinking Water, EPA/600/4-88/039, Revision 3, 1989, Method 524.2.

Semivolatile Organics (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 3550 and 8270.

Semivolatile Organics (Waters) - Federal Register, 40 CFR Part 136, October 26, 1984, Method 625.

TCLP Semivolatile Organics - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 1311, 3510 and 8270.

Pesticides (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 3550 and 8080.

Pesticides (Waters) - Federal Register, 40 CFR Part 136, October 26, 1984, Method 608.

TCLP Pesticides - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 1311, 3510 and 8080.

TCLP Herbicides (Waters) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 1311 and 8150.

PCB's (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 3550 and 8080.

PCB's (Waters) - Federal Register, 40 CFR, Part 136, October 26, 1984, Method 608.

PCB's (Oils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Methods 3580 and 8080.

Total Metals (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition. Methods 3020 or 3050 are used for digestion. All ICP metals are analyzed using Method 6010. Antimony, arsenic, cadmium, molybdenum, selenium and thallium are analyzed by Methods 7041, 7060, 7131, 7481, 7740 and 7841 respectively. Mercury is analyzed using the Inorganic Statement of Work, Contract Laboratory Program, Revision 2.1.

TCLP Metals - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 1311 followed by Method 3020 for digestion and the individual parameter methods listed above in the Total Metals (Soils) section.

ICP Metals (Waters) - Methods for the Determination of Metals in Environmental Samples, EPA/600/4-91/010, June 1991, Revision 3.3, Method 200.7.

GFAA Metals & Mercury (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983. Antimony, arsenic, cadmium, lead, molybdenum, selenium, thallium and tin are analyzed using Methods 204.2, 206.2, 213.2, 239.2, 246.2, 270.2, 279.2 and 282.2 respectively. Mercury is analyzed using the Inorganic Statement of Work, Contract Laboratory Program, Revision 2.1.

Cyanide (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 9010.

Cyanide (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 335.2.

Phenols (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 9065.

Phenols (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 420.1.

TPH (Soils & Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 418.1 for waters and modified 418.1 for soils using a soxhlet extraction with freon prior to analysis.

Hexavalent Chromium (Soils & Waters) - Test Methods for Evaluating Solid Waste, SW-846, Second and Third Editions, Methods 3060 and 7196A.

pH (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 9040.

pH (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 150.1.

Reactive Cyanide - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Chapter Seven, Section 7.3, Reactivity.

Reactive Sulfide - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Chapter Seven, Section 7.3, Reactivity.

Ignitability - Test Methods for Evaluating Solid Waste, SW-848, Third Edition, Chapter Seven, Section 7.1, Ignitability.

Flashpoint - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 1010.

Conductance (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 120.1.

Residue, Filterable (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 160.1.

Residue, Non-Filterable (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 160.2.

Residue, Total (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 160.3.

Chloride (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 325.3.

Chloride (Soils) - Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Method 9252.

Sulfide (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 376.1.

Chemical Oxygen Demand (Waters) - Hach Chemical Company, Method 8000.

Oil & Grease (Waters) - Methods for the Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983, Method 413.1.

TOX (Waters & Soils) - Refer to methods listed for volatile organics.

2,3,7,8 - TCDD/TCDF - Modified Contract Laboratory Program Statement of Work, November 1992.

VERITECH

47 CAREY AVE., BUTLER, NJ 07405

CT. NO: PH-0671
MADEP NO: NJ386
PADER NO: 68-463
NJDEPE NO: 14622
NYDOH NO: 11408

REPORT OF ANALYSIS

TO: ENVIRO-TECH, INC.
364 BROAD STREET
KEYPORT, N.J. 07735
(908) 888-1300

Date Collected: 04/13/95
Date Submitted: 04/17/95
Date Reported: 05/01/95
Project: EARLE

Sample I.D.		AA30027		AA30028	
Sample Description		PE-1 SOIL		PE-2 SOIL	
Analyte	Units	MDL	Result	MDL	Result
%SOLIDS	PERCENT	1.0	86	1.0	92
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.		AA30029		AA30030	
Sample Description		PE-3 SOIL		PE-4 SOIL	
Analyte	Units	MDL	Result	MDL	Result
%SOLIDS	PERCENT	1.0	90	1.0	87
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.		AA30031		AA30032	
Sample Description		PE-5 SOIL		PE-6 SOIL	
Analyte	Units	MDL	Result	MDL	Result
%SOLIDS	PERCENT	1.0	90	1.0	89
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.		AA30033		AA30034	
Sample Description		PE-7 SOIL		PE-8 SOIL	
Analyte	Units	MDL	Result	MDL	Result
%SOLIDS	PERCENT	1.0	84	1.0	85
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.	**AA30035**
Sample Description	**FIELD BLANK**

Analyte	**Units**	**MDL**	**Result**
%SOLIDS			
VOLATILES + 10	ATTACHED		Completed

This report is a true report of results obtained from our tests of this material. In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Stanley Gilewicz - Laboratory Director

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : JE4396
Date Analyzed : 04/19/95
Dilution Factor: 125
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	1300	U
74839	Bromomethane	1300	U
75014	Vinyl Chloride	630	U
75003	Chloroethane	1300	U
75092	Methylene Chloride	1300	400J
67641	Acetone	2500	U
75150	Carbon Disulfide	630	U
75694	Trichlorofluoromethane	630	U
75354	1,1-Dichloroethene	250	U
75343	1,1-Dichloroethane	630	U
156605	Trans-1,2-Dichloroethene	630	U
67663	Chloroform	630	U
107062	1,2-Dichloroethane	250	U
78933	2-Butanone	3100	U
71556	1,1,1-Trichloroethane	630	U
56235	Carbon Tetrachloride	250	U
108054	Vinyl Acetate	1300	U
75274	Bromodichloromethane	130	U
78875	1,2-Dichloropropane	130	U
10061015	cis-1,3-Dichloropropene	630	U
79016	Trichloroethene	130	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	630	U
79005	1,1,2-Trichloroethane	380	U
71432	Benzene	130	U
10061026	Trans-1,3-Dichloropropene	630	U
110758	2-Chloroethylvinylether	1300	U
75252	Bromoform	500	U
108101	4-Methyl-2-Pentanone	3100	U
591786	2-Hexanone	2500	U
127184	Tetrachloroethene	130	U
79345	1,1,2,2-Tetrachloroethane	250	U
108883	Toluene	630	U
108907	Chlorobenzene	500	U
100414	Ethylbenzene	630	U
100425	Styrene	630	U
108383	m&p-Xylenes	630	U
95476	o-Xylene	630	U
541731	1,3-Dichlorobenzene	630	U
95501	1,2-Dichlorobenzene	630	U
106467	1,4-Dichlorobenzene	630	U
1634044	Methyl-t-butyl ether	630	U
108203	Di-isopropyl-ether	630	U
75650	t-Butyl Alcohol	13000	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(M

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4396

Level: (low/med) MED Date Recvd/Ext:

% Solid: 100 Date Analyzed: 04/19/95

Column: CAP Dilution Factor: 125

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4396::QT
Data File: >E4396::D1
Name: DAILY BLK(MEOH)
Misc: M

Quant Rev: 7
Quant Time: 950419 15:34
Injected at: 950419 15:09
Dilution Factor: 1.00000
Instrument ID: MSD_1

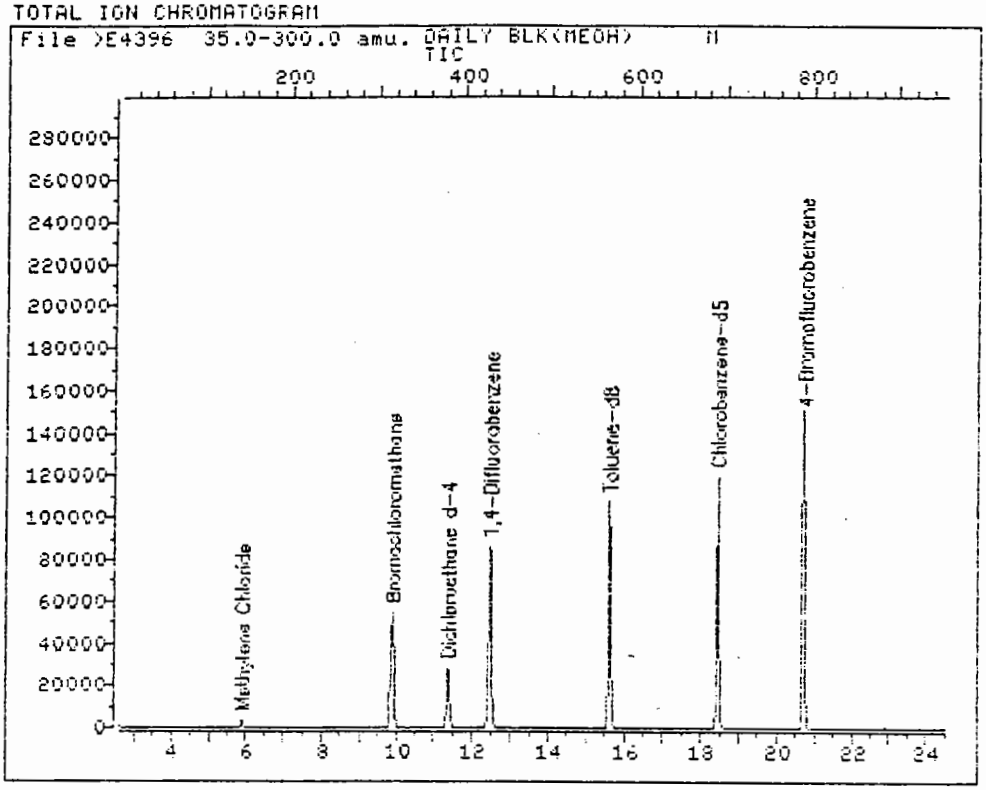
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950419 14:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	45383	50.00	ug/L	97
9)	Methylene Chloride	5.90	144	3855	3.18	ug/L	96
19)	1,2-Dichloroethane-d4	11.37	382	12903	46.96	ug/L	94
28)	*1,4-Difluorobenzene	12.47	430	196519	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.44	690	167434	50.00	ug/L	95
46)	Toluene d-8	15.62	567	177886	50.65	ug/L	94
53)	Bromofluorobenzene	20.72	789	140681	49.75	ug/L	96

* Compound is ISTD

YH 05/19/95

TOTAL ION CHROMATOGRAM



Data File: >E4396::D1
Name: DAILY BLK(MEOH)
Misc: M

Quant Output File: ^E4396::QT
Instrument ID: MSD_1

Id File: IDWVO1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950419 14:06

Operator ID: LIN
Quant Time : 950419 15:34
Injected at: 950419 15:09

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID :)E4417
Date Analyzed : 04/20/95
Dilution Factor: 125
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	1300	U	124481	Dibromochloromethane	630	U
74839	Bromomethane	1300	U	79005	1,1,2-Trichloroethane	380	U
75014	Vinyl Chloride	630	U	71432	Benzene	130	U
75003	Chloroethane	1300	U	10061026	Trans-1,3-Dichloropropene	630	U
75092	Methylene Chloride	1300	840J	110758	2-Chloroethylvinylether	1300	U
67641	Acetone	2500	U	75252	Bromoform	500	U
75150	Carbon Disulfide	630	U	108101	4-Methyl-2-Pentanone	3100	U
75694	Trichlorofluoromethane	630	U	591786	2-Hexanone	2500	U
75354	1,1-Dichloroethene	250	U	127184	Tetrachloroethene	130	U
75343	1,1-Dichloroethane	630	U-	79345	1,1,2,2-Tetrachloroethane	250	U
156605	Trans-1,2-Dichloroethene	630	U	108883	Toluene	630	U
67663	Chloroform	630	U	108907	Chlorobenzene	500	U
107062	1,2-Dichloroethane	250	U	100414	Ethylbenzene	630	U
78933	2-Butanone	3100	U	100425	Styrene	630	U
71556	1,1,1-Trichloroethane	630	U	108383	m&p-Xylenes	630	U
56235	Carbon Tetrachloride	250	U	95476	o-Xylene	630	U
108054	Vinyl Acetate	1300	U	541731	1,3-Dichlorobenzene	630	U
75274	Bromodichloromethane	130	U	95501	1,2-Dichlorobenzene	630	U
78875	1,2-Dichloropropane	130	U	106467	1,4-Dichlorobenzene	630	U
10061015	cis-1,3-Dichloropropene	630	U	1634044	Methyl-t-butyl ether	630	U
79016	Trichloroethene	130	U	108203	Di-isopropyl-ether	630	U
				75650	t-Butyl Alcohol	13000	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(M

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4417

Level: (low/med) MED Date Recvd/Ext:

% Solid: 100 Date Analyzed: 04/20/95

Column: CAP Dilution Factor: 125

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4417::QT
Data File: >E4417::D1
Name: DAILY BLK(MEOH)
Misc: M

Quant Rev: 7
Quant Time: 950420 15:52
Injected at: 950420 15:26
Dilution Factor: 1.00000
Instrument ID: MSD_1

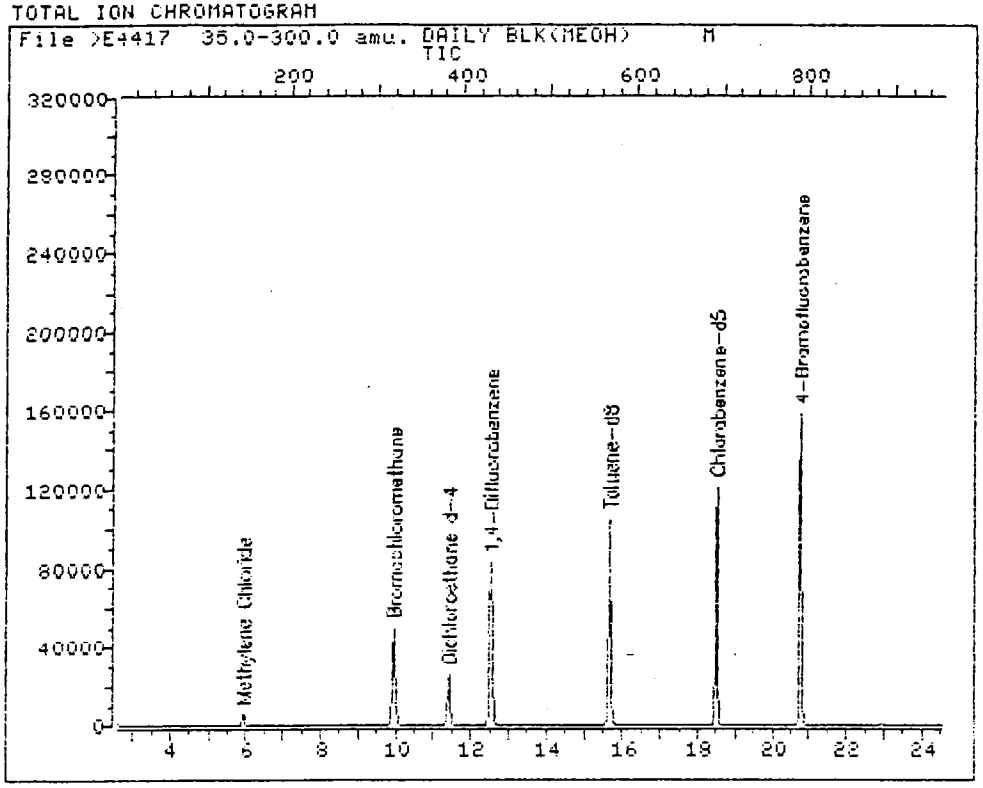
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950420 14:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.94	320	43466	50.00	ug/L	98
9)	Methylene Chloride	5.92	145	6965	6.69	ug/L	99
19)	1,2-Dichloroethane-d4	11.41	384	12889	48.60	ug/L	94
28)	*1,4-Difluorobenzene	12.51	432	188591	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.51	693	163791	50.00	ug/L	96
46)	Toluene d-8	15.66	569	175209	49.99	ug/L	95
53)	Bromofluorobenzene	20.76	791	134680	49.88	ug/L	93

* Compound is ISTD

Yu 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4417::D1 Quant Output File: ^E4417::QT
Name: DAILY BLK(MEOH) Instrument ID: MSD_1
Misc: M

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950420 14:07

Operator ID: LIN
Quant Time : 950420 15:52
Injected at: 950420 15:26

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Water
Percent Solid : 0
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : >E4420
Date Analyzed : 04/20/95
Dilution Factor: 1
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/L (PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U	124481	Dibromochloromethane	5	U
74839	Bromomethane	10	U	79005	1,1,2-Trichloroethane	3	U
75014	Vinyl Chloride	5	U	71432	Benzene	1	U
75003	Chloroethane	10	U	10061026	Trans-1,3-Dichloropropene	5	U
75092	Methylene Chloride	10	3J	110758	2-Chloroethylvinylether	10	U
67641	Acetone	20	U	75252	Bromoform	4	U
75150	Carbon Disulfide	5	U	108101	4-Methyl-2-Pentanone	25	U
75694	Trichlorofluoromethane	5	U	591786	2-Hexanone	20	U
75354	1,1-Dichloroethene	2	U	127184	Tetrachloroethene	1	U
75343	1,1-Dichloroethane	5	U-	79345	1,1,2,2-Tetrachloroethane	2	U
156605	Trans-1,2-Dichloroethene	5	U	108883	Toluene	5	U
67663	Chloroform	5	U	108907	Chlorobenzene	4	U
107062	1,2-Dichloroethane	2	U	100414	Ethylbenzene	5	U
78933	2-Butanone	25	U	100425	Styrene	5	U
71556	1,1,1-Trichloroethane	5	U	108383	m&p-Xylenes	5	U
56235	Carbon Tetrachloride	2	U	95476	o-Xylene	5	U
108054	Vinyl Acetate	10	U	541731	1,3-Dichlorobenzene	5	U
75274	Bromodichloromethane	1	U	95501	1,2-Dichlorobenzene	5	U
78875	1,2-Dichloropropane	1	U	106467	1,4-Dichlorobenzene	5	U
10061015	cis-1,3-Dichloropropene	5	U	1634044	Methyl-t-butyl ether	5	U
79016	Trichloroethene	1	U	108203	Di-isopropyl-ether	5	U
				75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(A

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Client ID:

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4420

Level: (low/med) LOW Date Recvd/Ext:

% Solid: 0 Date Analyzed: 04/20/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4420::QT
Data File: >E4420::D1
Name: DAILY BLK(A)
Misc: A

Quant Rev: 7
Quant Time: 950420 18:53
Injected at: 950420 18:28
Dilution Factor: 1.00000
Instrument ID: MSD_1

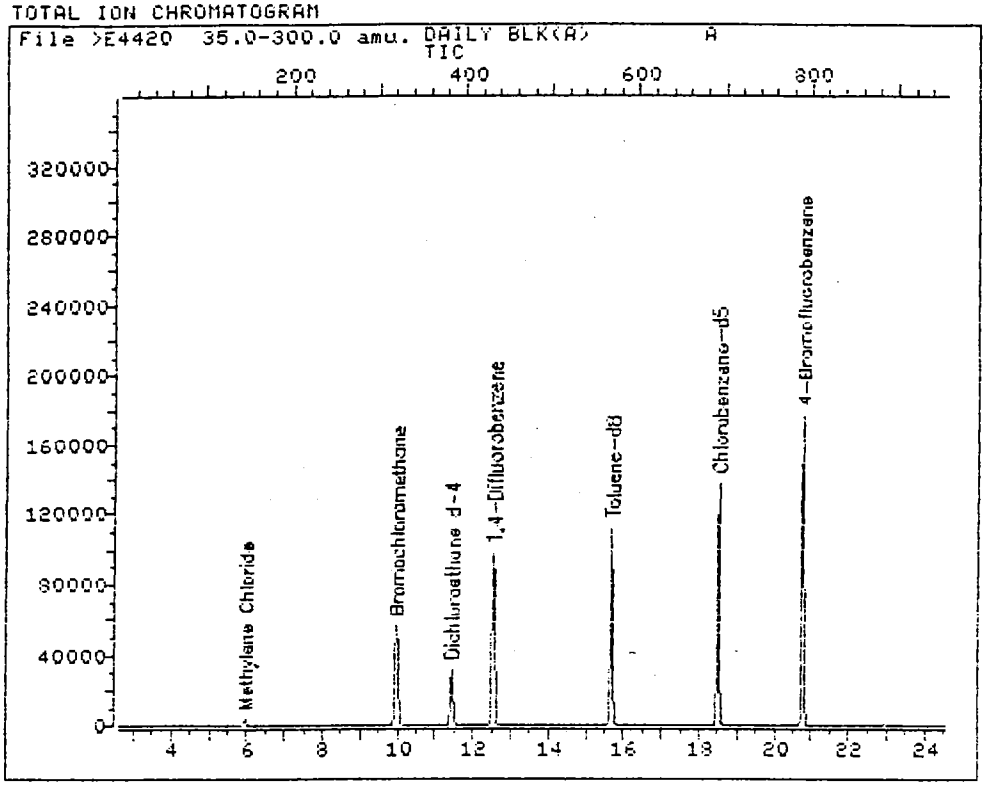
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950420 14:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	50023	50.00	ug/L	99
9)	Methylene Chloride	5.97	147	3890	3.25	ug/L	98
19)	1,2-Dichloroethane-d4	11.44	385	14387	47.14	ug/L	94
28)	*1,4-Difluorobenzene	12.54	433	212671	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.51	693	181281	50.00	ug/L	94
46)	Toluene d-8	15.68	570	193067	49.77	ug/L	96
53)	Bromofluorobenzene	20.76	791	151416	50.67	ug/L	96

* Compound is ISTD

YL 05/31/95

TOTAL ION CHROMATOGRAM



Data File: >E4420::D1 Quant Output File: ^E4420::QT
Name: DAILY BLK(A) Instrument ID: MSD_1
Misc: A

Id File: IDWVQ1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950420 14:07

Operator ID: LIN
Quant Time : 950420 18:53
Injected at: 950420 18:28

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : >E4434
Date Analyzed : 04/21/95
Dilution Factor: 1
Sample Wt/Vol : 5.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U
74839	Bromomethane	10	U
75014	Vinyl Chloride	5	U
75003	Chloroethane	10	U
75092	Methylene Chloride	10	4J
67641	Acetone	20	7J
75150	Carbon Disulfide	5	U
75694	Trichlorofluoromethane	5	U
75354	1,1-Dichloroethene	2	U
75343	1,1-Dichloroethane	5	U-
156605	Trans-1,2-Dichloroethene	5	U
67663	Chloroform	5	U
107062	1,2-Dichloroethane	2	U
78933	2-Butanone	25	U
71556	1,1,1-Trichloroethane	5	U
56235	Carbon Tetrachloride	2	U
108054	Vinyl Acetate	10	U
75274	Bromodichloromethane	1	U
78875	1,2-Dichloropropane	1	U
10061015	cis-1,3-Dichloropropene	5	U
79016	Trichloroethene	1	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	5	U
79005	1,1,2-Trichloroethane	3	U
71432	Benzene	1	U
10061026	Trans-1,3-Dichloropropene	5	U
110758	2-Chloroethylvinylether	10	U
75252	Bromoform	4	U
108101	4-Methyl-2-Pentanone	25	U
591786	2-Hexanone	20	U
127184	Tetrachloroethene	1	U
79345	1,1,2,2-Tetrachloroethane	2	U
108883	Toluene	5	U
108907	Chlorobenzene	4	U
100414	Ethylbenzene	5	U
100425	Styrene	5	U
108383	m&p-Xylenes	5	U
95476	o-Xylene	5	U
541731	1,3-Dichlorobenzene	5	U
95501	1,2-Dichlorobenzene	5	U
106467	1,4-Dichlorobenzene	5	U
1634044	Methyl-t-butyl ether	5	U
108203	Di-isopropyl-ether	5	U
75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(S)

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0(g/ml) g Lab File ID: >E4434

Level: (low/med) LOW Date Recvd/Ext:

% Solid: 100 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4434::QT
Data File: >E4434::D1
Name: DAILY BLK(S)
Misc: S

Quant Rev: 7
Quant Time: 950421 16:14
Injected at: 950421 15:48
Dilution Factor: 1.00000
Instrument ID: MSD_1

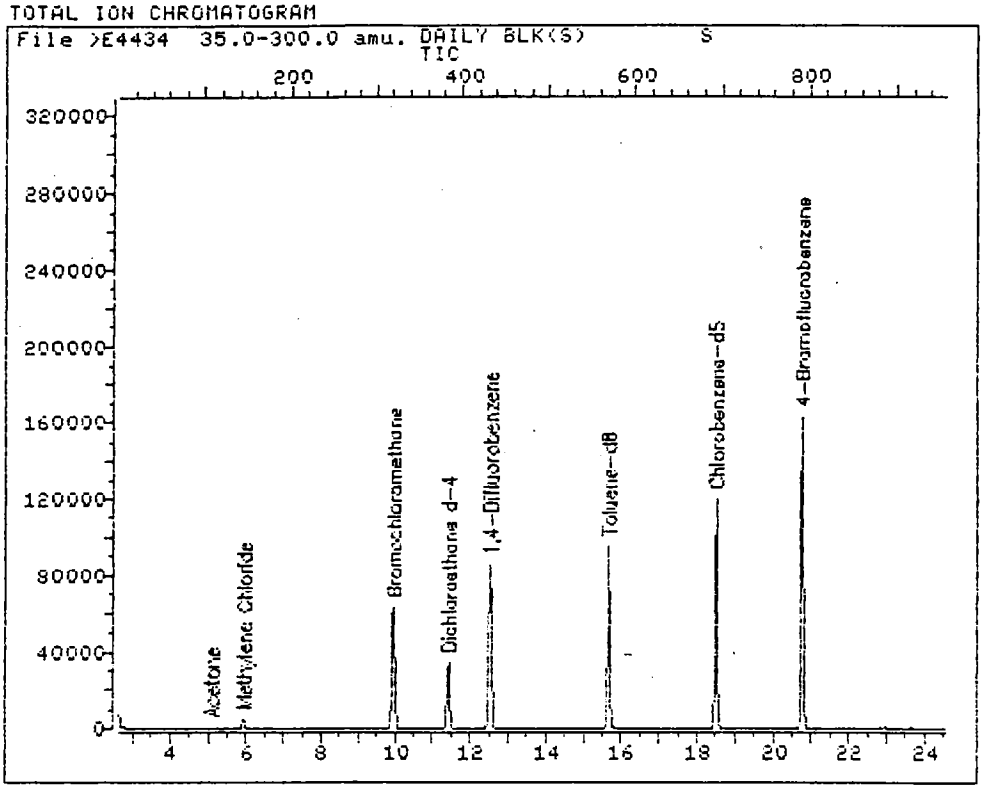
ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:10
Last Qcal Time: 950421 15:02

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	52697	50.00	ug/L	98
9)	Methylene Chloride	5.95	146	5254	3.97	ug/L	94
10)	Acetone	5.10	109	1595	6.74	ug/L	80
19)	1,2-Dichloroethane-d4	11.44	385	16092	48.94	ug/L	94
28)	*1,4-Difluorobenzene	12.54	433	189955	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.51	693	158996	50.00	ug/L	96
46)	Toluene d-8	15.66	569	166704	50.17	ug/L	95
53)	Bromofluorobenzene	20.76	791	138158	49.43	ug/L	92

* Compound is ISTD

YK 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4434::D1 Quant Output File: ^E4434::QT
Name: DAILY BLK(S) Instrument ID: MSD_1
Misc: S

Id File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:10 Last Qcal Time: 950421 15:02

Operator ID: LIN
Quant Time : 950421 16:14
Injected at: 950421 15:48

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : >E4437
Date Analyzed : 04/21/95
Dilution Factor: 125
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	1300	U
74839	Bromomethane	1300	U
75014	Vinyl Chloride	630	U
75003	Chloroethane	1300	U
75092	Methylene Chloride	1300	670J
67641	Acetone	2500	U
75150	Carbon Disulfide	630	U
75694	Trichlorofluoromethane	630	U
75354	1,1-Dichloroethene	250	U
75343	1,1-Dichloroethane	630	U-
156605	Trans-1,2-Dichloroethene	630	U
67663	Chloroform	630	U
107062	1,2-Dichloroethane	250	U
78933	2-Butanone	3100	U
71556	1,1,1-Trichloroethane	630	U
56235	Carbon Tetrachloride	250	U
108054	Vinyl Acetate	1300	U
75274	Bromodichloromethane	130	U
78875	1,2-Dichloropropane	130	U
10061015	cis-1,3-Dichloropropene	630	U
79016	Trichloroethene	130	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	630	U
79005	1,1,2-Trichloroethane	380	U
71432	Benzene	130	U
10061026	Trans-1,3-Dichloropropene	630	U
110758	2-Chloroethylvinylether	1300	U
75252	Bromoform	500	U
108101	4-Methyl-2-Pentanone	3100	U
591786	2-Hexanone	2500	U
127184	Tetrachloroethene	130	U
79345	1,1,2,2-Tetrachloroethane	250	U
108883	Toluene	630	U
108907	Chlorobenzene	500	U
100414	Ethylbenzene	630	U
100425	Styrene	630	U
108383	m&p-Xylenes	630	U
95476	o-Xylene	630	U
541731	1,3-Dichlorobenzene	630	U
95501	1,2-Dichlorobenzene	630	U
106467	1,4-Dichlorobenzene	630	U
1634044	Methyl-t-butyl ether	630	U
108203	Di-isopropyl-ether	630	U
75650	t-Butyl Alcohol	13000	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(M)

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4437

Level: (low/med) MED Date Recvd/Ext:

% Solid: 100 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 125

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4437::QT
Data File: >E4437::D1
Name: DAILY BLK(MEOH)
Misc: M

Quant Rev: 7
Quant Time: 950421 17:54
Injected at: 950421 17:29
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950421 14:32

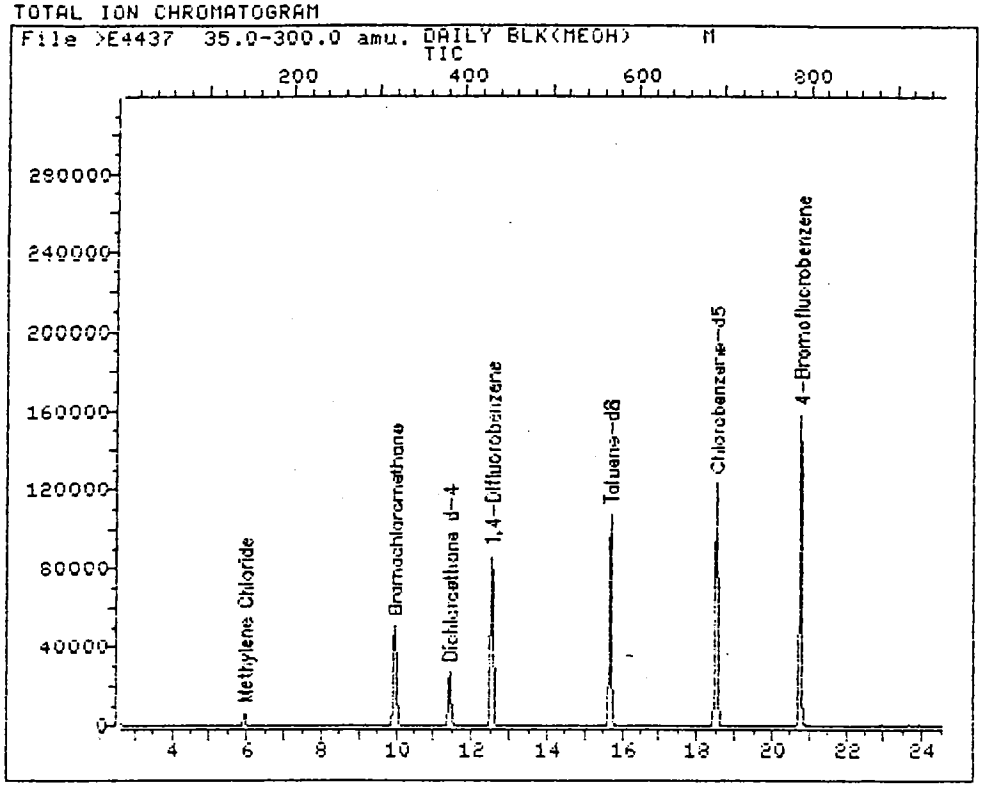
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.96	320	42850	50.00	ug/L	96
9)	Methylene Chloride	5.94	145	6612	5.33	ug/L	99
19)	1,2-Dichloroethane-d4	11.43	384	12832	49.38	ug/L	94
28)	*1,4-Difluorobenzene	12.53	432	190238	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.50	692	169187	50.00	ug/L	94
46)	Toluene d-8	15.68	569	178758	50.13	ug/L	95
53)	Bromofluorobenzene	20.76	790	138704	48.77	ug/L	85

* Compound is ISTD

000 36

Yu 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4437::D1 Quant Output File: ^E4437::QT
Name: DAILY BLK(MEOH) Instrument ID: MSD_1
Misc: M

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950421 14:32

Operator ID: LIN
Quant Time : 950421 17:54
Injected at: 950421 17:29

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-1 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 86
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30027
Lab File ID : >E4398
Date Analyzed : 04/19/95
Dilution Factor: 125
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	1500	U	124481	Dibromochloromethane	730	U
74839	Bromomethane	1500	U	79005	1,1,2-Trichloroethane	440	U
75014	Vinyl Chloride	730	U	71432	Benzene	150	U
75003	Chloroethane	1500	U	10061026	Trans-1,3-Dichloropropene	730	U
75092	Methylene Chloride	1500	570JB	110758	2-Chloroethylvinylether	1500	U
67641	Acetone	2900	U	75252	Bromoform	580	U
75150	Carbon Disulfide	730	U	108101	4-Methyl-2-Pentanone	3600	U
75694	Trichlorofluoromethane	730	U	591786	2-Hexanone	2900	U
75354	1,1-Dichloroethene	290	U	127184	Tetrachloroethene	150	U
75343	1,1-Dichloroethane	730	U-	79345	1,1,2,2-Tetrachloroethane	290	U
156605	Trans-1,2-Dichloroethene	730	U	108883	Toluene	730	U
67663	Chloroform	730	U	108907	Chlorobenzene	580	U
107062	1,2-Dichloroethane	290	U	100414	Ethylbenzene	730	U
78933	2-Butanone	3600	U	100425	Styrene	730	U
71556	1,1,1-Trichloroethane	730	U	108383	m&p-Xylenes	730	23000
56235	Carbon Tetrachloride	290	U	95476	o-Xylene	730	11000
108054	Vinyl Acetate	1500	U	541731	1,3-Dichlorobenzene	730	U
75274	Bromodichloromethane	150	U	95501	1,2-Dichlorobenzene	730	U
78875	1,2-Dichloropropane	150	U	106467	1,4-Dichlorobenzene	730	U
10061015	cis-1,3-Dichloropropene	730	U	1634044	Methyl-t-butyl ether	730	U
79016	Trichloroethene	150	U	108203	Di-isopropyl-ether	730	U
				75650	t-Butyl Alcohol	15000	U

TARGET COMPOUND SUMMARY: 34000

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: AA30027

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-1 SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4398

Level: (low/med) MED Date Recvd/Ext: 04/17/95-N/A

% Solid: 86 Date Analyzed: 04/19/95

Column: CAP Dilution Factor: 125

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	564023	Pentane, 2,2,3-trimethyl-	11.83	14535	J
2	592278	Heptane, 2-methyl-	14.91	10320	J
3	3221612	Octane, 2-methyl-	18.13	10174	J
4	611143	Benzene, 1-ethyl-2-methyl-	21.39	26163	J
5	108678	Benzene, 1,3,5-trimethyl-	21.56	15988	J
6	95636	Benzene, 1,2,4-trimethyl-	22.27	29070	J
7	1074437	Benzene, 1-methyl-3-propyl-	23.47	12791	J
8	1758889	Benzene, 2-ethyl-1,4-dimethy	23.60	11628	J
9		Unknown Substituted Benzene	24.16	8576	J
10		Unknown Substituted Benzene	24.30	8430	J

Tentative Compound Summary: 147674

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4398::QT
Data File: >E4398::D1
Name: AA30027
Misc: M,100ul OF 4g/10ml

Quant Rev: 7
Quant Time: 950419 16:43
Injected at: 950419 16:13
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950419 14:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	47846	50.00	ug/L	96
9)	Methylene Chloride	5.88	143	4998	3.91	ug/L	98
19)	1,2-Dichloroethane-d4	11.37	382	13669	47.19	ug/L	95
28)	*1,4-Difluorobenzene	12.47	430	204730	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.45	690	173020	50.00	ug/L	95
46)	Toluene d-8	15.62	567	189470	52.21	ug/L	97
50)	m&p-Xylenes	18.98	713	281456	161.17	ug/L	97
51)	o-Xylene	19.71	745	316958	78.98	ug/L	94
53)	Bromofluorobenzene	20.70	788	145172	49.68	ug/L	91

* Compound is ISTD

5/02/95

YL 05/01/95

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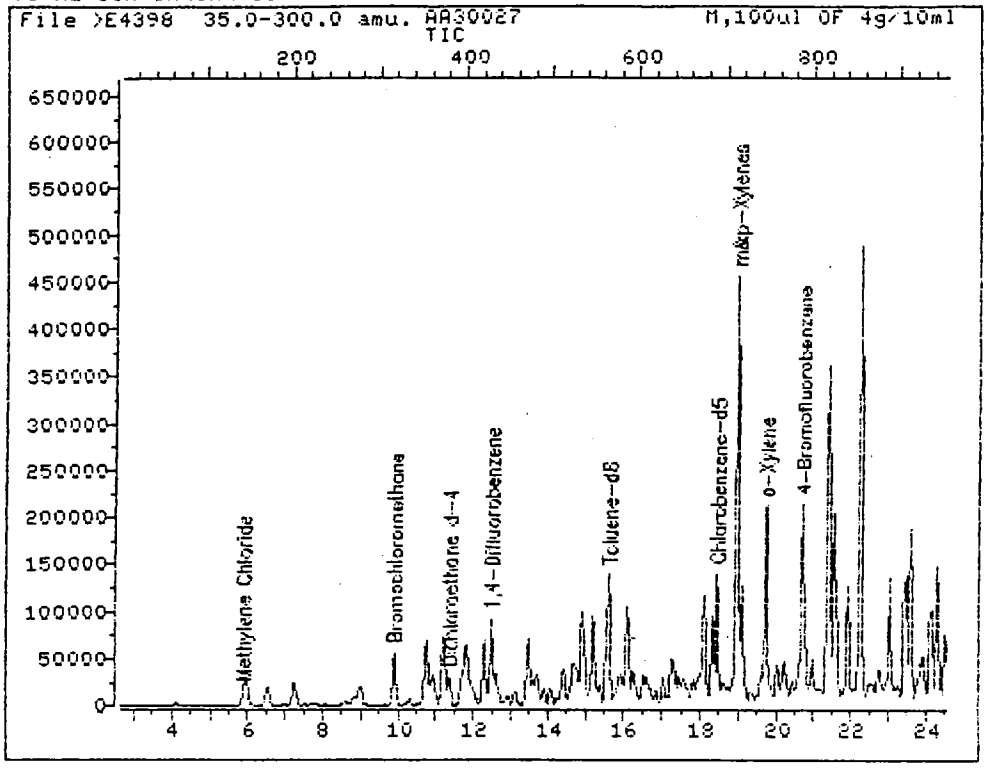
TOTAL ION CHROMATOGRAM



Data File: >E4398::D1 Quant Output File: ^E4398::QT
Name: AA30027 Instrument ID: MSD_1
Misc: M,100ul OF 4g/10ml

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950419 14:06

Operator ID: LIN
Quant Time : 950419 16:43
Injected at: 950419 16:13

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-2 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 92
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30028
Lab File ID : >E4424
Date Analyzed : 04/20/95
Dilution Factor: 2500
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	27000	U	124481	Dibromochloromethane	14000	U
74839	Bromomethane	27000	U	79005	1,1,2-Trichloroethane	8200	U
75014	Vinyl Chloride	14000	U	71432	Benzene	2700	15000
75003	Chloroethane	27000	U	10061026	Trans-1,3-Dichloropropene	14000	U
75092	Methylene Chloride	27000	100000JB	110758	2-Chloroethylvinylether	27000	U
67641	Acetone	54000	U	75252	Bromoform	11000	U
75150	Carbon Disulfide	14000	U	108101	4-Methyl-2-Pentanone	68000	U
75694	Trichlorofluoromethane	14000	U	591786	2-Hexanone	54000	U
75354	1,1-Dichloroethene	5400	U	127184	Tetrachloroethene	2700	U
75343	1,1-Dichloroethane	14000	U	79345	1,1,2,2-Tetrachloroethane	5400	U
156605	Trans-1,2-Dichloroethene	14000	U	108883	Toluene	14000	320000
67663	Chloroform	14000	U	108907	Chlorobenzene	11000	U
107062	1,2-Dichloroethane	5400	U	100414	Ethylbenzene	14000	160000
78933	2-Butanone	68000	U	100425	Styrene	14000	U
71556	1,1,1-Trichloroethane	14000	U	108383	m&p-Xylenes	14000	610000
56235	Carbon Tetrachloride	5400	U	95476	o-Xylene	14000	230000
108054	Vinyl Acetate	27000	U	541731	1,3-Dichlorobenzene	14000	U
75274	Bromodichloromethane	2700	U	95501	1,2-Dichlorobenzene	14000	U
78875	1,2-Dichloropropane	2700	U	106467	1,4-Dichlorobenzene	14000	U
10061015	cis-1,3-Dichloropropene	14000	U	1634044	Methyl-t-butyl ether	14000	U
79016	Trichloroethene	2700	U	108203	Di-isopropyl-ether	14000	U
				75650	t-Butyl Alcohol	270000	U

TARGET COMPOUND SUMMARY: 1335000

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30028

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-2 SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4424

Level: (low/med) MED Date Recvd/Ext: 04/17/95-N/A

% Solid: 92 Date Analyzed: 04/20/95

Column: CAP Dilution Factor: 2500

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	564023	Pentane, 2,2,3-trimethyl-	11.90	298913	J
2	592278	Heptane, 2-methyl-	14.98	228261	J
3	589811	Heptane, 3-methyl-	15.28	187500	J
4	3221612	Octane, 2-methyl-	18.18	184783	J
5	611143	Benzene, 1-ethyl-2-methyl-	21.44	489131	J
6	108678	Benzene, 1,3,5-trimethyl-	21.60	269022	J
7	95636	Benzene, 1,2,4-trimethyl-	22.32	543478	J
8	622968	Benzene, 1-ethyl-4-methyl-	23.10	168478	J
9	1074437	Benzene, 1-methyl-3-propyl-	23.52	225544	J
10	1758889	Benzene, 2-ethyl-1,4-dimethy	23.65	206522	J

Tentative Compound Summary: 2801631

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4424::QT
Data File: >E4424::D1
Name: AA30028
Misc: M,5ul OF 4g/10ml

Quant Rev: 7
Quant Time: 950420 21:11
Injected at: 950420 20:41
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950420 14:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	53179	50.00	ug/L	99
9)	Methylene Chloride	5.97	147	4834	3.79	ug/L	93
19)	1,2-Dichloroethane-d4	11.44	385	15840	48.82	ug/L	96
28)	*1,4-Difluorobenzene	12.54	433	227525	50.00	ug/L	98
35)	Benzene	11.58	391	20252	5.44	ug/L	95
39)	*Chlorobenzene-d5	18.50	692	190937	50.00	ug/L	96
45)	Toluene	15.81	575	289526	117.14	ug/L	94
46)	Toluene d-8	15.67	569	211993	51.88	ug/L	97
48)	Ethylbenzene	18.80	705	320735	60.57	ug/L	97
50)	m&p-Xylenes	19.03	715	414412	224.97	ug/L	96
51)	o-Xylene	19.79	748	364004	85.89	ug/L	99
53)	Bromofluorobenzene	20.75	790	157718	50.11	ug/L	88

* Compound is ISTD

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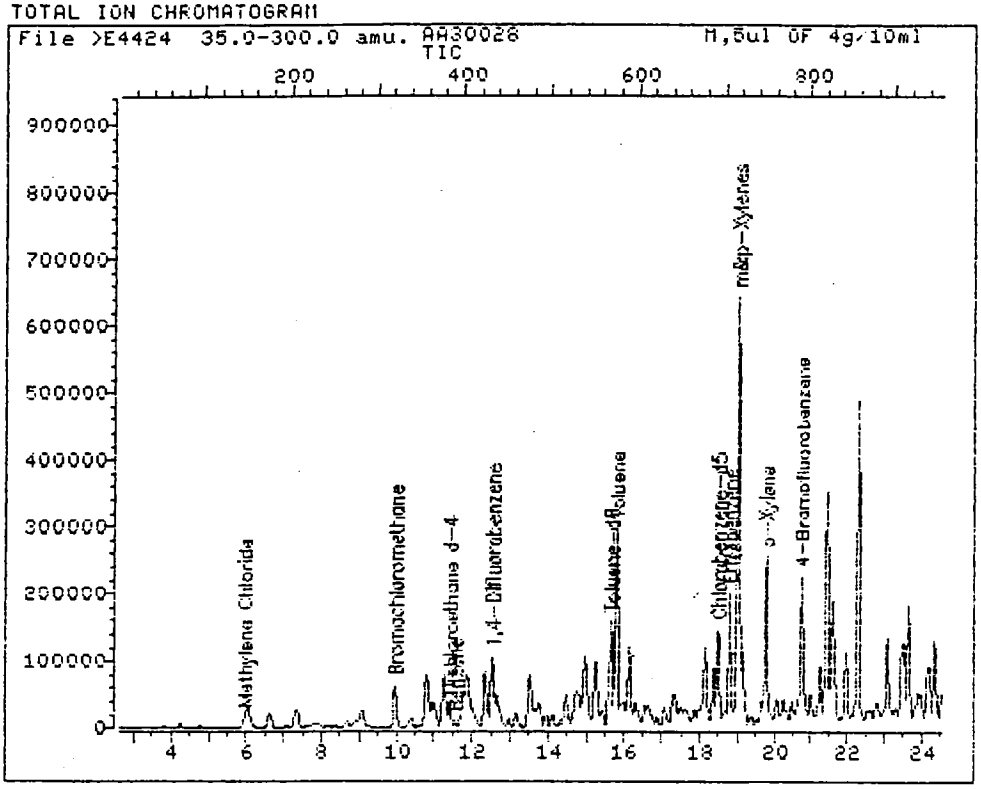
TOTAL ION CHROMATOGRAM



Data File: >E4424::D1 Quant Output File: ^E4424::QT
Name: AA30028 Instrument ID: MSD_1
Misc: M,5ul OF 4g/10ml

Id File: IDWVO1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950420 14:07

Operator ID: LIN
Quant Time : 950420 21:11
Injected at: 950420 20:41

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-3 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 90
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30029
Lab File ID : >E4442
Date Analyzed : 04/21/95
Dilution Factor: 5
Sample Wt/Vol : 1.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	56	U
74839	Bromomethane	56	U
75014	Vinyl Chloride	28	U
75003	Chloroethane	56	U
75092	Methylene Chloride	56	49JB
67641	Acetone	110	130 B
75150	Carbon Disulfide	28	U
75694	Trichlorofluoromethane	28	U
75354	1,1-Dichloroethene	11	U
75343	1,1-Dichloroethane	28	U-
156605	Trans-1,2-Dichloroethene	28	U
67663	Chloroform	28	U
107062	1,2-Dichloroethane	11	U
78933	2-Butanone	140	U
71556	1,1,1-Trichloroethane	28	U
56235	Carbon Tetrachloride	11	U
108054	Vinyl Acetate	56	U
75274	Bromodichloromethane	6	U
78875	1,2-Dichloropropane	6	U
10061015	cis-1,3-Dichloropropene	28	U
79016	Trichloroethene	6	U
124481	Dibromochloromethane	28	U
79005	1,1,2-Trichloroethane	17	U
71432	Benzene	6	U
10061026	Trans-1,3-Dichloropropene	28	U
110758	2-Chloroethylvinylether	56	U
75252	Bromoform	22	U
108101	4-Methyl-2-Pentanone	140	U
591786	2-Hexanone	110	U
127184	Tetrachloroethene	6	U
79345	1,1,2,2-Tetrachloroethane	11	U
108883	Toluene	28	U
108907	Chlorobenzene	22	U
100414	Ethylbenzene	29	U
100425	Styrene	28	U
108383	m&p-Xylenes	29	7J
95476	o-Xylene	28	43J
541731	1,3-Dichlorobenzene	29	U
95501	1,2-Dichlorobenzene	28	U
106467	1,4-Dichlorobenzene	29	U
1634044	Methyl-t-butyl ether	28	13J
108203	Di-isopropyl-ether	29	U
75650	t-Butyl Alcohol	560	110J

TARGET COMPOUND SUMMARY: 69J

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30029

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-3 SOIL

Sample wt/vol: 1.0(g/ml) g Lab File ID: >E4442

Level: (low/med) LOW Date Recvd/Ext: 04/17/95-N/A

% Solid: 90 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 5

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	921471	Hexane, 2,3,4-trimethyl-	18.17	611	J
2	108678	Benzene, 1,3,5-trimethyl-	21.62	1278	J
3		Unknown Substituted Benzene	21.99	889	J
4		Unknown Substituted Benzene	22.82	344	J
5		Unknown Substituted Benzene	23.10	1056	J
6	1074437	Benzene, 1-methyl-3-propyl-	23.54	889	J
7	934805	Benzene, 4-ethyl-1,2-dimethyl	23.65	1389	J
8	1074551	Benzene, 1-methyl-4-propyl-	24.00	1167	J
9		Unknown Substituted Benzene	24.23	417	J
10		Unknown Substituted Benzene	24.37	1278	J

Tentative Compound Summary: 9317

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4442::QT
Data File: >E4442::D1
Name: AA30029
Misc: S,1g

Quant Rev: 7
Quant Time: 950421 20:53
Injected at: 950421 20:22
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:10
Last Qcal Time: 950421 15:02

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	45773	50.00	ug/L	93
7)	t-Butyl Alcohol	6.38	165	2141	19.00	ug/L	72
8)	Methyl-t-butyl ether	6.68	178	45952	23.58	ug/L	89
9)	Methylene Chloride	5.97	147	10167	8.85	ug/L	94
10)	Acetone	5.12	110	4867	23.66	ug/L	91
19)	1,2-Dichloroethane-d4	11.44	385	14348	50.24	ug/L	94
28)	*1,4-Difluorobenzene	12.54	433	170382	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.49	692	118430	50.00	ug/L	97
46)	Toluene d-8	15.67	569	129678	52.39	ug/L	96
50)	m&p-Xylenes	19.02	715	1464	1.24	ug/L	91
51)	o-Xylene	19.78	748	216611	77.86	ug/L	95
53)	Bromofluorobenzene	20.77	791	115417	55.44	ug/L	94

* Compound is ISTD

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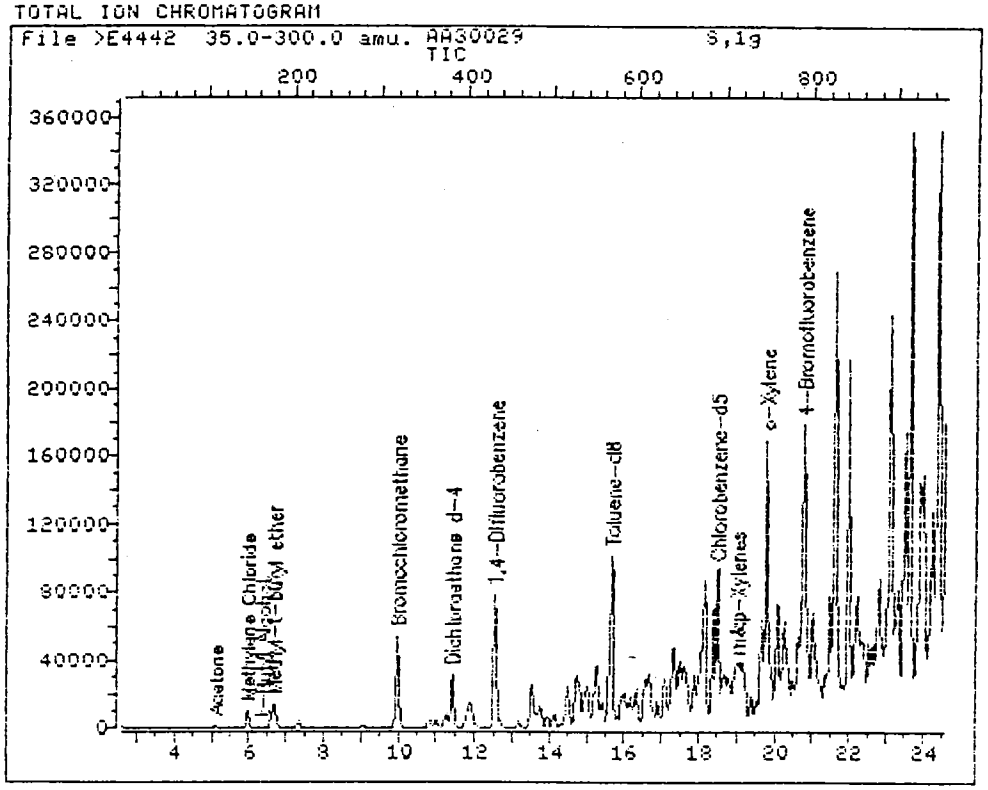
TOTAL ION CHROMATOGRAM



Data File: >E4442::D1 Quant Output File: ^E4442::QT
Name: AA30029 Instrument ID: MSD_1
Misc: S,1g

Id File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:10 Last Qcal Time: 950421 15:02

Operator ID: LIN
Quant Time : 950421 20:53
Injected at: 950421 20:22

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-4 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 87
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30030
Lab File ID : >E4439
Date Analyzed : 04/21/95
Dilution Factor: 250
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	2900	U
74839	Bromomethane	2900	U
75014	Vinyl Chloride	1400	U
75003	Chloroethane	2900	U
75092	Methylene Chloride	2900	1800JB
67641	Acetone	5700	U
75150	Carbon Disulfide	1400	U
75694	Trichlorofluoromethane	1400	U
75354	1,1-Dichloroethene	570	U
75343	1,1-Dichloroethane	1400	U
156605	Trans-1,2-Dichloroethene	1400	U
67663	Chloroform	1400	U
107062	1,2-Dichloroethane	570	U
78933	2-Butanone	7200	U
71556	1,1,1-Trichloroethane	1400	U
56235	Carbon Tetrachloride	570	U
108054	Vinyl Acetate	2900	U
75274	Bromodichloromethane	290	U
78875	1,2-Dichloropropane	290	U
10061015	cis-1,3-Dichloropropene	1400	U
79016	Trichloroethene	290	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	1400	U
79005	1,1,2-Trichloroethane	860	U
71432	Benzene	290	U
10061026	Trans-1,3-Dichloropropene	1400	U
110758	2-Chloroethylvinylether	2900	U
75252	Bromoform	1100	U
108101	4-Methyl-2-Pentanone	7200	U
591786	2-Hexanone	5700	U
127184	Tetrachloroethene	290	U
79345	1,1,2,2-Tetrachloroethane	570	U
108883	Toluene	1400	U
108907	Chlorobenzene	1100	U
100414	Ethylbenzene	1400	U
100425	Styrene	1400	U
108383	m&p-Xylenes	1400	4600
95476	o-Xylene	1400	16000
541731	1,3-Dichlorobenzene	1400	U
95501	1,2-Dichlorobenzene	1400	U
106467	1,4-Dichlorobenzene	1400	U
1634044	Methyl-t-butyl ether	1400	U
108203	Di-isopropyl-ether	1400	U
75650	t-Butyl Alcohol	29000	U

TARGET COMPOUND SUMMARY: 20600

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30030

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-4 SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4439

Level: (low/med) MED Date Recvd/Ext: 04/17/95-N/A

% Solid: 87 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 250

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1		Unknown Substituted Benzene	21.46	37356	J
2	108678	Benzene, 1,3,5-trimethyl-	21.62	31609	J
3		Unknown Substituted Benzene	21.99	18103	J
4	95636	Benzene, 1,2,4-trimethyl-	22.31	17816	J
5	622968	Benzene, 1-ethyl-4-methyl-	23.10	21264	J
6	1074437	Benzene, 1-methyl-3-propyl-	23.53	34483	J
7	1758889	Benzene, 2-ethyl-1,4-dimethy	23.65	34483	J
8	1074175	Benzene, 1-methyl-2-propyl-	24.00	24713	J
9	2870044	Benzene, 2-ethyl-1,3-dimethy	24.20	28161	J
10	535773	Benzene, 1-methyl-3-(1-methy	24.36	20690	J

Tentative Compound Summary: 268678

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4439::QT
Data File: >E4439::D1
Name: AA30030
Misc: M,50ul OF 4g/10ml

Quant Rev: 7
Quant Time: 950421 19:02
Injected at: 950421 18:33
Dilution Factor: 1.00000
Instrument ID: MSD_1

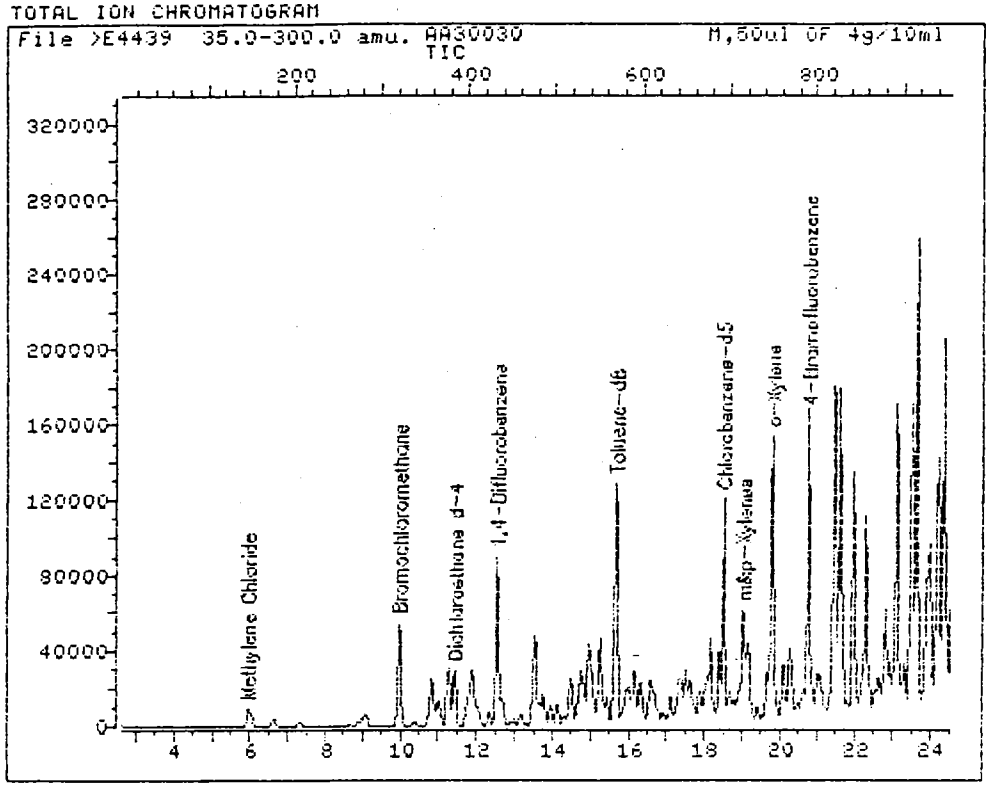
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950421 14:32

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	45170	50.00	ug/L	95
9)	Methylene Chloride	5.95	146	8109	6.20	ug/L	99
19)	1,2-Dichloroethane-d4	11.44	385	13297	48.54	ug/L	96
28)	*1,4-Difluorobenzene	12.54	433	196681	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.50	692	164872	50.00	ug/L	95
46)	Toluene d-8	15.67	569	181205	52.14	ug/L	97
50)	m&p-Xylenes	19.02	715	26519	15.85	ug/L	90
51)	o-Xylene	19.78	748	213725	55.79	ug/L	98
53)	Bromofluorobenzene	20.77	791	136414	49.22	ug/L	9[illegible]

* Compound is ISTD

Yu 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4439::D1 Quant Output File: ^E4439::QT
Name: AA30030 Instrument ID: MSD_1
Misc: M,50ul OF 4g/10ml

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950421 14:32

Operator ID: LIN
Quant Time : 950421 19:02
Injected at: 950421 18:33

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-5 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 90
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30031
Lab File ID : VE4440
Date Analyzed : 04/21/95
Dilution Factor: 2500
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	28000	U
74839	Bromomethane	28000	U
75014	Vinyl Chloride	14000	U
75003	Chloroethane	28000	U
75092	Methylene Chloride	28000	14000JB
67641	Acetone	56000	35000J
75150	Carbon Disulfide	14000	U
75694	Trichlorofluoromethane	14000	U
75354	1,1-Dichloroethene	5600	U
75343	1,1-Dichloroethane	14000	U
156605	Trans-1,2-Dichloroethene	14000	U
67663	Chloroform	14000	U
107062	1,2-Dichloroethane	5600	U
78933	2-Butanone	69000	U
71556	1,1,1-Trichloroethane	14000	U
56235	Carbon Tetrachloride	5600	U
108054	Vinyl Acetate	28000	U
75274	Bromodichloromethane	2800	U
78875	1,2-Dichloropropane	2800	U
10061015	cis-1,3-Dichloropropene	14000	U
79016	Trichloroethene	2800	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	14000	U
79005	1,1,2-Trichloroethane	8300	U
71432	Benzene	2800	U
10061026	Trans-1,3-Dichloropropene	14000	U
110758	2-Chloroethylvinylether	28000	U
75252	Bromoform	11000	U
108101	4-Methyl-2-Pentanone	69000	U
591786	2-Hexanone	56000	U
127184	Tetrachloroethene	2800	U
79345	1,1,2,2-Tetrachloroethane	5600	U
108883	Toluene	14000	25000
108907	Chlorobenzene	11000	U
100414	Ethylbenzene	14000	2900J
100425	Styrene	14000	U
108383	m&p-Xylenes	14000	440000
95476	o-Xylene	14000	200000
541731	1,3-Dichlorobenzene	14000	U
95501	1,2-Dichlorobenzene	14000	U
106467	1,4-Dichlorobenzene	14000	U
1634044	Methyl-t-butyl ether	14000	U
108203	Di-isopropyl-ether	14000	U
75650	t-Butyl Alcohol	280000	U

TARGET COMPOUND SUMMARY: 665000

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30031

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-5 SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4440

Level: (low/med) MED Date Recvd/Ext: 04/17/95-N/A

% Solid: 90 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 2500

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	921471	Hexane, 2,3,4-trimethyl-	18.17	100000	J
2	611143	Benzene, 1-ethyl-2-methyl-	21.46	361111	J
3		Unknown Substituted Benzene	21.62	200000	J
4		Unknown Substituted Benzene	22.31	444444	J
5	622968	Benzene, 1-ethyl-4-methyl-	23.10	119444	J
6		Unknown	23.49	155556	J
7	1758889	Benzene, 2-ethyl-1,4-dimethyl	23.65	147222	J
8	1120214	Undecane	23.92	105556	J
9	2870044	Benzene, 2-ethyl-1,3-dimethyl	24.20	102778	J
10	535773	Benzene, 1-methyl-3-(1-methyl	24.36	97222	J

Tentative Compound Summary: 1833333

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4440::QT
Data File: >E4440::D1
Name: AA30031
Misc: M,5ul OF 4g/10ml

Quant Rev: 7
Quant Time: 950421 19:39
Injected at: 950421 19:09
Dilution Factor: 1.00000
Instrument ID: MSD_1

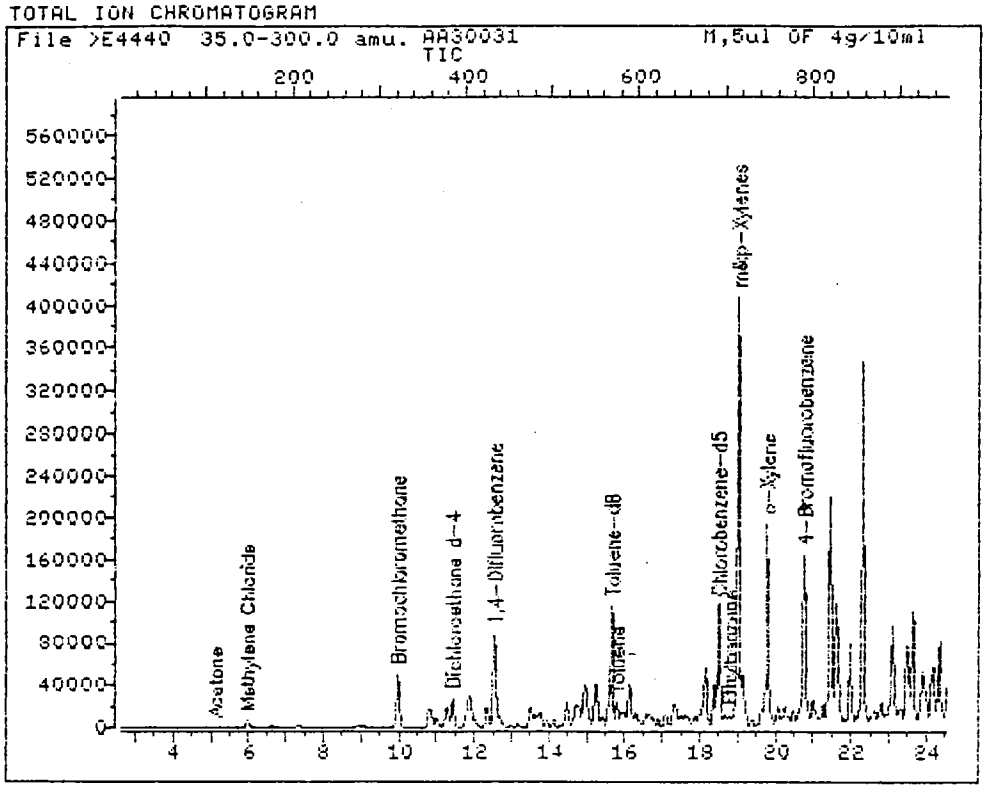
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950421 14:32

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	44188	50.00	ug/L	99
9)	Methylene Chloride	5.97	147	6355	4.97	ug/L	96
10)	Acetone	5.12	110	1360	12.61	ug/L	91
19)	1,2-Dichloroethane-d4	11.44	385	12813	47.81	ug/L	96
28)	*1,4-Difluorobenzene	12.54	433	190734	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.49	692	162278	50.00	ug/L	94
45)	Toluene	15.80	575	19736	9.12	ug/L	97
46)	Toluene d-8	15.67	569	174947	51.15	ug/L	95
48)	Ethylbenzene	18.79	705	4811	1.03	ug/L	96
50)	m&p-Xylenes	19.02	715	262351	159.28	ug/L	96
51)	o-Xylene	19.78	748	274198	72.73	ug/L	96
53)	Bromofluorobenzene	20.77	791	133729	49.03	ug/L	96

* Compound is ISTD

YL 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4440::D1 Quant Output File: ^E4440::QT
Name: AA30031 Instrument ID: MSD_1
Misc: M,5ul OF 4g/10ml

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950421 14:32

Operator ID: LIN
Quant Time : 950421 19:39
Injected at: 950421 19:09

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-6 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 89
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30032
Lab File ID : XE4429
Date Analyzed : 04/20/95
Dilution Factor: 250
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	2800	U
74839	Bromomethane	2800	U
75014	Vinyl Chloride	1400	U
75003	Chloroethane	2800	U
75092	Methylene Chloride	2800	2100JB
67641	Acetone	5600	U
75150	Carbon Disulfide	1400	U
75694	Trichlorofluoromethane	1400	U
75354	1,1-Dichloroethene	560	U
75343	1,1-Dichloroethane	1400	U
156605	Trans-1,2-Dichloroethene	1400	U
67663	Chloroform	1400	U
107062	1,2-Dichloroethane	560	U
78933	2-Butanone	7000	U
71556	1,1,1-Trichloroethane	1400	U
56235	Carbon Tetrachloride	560	U
108054	Vinyl Acetate	2800	U
75274	Bromodichloromethane	280	U
78875	1,2-Dichloropropane	280	U
10061015	cis-1,3-Dichloropropene	1400	U
79016	Trichloroethene	280	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	1400	U
79005	1,1,2-Trichloroethane	840	U
71432	Benzene	280	U
10061026	Trans-1,3-Dichloropropene	1400	U
110758	2-Chloroethylvinylether	2800	U
75252	Bromoform	1100	U
108101	4-Methyl-2-Pentanone	7000	U
591786	2-Hexanone	5600	U
127184	Tetrachloroethene	280	U
79345	1,1,2,2-Tetrachloroethane	560	U
108883	Toluene	1400	U
108907	Chlorobenzene	1100	U
100414	Ethylbenzene	1400	U
100425	Styrene	1400	U
108383	m&p-Xylenes	1400	22000
95476	o-Xylene	1400	18000
541731	1,3-Dichlorobenzene	1400	U
95501	1,2-Dichlorobenzene	1400	U
106467	1,4-Dichlorobenzene	1400	U
1634044	Methyl-t-butyl ether	1400	U
108203	Di-isopropyl-ether	1400	U
75650	t-Butyl Alcohol	28000	U

TARGET COMPOUND SUMMARY: 40000

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30032

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-6 SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4428

Level: (low/med) MED Date Recvd/Ext: 04/17/95-N/A

% Solid: 89 Date Analyzed: 04/20/95

Column: CAP Dilution Factor: 250

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	111842	Nonane	18.17	18820	J
2		Unknown Substituted Benzene	21.46	47753	J
3		Unknown Substituted Benzene	21.62	33708	J
4		Unknown Substituted Benzene	22.31	47753	J
5		Unknown Substituted Benzene	23.10	18539	J
6	1074437	Benzene, 1-methyl-3-propyl-	23.53	27247	J
7	1758889	Benzene, 2-ethyl-1,4-dimethy	23.65	26685	J
8	1120214	Undecane	23.93	16011	J
9		Unknown Substituted Benzene	24.20	20506	J
10		Unknown Substituted Benzene	24.36	19944	J

Tentative Compound Summary: 276966

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4428::QT
Data File: >E4428::D1
Name: AA30032
Misc: M,50ul OF 4g/10ml

Quant Rev: 7
Quant Time: 950420 23:37
Injected at: 950420 23:08
Dilution Factor: 1.00000
Instrument ID: MSD_1

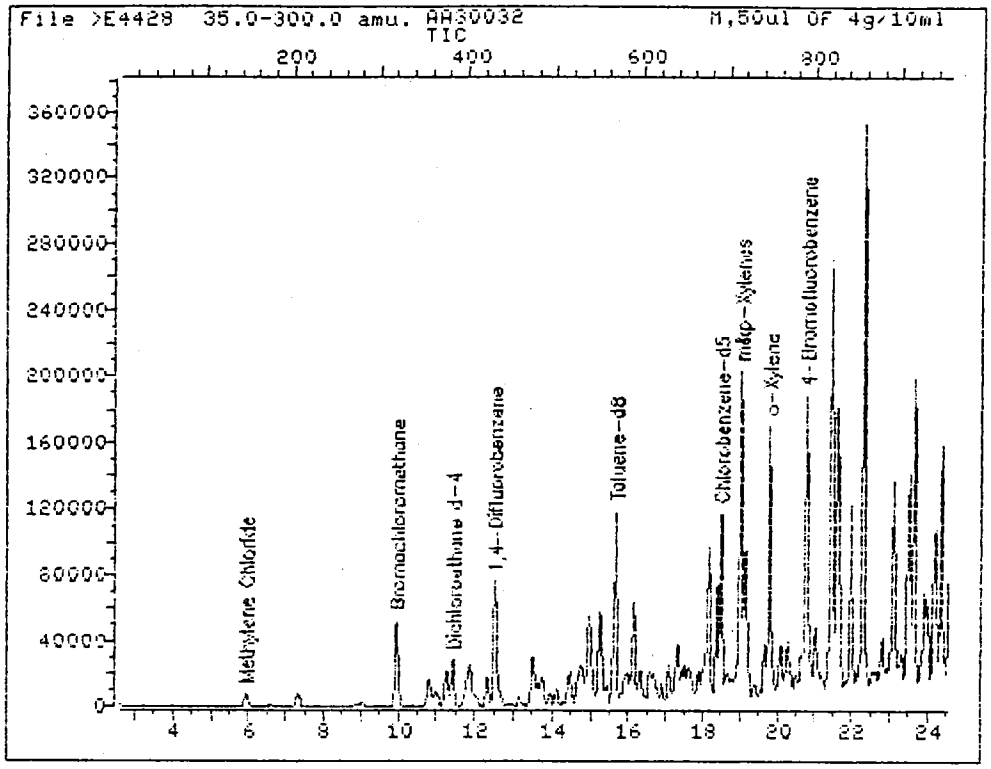
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950420 14:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	44634	50.00	ug/L	93
9)	Methylene Chloride	5.95	146	7959	7.44	ug/L	95
19)	1,2-Dichloroethane-d4	11.44	385	13300	48.84	ug/L	95
28)	*1,4-Difluorobenzene	12.52	432	176981	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.49	692	157312	50.00	ug/L	96
46)	Toluene d-8	15.67	569	166379	49.42	ug/L	96
50)	m&p-Xylenes	19.02	715	117844	77.65	ug/L	95
51)	o-Xylene	19.78	748	228883	65.55	ug/L	94
53)	Bromofluorobenzene	20.77	791	134592	51.90	ug/L	99

* Compound is ISTD

YCI 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4428::D1 Quant Output File: ^E4428::QT
Name: AA30032 Instrument ID: MSD_1
Misc: M,50ul OF 4g/10ml

Id File: IDWVD1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950420 14:07

Operator ID: LIN
Quant Time : 950420 23:37
Injected at: 950420 23:08

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-7 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 84
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30033
Lab File ID : >E4441
Date Analyzed : 04/21/95
Dilution Factor: 625
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	7400	U
74839	Bromomethane	7400	U
75014	Vinyl Chloride	3700	U
75003	Chloroethane	7400	U
75092	Methylene Chloride	7400	5000JB
67641	Acetone	15000	24000
75150	Carbon Disulfide	3700	U
75694	Trichlorofluoromethane	3700	U
75354	1,1-Dichloroethene	1500	U
75343	1,1-Dichloroethane	3700	U
156605	Trans-1,2-Dichloroethene	3700	U
67663	Chloroform	3700	U
107062	1,2-Dichloroethane	1500	U
78933	2-Butanone	19000	U
71556	1,1,1-Trichloroethane	3700	U
56235	Carbon Tetrachloride	1500	U
108054	Vinyl Acetate	7400	U
75274	Bromodichloromethane	740	U
78875	1,2-Dichloropropane	740	U
10061015	cis-1,3-Dichloropropene	3700	U
79016	Trichloroethene	740	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	3700	U
79005	1,1,2-Trichloroethane	2200	U
71432	Benzene	740	3300
10061026	Trans-1,3-Dichloropropene	3700	U
110758	2-Chloroethylvinylether	7400	U
75252	Bromoform	3000	U
108101	4-Methyl-2-Pentanone	19000	U
591786	2-Hexanone	15000	U
127184	Tetrachloroethene	740	U
79345	1,1,2,2-Tetrachloroethane	1500	U
108883	Toluene	3700	39000
108907	Chlorobenzene	3000	U
100414	Ethylbenzene	3700	20000
100425	Styrene	3700	U
108383	m&p-Xylenes	3700	86000
95476	o-Xylene	3700	32000
541731	1,3-Dichlorobenzene	3700	U
95501	1,2-Dichlorobenzene	3700	U
106467	1,4-Dichlorobenzene	3700	U
1634044	Methyl-t-butyl ether	3700	U
108203	Di-isopropyl-ether	3700	U
75650	t-Butyl Alcohol	74000	U

TARGET COMPOUND SUMMARY: 204300

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: AA30033

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-7 SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4441

Level: (low/med) MED Date Recvd/Ext: 04/17/95-N/A

% Solid: 84 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 625

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	564023	Pentane, 2,2,3-trimethyl-	11.90	28274	J
2	108872	Cyclohexane, methyl-	13.53	22321	J
3	592278	Heptane, 2-methyl-	14.98	22321	J
4	921471	Hexane, 2,3,4-trimethyl-	18.17	30506	J
5		Unknown Substituted Benzene	21.46	74405	J
6		Unknown Substituted Benzene	21.62	49851	J
7	95636	Benzene, 1,2,4-trimethyl-	22.31	96726	J
8	620144	Benzene, 1-ethyl-3-methyl-	23.10	26042	J
9	1074437	Benzene, 1-methyl-3-propyl-	23.53	36458	J
10	1758889	Benzene, 2-ethyl-1,4-dimethyl	23.65	40179	J

Tentative Compound Summary: 427083

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4441::QT
Data File: >E4441::D1
Name: AA30033
Misc: M,20ul OF 4g/10ml

Quant Rev: 7
Quant Time: 950421 20:15
Injected at: 950421 19:46
Dilution Factor: 1.00000
Instrument ID: MSD_1

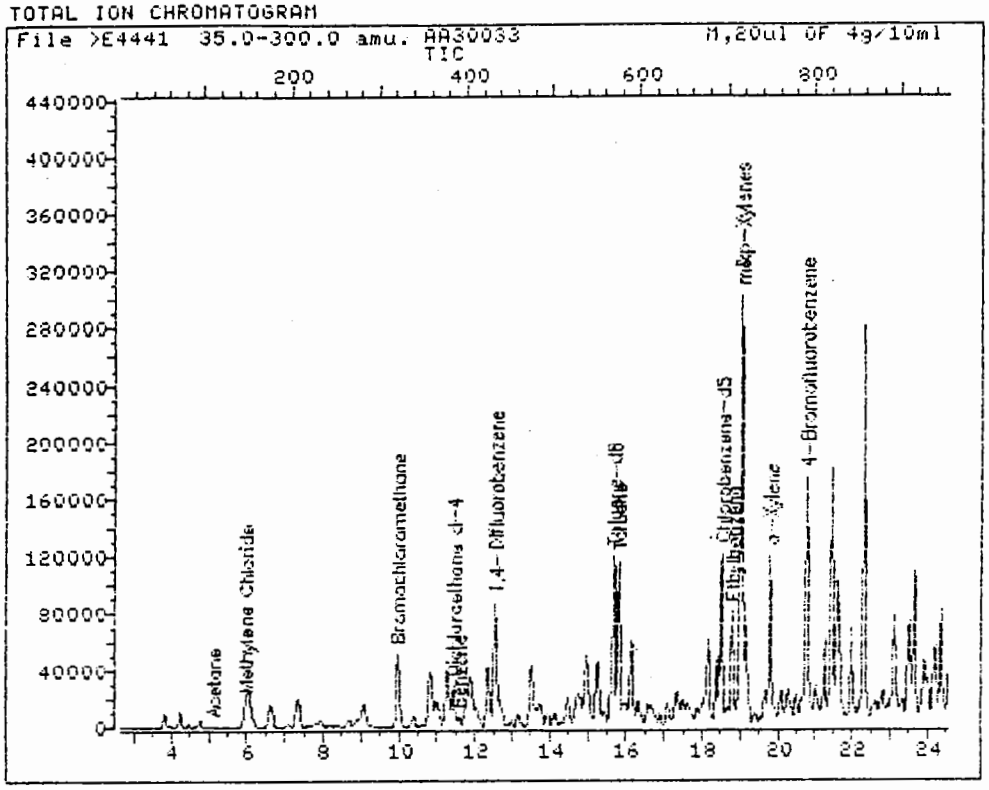
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950421 14:32

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	43906	50.00	ug/L	97
9)	Methylene Chloride	5.97	147	8551	6.73	ug/L	97
10)	Acetone	5.12	110	3407	31.79	ug/L	79
19)	1,2-Dichloroethane-d4	11.44	385	12973	48.72	ug/L	95
28)	*1,4-Difluorobenzene	12.54	433	188026	50.00	ug/L	97
35)	Benzene	11.58	391	14318	4.48	ug/L	96
39)	*Chlorobenzene-d5	18.52	693	162365	50.00	ug/L	95
45)	Toluene	15.80	575	114251	52.75	ug/L	95
46)	Toluene d-8	15.67	569	174648	51.03	ug/L	96
48)	Ethylbenzene	18.79	705	128376	27.49	ug/L	95
50)	m&p-Xylenes	19.02	715	191322	116.09	ug/L	96
51)	o-Xylene	19.78	748	161253	42.75	ug/L	95
53)	Bromofluorobenzene	20.77	791	143017	52.40	ug/L	99

* Compound is ISTD

Yu 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4441::D1 Quant Output File: ^E4441::QT
Name: AA30033 Instrument ID: MSD_1
Misc: M,20ul OF 4g/10ml

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950421 14:32

Operator ID: LIN
Quant Time : 950421 20:15
Injected at: 950421 19:46

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-8 SOIL
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Soil
Percent Solid : 85
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30034
Lab File ID : >E4436
Date Analyzed : 04/21/95
Dilution Factor: 5
Sample Wt/Vol : 1.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	59	U	124481	Dibromochloromethane	29	U
74839	Bromomethane	59	U	79005	1,1,2-Trichloroethane	18	U
75014	Vinyl Chloride	29	U	71432	Benzene	6	U
75003	Chloroethane	59	U	10061026	Trans-1,3-Dichloropropene	29	U
75092	Methylene Chloride	59	43JB	110758	2-Chloroethylvinylether	59	U
67641	Acetone	120	320 B	75252	Bromoform	24	U
75150	Carbon Disulfide	29	U	108101	4-Methyl-2-Pentanone	150	U
75694	Trichlorofluoromethane	29	U	591786	2-Hexanone	120	U
75354	1,1-Dichloroethene	12	U	127184	Tetrachloroethene	6	U
75343	1,1-Dichloroethane	29	U	79345	1,1,2,2-Tetrachloroethane	12	U
156605	Trans-1,2-Dichloroethene	29	U	108883	Toluene	29	U
67663	Chloroform	29	U	108907	Chlorobenzene	24	U
107062	1,2-Dichloroethane	12	U	100414	Ethylbenzene	29	16J
78933	2-Butanone	150	U	100425	Styrene	29	U
71556	1,1,1-Trichloroethane	29	U	108383	m&p-Xylenes	29	18J
56235	Carbon Tetrachloride	12	U	95476	o-Xylene	29	8J
108054	Vinyl Acetate	59	U	541731	1,3-Dichlorobenzene	29	U
75274	Bromodichloromethane	6	U	95501	1,2-Dichlorobenzene	29	U
78875	1,2-Dichloropropane	6	U	106467	1,4-Dichlorobenzene	29	U
10061015	cis-1,3-Dichloropropene	29	U	1634044	Methyl-t-butyl ether	29	82
79016	Trichloroethene	6	U	108203	Di-isopropyl-ether	29	U
				75650	t-Butyl Alcohol	590	U

TARGET COMPOUND SUMMARY: 402

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30034

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-8 SOIL

Sample wt/vol: 1.0(g/ml) g Lab File ID: >E4436

Level: (low/med) LOW Date Recvd/Ext: 04/17/95-N/A

% Solid: 85 Date Analyzed: 04/21/95

Column: CAP Dilution Factor: 5

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	592278	Heptane, 2-methyl-	14.97	82	J
2	921471	Hexane, 2,3,4-trimethyl-	18.17	147	J
3	696297	Cyclohexane, (1-methylethyl)	20.28	71	J
4	95636	Benzene, 1,2,4-trimethyl-	21.62	224	J
5	611143	Benzene, 1-ethyl-2-methyl-	21.99	247	J
6	620144	Benzene, 1-ethyl-3-methyl-	23.09	112	J
7	873494	Benzene, cyclopropyl-	23.48	253	J
8	1758889	Benzene, 2-ethyl-1,4-dimethyl	23.64	312	J
9	1074551	Benzene, 1-methyl-4-propyl-	23.99	106	J
10	934805	Benzene, 4-ethyl-1,2-dimethyl	24.36	282	J

Tentative Compound Summary: 1835

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4436::QT
Data File: >E4436::D1
Name: AA30034
Misc: S,1g

Quant Rev: 7
Quant Time: 950421 17:23
Injected at: 950421 16:53
Dilution Factor: 1.00000
Instrument ID: MSD_1

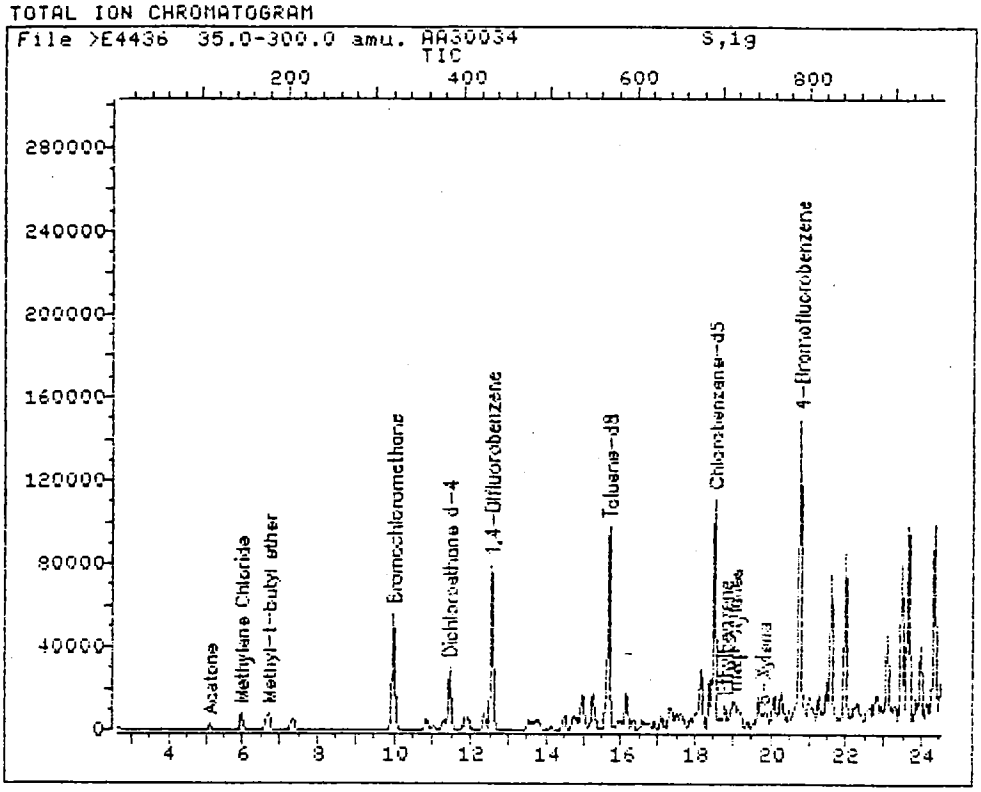
ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:10
Last Qcal Time: 950421 15:02

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.99	322	46098	50.00	ug/L	99
8)	Methyl-t-butyl ether	6.71	179	27314	13.92	ug/L	88
9)	Methylene Chloride	5.97	147	8544	7.39	ug/L	93
10)	Acetone	5.12	110	11390	54.98	ug/L	89
19)	1,2-Dichloroethane-d4	11.44	385	14420	50.14	ug/L	94
28)	*1,4-Difluorobenzene	12.54	433	175118	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.51	693	145931	50.00	ug/L	96
46)	Toluene d-8	15.69	570	158410	51.94	ug/L	9[illegible]
48)	Ethylbenzene	18.79	705	11357	2.73	ug/L	9[illegible]
50)	m&p-Xylenes	19.04	716	4322	2.98	ug/L	9[illegible]
51)	o-Xylene	19.78	748	4455	1.30	ug/L	9[illegible]
53)	Bromofluorobenzene	20.77	791	118427	46.17	ug/L	9[illegible]

* Compound is ISTD

Yu 05/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4436::D1 Quant Output File: ^E4436::QT
Name: AA30034 Instrument ID: MSD_1
Misc: S,1g

Id File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:10 Last Qcal Time: 950421 15:02

Operator ID: LIN
Quant Time : 950421 17:23
Injected at: 950421 16:53

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : FIELD BLANK
Date Rcvd/Extd: 04/17/95-N/A
Sample Matrix : Water
Percent Solid : 0
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA30035
Lab File ID : >E4421
Date Analyzed : 04/20/95
Dilution Factor: 1
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/L (PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U	124481	Dibromochloromethane	5	U
74839	Bromomethane	10	U	79005	1,1,2-Trichloroethane	3	U
75014	Vinyl Chloride	5	U	71432	Benzene	1	U
75003	Chloroethane	10	U	10061026	Trans-1,3-Dichloropropene	5	U
75092	Methylene Chloride	10	4JB	110758	2-Chloroethylvinylether	10	U
67641	Acetone	20	U	75252	Bromoform	4	U
75150	Carbon Disulfide	5	U	108101	4-Methyl-2-Pentanone	25	U
75694	Trichlorofluoromethane	5	U	591786	2-Hexanone	20	U
75354	1,1-Dichloroethene	2	U	127184	Tetrachloroethene	1	U
75343	1,1-Dichloroethane	5	U	79345	1,1,2,2-Tetrachloroethane	2	U
156605	Trans-1,2-Dichloroethene	5	U	108883	Toluene	5	U
67663	Chloroform	5	1J	108907	Chlorobenzene	4	U
107062	1,2-Dichloroethane	2	U	100414	Ethylbenzene	5	U
78933	2-Butanone	25	U	100425	Styrene	5	U
71556	1,1,1-Trichloroethane	5	U	108383	m&p-Xylenes	5	U
56235	Carbon Tetrachloride	2	U	95476	o-Xylene	5	U
108054	Vinyl Acetate	10	U	541731	1,3-Dichlorobenzene	5	U
75274	Bromodichloromethane	1	U	95501	1,2-Dichlorobenzene	5	U
78875	1,2-Dichloropropane	1	U	106467	1,4-Dichlorobenzene	5	U
10061015	cis-1,3-Dichloropropene	5	U	1634044	Methyl-t-butyl ether	5	U
79016	Trichloroethene	1	U	108203	Di-isopropyl-ether	5	U
				75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA30035

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Client ID: FIELD BLANK

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E4421

Level: (low/med) LOW Date Recvd/Ext: 04/17/95-N/A

% Solid: 0 Date Analyzed: 04/20/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

QUANT REPORT

Operator ID: LIN
Output File: ^E4421::QT
Data File: >E4421::D1
Name: AA30035
Misc: A,5ml,FB

Quant Rev: 7
Quant Time: 950420 19:23
Injected at: 950420 18:58
Dilution Factor: 1.00000
Instrument ID: MSD_1

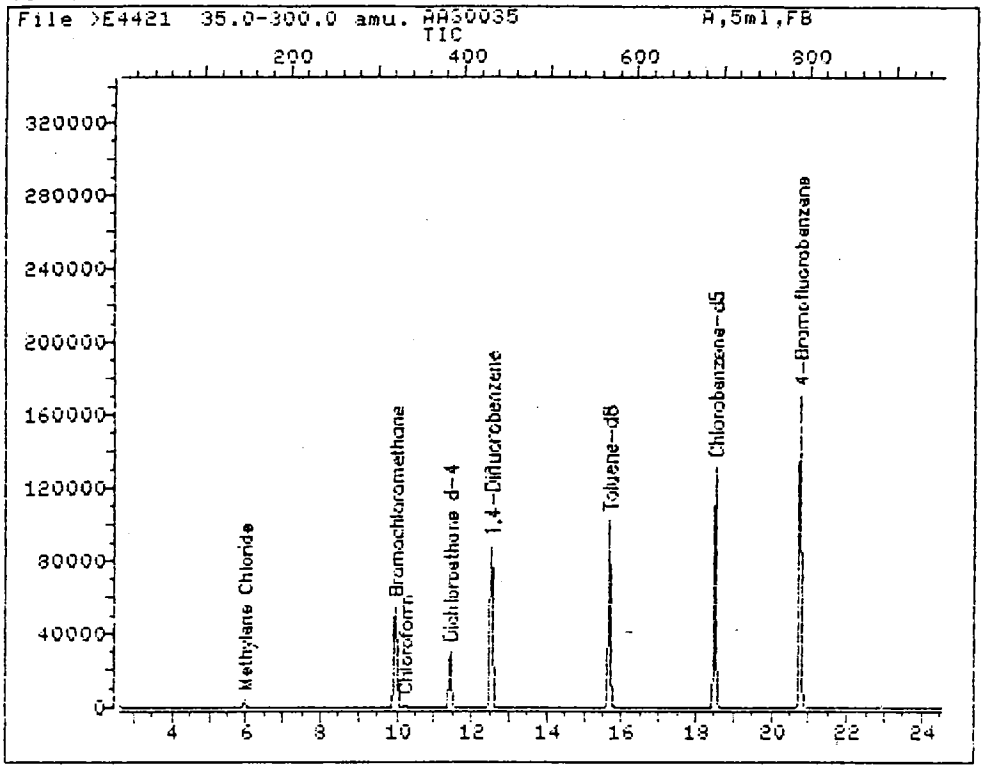
ID File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11
Last Qcal Time: 950420 14:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	321	45720	50.00	ug/L	96
9)	Methylene Chloride	5.97	147	3901	3.56	ug/L	97
18)	Chloroform	10.22	332	3624	1.46	ug/L	90
19)	1,2-Dichloroethane-d4	11.44	385	13196	47.30	ug/L	96
28)	*1,4-Difluorobenzene	12.54	433	193115	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.51	693	170809	50.00	ug/L	95
46)	Toluene d-8	15.66	569	180604	49.41	ug/L	96
53)	Bromofluorobenzene	20.76	791	144224	51.22	ug/L	91

* Compound is ISTD

Yu 5/01/95

TOTAL ION CHROMATOGRAM



Data File: >E4421::D1 Quant Output File: ^E4421::QT
Name: AA30035 Instrument ID: MSD_1
Misc: A,5ml,FB

Id File: IDWV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950329 23:11 Last Qcal Time: 950420 14:07

Operator ID: LIN
Quant Time : 950420 19:23
Injected at: 950420 18:58

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Veritech NJDEPE CERT.# 14622

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Dates Analyzed: 04/19/95 thru 04/20/95

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	FILE	TOT OUT
DAILY BLK(	W	94	101	100	^E4396	0
AA29809	W	94	101	99	^E4397	0
AA30027	W	94	104	99	^E4398	0
AA30028	W	96	106	99	^E4399	0
DAILY BLK(	S	105	98	102	^E4400	0
AA30045	S	101	100	101	^E4401	0
AA30046	S	104	98	100	^E4402	0
AA30047	S	99	98	102	^E4403	0
AA30048	S	100	98	100	^E4404	0
AA30049	S	103	98	101	^E4405	0
AA30050	S	104	99	101	^E4406	0
AA30051	S	101	96	101	^E4407	0
AA30052	S	102	97	102	^E4408	0
AA29878	S	104	101	107	^E4409	0
AA30067	W	95	100	100	^E4410	0
WMB-SPK	W	95	100	101	^E4411	0
AA30014MS	W	99	100	101	^E4412	0
AA30014MSD	W	96	100	101	^E4413	0

QC Limits For:	Soil	Water	Sur Conc(ug/L) Water	Sur Conc(ug/L) Soil
S1 (DCE) = 1,2-Dichloroethane-d4	70-121	76-114	50	50
S2 (TOL) = Toluene d-8	81-117	88-110	50	50
S3 (BFB) = Bromofluorobenzene	74-121	86-115	50	50

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of method/lab limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Veritech NJDEPE CERT.# 14622

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Dates Analyzed: 04/20/95 thru 04/21/95

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	FILE	TOT OUT
DAILY BLK(	W	97	100	100	^E4417	0
AA30067	W	94	102	101	^E4418	0
DAILY BLK(	S	101	98	99	^E4419	0
DAILY BLK(	W	94	100	101	^E4420	0
AA30035	W	95	99	102	^E4421	0
AA30054	S	96	104	94	^E4422	0
AA30056	S	96	107	93	^E4423	0
AA30028	W	98	104	100	^E4424	0
AA30029	W	98	97	103	^E4425	0
AA30030	W	98	96	101	^E4426	0
AA30031	W	97	101	104	^E4427	0
AA30032	W	98	99	104	^E4428	0
AA30033	W	100	105	102	^E4429	0
AA30034	W	99	98	102	^E4430	0

QC Limits For:	Soil	Water	Sur Conc(ug/L) Water	Sur Conc(ug/L) Soil
S1 (DCE) = 1,2-Dichloroethane-d4	70-121	76-114	50	50
S2 (TOL) = Toluene d-8	81-117	88-110	50	50
S3 (BFB) = Bromofluorobenzene	74-121	86-115	50	50

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of method/lab limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Veritech NJDEPE CERT.# 14622

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 04/21/95

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	FILE	TOT OUT
DAILY BLK(	S	98	100	99	^E4434	0
AA30067	S	99	105	89	^E4435	0
AA30034	S	100	104	92	^E4436	0
DAILY BLK(	W	99	100	98	^E4437	0
AA30029	W	95	100	101	^E4438	0
AA30030	W	97	104	98	^E4439	0
AA30031	W	96	102	98	^E4440	0
AA30033	W	97	102	105	^E4441	0
AA30029	S	100	105	111	^E4442	0
SMB-SPK	S	103	100	99	^E4443	0
AA30056MS	S	101	104	94	^E4444	0
AA30056MSD	S	103	103	95	^E4445	0

QC Limits For:	Soil	Water	Sur Conc(ug/L) Water	Sur Conc(ug/L) Soil
S1 (DCE) = 1,2-Dichloroethane-d4	70-121	76-114	50	50
S2 (TOL) = Toluene d-8	81-117	88-110	50	50
S3 (BFB) = Bromofluorobenzene	74-121	86-115	50	50

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of method/lab limits

FORM 3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Matrix Spike - Lab sample No.: AA30014

Non spiked file: ^E4371 Spiked file: ^E4412 Spike dup file: ^E4413

Compound	Spike Added (ug/L)	Sample Conc (ug/L)	MS Conc (ug/L)	MSD Conc (ug/L)	MS % Rec#	MSD % Rec#	% Rpd#	QC Limits Rpd	QC Limits Rec
1,1-Dichloroethene	50	0	44	41	88	82	7	14	61-145
Trichloroethene	50	0	51	51	102	102	0	14	71-120
Benzene	50	0	50	51	100	102	2	11	76-127
Toluene	50	0	49	49	98	98	0	13	76-125
Chlorobenzene	50	0	50	49	100	98	2	13	75-130

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 of 10 outside of limits

Comments:

FORM 3

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Matrix Spike - Lab sample No.: AA30056

Non spiked file: ^E4423 Spiked file: ^E4444 Spike dup file: ^E4445

Compound	Spike Added (ug/Kg)	Sample Conc (ug/Kg)	MS Conc (ug/Kg)	MSD Conc (ug/Kg)	MS % Rec#	MSD % Rec#	% Rpd#	QC Limits Rpd	QC Limits Rec
1,1-Dichloroethene	50	0	43	43	86	86	0	22	59-172
Trichloroethene	50	0	50	49	100	98	2	24	62-137
Benzene	50	0	50	50	100	100	0	21	66-142
Toluene	50	0	53	52	106	104	2	21	59-139
Chlorobenzene	50	0	50	49	100	98	2	21	60-133

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 of 10 outside of limits

Comments:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622,

Lab file ID: >E4396 Lab Sample ID: DAILY BLK(M

Date Analyzed: 04/19/95 Time Analyzed: 15:09

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E4397	AA29809	15:40
>E4398	AA30027	16:13
>E4399	AA30028	16:48
>E4410	AA30067	23:23
>E4411	WMB-SPK	23:59
>E4412	AA30014MS	00:36
>E4413	AA30014MSD	01:12

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622,

Lab file ID: >E4417 Lab Sample ID: DAILY BLK(M

Date Analyzed: 04/20/95 Time Analyzed: 15:26

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E4418	AA30067	15:57
>E4424	AA30028	20:41
>E4425	AA30029	21:18
>E4426	AA30030	21:55
>E4427	AA30031	22:31
>E4428	AA30032	23:08
>E4429	AA30033	23:44
>E4430	AA30034	00:21

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622,

Lab file ID: >E4420 Lab Sample ID: DAILY BLK(A

Date Analyzed: 04/20/95 Time Analyzed: 18:28

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E4421	AA30035	18:58

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622,

Lab file ID: >E4434 Lab Sample ID: DAILY BLK(S

Date Analyzed: 04/21/95 Time Analyzed: 15:48

Matrix: Soil

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E4435	AA30067	16:19
>E4436	AA30034	16:53
>E4442	AA30029	20:22
>E4443	SMB-SPK	20:59
>E4444	AA30056MS	21:35
>E4445	AA30056MSD	22:11

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622,

Lab file ID: >E4437 Lab Sample ID: DAILY BLK(M

Date Analyzed: 04/21/95 Time Analyzed: 17:29

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E4438	AA30029	17:58
>E4439	AA30030	18:33
>E4440	AA30031	19:09
>E4441	AA30033	19:46

Comments:

5A

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

Lab Name: VERITECH Contract: -----

Lab File ID: >E4163 BFB Injection date: 3/29/95

Instrument ID: MSD_1 BFB Injection time: 17:31

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	18.9
75	30-60% of mass 95	44.9
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	83.5
175	5.0 - 9.0% of mass 174	5.9(7.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	82.5(98.8)1
177	5.0 - 9.0% of mass 176	5.4(6.6)2

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

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

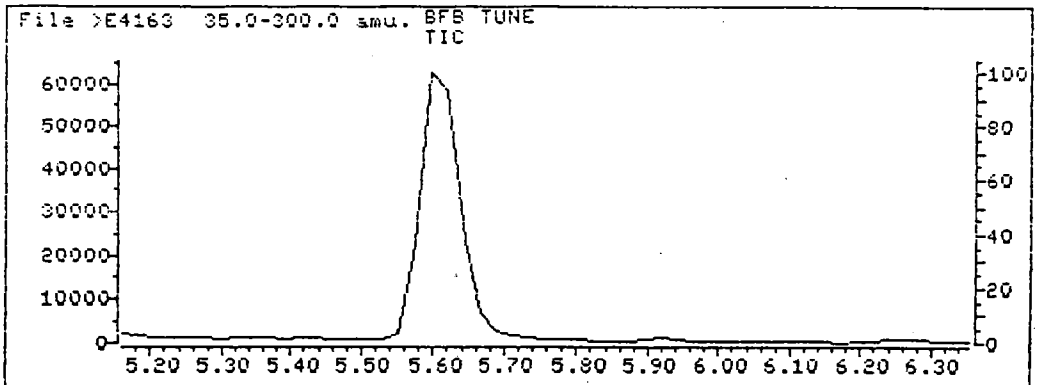
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	10PPB STD	>E4164	3/29/95	18:01
2	----------	20PPB STD	>E4165	3/29/95	18:43
3	----------	50PPB STD	>E4166	3/29/95	19:13
4	----------	100PPB STD	>E4167	3/29/95	19:43
5	----------	200PPB STD	>E4168	3/29/95	20:13
6	----------	10PPB STD	>E4169	3/29/95	20:43
7	----------	20PPB STD	>E4170	3/29/95	21:12
8	----------	50PPB STD	>E4171	3/29/95	21:42
9	----------	100PPB STD	>E4172	3/29/95	22:12
10	----------	200PPB STD	>E4173	3/29/95	22:41
11	----------	BLANK	>E4174	3/29/95	23:11
12	----------	DAILY BLK(S)	>E4175	3/29/95	23:47
13	----------	AA29602	>E4176	3/30/95	0:22
14	----------	AA29547MS	>E4177	3/30/95	0:58
15	----------	AA29547MSD	>E4178	3/30/95	1:34
16	----------	SMB-SPK	>E4179	3/30/95	2:09

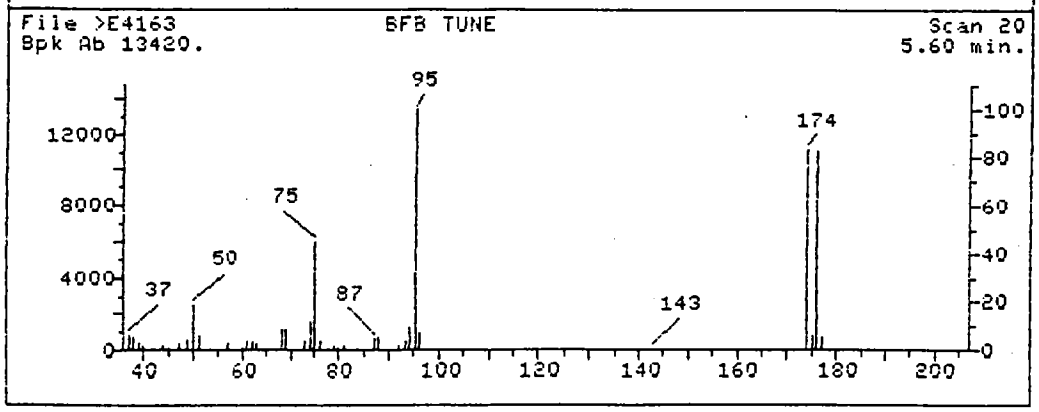
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	18.90	18.90	Ok
75	30-60% of mass 95	44.90	44.90	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.52	6.52	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	83.48	83.48	Ok
175	5-9% of mass 174	5.92	7.10	Ok
176	95-101% of mass 174	82.47	98.79	Ok
177	5-9% of mass 176	5.43	6.59	Ok

Injection Date: 03/29/95
Injection Time: 17:31
Data File: >E4163
Scan: 20





Yu 05/01/95

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>E4163 BFB TUNE
20

File: >E4163 Scan #: 20 Retn. time: 5.60

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	216.0	48.95	556.0	69.05	1185.0	79.95	108.0	95.05	13420.0
37.00	831.0	50.05	2537.0	71.95	65.0	80.95	248.0	96.05	875.0
38.00	753.0	51.05	788.0	73.05	519.0	81.75	78.0	142.95	68.0
39.10	324.0	57.05	351.0	74.05	1657.0	87.05	703.0	174.00	11203.0
40.00	198.0	59.95	100.0	75.05	6026.0	87.95	678.0	175.00	795.0
44.00	198.0	61.05	500.0	76.05	503.0	92.05	265.0	176.00	11068.0
45.00	140.0	62.05	511.0	78.05	131.0	93.05	455.0	177.00	729.0
47.00	313.0	63.05	368.0	78.95	245.0	94.05	1302.0	207.10	126.0
47.90	71.0	68.05	1152.0						

5A

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

Lab Name:VERITECH Contract: -----

Lab File ID: >E4393 BFB Injection date: 4/19/95

Instrument ID: MSD_1 BFB Injection time: 13:37

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	21.1
75	30-60% of mass 95	46.0
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	72.6
175	5.0 - 9.0% of mass 174	4.9(6.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.4(96.9)1
177	5.0 - 9.0% of mass 176	4.6(6.6)2

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

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

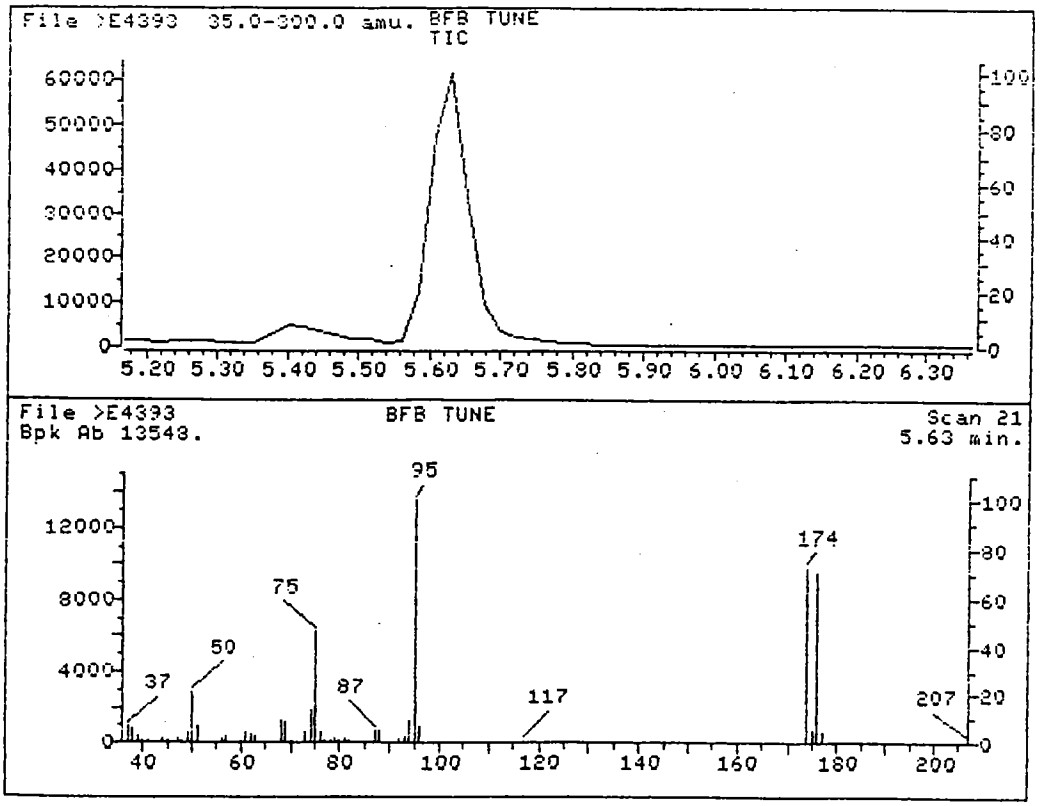
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(A)	>E4394	4/19/95	14:06
2	----------	DAILY CAL(S)	>E4395	4/19/95	14:36
3	----------	DAILY BLK(ME	>E4396	4/19/95	15:09
4	----------	AA29809	>E4397	4/19/95	15:40
5	----------	AA30027	>E4398	4/19/95	16:13
6	----------	AA30028	>E4399	4/19/95	16:48
7	----------	DAILY BLK(S)	>E4400	4/19/95	17:26
8	----------	AA30045	>E4401	4/19/95	17:55
9	----------	AA30046	>E4402	4/19/95	18:31
10	----------	AA30047	>E4403	4/19/95	19:08
11	----------	AA30048	>E4404	4/19/95	19:44
12	----------	AA30049	>E4405	4/19/95	20:21
13	----------	AA30050	>E4406	4/19/95	20:57
14	----------	AA30051	>E4407	4/19/95	21:33
15	----------	AA30052	>E4408	4/19/95	22:10
16	----------	AA29878	>E4409	4/19/95	22:46
17	----------	AA30067	>E4410	4/19/95	23:23
18	----------	WMB-SPK	>E4411	4/19/95	23:59
19	----------	AA30014MS	>E4412	4/20/95	0:36
20	----------	AA30014MSD	>E4413	4/20/95	1:12

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.09	21.09	Ok
75	30-60% of mass 95	46.02	46.02	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.17	7.17	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	72.60	72.60	Ok
175	5-9% of mass 174	4.86	6.70	Ok
176	95-101% of mass 174	70.35	96.90	Ok
177	5-9% of mass 176	4.63	6.58	Ok

Injection Date: 04/19/95
Injection Time: 13:37
Data File: >E4393
Scan: 21



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Yu 05/01/95

>E4393 BFB TUNE
21

File: >E4393 Scan #: 21 Retn. time: 5.63

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	174.0	49.05	610.0	63.05	389.0	78.05	102.0	94.05	1252.0
37.00	886.0	50.05	2857.0	68.05	1225.0	78.95	262.0	95.05	13548.0
38.10	794.0	51.05	918.0	69.05	1197.0	79.95	98.0	96.05	972.0
39.10	337.0	55.05	79.0	70.05	114.0	80.95	298.0	116.95	81.0
40.00	161.0	56.05	208.0	73.05	592.0	81.95	89.0	174.00	9836.0
41.10	110.0	57.05	419.0	74.05	1879.0	86.95	668.0	175.00	659.0
44.10	278.0	59.95	97.0	75.05	6235.0	88.05	662.0	176.00	9531.0
45.10	170.0	61.05	576.0	76.05	555.0	92.05	284.0	177.00	627.0
47.10	254.0	62.05	539.0	77.05	140.0	93.05	420.0	207.00	86.0
48.10	87.0								

5A

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

Lab Name:VERITECH Contract: -----

Lab File ID: >E4414 BFB Injection date: 4/20/95

Instrument ID: MSD_1 BFB Injection time: 13:37

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	21.0
75	30-60% of mass 95	46.8
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	74.0
175	5.0 - 9.0% of mass 174	5.1(6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	72.2(97.5)1
177	5.0 - 9.0% of mass 176	4.8(6.6)2

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

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

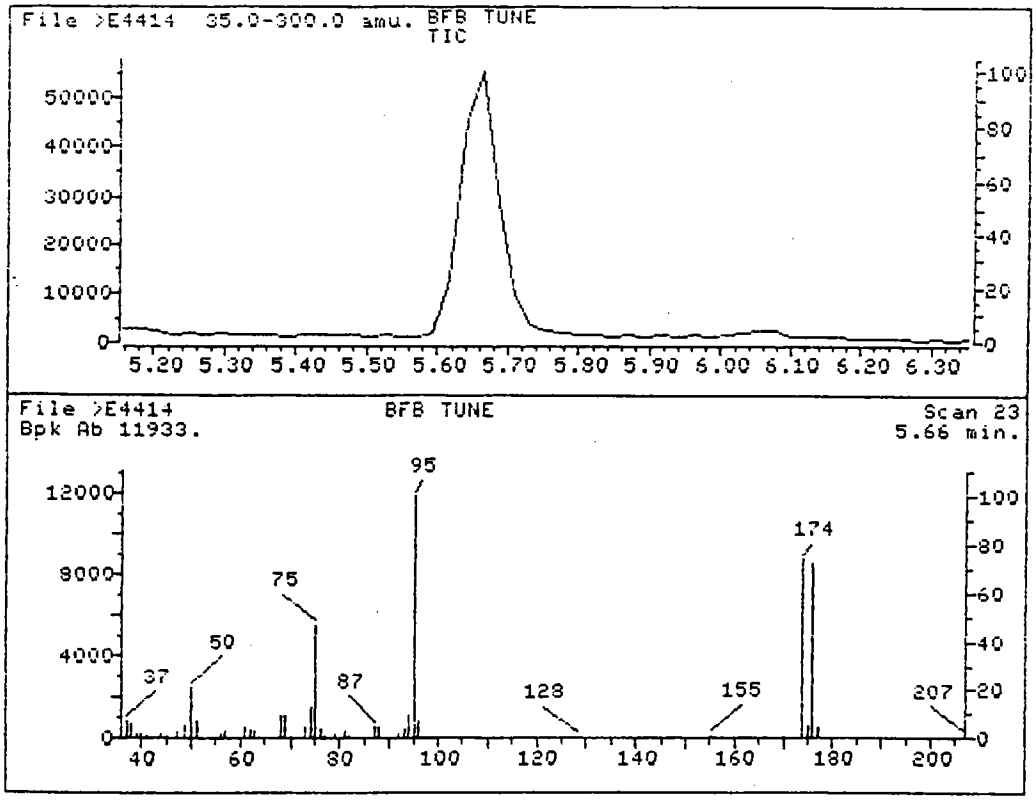
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(A)	>E4415	4/20/95	14:07
2	----------	DAILY CAL(S)	>E4416	4/20/95	14:36
3	----------	DAILY BLK(ME	>E4417	4/20/95	15:26
4	----------	AA30067	>E4418	4/20/95	15:57
5	----------	DAILY BLK(S)	>E4419	4/20/95	17:58
6	----------	DAILY BLK(A)	>E4420	4/20/95	18:28
7	----------	AA30035	>E4421	4/20/95	18:58
8	----------	AA30054	>E4422	4/20/95	19:28
9	----------	AA30056	>E4423	4/20/95	20:05
10	----------	AA30028	>E4424	4/20/95	20:41
11	----------	AA30029	>E4425	4/20/95	21:18
12	----------	AA30030	>E4426	4/20/95	21:55
13	----------	AA30031	>E4427	4/20/95	22:31
14	----------	AA30032	>E4428	4/20/95	23:08
15	----------	AA30033	>E4429	4/20/95	23:44
16	----------	AA30034	>E4430	4/21/95	0:21

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	20.97	20.97	Ok
75	30-60% of mass 95	46.76	46.76	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.05	7.05	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	74.02	74.02	Ok
175	5-9% of mass 174	5.10	6.88	Ok
176	95-101% of mass 174	72.16	97.49	Ok
177	5-9% of mass 176	4.79	6.64	Ok

Injection Date: 04/20/95
Injection Time: 13:37
Data File: >E4414
Scan: 23



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Yu 05/01/00

>E4414 BFB TUNE
23

File: >E4414 Scan #: 23 Retn. time: 5.66

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	174.0	50.05	2502.0	70.05	88.0	80.95	347.0	118.95	68.0
37.10	829.0	51.05	785.0	73.05	524.0	81.95	89.0	128.05	72.0
38.10	699.0	55.05	131.0	74.05	1563.0	87.05	604.0	155.10	140.0
39.10	255.0	56.05	178.0	75.05	5580.0	87.95	523.0	170.10	135.0
40.00	187.0	57.05	342.0	76.05	459.0	92.05	240.0	174.00	8833.0
41.10	119.0	61.05	531.0	77.05	131.0	93.05	408.0	175.00	608.0
44.00	198.0	62.05	476.0	77.95	74.0	94.05	1177.0	176.00	8611.0
45.00	156.0	63.05	347.0	78.85	210.0	95.05	11933.0	177.00	572.0
47.10	277.0	68.05	1149.0	79.95	62.0	96.05	841.0	207.00	95.0
48.95	597.0	69.05	1145.0						

5A

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

Lab Name:VERITECH Contract: -----

Lab File ID: >E4431 BFB Injection date: 4/21/95

Instrument ID: MSD_1 BFB Injection time: 14:02

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	19.3
75	30-60% of mass 95	45.0
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	81.4
175	5.0 - 9.0% of mass 174	5.6(6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.0(98.3)1
177	5.0 - 9.0% of mass 176	5.0(6.3)2

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

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

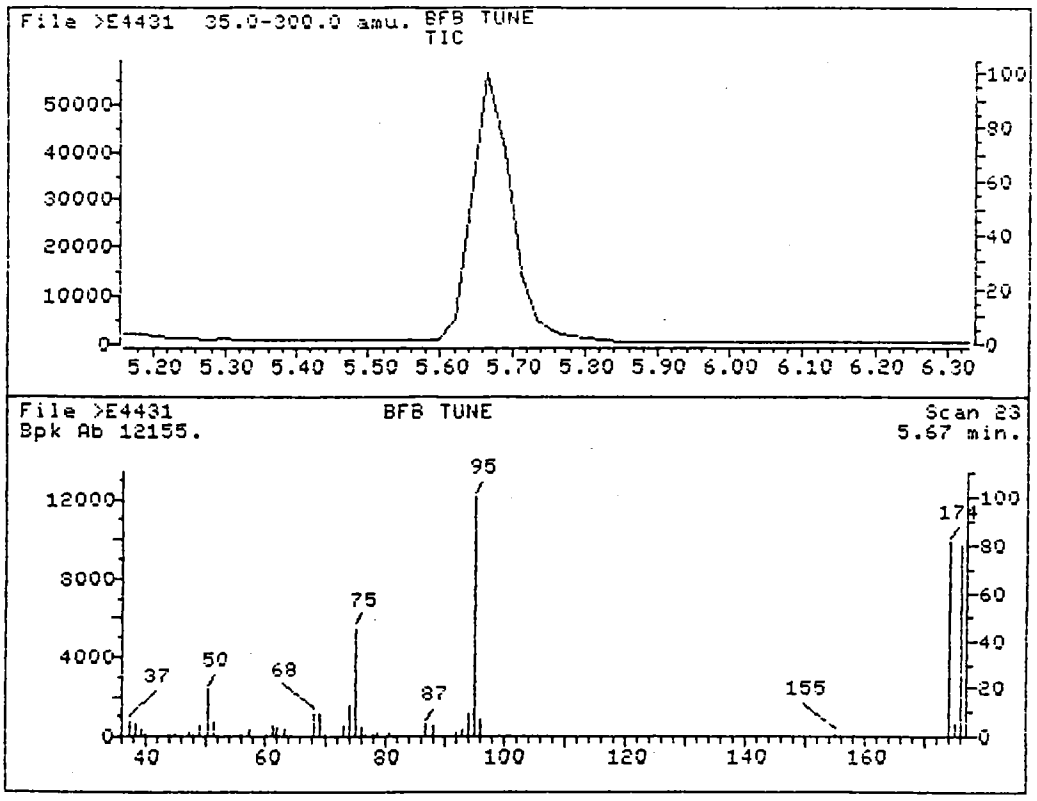
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(A)	>E4432	4/21/95	14:32
2	----------	DAILY CAL(S)	>E4433	4/21/95	15:02
3	----------	DAILY BLK(S)	>E4434	4/21/95	15:48
4	----------	AA30067	>E4435	4/21/95	16:19
5	----------	AA30034	>E4436	4/21/95	16:53
6	----------	DAILY BLK(ME	>E4437	4/21/95	17:29
7	----------	AA30029	>E4438	4/21/95	17:58
8	----------	AA30030	>E4439	4/21/95	18:33
9	----------	AA30031	>E4440	4/21/95	19:09
10	----------	AA30033	>E4441	4/21/95	19:46
11	----------	AA30029	>E4442	4/21/95	20:22
12	----------	SMB-SPK	>E4443	4/21/95	20:59
13	----------	AA30056MS	>E4444	4/21/95	21:35
14	----------	AA30056MSD	>E4445	4/21/95	22:11

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	19.26	19.26	Ok
75	30-60% of mass 95	45.03	45.03	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.19	7.19	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	81.41	81.41	Ok
175	5-9% of mass 174	5.62	6.90	Ok
176	95-101% of mass 174	80.02	98.29	Ok
177	5-9% of mass 176	5.01	6.26	Ok

Injection Date: 04/21/95
Injection Time: 14:02
Data File: >E4431
Scan: 23



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>E4431 BFB TUNE
23

File: >E4431 Scan #: 23 Retn. time: 5.67

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	143.0	48.95	513.0	68.05	1152.0	78.05	112.0	94.05	1121.0
37.10	770.0	50.05	2341.0	69.05	1149.0	78.95	242.0	95.05	12155.0
38.10	678.0	51.05	790.0	70.05	92.0	79.95	68.0	96.05	874.0
39.10	287.0	55.95	162.0	72.05	67.0	80.95	262.0	155.10	155.0
40.00	165.0	57.05	314.0	73.05	503.0	86.95	604.0	174.00	9895.0
44.00	169.0	60.05	101.0	74.05	1595.0	88.05	571.0	175.00	683.0
45.00	134.0	61.05	490.0	75.05	5473.0	92.05	227.0	176.00	9726.0
47.10	246.0	61.95	473.0	76.05	484.0	93.05	357.0	177.00	609.0
48.00	92.0	63.05	323.0	76.95	118.0				

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E4432

Instrument ID : MSD_1
Calibration Date: 04/21/95
Injection Time : 1432

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	1.348	1.317	3.052	2.27	**	
Bromomethane	.6636	1.174	3.672	76.95		
Vinyl Chloride	1.246	1.265	3.189	1.51	*	
Chloroethane	.4056	.6108	3.695	50.60		
Trichlorofluoromethane	1.710	1.857	4.108	8.56		
t-Butyl Alcohol	.0487	.0424	6.359	13.01		(Conc=250)
Methyl-t-butyl ether	1.831	1.685	6.681	7.97		
Methylene Chloride	1.348	1.447	5.946	7.34		
Acrolein	--	--	--	--		
Acrylonitrile	.1557	.1567	6.520	.61		
Acetone	.1454	.1220	5.119	16.08		
Carbon Disulfide	3.428	2.891	5.395	15.68		
1,1-Dichloroethene	.9482	.8878	4.981	6.37	*	
Di-isopropyl-ether	4.906	4.469	8.037	8.89		
1,1-Dichloroethane	2.687	2.467	7.669	8.16	**	
Trans-1,2-Dichloroethene	1.491	1.425	6.589	4.42		
Chloroform	3.007	2.774	10.22	7.75	*	
1,2-Dichloroethane-d4	.3022	.3032	11.44	.34		
1,2-Dichloroethane	1.508	1.345	11.62	10.83		
2-Butanone	.3017	.2548	9.461	15.52		
1,1,1-Trichloroethane	2.489	2.289	10.68	8.04		
Carbon Tetrachloride	2.595	2.342	11.09	9.75		
Vinyl Acetate	4.008	3.742	7.899	6.64		
Bromodichloromethane	3.249	2.990	14.17	7.99		
1,2-Dichloropropane	.4298	.4006	13.55	6.78	*	
Trans-1,3-Dichloropropene	.4347	.4043	16.26	7.01		
Trichloroethene	.4887	.4722	13.09	3.36		
Dibromochloromethane	.5227	.4825	17.36	7.68		
1,1,2-Trichloroethane	.2995	.2788	16.61	6.90		
Benzene	.9066	.8503	11.57	6.21		
cis-1,3-Dichloropropene	.5664	.5399	15.14	4.68		
2-Chloroethylvinylether	.1380	.1372	14.86	.63		
Bromoform	.5776	.5363	20.12	7.15	**	
2-Hexanone	.1543	.1347	17.16	12.69		
4-Methyl-2-Pentanone	.2492	.2109	15.48	15.37		
Tetrachloroethene	.5626	.5607	16.90	.33		
1,1,2,2-Tetrachloroethane	.5691	.5193	21.04	8.75	**	
Toluene	.6709	.6670	15.80	.58	*	
Toluene d-8	1.051	1.054	15.66	.32		
Chlorobenzene	.9606	.9573	18.56	.35	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E4432

Instrument ID : MSD_1
Calibration Date: 04/21/95
Injection Time : 1432

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.440	1.438	18.81	.17	*	
Styrene	.8240	.8463	19.80	2.71		
m&p-Xylenes	.4894	.5075	19.04	3.70		(Conc=100)
o-Xylene	1.162	1.162	19.78	.00		
Bromofluorobenzene	.8829	.8404	20.76	4.81		
1,3-Dichlorobenzene	1.031	1.010	22.81	2.05		
1,4-Dichlorobenzene	1.061	1.061	22.99	.05		
1,2-Dichlorobenzene	.9292	.9101	23.68	2.05		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

FORM7 (Page 2 of 2)

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E4433

Instrument ID : MSD_1
Calibration Date: 04/21/95
Injection Time : 1502

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	.9896	.9615	3.052	2.84	**	
Bromomethane	.2869	.7083	3.649	146.9		
Vinyl Chloride	.9907	.9649	3.167	2.60	*	
Chloroethane	.1318	.4168	3.672	216.4		
Trichlorofluoromethane	1.015	1.544	4.086	52.02		
t-Butyl Alcohol	.1511	.1231	6.406	18.52		(Conc=250)
Methyl-t-butyl ether	2.222	2.129	6.705	4.22		
Methylene Chloride	1.209	1.254	5.946	3.74		
Acrolein	--	--	--	--		
Acrylonitrile	.2820	.2542	6.521	9.87		
Acetone	.2731	.2247	5.120	17.73		
Carbon Disulfide	2.636	2.401	5.395	8.92		
1,1-Dichloroethene	.7239	.7290	4.982	.70	*	
Di-isopropyl-ether	4.480	4.253	8.037	5.08		
1,1-Dichloroethane	2.266	2.120	7.669	6.45	**	
Trans-1,2-Dichloroethene	1.189	1.172	6.590	1.42		
Chloroform	2.661	2.504	10.24	5.87	*	
1,2-Dichloroethane-d4	.3174	.3120	11.44	1.71		
1,2-Dichloroethane	1.610	1.470	11.62	8.72		
2-Butanone	.6455	.5341	9.461	17.26		
1,1,1-Trichloroethane	2.133	2.028	10.68	4.95		
Carbon Tetrachloride	2.223	2.081	11.09	6.41		
Vinyl Acetate	3.844	4.499	7.922	17.05		
Bromodichloromethane	3.088	2.842	14.17	7.98		
1,2-Dichloropropane	.4537	.4291	13.57	5.44	*	
Trans-1,3-Dichloropropene	.5296	.5058	16.26	4.50		
Trichloroethene	.4839	.4645	13.09	4.00		
Dibromochloromethane	.6597	.6058	17.36	8.18		
1,1,2-Trichloroethane	.4021	.3745	16.61	6.87		
Benzene	.8783	.8679	11.57	1.18		
cis-1,3-Dichloropropene	.6112	.5983	15.14	2.11		
2-Chloroethylvinylether	.2328	.2120	14.86	8.93		
Bromoform	.8714	.8104	20.12	7.00	**	
2-Hexanone	.4056	.3491	17.16	14.20		
4-Methyl-2-Pentanone	.5658	.5012	15.48	11.42		
Tetrachloroethene	.5306	.5408	16.91	1.93		
1,1,2,2-Tetrachloroethane	.9692	.9174	21.04	5.35	**	
Toluene	.6408	.6567	15.80	2.48	*	
Toluene d-8	1.042	1.045	15.66	.26		
Chlorobenzene	.9474	.9622	18.56	1.57	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

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Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E4433

Instrument ID : MSD_1
Calibration Date: 04/21/95
Injection Time : 1502

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.386	1.423	18.79	2.65	*	
Styrene	.8310	.8732	19.80	5.08		
m&p-Xylenes	.4698	.4969	19.02	5.78		(Conc=100)
o-Xylene	1.133	1.175	19.78	3.65		
Bromofluorobenzene	.9011	.8789	20.77	2.46		
1,3-Dichlorobenzene	1.035	1.063	22.83	2.71		
1,4-Dichlorobenzene	1.104	1.152	22.99	4.39		
1,2-Dichlorobenzene	1.022	1.040	23.68	1.75		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

FORM7 (Page 2 of 2)

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR WATER

Instrument ID: MSD_1
Calibration Date: 03/29/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E4164	>E4165	>E4166	>E4167	>E4168					
Compound	RF 10.0	RF 20.0	RF 50.0	RF 100.0	RF 200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Chloromethane	1.795	1.443	1.241	1.135	1.126	3.007	1.348	20.829	**	
Bromomethane	.6687	.6768	.6779	.6501	.6447	3.622	.6636	2.317		
Vinyl Chloride	1.526	1.305	1.175	1.117	1.106	3.126	1.246	14.072	*	
Chloroethane	.3315	.4144	.4343	.4252	.4225	3.622	.4056	10.360		
Trichlorofluoromethane	1.708	1.660	1.735	1.728	1.719	4.036	1.710	1.730		
t-Butyl Alcohol	.0517	.0502	.0468	.0458	.0490	6.338	.0487	4.947		(50.0,100.,250.,500.,1000)
Methyl-t-butyl ether	1.892	1.851	1.799	1.766	1.847	6.609	1.831	2.674		
Methylene Chloride	1.815	1.399	1.131	1.194	1.202	5.883	1.348	20.762		
Acrolein	--	--	--	--	--					
Acrylonitrile	.0949	.1437	.1814	.1714	.1872	6.452	.1557	24.318		
Acetone	.1699	.1554	.1379	.1296	.1344	5.070	.1454	11.537		
Carbon Disulfide	3.568	3.499	3.382	3.333	3.359	5.336	3.428	2.937		
1,1-Dichloroethene	1.015	.9925	.9210	.9135	.8990	4.932	.9482	5.489	*	
Di-isopropyl-ether	5.100	4.990	4.803	4.734	4.901	7.950	4.906	2.971		
1,1-Dichloroethane	2.692	2.765	2.689	2.620	2.667	7.578	2.687	1.952	**	
Trans-1,2-Dichloroethene	1.584	1.585	1.462	1.423	1.400	6.517	1.491	5.920		
Chloroform	3.027	3.060	3.011	2.959	2.978	10.15	3.007	1.327	*	
1,2-Dichloroethane-d4	.3043	.3055	.3080	.2934	.2998	11.36	.3022	1.899		(50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	1.435	1.541	1.520	1.502	1.541	11.55	1.508	2.899		
2-Butanone	.2709	.3117	.3125	.2946	.3186	9.383	.3017	6.418		
1,1,1-Trichloroethane	2.391	2.577	2.528	2.488	2.461	10.58	2.489	2.811		
Carbon Tetrachloride	2.468	2.661	2.651	2.616	2.580	11.02	2.595	3.003		
Vinyl Acetate	4.143	4.150	3.953	3.836	3.959	7.826	4.008	3.377		
Bromodichloromethane	3.128	3.305	3.269	3.230	3.316	14.12	3.249	2.340		
1,2-Dichloropropane	.4100	.4416	.4335	.4253	.4386	13.50	.4298	2.954	*	
Trans-1,3-Dichloropropene	.4062	.4290	.4355	.4339	.4692	16.21	.4347	5.187		
Trichloroethene	.5001	.5040	.4947	.4757	.4689	13.02	.4887	3.171		
Dibromochloromethane	.5012	.5254	.5254	.5176	.5437	17.32	.5227	2.944		
1,1,2-Trichloroethane	.2899	.3071	.3010	.2926	.3070	16.56	.2995	2.668		
Benzene	.9288	.9162	.9191	.8820	.8870	11.50	.9066	2.291		
cis-1,3-Dichloropropene	.5480	.5625	.5673	.5606	.5935	15.07	.5664	2.962		
2-Chloroethylvinylether	.0910	.1319	.1461	.1500	.1713	14.81	.1380	21.621		
Bromoform	.5417	.5951	.5788	.5672	.6050	20.05	.5776	4.289	**	
2-Hexanone	.1235	.1458	.1597	.1626	.1797	17.11	.1543	13.605		
4-Methyl-2-Pentanone	.2332	.2354	.2547	.2504	.2724	15.43	.2492	6.403		
Tetrachloroethene	.5974	.5855	.5782	.5397	.5120	16.84	.5626	6.325		
1,1,2,2-Tetrachloroethane	.5465	.5750	.5733	.5565	.5939	20.97	.5691	3.215	**	
Toluene	.6841	.6749	.6860	.6597	.6497	15.75	.6709	2.348	*	
Toluene d-8	1.013	1.036	1.069	1.068	1.066	15.61	1.051	2.382		(50.0,50.0,50.0,50.0,50.0)
Chlorobenzene	.9735	.9825	.9651	.9418	.9401	18.50	.9606	1.973	**	

* - Indicates CCC Compound ** - Indicates SPCC Compound Units in ug/L
$RT - Avg Retention Times $RF - Avg Response Factor $RSD- Relative Standard Deviation

Initial Calibration Data

Lab: Veritech
Instrument ID: MSD_1
Cal Type: CAL FOR WATER
Calibration Date: 03/29/95

Minimum Avg RF for SPCC is: .300
Maximum %RSD for CCC is: 30

Laboratory ID:	>E4164	>E4165	>E4166	>E4167	>E4168					
	RF	RF	RF	RF	RF					
Compound	10.0	20.0	50.0	100.0	200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Ethylbenzene	1.435	1.447	1.459	1.420	1.440	18.74	1.440	.988	*	
Styrene	.8334	.8577	.8448	.8059	.7792	19.75	.8240	3.876		
m&p-Xylenes	.5064	.5138	.5064	.4694	.4510	18.97	.4894	5.638		(20.0,40.0,100.,200.,400.)
o-Xylene	1.204	1.214	1.179	1.117	1.094	19.73	1.162	4.596		
Bromofluorobenzene	.8629	.8858	.8804	.8858	.8997	20.70	.8829	1.503		(50.0,50.0,50.0,50.0,50.0)
1,3-Dichlorobenzene	1.078	1.091	1.036	.9817	.9680	22.76	1.031	5.372		
1,4-Dichlorobenzene	1.107	1.115	1.060	1.014	1.008	22.93	1.061	4.716		
1,2-Dichlorobenzene	.9637	.9651	.9263	.8961	.8946	23.61	.9292	3.717		

* - Indicates CCC Compound
** - Indicates SPCC Compound
Units in ug/L
$RT - Avg Retention Times
$RF - Avg Response Factor
$RSD- Relative Standard Deviation

FORM6 (Page 2 of 2)

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR SOIL

Instrument ID: MSD_1
Calibration Date: 03/29/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E4169	>E4170	>E4171	>E4172	>E4173					
Compound	RF 10.0	RF 20.0	RF 50.0	RF 100.0	RF 200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Chloromethane	.9812	1.044	1.054	.9437	.9255	3.005	.9896	5.836	**	
Bromomethane	.2471	.2904	.3115	.2958	.2897	3.511	.2869	8.334		
Vinyl Chloride	.9907	1.031	1.031	.9637	.9374	3.120	.9907	4.159	*	
Chloroethane	.0668	.1154	.1662	.1637	.1467	3.520	.1318	31.562		
Trichlorofluoromethane	.7767	1.052	1.114	1.073	1.061	3.975	1.015	13.350		
t-Butyl Alcohol	.1705	.1409	.1465	.1459	.1518	6.410	.1511	7.625		(50.0,100.,250.,500.,1000)
Methyl-t-butyl ether	2.303	2.125	2.260	2.185	2.239	6.621	2.222	3.097		
Methylene Chloride	1.407	1.208	1.202	1.117	1.110	5.863	1.209	9.908		
Acrolein	--	--	--	--	--					
Acrylonitrile	.2849	.2419	.2910	.2901	.3023	6.456	.2820	8.270		
Acetone	.3805	.2847	.2476	.2265	.2262	5.082	.2731	23.647		
Carbon Disulfide	2.420	2.545	2.747	2.706	2.763	5.298	2.636	5.636		
1,1-Dichloroethene	.6854	.7140	.7648	.7304	.7249	4.889	.7239	3.964	*	
Di-isopropyl-ether	4.517	4.292	4.538	4.480	4.575	7.963	4.480	2.475		
1,1-Dichloroethane	2.201	2.219	2.304	2.284	2.322	7.577	2.266	2.356	**	
Trans-1,2-Dichloroethene	1.159	1.160	1.232	1.201	1.192	6.497	1.189	2.575		
Chloroform	2.660	2.610	2.689	2.691	2.652	10.15	2.661	1.234	*	
1,2-Dichloroethane-d4	.3205	.3189	.3131	.3174	.3170	11.35	.3174	.867		(50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	1.659	1.582	1.623	1.603	1.583	11.55	1.610	1.992		
2-Butanone	.7266	.6246	.6166	.6206	.6390	9.391	.6455	7.148		
1,1,1-Trichloroethane	2.039	2.109	2.172	2.181	2.166	10.59	2.133	2.811		
Carbon Tetrachloride	2.088	2.198	2.274	2.297	2.258	11.00	2.223	3.774		
Vinyl Acetate	4.022	3.655	3.958	3.820	3.766	7.825	3.844	3.839		
Bromodichloromethane	3.058	3.023	3.086	3.153	3.119	14.12	3.088	1.644		
1,2-Dichloropropane	.4527	.4446	.4602	.4565	.4546	13.50	.4537	1.280	*	
Trans-1,3-Dichloropropene	.5326	.4958	.5310	.5401	.5486	16.20	.5296	3.806		
Trichloroethene	.4756	.4815	.4961	.4899	.4763	13.02	.4839	1.838		
Dibromochloromethane	.7331	.6184	.6563	.6546	.6362	17.32	.6597	6.643		
1,1,2-Trichloroethane	.4584	.3861	.3936	.3887	.3837	16.55	.4021	7.882		
Benzene	.8685	.8650	.8948	.8890	.8741	11.50	.8783	1.482		
cis-1,3-Dichloropropene	.6117	.5789	.6148	.6241	.6265	15.07	.6112	3.124		
2-Chloroethylvinylether	.2206	.2069	.2260	.2506	.2600	14.91	.2328	9.411		
Bromoform	1.016	.8164	.8596	.8444	.8203	20.05	.8714	9.512	**	
2-Hexanone	.4627	.3620	.3799	.4018	.4216	17.10	.4056	9.621		
4-Methyl-2-Pentanone	.6298	.5143	.5400	.5594	.5855	15.43	.5658	7.822		
Tetrachloroethene	.5342	.5355	.5443	.5367	.5022	16.84	.5306	3.077		
1,1,2,2-Tetrachloroethane	1.193	.8940	.9207	.9116	.9269	20.98	.9692	12.955	**	
Toluene	.6292	.6347	.6467	.6481	.6455	15.74	.6409	1.309	*	
Toluene d-8	1.034	1.034	1.034	1.047	1.062	15.62	1.042	1.200		(50.0,50.0,50.0,50.0,50.0)
Chlorobenzene	.9812	.9266	.9497	.9459	.9334	18.49	.9474	2.227	**	

* - Indicates CCC Compound ** - Indicates SPCC Compound Units in ug/L
$RT - Avg Retention Times $RF - Avg Response Factor $RSD- Relative Standard Deviation

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR SOIL

Instrument ID: MSD_1
Calibration Date: 03/29/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E4169 RF 10.0	>E4170 RF 20.0	>E4171 RF 50.0	>E4172 RF 100.0	>E4173 RF 200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Ethylbenzene	1.371	1.350	1.397	1.407	1.406	18.74	1.386	1.802	*	
Styrene	.8820	.8184	.8462	.8305	.7777	19.74	.8310	4.594		
m&p-Xylenes	.4847	.4769	.4833	.4700	.4340	18.97	.4698	4.435		(20.0,40.0,100.,200.,400.)
o-Xylene	1.178	1.144	1.151	1.123	1.071	19.71	1.133	3.528		
Bromofluorobenzene	.8966	.8844	.8956	.9018	.9269	20.70	.9011	1.748		(50.0,50.0,50.0,50.0,50.0)
1,3-Dichlorobenzene	1.146	1.016	1.038	1.008	.9667	22.76	1.035	6.505		
1,4-Dichlorobenzene	1.261	1.079	1.093	1.072	1.014	22.92	1.104	8.429		
1,2-Dichlorobenzene	1.201	.9910	1.001	.9699	.9469	23.61	1.022	10.007		

* - Indicates CCC Compound ** - Indicates SPCC Compound Units in ug/L
$RT - Avg Retention Times $RF - Avg Response Factor $RSD- Relative Standard Deviation

FORM6 (Page 2 of 2)

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E4394

Instrument ID : MSD_1
Calibration Date: 04/19/95
Injection Time : 1406

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	1.348	1.477	3.015	9.53	**	
Bromomethane	.6636	.6683	3.636	.71		
Vinyl Chloride	1.246	1.378	3.130	10.58	*	
Chloroethane	.4056	.4600	3.613	13.42		
Trichlorofluoromethane	1.710	1.715	4.026	.31		
t-Butyl Alcohol	.0487	.0381	6.324	21.84		(Conc=250)
Methyl-t-butyl ether	1.831	1.580	6.622	13.72		
Methylene Chloride	1.348	1.336	5.887	.93		
Acrolein	--	--	--	--		
Acrylonitrile	.1557	.1487	6.461	4.54		
Acetone	.1454	.1136	5.060	21.90		
Carbon Disulfide	3.428	2.889	5.336	15.74		
1,1-Dichloroethene	.9482	.8528	4.922	10.06	*	
Di-isopropyl-ether	4.906	4.178	7.955	14.84		
1,1-Dichloroethane	2.687	2.402	7.587	10.59	**	
Trans-1,2-Dichloroethene	1.491	1.373	6.507	7.90		
Chloroform	3.007	2.760	10.14	8.22	*	
1,2-Dichloroethane-d4	.3022	.3027	11.35	.17		
1,2-Dichloroethane	1.508	1.331	11.54	11.76		
2-Butanone	.3017	.2367	9.379	21.55		
1,1,1-Trichloroethane	2.489	2.268	10.57	8.85		
Carbon Tetrachloride	2.595	2.386	11.01	8.07		
Vinyl Acetate	4.008	3.554	7.817	11.34		
Bromodichloromethane	3.249	3.016	14.11	7.20		
1,2-Dichloropropane	.4298	.4012	13.49	6.64	*	
Trans-1,3-Dichloropropene	.4347	.3999	16.20	8.03		
Trichloroethene	.4887	.4804	13.03	1.69		
Dibromochloromethane	.5227	.4971	17.31	4.89		
1,1,2-Trichloroethane	.2995	.2826	16.55	5.64		
Benzene	.9066	.8488	11.49	6.38		
cis-1,3-Dichloropropene	.5664	.5325	15.05	5.98		
2-Chloroethylvinylether	.1380	.1351	14.80	2.14		
Bromoform	.5776	.5478	20.06	5.15	**	
2-Hexanone	.1543	.1315	17.10	14.77		
4-Methyl-2-Pentanone	.2492	.2049	15.42	17.77		
Tetrachloroethene	.5626	.5784	16.85	2.82		
1,1,2,2-Tetrachloroethane	.5691	.5337	20.98	6.21	**	
Toluene	.6709	.6669	15.74	.60	*	
Toluene d-8	1.051	1.049	15.61	.17		
Chlorobenzene	.9606	.9658	18.50	.54	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E4394

Instrument ID : MSD_1
Calibration Date: 04/19/95
Injection Time : 1406

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.440	1.428	18.73	.89	*	
Styrene	.8240	.8520	19.74	3.40		
m&p-Xylenes	.4894	.5047	18.96	3.12		(Conc=100)
o-Xylene	1.162	1.160	19.72	.16		
Bromofluorobenzene	.8829	.8444	20.71	4.36		
1,3-Dichlorobenzene	1.031	1.029	22.75	.21		
1,4-Dichlorobenzene	1.061	1.070	22.94	.91		
1,2-Dichlorobenzene	.9292	.9216	23.62	.81		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

FORM7 (Page 2 of 2)

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E4415

Instrument ID : MSD_1
Calibration Date: 04/20/95
Injection Time : 1407

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	1.348	1.417	3.077	5.11	**	
Bromomethane	.6636	.6690	3.675	.81		
Vinyl Chloride	1.246	1.349	3.192	8.30	*	
Chloroethane	.4056	.4755	3.675	17.23		
Trichlorofluoromethane	1.710	1.762	4.088	3.05		
t-Butyl Alcohol	.0487	.0382	6.408	21.55		(Conc=250)
Methyl-t-butyl ether	1.831	1.569	6.707	14.29		
Methylene Chloride	1.348	1.198	5.949	11.15		
Acrolein	--	--	--	--		
Acrylonitrile	.1557	.1335	6.523	14.25		
Acetone	.1454	.1017	5.122	30.07		
Carbon Disulfide	3.428	2.841	5.398	17.12		
1,1-Dichloroethene	.9482	.8421	4.984	11.20	*	
Di-isopropyl-ether	4.906	4.325	8.062	11.84		
1,1-Dichloroethane	2.687	2.432	7.672	9.49	**	
Trans-1,2-Dichloroethene	1.491	1.386	6.592	7.06		
Chloroform	3.007	2.718	10.22	9.62	*	
1,2-Dichloroethane-d4	.3022	.3051	11.44	.95		
1,2-Dichloroethane	1.508	1.293	11.62	14.26		
2-Butanone	.3017	.2353	9.463	21.98		
1,1,1-Trichloroethane	2.489	2.270	10.68	8.79		
Carbon Tetrachloride	2.595	2.340	11.09	9.84		
Vinyl Acetate	4.008	3.570	7.925	10.92		
Bromodichloromethane	3.249	2.846	14.17	12.40		
1,2-Dichloropropane	.4298	.3738	13.55	13.03	*	
Trans-1,3-Dichloropropene	.4347	.3642	16.26	16.23		
Trichloroethene	.4887	.4532	13.09	7.26		
Dibromochloromethane	.5227	.4322	17.37	17.30		
1,1,2-Trichloroethane	.2995	.2501	16.61	16.51		
Benzene	.9066	.8179	11.58	9.79		
cis-1,3-Dichloropropene	.5664	.4900	15.12	13.48		
2-Chloroethylvinylether	.1380	.1196	14.86	13.37		
Bromoform	.5776	.4678	20.10	19.01	**	
2-Hexanone	.1543	.1182	17.16	23.38		
4-Methyl-2-Pentanone	.2492	.1931	15.48	22.54		
Tetrachloroethene	.5626	.5469	16.88	2.78		
1,1,2,2-Tetrachloroethane	.5691	.4665	21.04	18.03	**	
Toluene	.6709	.6472	15.80	3.53	*	
Toluene d-8	1.051	1.070	15.67	1.85		
Chlorobenzene	.9606	.9101	18.56	5.26	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E4415

Instrument ID : MSD_1
Calibration Date: 04/20/95
Injection Time : 1407

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.440	1.387	18.79	3.73	*	
Styrene	.8240	.8012	19.80	2.77		
m&p-Xylenes	.4894	.4824	19.02	1.44		(Conc=100)
o-Xylene	1.162	1.110	19.78	4.47		
Bromofluorobenzene	.8829	.8243	20.77	6.64		
1,3-Dichlorobenzene	1.031	.9671	22.81	6.19		
1,4-Dichlorobenzene	1.061	1.006	22.97	5.19		
1,2-Dichlorobenzene	.9292	.8657	23.66	6.83		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

FORM7 (Page 2 of 2)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E4166 Lab Sample ID: 50PPB STD

Date Analyzed: 03/29/95 Time Analyzed: 19:13

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	36932	9.90	156856	12.47	136599	18.44
UPPER LIMIT	73864		313712		273198	
LOWER LIMIT	18466		78428		68300	
LAB SAMPLE #						
10PPB STD	31025	9.87	132914	12.47	120327	18.44
20PPB STD	32341	9.88	142067	12.45	130809	18.45
50PPB STD	36932	9.90	156856	12.47	136599	18.44
100PPB STD	38209	9.87	162826	12.47	143265	18.44
200PPB STD	37807	9.87	158640	12.47	143006	18.45

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E4171 Lab Sample ID: 50PPB STD

Date Analyzed: 03/29/95 Time Analyzed: 21:42

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	45460	9.87	169001	12.47	153466	18.44
UPPER LIMIT	90920		338002		306932	
LOWER LIMIT	22730		84500		76733	
LAB SAMPLE #						
10PPB STD	47548	9.87	177431	12.47	161881	18.44
20PPB STD	47143	9.87	180238	12.47	162937	18.44
50PPB STD	45460	9.87	169001	12.47	153466	18.44
100PPB STD	49390	9.87	184746	12.47	165624	18.45
200PPB STD	49483	9.87	183207	12.47	163237	18.45
BLANK	0*	0.00	0*	0.00	0*	0.00
DAILY BLK(	51039	9.90	186472	12.47	168469	18.44
AA29602	44762	9.90	162679	12.47	134412	18.44
AA29547MS	0*	0.00	0*	0.00	0*	0.00
AA29547MSD	36289	9.87	148444	12.47	130422	18.44
SMB-SPK	44920	9.87	168601	12.47	155235	18.44

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E4373 Lab Sample ID: DAILY CAL(A

Date Analyzed: ~~04/18/95~~ 04/19/95 Time Analyzed: 14:44

SA 05/01/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	40488	9.88	171853	12.48	151581	18.45
UPPER LIMIT	80976		343706		303162	
LOWER LIMIT	20244		85927		75790	
LAB SAMPLE #						
DAILY CAL(	46537	9.88	196225	12.46	172714	18.45
DAILY BLK(	45383	9.90	196519	12.47	167434	18.44
AA29809	46758	9.87	198035	12.47	170357	18.44
AA30027	47846	9.90	204730	12.47	173020	18.45
AA30028	47571	9.90	199527	12.48	171835	18.46
AA30067	45317	9.87	185935	12.47	159575	18.44
WMB-SPK	46129	9.87	191146	12.45	168450	18.44
AA30014MS	41653	9.87	165026	12.45	147715	18.45
AA30014MSD	41943	9.87	161620	12.45	146973	18.45

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E4394 Lab Sample ID: DAILY CAL(A

Date Analyzed: ~~04/19/95~~ 04/20/95 Time Analyzed: 14:06

SA 05/01/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	46537	9.88	196225	12.46	172714	18.45
UPPER LIMIT	93074		392450		345428	
LOWER LIMIT	23269		98113		86357	
LAB SAMPLE #						
DAILY CAL(	45503	9.97	200638	12.54	170203	18.49
DAILY BLK(	43466	9.94	188591	12.51	163791	18.51
AA30067	45383	9.94	197725	12.51	170052	18.51
DAILY BLK(	50023	9.97	212671	12.54	181281	18.51
AA30035	45720	9.97	193115	12.54	170809	18.51
AA30028	53179	9.97	227525	12.54	190937	18.50
AA30029	46544	9.94	194625	12.52	171285	18.51
AA30030	47956	9.97	194052	12.52	175940	18.51
AA30031	48088	9.97	189959	12.54	165294	18.50
AA30032	44634	9.97	176981	12.52	157312	18.49
AA30033	44062	9.97	176060	12.52	151294	18.50
AA30034	42322	9.96	177289	12.54	158751	18.51

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E4415 Lab Sample ID: DAILY CAL(A

Date Analyzed: ~~04/20/95~~ 04/21/95 Time Analyzed: 14:07

SAS/1/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	45503	9.97	200638	12.54	170203	18.49
UPPER LIMIT	91006		401276		340406	
LOWER LIMIT	22751		100319		85102	
LAB SAMPLE #						
DAILY CAL(	43289	9.97	187220	12.54	166669	18.51
DAILY BLK(	42850	9.96	190238	12.53	169187	18.50
AA30029	46420	9.96	199962	12.53	174321	18.50
AA30030	45170	9.97	196681	12.54	164872	18.50
AA30031	44188	9.97	190734	12.54	162278	18.49
AA30033	43906	9.97	188026	12.54	162365	18.52

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E4416 Lab Sample ID: DAILY CAL(S

Date Analyzed: ~~04/20/95~~ 04/21/95 Time Analyzed: 14:36

SA 5/1/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	51103	9.94	191311	12.52	171465	18.51
UPPER LIMIT	102206		382622		342930	
LOWER LIMIT	25551		95655		85733	
LAB SAMPLE #						
DAILY CAL(	50741	9.97	186963	12.54	165842	18.51
DAILY BLK(	52697	9.97	189955	12.54	158996	18.51
AA30067	49170	9.97	180382	12.54	145554	18.52
AA30034	46098	9.99	175118	12.54	145931	18.51
AA30029	45773	9.97	170382	12.54	118430	18.49
SMB-SPK	49039	9.97	188036	12.54	169020	18.51
AA30056MS	45340	9.94	169579	12.54	142247	18.51
AA30056MSD	43299	9.95	161556	12.52	139079	18.49

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

METHOD DETECTION LIMTS FOR METHOD 8240 RUN 01/20/95

RUN AT 10PPB

FILE ==========>	^E35021	^E35031	^E35041	^E35051	^E35061	^E35071	^E35081	AVG	STDDEV	MDL
Chloromethane	6.15	6.14	6.18	5.21	5.18	5.46	4.96	5.61	.53	1.67
Bromomethane	16.24	16.37	16.51	14.73	16.04	16.48	14.90	15.89	.76	2.38
Vinyl Chloride	7.41	7.41	7.57	6.20	6.81	6.76	6.09	6.89	.60	1.88
Chloroethane	11.93	12.49	12.20	10.72	11.69	11.46	10.96	11.64	.64	2.01
Trichlorofluorometh	10.71	10.79	10.87	10.09	10.12	11.07	10.60	10.61	.37	1.18
t-Butyl Alcohol	53.71	40.30	48.65	46.62	46.34	32.20	41.75	44.22	6.90	21.70
Methyl-t-butyl ethe	11.37	10.53	11.17	10.87	10.71	10.31	10.57	10.79	.37	1.18
Methylene Chloride	15.78	14.01	14.20	14.17	13.93	13.19	13.63	14.13	.81	2.54
Acetone	21.65	18.19	25.59	13.45	12.47	10.63	10.63	16.09	5.85	18.38
Carbon Disulfide	8.48	8.48	8.69	7.69	8.00	8.41	7.81	8.22	.38	1.20
Di-isopropyl-ether	9.49	9.43	9.62	9.41	9.46	9.43	9.32	9.45	.09	.29
1,1-Dichloroethene	9.84	9.68	10.21	9.15	9.85	10.33	9.64	9.82	.39	1.23
1,1-Dichloroethane	9.59	9.69	9.99	9.57	9.59	10.03	9.79	9.75	.20	.61
Trans-1,2-Dichloroe	9.71	9.59	9.51	9.20	9.52	9.99	9.61	9.59	.24	.75
Chloroform	10.14	10.17	10.37	10.05	10.24	10.61	10.36	10.28	.19	.59
1,2-Dichloroethane	10.57	11.02	11.19	10.83	10.85	10.86	10.55	10.84	.23	.71
2-Butanone	10.16	9.58	10.85	9.47	9.88	8.51	8.68	9.59	.82	2.57
1,1,1-Trichloroetha	10.10	10.15	10.39	9.98	9.97	10.49	10.14	10.17	.20	.62
Carbon Tetrachlorid	9.66	9.67	9.81	9.51	9.39	9.95	9.80	9.68	.19	.60
Vinyl Acetate	9.14	8.85	8.95	8.84	8.84	8.12	8.28	8.72	.37	1.17
Bromodichloromethan	9.87	10.09	10.29	9.87	9.87	10.06	9.87	9.99	.16	.52
1,2-Dichloropropane	10.30	10.07	10.22	10.13	10.08	9.93	10.35	10.16	.15	.46
cis-1,3-Dichloropro	9.99	9.89	10.03	9.69	9.91	9.75	9.81	9.87	.12	.38
Trichloroethene	10.20	10.10	10.40	10.07	10.23	10.34	10.36	10.24	.13	.41
Dibromochloromethan	10.02	9.90	10.35	9.89	9.83	9.39	9.87	9.89	.28	.89
1,1,2-Trichloroetha	11.29	11.02	11.24	10.99	11.02	10.65	10.69	10.99	.24	.77
Benzene	10.18	9.80	10.02	9.94	9.92	10.03	10.24	10.02	.15	.47
Trans-1,3-Dichlorop	10.19	9.78	9.96	9.86	9.94	9.51	9.66	9.85	.22	.69
2-Chloroethylvinyle	10.25	9.84	10.28	9.76	9.84	9.10	9.74	9.83	.39	1.24
Bromoform	9.69	9.32	9.82	9.46	9.51	8.83	9.17	9.40	.33	1.04
2-Hexanone	11.13	10.15	11.38	11.01	10.63	10.56	10.47	10.76	.43	1.34
4-Methyl-2-Pentanon	12.38	9.65	10.76	10.83	10.09	9.52	9.43	10.38	1.05	3.29
Tetrachloroethene	9.75	9.82	10.09	9.84	9.82	10.06	9.90	9.90	.13	.41
1,1,2,2-Tetrachloro	11.05	11.12	12.01	12.46	12.47	10.17	11.65	11.56	.84	2.64
Toluene	9.93	10.03	10.25	10.45	10.25	10.23	10.32	10.21	.18	.55
Chlorobenzene	10.01	10.11	10.28	10.11	9.98	10.28	10.19	10.14	.12	.38
Ethylbenzene	9.99	10.15	10.37	10.28	10.20	10.27	10.38	10.23	.13	.42
Styrene	10.46	10.39	10.41	10.34	10.50	10.45	10.63	10.45	.10	.30
m&p-Xylenes	20.61	20.59	20.97	20.95	20.70	21.16	21.15	20.88	.24	.76
o-Xylene	10.58	10.39	10.71	10.69	10.70	10.75	10.87	10.67	.15	.48
1,3-Dichlorobenzene	10.01	9.91	9.95	10.04	10.14	9.63	9.81	9.93	.17	.53
1,4-Dichlorobenzene	9.92	9.99	9.93	10.00	10.20	9.60	10.02	9.95	.18	.57
1,2-Dichlorobenzene	9.88	9.96	9.98	9.89	10.12	9.57	9.78	9.88	.17	.55

No. 2

UST C17/C20-FG

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Division of Hampton-Clarke, Inc.
environmental and analytical services

ENVIRO-TECH, INC.
NJDEP REDUCED PKG

PROJECT: EARLE

LAB # AA31897 - AA31903

NJDEP Cert. #14622, CT Cert. # PH0671
PADER Cert. #68-463, MA Cert. #NJ386
NYDOH Cert. # 11408

47 Carey Avenue • Butler, NJ 07405
Phone: (201) 492-8744 Fax: (201) 492-1815

Veritech

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SAMPLE KEY

Enviro-Tech No.	VERITECH No.
PE-13	AA31897
PE-14	AA31898
PE-15	AA31899
PE-16	AA31900
PE-17	AA31901
PE-18	AA31902
FIELD BLANK	AA31903

Enviro-Tech Inc.

CHAIN-OF-CUSTODY RECORD

07140950

SAMPLER: (Signature) [signature]
Phone 908-888-1300
Date Shipped
Airbill No.
Carrier GDM
Cooler No.

SHIP TO:

VERITECH

ATTENTION:

SEND RESULTS TO:

Client Name
Company ENVIRO-TECH, INC.
Address 364 BROAD ST.
KEYPORT, NJ
Phone 908-888-1300

PROJECT NAME EARLE - AMERICAN CYNET. **PROJECT NO.** **P.O. NO.**

Relinquished by: (Signature)	Received by: (Signature)	Date	Military Time
[signature]	[signature]	7/13/95	09:50
Relinquished by: (Signature)	Received by: (Signature)	Date	Military Time
[signature]	[signature]	7/13/95	1150
Relinquished by: (Signature)	Received at lab by: (Signature)	Date	Military Time
Relinquished from lab by: (Signature)	Received by: (Signature)	Date	Military Time

ANALYSIS REQUEST

	Sample ID Number	Sample Description	Date/Time Sampled		Analysis Requested	Sample Condition Upon Receipt
1	PE-13	Soil	7/12/95	12:30	VOTIO, XYLENE	Cool AA3189
1	PE-14			12:33		3189
1	PE-15			12:36		3189
1	PE-16			12:39		3190
1	PE-17			12:42		3190
1	PE-18			12:45		3190
2	FIELD BLANK	AQUEOUS		12:28		3196

Special Instructions/Comments:

Cooler temp 4°

NOTE: UNUSED PORTIONS OF NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Expected Analytical T.A.T.'s: ____ Immediate Attention (200% surcharge) ____ RUSH (50-100% surcharge) X Standard

002

Sample Custodians Chain of Custody

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environmental and analytical services

CONDITION UPON RECEIPT FORM

Date Received July 13, 1995 Filed By Gerard DiMizio

Client Enviro-Tech Lab Sample No(s) _____

Project - Earle

CONDITION (Check Applicable Items)

_____ (1) Not enough sample sent for analysis

_____ (2) Sample(s) received broken (Specify) _____
Sample(s) received leaking (Specify) _____

_____ (3) Illegible sample number(s) or label(s) missing from bottle(s) (Specify) _____

_____ (4) Numbers on sample(s) do not correspond to information on the chain of custody record

_____ (5) No chain of custody record submitted with the samples

_____ (6) Samples received without a cooler

_____ (7) Custody seals missing or broken (circle one)

_____ (8) Holding time(s) exceeded upon receipt
(List parameters _____)

_____ (9) Samples received without proper refrigeration when deemed necessary

_____ (10) Samples received without proper preservation (see Preservation Form for actual pH readings)

✓ (11) Cooler Temperature Upon Receipt (Specify) 4°C

_____ (12) Other (Specify) _____

003

47 Carey Avenue • Butler, NJ 07405

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environmental and analytical services

PRESERVATION DOCUMENTATION FORM

Date Received July 13, 1995 Filed By Gerard DiMizio

Client Envirotech, Inc Lab Sample No(s) _____

Project - Earle

SAMPLE ID	CONTAINER SIZE	CONTAINER TYPE (P,G)	PARAMETER	PRESERVATIVE	pH
F.B	40ml	Glass	Voto, xylene	HCL	2

PRESERV

47 Carey Avenue • Butler, NJ 07405

Phone: (201) 492-8744 Fax: (201) 492-1815

VERITECH INTERNAL CHAIN OF CUSTODY RECORD
REFRIGERATOR # 2

PARAMETER	RFRG FROM	RFRG TO	SAMPLE NUMBER(S)	DATE OUT	TIME OUT	DATE IN*	TIME IN	SIGNATURE
GC/MS	2	2	31710, 31713	7/12	4:49	7/12	4:59	
"	2		31709, 31711, 31712, 31714	"	6:11			
"	2	2	31689, 31715 ~ 31717	"	7:00	7/12	7:15	
"	2	2	31444, 31648	"	7:21	"	7:30	
TO-metals	2	3	31652	7/13	10:45	—	—	
GC/MS	2		31678, 31690, 31718, 31720, 31722	"	1:22			
"	2	2	31820, 31821	"	2:19	7/13	2:29	
"	2		31821, 31824, 31715	"	3:55	"	4:10	
"	2		31724, 31726 ~ 31730	"	4:57			
"	2	2	31852	"	5:33	7/13	5:50	
"	2		31852, 31715	"	6:01	"	6:10	
"	2		31731 ~ 31736	"	6:17			
"	2	2	31710, 31721, 31724	7/14	10:19	7/14	10:42	
TO-metals	2	3	31715 - 31716	7/14	11:02	—	—	
GC/MS	2	2	31821	"	3:08	7/14	3:14	
"	2		31754 ~ 31759	"	4:04			
"	2		31885	"	5:17			
"	2		31839 ~ 31843, 31844 ~ 31846	"	5:41			
"	2	2	31875 ~ 31884	"	6:08	7/14	6:15	
"	2		31734	"	6:28			
"	2		31875 ~ 31879, 31881	"	6:40	7/14	6:52	
"	2		31757, 31758, 31734	7/17	4:41			
"	2		31860 ~ 31867	"	5:21			
"	2		31869 ~ 31871, 31872, 31891	"	6:33			
"	2		31866, 31872 ~ 31874, 31872, 31893	7/18	10:57			
"	2	2	31868, 31875, 31876, 31882, 31884	"	1:55	7/18	2:17	
"	2		31886, 31887	"	2:31			
(*) "	2	2	31897 ~ 31901	"	4:44	7/18	5:00	
"	2	2	31835, 31876 ~ 31877, 31879	"	5:49	"	6:01	
(*) "	2	2	31881, 31898 ~ 31900	"	6:11	"	6:33	
"	2	2	31883	"	6:50	"	7:02	
"	2		31886 ~ 31890	7/19	1:12			
"	2		31939 ~ 31946	"	3:10			
"	2	2	31881, 31900	"	3:14	7/19	3:35	
(*) "	2		31903, 31947	"	4:51			
"	2	2	31911, 912	"	5:10	7/19	5:18	
"	2	2	31959 ~ 953, 31963	"	5:28	7/19	5:31	
"	2		31868	"	6:11	"	6:19	
GC/MS	2	3	31911 + 31912	7-20-95	10:45			
"	2		31979, 31980	"	11:02			
"	2	2	32001, 32002, 32004	"	3:45	7/20	3:01	
"	2		31983, 31981, 31982	"	3:40			
"	2		31978	"	5:41			
"	2	2	31976, 31977, 31953, 31[illegible]	"	5:51	7/20	5:59	
"	2		32003, 32004	"	6:17	"	6:26	
"	2		32017 ~ 32020	7/21	11:14			
"	2		31976	"	5:20	7/21	5:25	

COMMENTS: *-Aqueous volatile samples are not logged back into the refrigerator

Veritech

INTERNAL CHAIN OF CUSTODY RECORD

		REMOVED FROM:				RETURNED TO:			
PARAMETER	SAMPLE No.	COLDBOX No.	DATE	TIME (A/P)	SIGNATURE	COLDBOX No.	DATE	TIME (A/P)	SIGNATURE
HERB	31445-450, 31692	SHELF	7/13/95	8:40	[illegible]	SHELF	7/13/95	8:55	[illegible]
TPH % solid	31895 — 31819	3	7/13/95	840	[illegible]				
TPH water	31832, 31769, 31770	3	7/13/95	0930	[illegible]	Depleted →			[illegible]
Ignit, PH, TPH	31834	3	7/13/95	940	[illegible]	3	7/13/95	1510	[illegible]
RS / RC Nitrat	↓	1							
% solid	31824, 31830—34	3							
	31820 — 31829	1				↓			
TD - Metals	31833	3	7/13/95	10:10	[illegible]	3	10:20	7/13/95	[illegible]
TD - Metals	31652	2	7/13/95	10:10	[illegible]	3	10:20	7/13/95	[illegible]
TPH	31820 → 823	3	7/13/95	12:35	[illegible]	3	12:45	7/13/95	[illegible]
"	31652, 31833	3	7/13/95	13:15	T. Crane	3	13:30	7/13/95	T. Crane
TPH	31828, 29, 30, 31-38	3	7/13/95	1410	[illegible]	→	1510	7/13/95	[illegible]
TPH % solid	31835 — 31838	1	1	1	1	↓	1	1	1
GC/MS	31834	3	7/13/95	3:38	[illegible]				
TPH % solid	31853 → 59, 68	3	7/14	8:10	[illegible]	3	1730	7/14	[illegible]
TD - metals	31718 - 31725, 31734	3	7/14	9:10	[illegible]	3	10:15	7/14	[illegible]
↓	31739 - 31742	3	7/14	↓	↓	3	↓	↓	↓
↓	31891 - 92	3	↓	↓	↓	↓	↓	↓	↓
Reactive Sens	31868, 31869, 7/14	3	7/15	1000	[illegible]	3	1725	7/14	[illegible]
↓	31837	↓	↓	↓	↓	1	1	1	
D + G	31769, 70	3	7/14	1000	[illegible]	3	11:01	7/14	[illegible]
TD metals	31652 31833	3	7/14	10:40	[illegible]	↓	↓	↓	↓
↓	31717 31824-27	↓	↓	↓	↓	3			
% solid	31875 — 84	3	7/14	1440	[illegible]	3	7/14	1725	[illegible]
	31900 - 02, 109-18								
	31894 — 99								
GC/MS	31875 ~ 31884	wet lab	↓	16:34	[illegible]				
TPH	31895 —								

A:\ICOCREC.DOC

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:55

Sample I.D. AA31897
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: PE-13 SOIL

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	88	PERCENT	07/14/95	JK
VOLATILES + 10	Completed	ATTACHED	07/18/95	YS

End of progress report on sample: AA31897

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:56

Sample I.D. AA31898
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: PE-14 SOIL

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	87	PERCENT	07/14/95	JK
VOLATILES + 10	Completed	ATTACHED	07/18/95	YS

End of progress report on sample: AA31898

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:56

Sample I.D. AA31899
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: PE-15 SOIL

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	86	PERCENT	07/14/95	JK
VOLATILES + 10	Completed	ATTACHED	07/18/95	YS

End of progress report on sample: AA31899

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:57

Sample I.D. AA31900
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: PE-16 SOIL

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	90	PERCENT	07/14/95	JK
VOLATILES + 10	Completed	ATTACHED	07/19/95	YS

End of progress report on sample: AA31900

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:57

Sample I.D. AA31901
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: PE-17 SOIL

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	88	PERCENT	07/14/95	JK
VOLATILES + 10	Completed	ATTACHED	07/18/95	YS

End of progress report on sample: AA31901

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:58

Sample I.D. AA31902
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: PE-18 SOIL

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
%SOLIDS	88	PERCENT	07/14/95	JK
VOLATILES + 10	Completed	ATTACHED	07/18/95	YS

End of progress report on sample: AA31902

SAMPLE PROGRESS REPORT

Veritech (Hampton Clarke)
Date: 07-31-1995 Time: 17:34:58

Sample I.D. AA31903
Status: Complete and inactive
Priority:
Deliverables: REDUCED
Client ID: ENVIRO
Project Account Code: EARLE
CONTAIN: 2

Date collected: 07/12/95
Date submitted: 07/14/95
Due date: 07/26/95
Specification checking: off
Descript: FIELD BLANK

COL.DATE: 7/12/95

Analysis	Result	Unit	Finished	Anl
VOLATILES + 10	Completed	ATTACHED	07/19/95	YS
pH (VOA VIALS)	<2	UNITS	07/14/95	DLM

End of progress report on sample: AA31903

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

CLIENT: ENVIRO PROJECT: EARLE
ANALYSIS: VOLATILES

	NO	YES
1. GC/MS Tune Specifications		
a. BFB passed	___	_X_
b. DFTPP passed	___	___
2. GC/MS Tuning Frequency - performed every 12 hours	___	_X_
3. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 12 hours before sample analysis.	___	_X_
4. GC/MS Calibration Requirements		
a. Calibration Check Compounds	___	_X_
b. System Performance Check Compounds	___	_X_
5. Blank Contamination - List compounds for each fraction		
a. VOA Fraction See Form1.		
b. B/N Fraction		
c. Acid Fraction		
6. Surrogate Recoveries Meet Criteria (If not met; list those compounds and their recoveries which fall outside the acceptable range)	___	_X_
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
7. Extraction Holding Time Met	___	_X_

Comments: _____

8. Analysis Holding Time Met ___ _X_

Comments: _____

Additional Comments: _____

Organics Director _____ Date: 07/25/95

METHOD REFERENCES

Volatile Organics (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 8240.

Volatile Organics (Waters): *Federal Register*, 40 CFR Part 136, October 26, 1984, Method 624.

TCLP Volatile Organics: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 1311 and 8240.

Volatile Organics (Drinking Waters): *Methods for the Determination of Organic Compounds in Drinking Water*, EPA/600/4-88/039, Revision 3, 1989, Method 524.2.

Semivolatile Organics (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 3550 and 8270.

Semivolatile Organics (Waters): *Federal Register*, 40 CFR Part 136, October 26, 1984, Method 625.

TCLP Semivolatile Organics: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 1311, 3510 and 8270.

Pesticides (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 3550 and 8080.

Pesticides (Waters): *Federal Register*, 40 CFR Part 136, October 26, 1984, Method 608.

TCLP Pesticides: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 1311, 3510 and 8080.

TCLP Herbicides (Waters): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 1311 and 8150.

PCB's (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 3550 and 8080.

PCB's (Waters): *Federal Register*, 40 CFR, Part 136, October 26, 1984, Method 608.

PCB's (Oils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Methods 3580 and 8080.

Total Metals (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition. Methods 3020 or 3050 are used for digestion. All ICP metals are analyzed using Method 6010. Antimony, arsenic, cadmium, molybdenum, selenium and thallium are analyzed by Methods 7041, 7060, 7131, 7481, 7740 and 7841 respectively. Mercury is analyzed using the Inorganic Statement of Work, Contract Laboratory Program, Revision 2.1.

TCLP Metals: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 1311 followed by Method 3020 for digestion, Methods 6010 and 7470 for analysis.

ICP Metals (Waters): *Methods for the Determination of Metals in Environmental Samples*, EPA/600/4-91/010, June 1991, Revision 3.3, Method 200.7.

GFAA Metals & Mercury (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983. Antimony, arsenic, cadmium, lead, molybdenum, selenium, thallium and tin are

analyzed using Methods 204.2, 206.2, 213.2, 239.2, 246.2, 270.2, 279.2 and 282.2 respectively. Mercury is analyzed using Method 245.1.

Cyanide (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 9010.

Cyanide (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 335.2.

Cyanide (Free): *Standard Methods for the Examination of Water and Wastewater*, 18th Edition, 1992, Method 4500-CN-I.

Phenols (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 9065.

Phenols (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method
420.1.

TPH (Soils & Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 418.1 for waters and modified 418.1 for soils using a soxhlet extraction with freon prior to analysis.

TPH Extractables: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 3510 or 3550 and Modified Method 8015.

Hexavalent Chromium (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Second and Third Editions, Methods 3060 and 7196A.

Hexavalent Chromium (Waters): *Standard Methods for the Examination of Water and Wastewater*, 18th Edition, 1992, Method 3500-Cr D.

pH (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 9040.

pH (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 150.1.

Reactive Cyanide: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Chapter Seven, Section 7.3, Reactivity.

Reactive Sulfide: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Chapter Seven, Section 7.3, Reactivity.

Ignitability: *Test Methods for Evaluating Solid Waste*, SW-848, Third Edition, Chapter Seven, Section 7.1, Ignitability.

Flashpoint: *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 1010.

Conductance (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 120.1.

Residue, Filterable (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 160.1.

Residue, Non-Filterable (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 160.2.

Residue, Total (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 160.3.

Chloride (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 325.3.

Chloride (Soils): *Test Methods for Evaluating Solid Waste*, SW-846, Third Edition, Method 9252.

Sulfide (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 376.1.

Chemical Oxygen Demand (Waters): *Hach Chemical Company*, Method 8000.

Oil & Grease (Waters): *Methods for the Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983, Method 413.1.

TOX (Waters & Soils): *American Society for Testing & Materials (ASTM)*, D2361-91, June 1991.

2,3,7,8 - TCDD/TCDF: *Modified Contract Laboratory Program Statement of Work*, November 1992.

VERITECH

47 CAREY AVE., BUTLER, NJ 07405

REPORT OF ANALYSIS

CT. NO: PH-0671
MADEP NO: NJ386
PADER NO: 68-463
NJDEPE NO: 14622
NYDOH NO: 11408

TO: ENVIRO-TECH, INC.
364 BROAD STREET
KEYPORT, N.J. 07735
(908) 888-1300

Date Collected: 07/12/95
Date Submitted: 07/14/95
Date Reported: 07/31/95
Project: EARLE

Sample I.D.		AA31897		AA31898	
Sample Description		PE-13 SOIL		PE-14 SOIL	
Analyte	**Units**	**MDL**	**Result**	**MDL**	**Result**
%SOLIDS	PERCENT	1.0	88	1.0	87
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.		AA31899		AA31900	
Sample Description		PE-15 SOIL		PE-16 SOIL	
Analyte	**Units**	**MDL**	**Result**	**MDL**	**Result**
%SOLIDS	PERCENT	1.0	86	1.0	90
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.		AA31901		AA31902	
Sample Description		PE-17 SOIL		PE-18 SOIL	
Analyte	**Units**	**MDL**	**Result**	**MDL**	**Result**
%SOLIDS	PERCENT	1.0	88	1.0	88
VOLATILES + 10	ATTACHED		Completed		Completed

Sample I.D.		AA31903	
Sample Description		FIELD BLANK	
Analyte	**Units**	**MDL**	**Result**
%SOLIDS			
VOLATILES + 10	ATTACHED		Completed

This report is a true report of results obtained from our tests of this material. In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Chris Heltzel

Chris Heltzel - Laboratory Manager

Or

Stanley Gilewicz - Laboratory Director

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : >E5356
Date Analyzed : 07/18/95
Dilution Factor: 125
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	1300	U
74839	Bromomethane	1300	U
75014	Vinyl Chloride	630	U
75003	Chloroethane	1300	U
75092	Methylene Chloride	1300	520J
67641	Acetone	2500	U
75150	Carbon Disulfide	630	U
75694	Trichlorofluoromethane	630	U
75354	1,1-Dichloroethene	250	U
75343	1,1-Dichloroethane	630	U
156605	Trans-1,2-Dichloroethene	630	U
67663	Chloroform	630	U
107062	1,2-Dichloroethane	250	U
78933	2-Butanone	3100	U
71556	1,1,1-Trichloroethane	630	U
56235	Carbon Tetrachloride	250	U
108054	Vinyl Acetate	1300	U
75274	Bromodichloromethane	130	U
78875	1,2-Dichloropropane	130	U
10061015	cis-1,3-Dichloropropene	630	U
79016	Trichloroethene	130	U
124481	Dibromochloromethane	630	U
79005	1,1,2-Trichloroethane	380	U
71432	Benzene	130	U
10061026	Trans-1,3-Dichloropropene	630	U
110758	2-Chloroethylvinylether	1300	U
75252	Bromoform	500	U
108101	4-Methyl-2-Pentanone	3100	U
591786	2-Hexanone	2500	U
127184	Tetrachloroethene	130	U
79345	1,1,2,2-Tetrachloroethane	250	U
108883	Toluene	630	U
108907	Chlorobenzene	500	U
100414	Ethylbenzene	630	U
100425	Styrene	630	U
108383	m&p-Xylenes	630	U
95476	o-Xylene	630	U
541731	1,3-Dichlorobenzene	630	U
95501	1,2-Dichlorobenzene	630	U
106467	1,4-Dichlorobenzene	630	U
1634044	Methyl-t-butyl ether	630	U
108203	Di-isopropyl-ether	630	U
75650	t-Butyl Alcohol	13000	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(M

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E5356

Level: (low/med) MED Date Recvd/Ext:

% Solid: 100 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 125

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

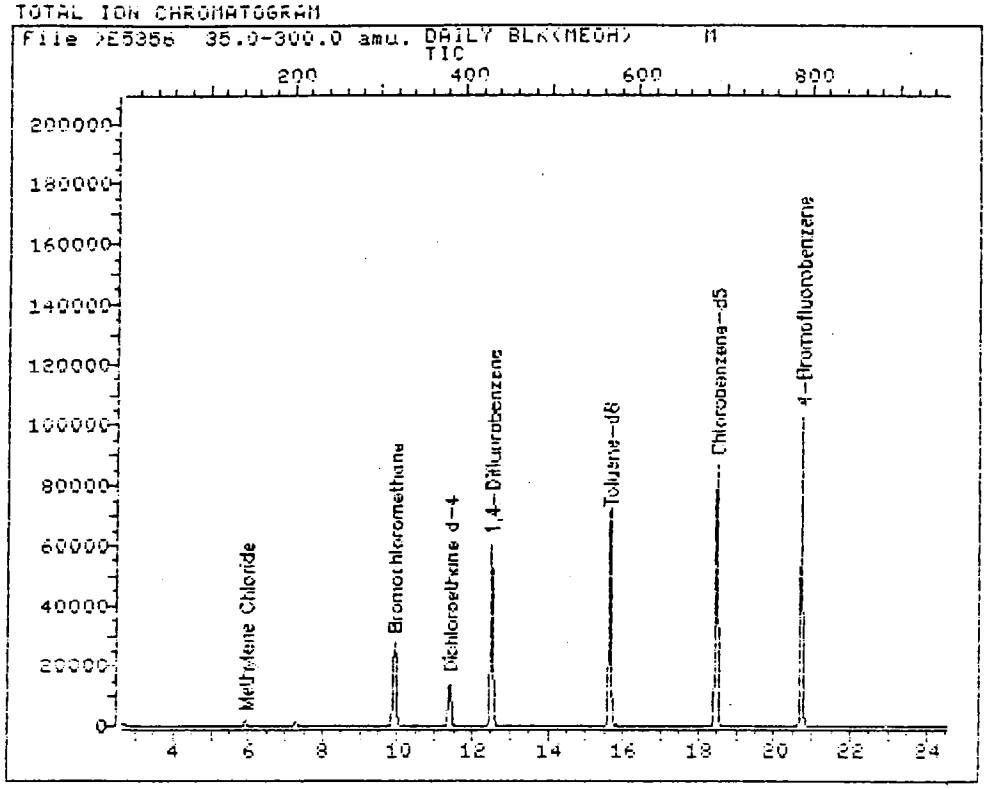
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5356::D1 Quant Output File: ^E5356::A2
Name: DAILY BLK(MEOH) Instrument ID: MSD_1
Misc: M

Id File: IOWU01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44 Last Qcal Time: 950718 12:21

Operator ID: LIN
Quant Time : 950718 13:52
Injected at: 950718 13:27

Operator ID: LIN
Output File: ^E5356::A2
Data File: >E5356::D1
Name: DAILY BLK(MEOH)
Misc: M

Quant Rev: 7
Quant Time: 950718 13:52
Injected at: 950718 13:27
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDWU01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44
Last Qcal Time: 950718 12:21

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	24442	50.00	ug/L	98
9)	Methylene Chloride	5.93	145	2886	4.20	ug/L	95
19)	1,2-Dichloroethane-d4	11.40	383	6733	46.88	ug/L	95
28)	*1,4-Difluorobenzene	12.50	431	133830	50.00	ug/L	96
39)	*Chlorobenzene-d5	18.47	691	117373	50.00	ug/L	95
46)	Toluene d-8	15.62	567	128214	49.42	ug/L	97
53)	Bromofluorobenzene	20.72	789	91340	48.70	ug/L	99

* Compound is ISTD

DB 7/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : >E5357
Date Analyzed : 07/18/95
Dilution Factor: 1
Sample Wt/Vol : 5.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U
74839	Bromomethane	10	U
75014	Vinyl Chloride	5	U
75003	Chloroethane	10	U
75092	Methylene Chloride	10	3J
67641	Acetone	20	U
75150	Carbon Disulfide	5	U
75694	Trichlorofluoromethane	5	U
75354	1,1-Dichloroethene	2	U
75343	1,1-Dichloroethane	5	U
156605	Trans-1,2-Dichloroethene	5	U
67663	Chloroform	5	U
107062	1,2-Dichloroethane	2	U
78933	2-Butanone	25	U
71556	1,1,1-Trichloroethane	5	U
56235	Carbon Tetrachloride	2	U
108054	Vinyl Acetate	10	U
75274	Bromodichloromethane	1	U
78875	1,2-Dichloropropane	1	U
10061015	cis-1,3-Dichloropropene	5	U
79016	Trichloroethene	1	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	5	U
79005	1,1,2-Trichloroethane	3	U
71432	Benzene	1	U
10061026	Trans-1,3-Dichloropropene	5	U
110758	2-Chloroethylvinylether	10	U
75252	Bromoform	4	U
108101	4-Methyl-2-Pentanone	25	U
591786	2-Hexanone	20	U
127184	Tetrachloroethene	1	U
79345	1,1,2,2-Tetrachloroethane	2	U
108883	Toluene	5	U
108907	Chlorobenzene	4	U
100414	Ethylbenzene	5	U
100425	Styrene	5	U
108383	m&p-Xylenes	5	U
95476	o-Xylene	5	U
541731	1,3-Dichlorobenzene	5	U
95501	1,2-Dichlorobenzene	5	U
106467	1,4-Dichlorobenzene	5	U
1634044	Methyl-t-butyl ether	5	U
108203	Di-isopropyl-ether	5	U
75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(S)

Lab Name: VERITECH, NJDEPE CERT # 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0(g/ml) g Lab File ID: >E5357

Level: (low/med) LOW Date Recvd/Ext:

% Solid: 100 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

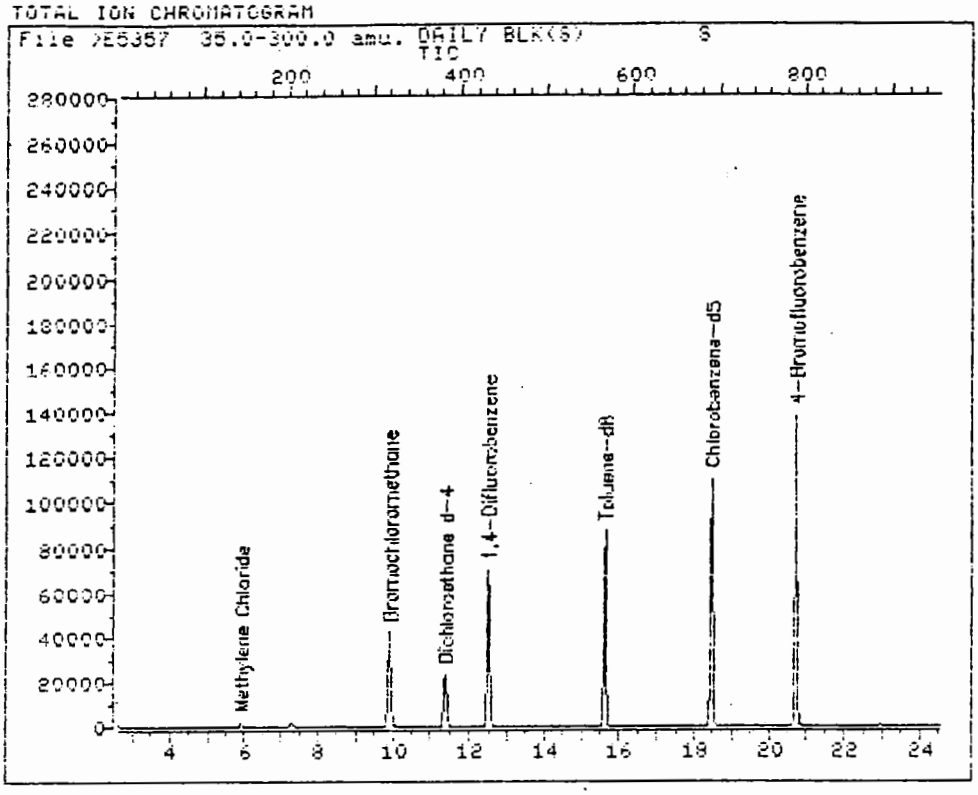
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5357::D1 Quant Output File: ^E5357::A2
Name: DAILY BLK(S) Instrument ID: MSD_1
Misc: S

Id File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18 Last Qcal Time: 950718 12:51

Operator ID: LIN
Quant Time : 950718 14:22
Injected at: 950718 13:57

QUANT REPORT

Operator ID: LIN
Output File: ^E5357::A2
Data File: >E5357::D1
Name: DAILY BLK(S)
Misc: S

Quant Rev: 7
Quant Time: 950718 14:22
Injected at: 950718 13:57
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950718 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.92	319	35860	50.00	ug/L	98
9)	Methylene Chloride	5.92	145	2932	3.34	ug/L	92
19)	1,2-Dichloroethane-d4	11.39	393	10875	49.98	ug/L	96
28)	*1,4-Difluorobenzene	12.49	431	152283	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.46	691	146161	50.00	ug/L	95
46)	Toluene d-8	15.64	568	148391	47.91	ug/L	96
53)	Bromofluorobenzene	20.21	799	121302	49.37	ug/L	96

* Compound is ISTD

DB 7/25/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Soil
Percent Solid : 100
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : VE5396
Date Analyzed : 07/19/95
Dilution Factor: 1
Sample Wt/Vol : 5.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U
74839	Bromomethane	10	U
75014	Vinyl Chloride	5	U
75003	Chloroethane	10	U
75092	Methylene Chloride	10	1J
67641	Acetone	20	U
75150	Carbon Disulfide	5	U
75694	Trichlorofluoromethane	5	U
75354	1,1-Dichloroethene	2	U
75343	1,1-Dichloroethane	5	U
156605	Trans-1,2-Dichloroethene	5	U
67663	Chloroform	5	U
107062	1,2-Dichloroethane	2	U
78933	2-Butanone	25	U
71556	1,1,1-Trichloroethane	5	U
56235	Carbon Tetrachloride	2	U
108054	Vinyl Acetate	10	U
75274	Bromodichloromethane	1	U
78875	1,2-Dichloropropane	1	U
10061015	cis-1,3-Dichloropropene	5	U
79016	Trichloroethene	1	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	5	U
79005	1,1,2-Trichloroethane	3	U
71432	Benzene	1	U
10061026	Trans-1,3-Dichloropropene	5	U
110758	2-Chloroethylvinylether	10	U
75252	Bromoform	4	U
108101	4-Methyl-2-Pentanone	25	U
591786	2-Hexanone	20	U
127184	Tetrachloroethene	1	U
79345	1,1,2,2-Tetrachloroethane	2	U
108883	Toluene	5	U
108907	Chlorobenzene	4	U
100414	Ethylbenzene	5	U
100425	Styrene	5	U
108383	m&p-Xylenes	5	U
95476	o-Xylene	5	U
541731	1,3-Dichlorobenzene	5	U
95501	1,2-Dichlorobenzene	5	U
106467	1,4-Dichlorobenzene	5	U
1634044	Methyl-t-butyl ether	5	U
108203	Di-isopropyl-ether	5	U
75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(S)

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID:

Sample wt/vol: 5.0(g/ml) g Lab File ID: >E5386

Level: (low/med) LOW Date Recvd/Ext:

% Solid: 100 Date Analyzed: 07/19/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/Kg

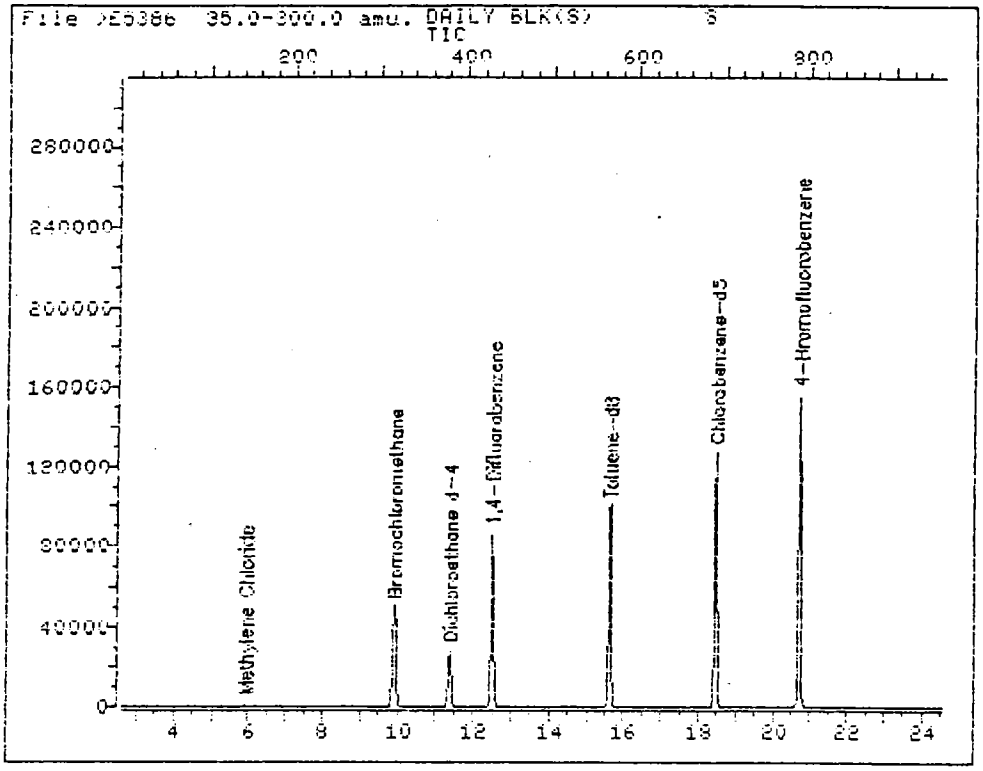
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5386::D1 Quant Output File: ^E5386::A2
Name: DAILY BLK(S) Instrument ID: MSD_1
Misc: S

Id File: IDSU01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18 Last Qcal Time: 950719 13:41

Operator ID: LIN
Quant Time : 950719 15:14
Injected at: 950719 14:49

QUANT REPORT

Operator ID: LIN
Quant Rev: 7
Quant Time: 950719 15:14
Output File: ^E5386::A2
Injected at: 950719 14:49
Data File: >E5386::D1
Dilution Factor: 1.00000
Name: DAILY BLK(S)
Instrument ID: MSD_1
Misc: S

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950719 13:41

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	43461	50.00	ug/L	93
9)	Methylene Chloride	5.93	145	1257	1.41	ug/L	92
19)	1,2-Dichloroethane-d4	11.39	383	12669	47.69	ug/L	96
28)	*1,4-Difluorobenzene	12.50	431	185888	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.47	691	169772	50.00	ug/L	94
46)	Toluene d-8	15.62	567	178857	49.40	ug/L	96
53)	Bromofluorobenzene	20.72	799	135496	48.05	ug/L	99

* Compound is ISTD

DB 7/25/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID :
Date Rcvd/Extd:
Sample Matrix : Water
Percent Solid : 0
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : DAILY BL
Lab File ID : >E5387
Date Analyzed : 07/19/95
Dilution Factor: 1
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/L (PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U	124481	Dibromochloromethane	5	U
74839	Bromomethane	10	U	79005	1,1,2-Trichloroethane	3	U
75014	Vinyl Chloride	5	U	71432	Benzene	1	U
75003	Chloroethane	10	U	10061026	Trans-1,3-Dichloropropene	5	U
75092	Methylene Chloride	10	1J	110758	2-Chloroethylvinylether	10	U
67641	Acetone	20	U	75252	Bromoform	4	U
75150	Carbon Disulfide	5	U	108101	4-Methyl-2-Pentanone	25	U
75694	Trichlorofluoromethane	5	U	591786	2-Hexanone	20	U
75354	1,1-Dichloroethene	2	U	127184	Tetrachloroethene	1	U
75343	1,1-Dichloroethane	5	U	79345	1,1,2,2-Tetrachloroethane	2	U
156605	Trans-1,2-Dichloroethene	5	U	108883	Toluene	5	U
67663	Chloroform	5	U	108907	Chlorobenzene	4	U
107062	1,2-Dichloroethane	2	U	100414	Ethylbenzene	5	U
78933	2-Butanone	25	U	100425	Styrene	5	U
71556	1,1,1-Trichloroethane	5	U	108383	m&p-Xylenes	5	U
56235	Carbon Tetrachloride	2	U	95476	o-Xylene	5	U
108054	Vinyl Acetate	10	U	541731	1,3-Dichlorobenzene	5	U
75274	Bromodichloromethane	1	U	95501	1,2-Dichlorobenzene	5	U
78875	1,2-Dichloropropane	1	U	106467	1,4-Dichlorobenzene	5	U
10061015	cis-1,3-Dichloropropene	5	U	1634044	Methyl-t-butyl ether	5	U
79016	Trichloroethene	1	U	108203	Di-isopropyl-ether	5	U
				75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

DAILY BLK(A)

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Client ID:

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E5387

Level: (low/med) LOW Date Recvd/Ext:

% Solid: 0 Date Analyzed: 07/19/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

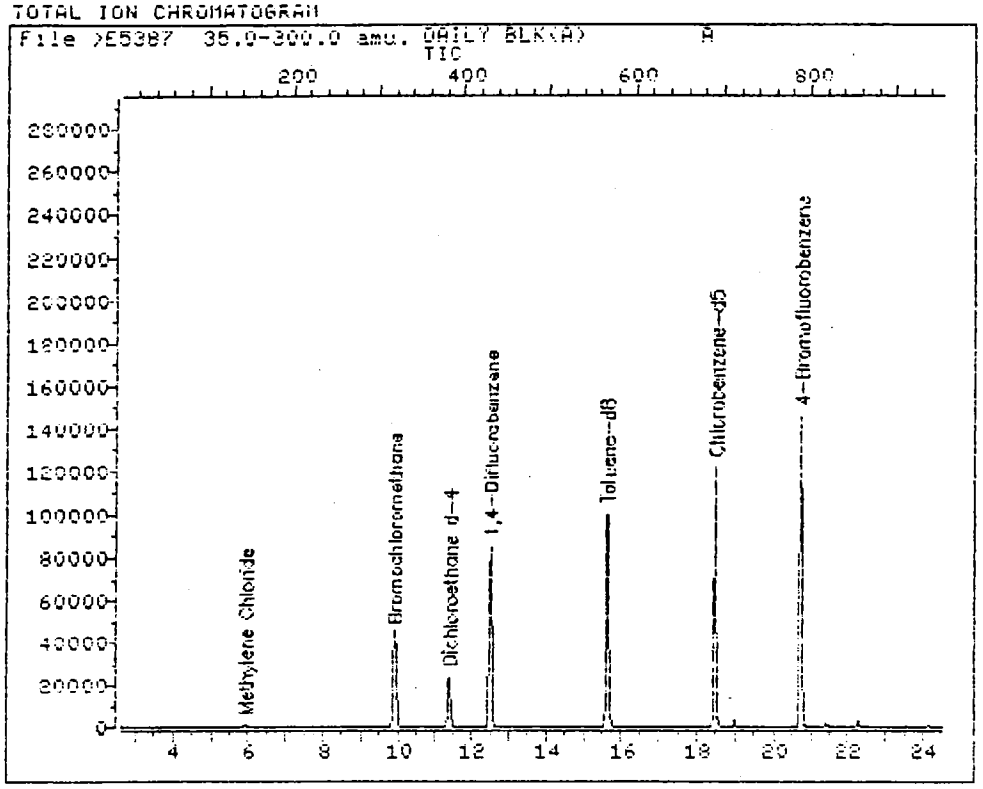
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5387::D1 Quant Output File: ^E5387::A2
Name: DAILY BLK(A) Instrument ID: MSD_1
Misc: A

Id File: IOWUD1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44 Last Qual Time: 950719 13:11

Operator ID: LIN
Quant Time : 950719 15:44
Injected at: 950719 15:19

QUANT REPORT

Operator ID: LIN
Output File: ^E5387::A2
Data File: >E5387::D1
Name: DAILY BLK(A)
Misc: A

Quant Rev: 7
Quant Time: 950719 15:44
Injected at: 950719 15:19
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDWVQ1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44
Last Qcal Time: 950719 13:11

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.91	318	38910	50.00	ug/L	96
9)	Methylene Chloride	5.93	145	1307	1.21	ug/L	88
19)	1,2-Dichloroethane-d4	11.40	383	11125	49.08	ug/L	96
28)	*1,4-Difluorobenzene	12.50	431	186362	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.47	691	166352	50.00	ug/L	93
46)	Toluene d-8	15.63	567	178240	46.97	ug/L	95
53)	Bromofluorobenzene	20.72	789	129753	49.81	ug/L	99

* Compound is ISTD

DB 7/25/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-13 SOIL
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Soil
Percent Solid : 88
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : A031897
Lab File ID : VF5364
Date Analyzed : 07/18/95
Dilution Factor: 5
Sample Wt/Vol : 1.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	57	U
74839	Bromomethane	57	U
75014	Vinyl Chloride	28	U
75003	Chloroethane	57	U
75092	Methylene Chloride	57	240B
67641	Acetone	110	360
75150	Carbon Disulfide	28	U
75694	Trichlorofluoromethane	28	U
75354	1,1-Dichloroethene	11	U
75343	1,1-Dichloroethane	28	U
156605	Trans-1,2-Dichloroethene	28	U
67663	Chloroform	28	U
107062	1,2-Dichloroethane	11	U
78933	2-Butanone	140	U
71556	1,1,1-Trichloroethane	28	U
56235	Carbon Tetrachloride	11	U
108054	Vinyl Acetate	57	U
75274	Bromodichloromethane	6	U
78875	1,2-Dichloropropane	6	U
10061015	cis-1,3-Dichloropropene	28	U
79016	Trichloroethene	6	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	28	U
79005	1,1,2-Trichloroethane	17	U
71432	Benzene	6	U
10061026	Trans-1,3-Dichloropropene	28	U
110758	2-Chloroethylvinylether	57	U
75252	Bromoform	23	U
108101	4-Methyl-2-Pentanone	140	U
591786	2-Hexanone	110	U
127184	Tetrachloroethene	6	U
79345	1,1,2,2-Tetrachloroethane	11	U
108883	Toluene	28	U
108907	Chlorobenzene	23	U
100414	Ethylbenzene	28	69
100425	Styrene	28	U
108383	m&p-Xylenes	28	130
95476	o-Xylene	28	U
541731	1,3-Dichlorobenzene	28	U
95501	1,2-Dichlorobenzene	28	U
106467	1,4-Dichlorobenzene	28	U
1634044	Methyl-t-butyl ether	28	75
108203	Di-isopropyl-ether	28	U
75650	t-Butyl Alcohol	570	U

TARGET COMPOUND SUMMARY: 504

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA31897

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-13_SOIL

Sample wt/vol: 1.0(g/ml) g Lab File ID: >E5364

Level: (low/med) LOW Date Recvd/Ext: 07/14/95-N/A

% Solid: 88 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 5

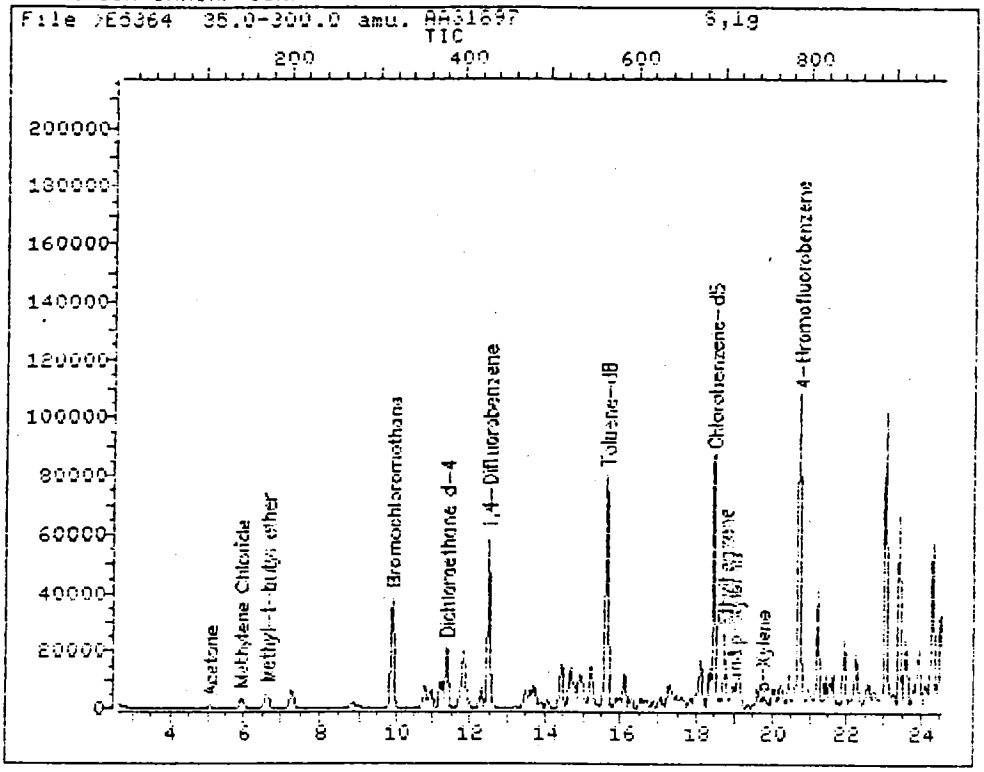
Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	540841	Pentane, 2,2,4-trimethyl-	11.83	153	J
2	560214	Pentane, 2,3,3-trimethyl-	14.67	114	J
3	589811	Heptane, 3-methyl-	15.23	91	J
4		Unknown	18.12	74	J
5	103651	Benzene, propyl-	21.22	85	J
6	622968	Benzene, 1-ethyl-4-methyl-	23.04	256	J
7		Unknown	23.41	176	J
8	141935	Benzene, 1,3-diethyl-	23.59	68	J
9	1074175	Benzene, 1-methyl-2-propyl-	23.94	80	J
10	1758889	Benzene, 2-ethyl-1,4-dimethy	24.31	148	J

Tentative Compound Summary: 1244

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5364::01
Name: AA31897
Misc: S,1g

Quant Output File: ^E5364::A2
Instrument ID: MSD_1

Id File: IDSW01::02
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qual Time: 950718 12:51

Operator ID: LIN
Quant Time : 950718 18:31
Injected at: 950718 18:02

QUANT REPORT

Operator ID: LIN
Output File: ^E5364::A2
Data File: >E5364::D1
Name: AA31897
Misc: S,1g

Quant Rev: 7
Quant Time: 950718 18:31
Injected at: 950718 18:02
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950718 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	31462	50.00	ug/L	98
8)	Methyl-t-butyl ether	6.63	176	16260	13.23	ug/L	67
9)	Methylene Chloride	5.92	145	3249	4.22	ug/L	95
10)	Acetone	5.07	108	4842	62.90	ug/L	86
19)	1,2-Dichloroethane-d4	11.37	382	9968	52.16	ug/L	95
28)	*1,4-Difluorobenzene	12.47	430	134767	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.44	690	122483	50.00	ug/L	94
46)	Toluene d-8	15.62	567	126432	48.71	ug/L	97
48)	Ethylbenzene	18.74	703	42291	12.15	ug/L	98
50)	m&p-Xylenes	18.99	714	2757	2.22	ug/L	97
~~51)~~	~~o-Xylene~~	19.73	746	1487	.690	ug/L	97
53)	Bromofluorobenzene	20.72	789	102087	49.58	ug/L	90

ok Sub 7/25/95

* Compound is ISTD

DB 7/25/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-14 SOIL
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Soil
Percent Solid : 87
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : A031898
Lab File ID : >F5372
Date Analyzed : 07/18/95
Dilution Factor: 5
Sample Wt/Vol : 1.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	57	U
74839	Bromomethane	57	U
75014	Vinyl Chloride	29	U
75003	Chloroethane	57	U
75092	Methylene Chloride	57	U
67641	Acetone	110	520
75150	Carbon Disulfide	29	U
75694	Trichlorofluoromethane	29	U
75354	1,1-Dichloroethene	11	U
75343	1,1-Dichloroethane	29	U
156605	Trans-1,2-Dichloroethene	29	U
67663	Chloroform	29	U
107062	1,2-Dichloroethane	11	U
78933	2-Butanone	140	U
71556	1,1,1-Trichloroethane	29	U
56235	Carbon Tetrachloride	11	U
108054	Vinyl Acetate	57	U
75274	Bromodichloromethane	6	U
78875	1,2-Dichloropropane	6	U
10061015	cis-1,3-Dichloropropene	29	U
79016	Trichloroethene	6	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	29	U
79005	1,1,2-Trichloroethane	17	U
71432	Benzene	6	9
10061026	Trans-1,3-Dichloropropene	29	U
110758	2-Chloroethylvinylether	57	U
75252	Bromoform	23	U
108101	4-Methyl-2-Pentanone	140	U
591786	2-Hexanone	110	U
127184	Tetrachloroethene	6	U
79345	1,1,2,2-Tetrachloroethane	11	U
108883	Toluene	29	120
108907	Chlorobenzene	23	U
100414	Ethylbenzene	29	830
100425	Styrene	29	U
108383	m&p-Xylenes	29	1100
95476	o-Xylene	29	55
541731	1,3-Dichlorobenzene	29	U
95501	1,2-Dichlorobenzene	29	U
106467	1,4-Dichlorobenzene	29	U
1634044	Methyl-t-butyl ether	29	U
108203	Di-isopropyl-ether	29	U
75650	t-Butyl Alcohol	570	U

TARGET COMPOUND SUMMARY: 2514

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.: AA31898

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-14_SOIL

Sample wt/vol: 1.0(g/ml) g Lab File ID: >E5372

Level: (low/med) LOW Date Recvd/Ext: 07/14/95-N/A

% Solid: 87 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 5

Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

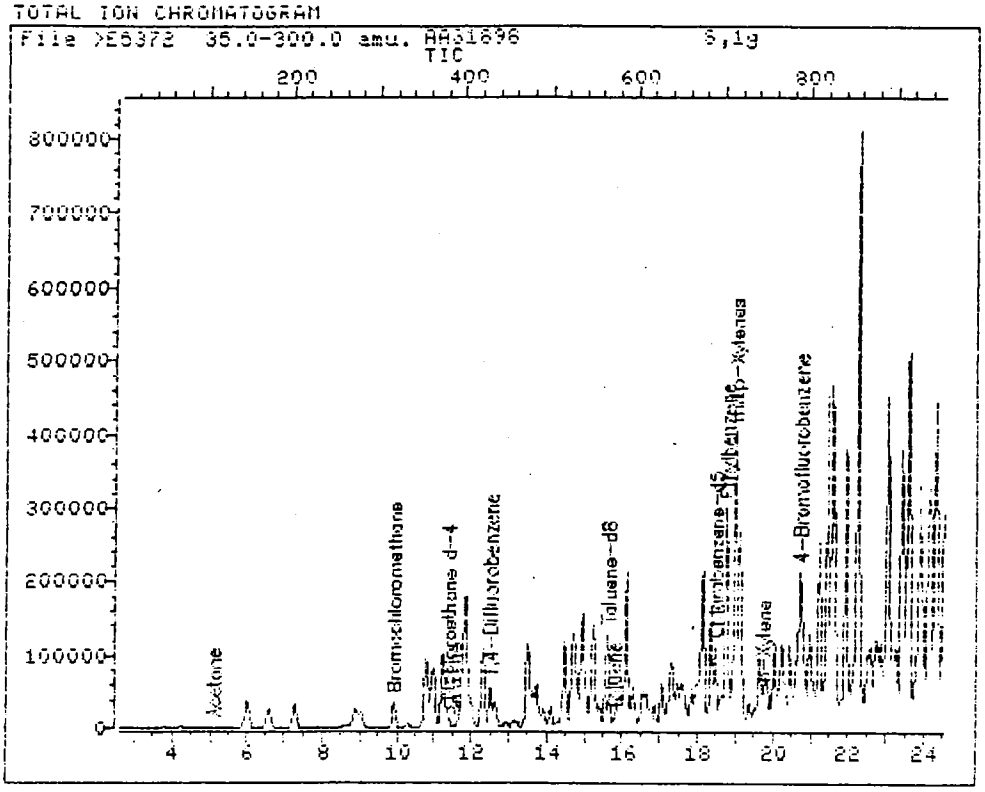
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	540841	Pentane, 2,2,4-trimethyl-	11.84	2184	J
2	611143	Benzene, 1-ethyl-2-methyl-	21.45	690	J
3	622968	Benzene, 1-ethyl-4-methyl-	21.57	1149	J
4		Unknown Substituted Benzene	22.28	1724	J
5		Unknown Substituted Benzene	23.06	747	J
6	611154	Benzene, 1-ethenyl-2-methyl-	23.43	805	J
7	1758689	Benzene, 2-ethyl-1,4-dimethy	23.62	1034	J
8	1120214	Undecane	23.89	862	J
9	535773	Benzene, 1-methyl-3-(1-methy	24.17	747	J
10	2870044	Benzene, 2-ethyl-1,3-dimethy	24.31	747	J

Tentative Compound Summary: 10690

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5372::D1 Quant Output File: ^E5372::A2
Name: AA31896 Instrument ID: MSD_1
Misc: S,1g

Id File: IDSW01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18 Last Qcal Time: 950718 12:51

Operator ID: LIN
Quant Time : 950718 23:20
Injected at: 950718 22:51

QUANT REPORT

Operator ID: LIN
Output File: ^E5372::A2
Data File: >E5372::01
Name: AA31898
Misc: S,1g

Quant Rev: 7
Quant Time: 950718 23:20
Injected at: 950718 22:51
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950718 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	29603	50.00	ug/L	98
10)	Acetone	5.08	108	6593	91.02	ug/L	76
19)	1,2-Dichloroethane-d4	11.38	382	9245	51.47	ug/L	96
28)	*1,4-Difluorobenzene	12.48	430	125390	50.00	ug/L	98
35)	Benzene	11.54	389	3406	1.52	ug/L	96
39)	*Chlorobenzene-d5	18.46	690	117587	50.00	ug/L	95
45)	Toluene	15.77	573	3331	2.13	ug/L	93
46)	Toluene d-8	15.63	567	125158	50.23	ug/L	95
49)	Ethylbenzene	18.76	703	483576	144.48	ug/L	99
50)	m&p-Xylenes	18.99	713	231576	194.55	ug/L	96
51)	o-Xylene	19.73	746	25966	9.62	ug/L	91
53)	Bromofluorobenzene	20.72	788	94703	47.91	ug/L	96

* Compound is ISTD

DB 7/25

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PF-15 SOIL
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Soil
Percent Solid : 86
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA31899
Lab File ID : >F5373
Date Analyzed : 07/18/95
Dilution Factor: 5
Sample Wt/Vol : 1.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	58	U
74839	Bromomethane	58	U
75014	Vinyl Chloride	29	U
75003	Chloroethane	58	U
75092	Methylene Chloride	58	260B
67641	Acetone	120	230
75150	Carbon Disulfide	29	U
75694	Trichlorofluoromethane	29	U
75354	1,1-Dichloroethene	12	U
75343	1,1-Dichloroethane	29	U
156605	Trans-1,2-Dichloroethene	29	U
67663	Chloroform	29	U
107062	1,2-Dichloroethane	12	U
78933	2-Butanone	150	U
71556	1,1,1-Trichloroethane	29	U
56235	Carbon Tetrachloride	12	U
108054	Vinyl Acetate	58	U
75274	Bromodichloromethane	6	U
78875	1,2-Dichloropropane	6	U
10061015	cis-1,3-Dichloropropene	29	U
79016	Trichloroethene	6	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	29	U
79005	1,1,2-Trichloroethane	17	U
71432	Benzene	6	8
10061026	Trans-1,3-Dichloropropene	29	U
110758	2-Chloroethylvinylether	58	U
75252	Bromoform	23	U
108101	4-Methyl-2-Pentanone	150	U
591786	2-Hexanone	120	U
127184	Tetrachloroethene	6	U
79345	1,1,2,2-Tetrachloroethane	12	U
108883	Toluene	29	U
108907	Chlorobenzene	23	U
100414	Ethylbenzene	29	230
100425	Styrene	29	U
108383	m&p-Xylenes	29	77
95476	o-Xylene	29	U
541731	1,3-Dichlorobenzene	29	U
95501	1,2-Dichlorobenzene	29	U
106467	1,4-Dichlorobenzene	29	U
1634044	Methyl-t-butyl ether	29	310
108203	Di-isopropyl-ether	29	U
75650	t-Butyl Alcohol	580	U

TARGET COMPOUND SUMMARY: 855

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA31899

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-15_SOIL

Sample wt/vol: 1.0(g/ml) g Lab File ID: >E5373

Level: (low/med) LOW Date Recvd/Ext: 07/14/95-N/A

% Solid: 86 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 5

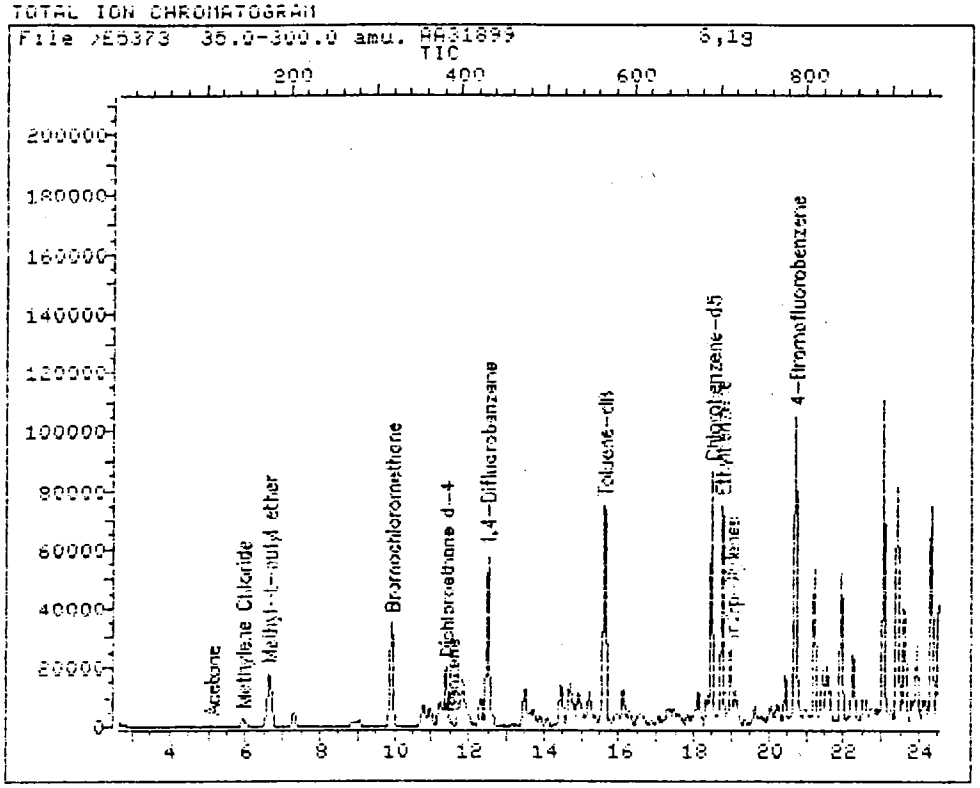
Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	1070877	Pentane, 2,2,4,4-tetramethyl	11.85	145	J
2	560214	Pentane, 2,3,3-trimethyl-	14.70	110	J
3		Unknown Substituted Benzene	21.57	81	J
4	611143	Benzene, 1-ethyl-2-methyl-	21.94	145	J
5		Unknown Substituted Benzene	22.26	81	J
6	95636	Benzene, 1,2,4-trimethyl-	23.05	302	J
7		Unknown	23.41	256	J
8	105055	Benzene, 1,4-diethyl-	23.60	140	J
9	1074175	Benzene, 1-methyl-2-propyl-	23.94	105	J
10	535773	Benzene, 1-methyl-3-(1-methy	24.31	221	J

Tentative Compound Summary: 1587

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5373::D1 Quant Output File: ^E5373::A2
Name: AA31899 Instrument ID: MSD_1
Misc: S,1g

Id File: IDSVQ1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18 Last Qcal Time: 950718 12:51

Operator ID: LIN
Quant Time : 950718 23:56
Injected at: 950718 23:26

QUANT REPORT

Operator ID: LIN
Output File: ^E5373::A2
Data File: >E5373::D1
Name: AA31899
Misc: S,1g

Quant Rev: 7
Quant Time: 950718 23:56
Injected at: 950718 23:26
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950718 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.92	319	29406	50.00	ug/L	97
8)	Methyl-t-butyl ether	6.64	176	61484	53.51	ug/L	86
9)	Methylene Chloride	5.93	145	3197	4.44	ug/L	95
10)	Acetone	5.10	109	2891	40.18	ug/L	84
19)	1,2-Dichloroethane-d4	11.39	393	9440	52.91	ug/L	95
28)	*1,4-Difluorobenzene	12.50	431	125075	50.00	ug/L	98
35)	Benzene	11.55	390	2948	1.32	ug/L	93
39)	*Chlorobenzene-d5	18.47	691	118748	50.00	ug/L	95
46)	Toluene d-8	15.62	567	123098	48.89	ug/L	99
48)	Ethylbenzene	18.75	703	133646	39.59	ug/L	94
50)	m&p-Xylenes	19.00	714	15898	13.23	ug/L	92
53)	Bromofluorobenzene	20.72	789	95140	47.66	ug/L	97

* Compound is ISTD

DB 7/25/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PF-16 SOIL
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Soil
Percent Solid : 90
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA31900
Lab File ID : >E5398
Date Analyzed : 07/19/95
Dilution Factor: 5
Sample Wt/Vol : 1.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	56	U	124481	Dibromochloromethane	28	U
74839	Bromomethane	56	U	79005	1,1,2-Trichloroethane	17	U
75014	Vinyl Chloride	28	U	71432	Benzene	6	U
75003	Chloroethane	56	U	10061026	Trans-1,3-Dichloropropene	28	U
75092	Methylene Chloride	56	19JB	110758	2-Chloroethylvinylether	56	U
67641	Acetone	110	64J	75252	Bromoform	22	U
75150	Carbon Disulfide	28	U	108101	4-Methyl-2-Pentanone	140	U
75694	Trichlorofluoromethane	28	U	591786	2-Hexanone	110	U
75354	1,1-Dichloroethene	11	U	127184	Tetrachloroethene	6	U
75343	1,1-Dichloroethane	28	U	79345	1,1,2,2-Tetrachloroethane	11	U
156605	Trans-1,2-Dichloroethene	28	U	108883	Toluene	28	U
67663	Chloroform	28	U	108907	Chlorobenzene	22	U
107062	1,2-Dichloroethane	11	U	100414	Ethylbenzene	28	U
78933	2-Butanone	140	U	100425	Styrene	28	U
71556	1,1,1-Trichloroethane	28	U	108383	m&p-Xylenes	28	U
56235	Carbon Tetrachloride	11	U	95476	o-Xylene	28	U
108054	Vinyl Acetate	56	U	541731	1,3-Dichlorobenzene	28	U
75274	Bromodichloromethane	6	U	95501	1,2-Dichlorobenzene	28	U
78875	1,2-Dichloropropane	6	U	106467	1,4-Dichlorobenzene	28	U
10061015	cis-1,3-Dichloropropene	28	U	1634044	Methyl-t-butyl ether	28	19J
79016	Trichloroethene	6	U	108203	Di-isopropyl-ether	28	U
				75650	t-Butyl Alcohol	560	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA31900

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-16_SOIL

Sample wt/vol: 1.0(g/ml) g Lab File ID: >E5388

Level: (low/med) LOW Date Recvd/Ext: 07/14/95-N/A

% Solid: 90 Date Analyzed: 07/19/95

Column: CAP Dilution Factor: 5

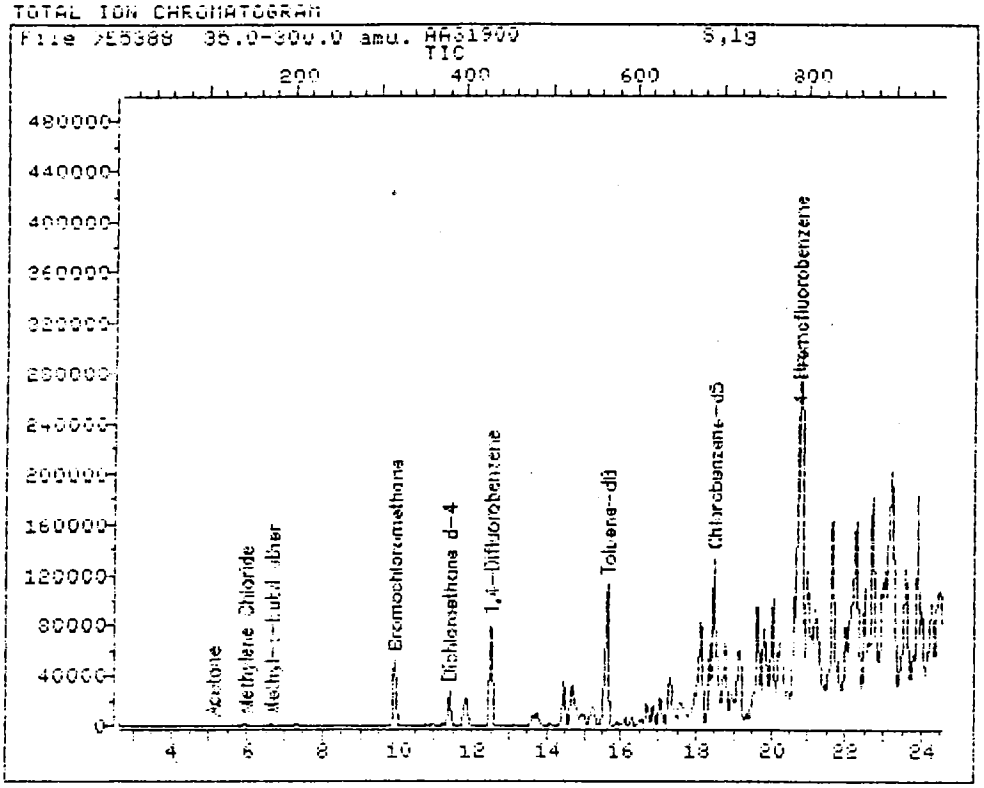
Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	2216344	Octane, 4-methyl-	18.12	328	J
2		Unknown	19.64	306	J
3		Unknown	21.20	228	J
4	112403	Dodecane	21.66	372	J
5	17302373	Decane, 2,2-dimethyl-	22.28	667	J
6	17302328	Nonane, 3,7-dimethyl-	22.72	311	J
7	62016346	Octane, 2,3,7-trimethyl-	23.04	267	J
8	62108310	Heptane, 4-ethyl-2,2,6,6-tet	23.23	778	J
9		Unknown	23.59	283	J
10	19218941	Tetradecane, 1-iodo-	23.89	339	J

Tentative Compound Summary: 3878

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5388::D1 Quant Output File: ^E5388::A2
Name: AA31900 Instrument ID: MSD_1
Misc: S,1g

Id File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18 Last Qcal Time: 950719 13:41

Operator ID: LIN
Quant Time : 950719 16:18
Injected at: 950719 15:49

QUANT REPORT

Operator ID: LIN
Output File: ^E5388::A2
Data File: >E5388::D1
Name: AA31900
Misc: S,1g

Quant Rev: 7
Quant Time: 950719 16:18
Injected at: 950719 15:49
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950719 13:41

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.91	318	43424	50.00	ug/L	97
8)	Methyl-t-butyl ether	6.65	176	5942	3.47	ug/L	87
9)	Methylene Chloride	5.94	145	2986	3.36	ug/L	92
10)	Acetone	5.09	108	1391	11.47	ug/L	78
19)	1,2-Dichloroethane-d4	11.38	392	12969	48.96	ug/L	96
28)	*1,4-Difluorobenzene	12.49	430	181557	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.46	690	157126	50.00	ug/L	97
46)	Toluene d-8	15.63	567	170428	50.86	ug/L	98
53)	Bromofluorobenzene	20.72	788	127279	48.77	ug/L	96

* Compound is ISTD

DB 7/25/6

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PE-17 SOIL
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Soil
Percent Solid : 88
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA31901
Lab File ID : VE5371
Date Analyzed : 07/18/95
Dilution Factor: 125
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	1400	U
74839	Bromomethane	1400	U
75014	Vinyl Chloride	710	U
75003	Chloroethane	1400	U
75092	Methylene Chloride	1400	3300B
67641	Acetone	2800	U
75150	Carbon Disulfide	710	U
75694	Trichlorofluoromethane	710	U
75354	1,1-Dichloroethene	280	U
75343	1,1-Dichloroethane	710	U
156605	Trans-1,2-Dichloroethene	710	U
67663	Chloroform	710	830
107062	1,2-Dichloroethane	280	U
78933	2-Butanone	3600	U
71556	1,1,1-Trichloroethane	710	U
56235	Carbon Tetrachloride	280	U
108054	Vinyl Acetate	1400	U
75274	Bromodichloromethane	140	U
78875	1,2-Dichloropropane	140	U
10061015	cis-1,3-Dichloropropene	710	U
79016	Trichloroethene	140	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	710	U
79005	1,1,2-Trichloroethane	430	U
71432	Benzene	140	U
10061026	Trans-1,3-Dichloropropene	710	U
110758	2-Chloroethylvinylether	1400	U
75252	Bromoform	570	U
108101	4-Methyl-2-Pentanone	3600	U
591786	2-Hexanone	2800	U
127184	Tetrachloroethene	140	U
79345	1,1,2,2-Tetrachloroethane	280	U
108883	Toluene	710	3800
108907	Chlorobenzene	570	U
100414	Ethylbenzene	710	14000
100425	Styrene	710	U
108383	m&p-Xylenes	710	5300
95476	o-Xylene	710	1600
541731	1,3-Dichlorobenzene	710	U
95501	1,2-Dichlorobenzene	710	U
106467	1,4-Dichlorobenzene	710	U
1634044	Methyl-t-butyl ether	710	U
108203	Di-isopropyl-ether	710	U
75650	t-Butyl Alcohol	14000	U

TARGET COMPOUND SUMMARY: 21730

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
AA31901

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-17_SOIL

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E5371

Level: (low/med) MED Date Recvd/Ext: 07/14/95-N/A

% Solid: 88 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 125

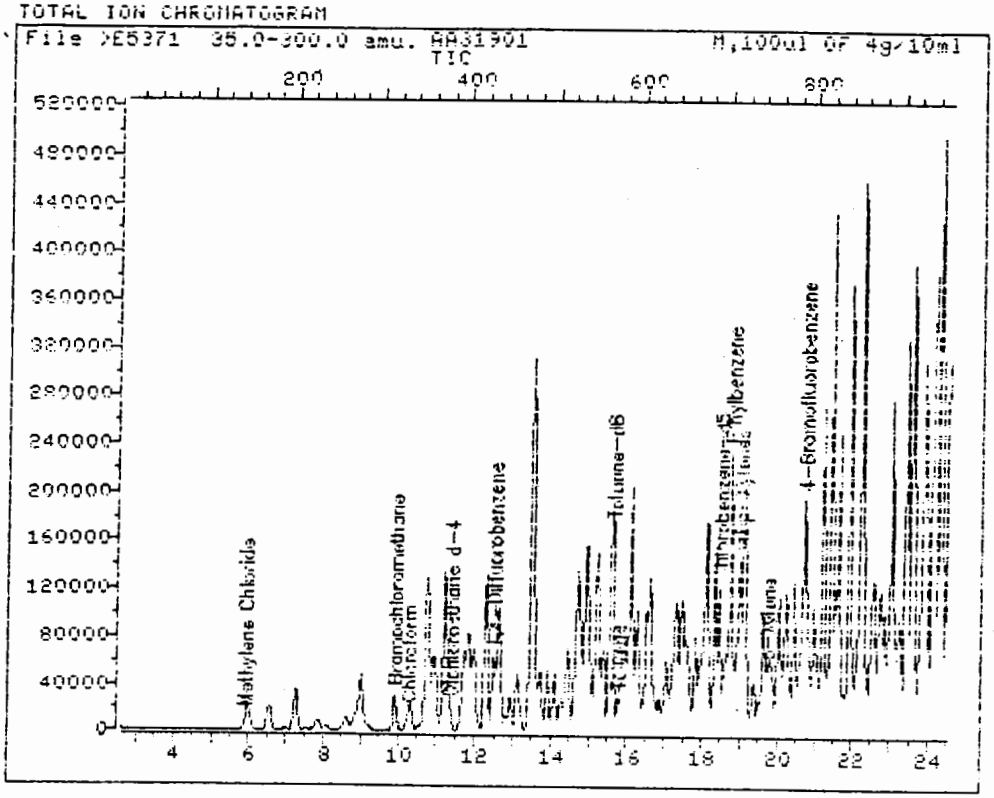
Number of TICs found: 10 CONCENTRATION UNITS: ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	108872	Cyclohexane, methyl-	13.49	62500	J
2	921471	Hexane, 2,3,4-trimethyl-	18.12	26989	J
3	622968	Benzene, 1-ethyl-4-methyl-	21.45	36932	J
4	611143	Benzene, 1-ethyl-2-methyl-	21.94	36932	J
5	95636	Benzene, 1,2,4-trimethyl-	22.26	52557	J
6	141935	Benzene, 1,3-diethyl-	23.43	35511	J
7	25340174	Benzene, diethyl-	23.60	45455	J
8	1120214	Undecane	23.90	51136	J
9	535773	Benzene, 1-methyl-3-(1-methyl	24.17	51136	J
10	874419	Benzene, 1-ethyl-2,4-dimethyl	24.31	46875	J

Tentative Compound Summary: 446023

DATA REPORTING QUALIFIERS
A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5371::D1
Name: AA31901
Misc: M,100ul OF 4g/10ml

Quant Output File: ^E5371::A2
Instrument ID: MSD_1

Id File: IDWUQ1::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44

Last Qual Time: 950718 12:21

Operator ID: LIN
Quant Time : 950718 22:44
Injected at: 950718 22:15

QUANT REPORT

Operator ID: LIN
Quant Rev: 7
Quant Time: 950718 22:44
Output File: ^E5371::A2
Injected at: 950718 22:15
Data File: >E5371::D1
Dilution Factor: 1.00000
Name: AA31901
Instrument ID: MSD_1
Misc: M,100ul OF 4g/10ml

ID File: IDWU01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44
Last Qcal Time: 950718 12:21

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	318	26389	50.00	ug/L	90
9)	Methylene Chloride	5.91	144	1738	2.34	ug/L	95
18)	Chloroform	10.27	334	10095	5.82	ug/L	48
19)	1,2-Dichloroethane-d4	11.38	382	7807	50.34	ug/L	94
28)	*1,4-Difluorobenzene	12.48	430	137481	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.46	690	123159	50.00	ug/L	97
45)	Toluene	15.77	573	4555	2.64	ug/L	95
46)	Toluene d-8	15.63	567	143138	52.58	ug/L	99
48)	Ethylbenzene	18.76	703	354791	95.43	ug/L	97
50)	m&p-Xylenes	18.99	713	48880	36.97	ug/L	94
51)	o-Xylene	19.73	745	31809	11.02	ug/L	92
53)	Bromofluorobenzene	20.72	788	103569	52.63	ug/L	98

* Compound is ISTD

DB 7/25/

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : PF-18 SOIL
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Soil
Percent Solid : 88
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA31902
Lab File ID : >E5363
Date Analyzed : 07/18/95
Dilution Factor: 1
Sample Wt/Vol : 5.0g

CONCENTRATION UNITS: UG/KG(PPB)

CAS No.	COMPOUND	PQL	CONC
74873	Chloromethane	11	U
74839	Bromomethane	11	U
75014	Vinyl Chloride	6	U
75003	Chloroethane	11	U
75092	Methylene Chloride	11	43B
67641	Acetone	23	U
75150	Carbon Disulfide	6	U
75694	Trichlorofluoromethane	6	U
75354	1,1-Dichloroethene	2	U
75343	1,1-Dichloroethane	6	U
156605	Trans-1,2-Dichloroethene	6	U
67663	Chloroform	6	U
107062	1,2-Dichloroethane	2	U
78933	2-Butanone	28	U
71556	1,1,1-Trichloroethane	6	U
56235	Carbon Tetrachloride	2	U
108054	Vinyl Acetate	11	U
75274	Bromodichloromethane	1	U
78875	1,2-Dichloropropane	1	U
10061015	cis-1,3-Dichloropropene	6	U
79016	Trichloroethene	1	U

CAS NO.	COMPOUND	PQL	CONC
124481	Dibromochloromethane	6	U
79005	1,1,2-Trichloroethane	3	U
71432	Benzene	1	U
10061026	Trans-1,3-Dichloropropene	6	U
110758	2-Chloroethylvinylether	11	U
75252	Bromoform	5	U
108101	4-Methyl-2-Pentanone	28	U
591786	2-Hexanone	23	U
127184	Tetrachloroethene	1	U
79345	1,1,2,2-Tetrachloroethane	2	U
108883	Toluene	6	U
108907	Chlorobenzene	5	U
100414	Ethylbenzene	6	U
100425	Styrene	6	U
108383	m&p-Xylenes	6	U
95476	o-Xylene	6	U
541731	1,3-Dichlorobenzene	6	U
95501	1,2-Dichlorobenzene	6	U
106467	1,4-Dichlorobenzene	6	U
1634044	Methyl-t-butyl ether	6	U
108203	Di-isopropyl-ether	6	U
75650	t-Butyl Alcohol	110	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

AA31902

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: SOIL Client ID: PE-18_SOIL

Sample wt/vol: 5.0(g/ml) g Lab File ID: >E5363

Level: (low/med) LOW Date Recvd/Ext: 07/14/95-N/A

% Solid: 88 Date Analyzed: 07/18/95

Column: CAP Dilution Factor: 1

Number of TICs found: 1 CONCENTRATION UNITS: ug/Kg

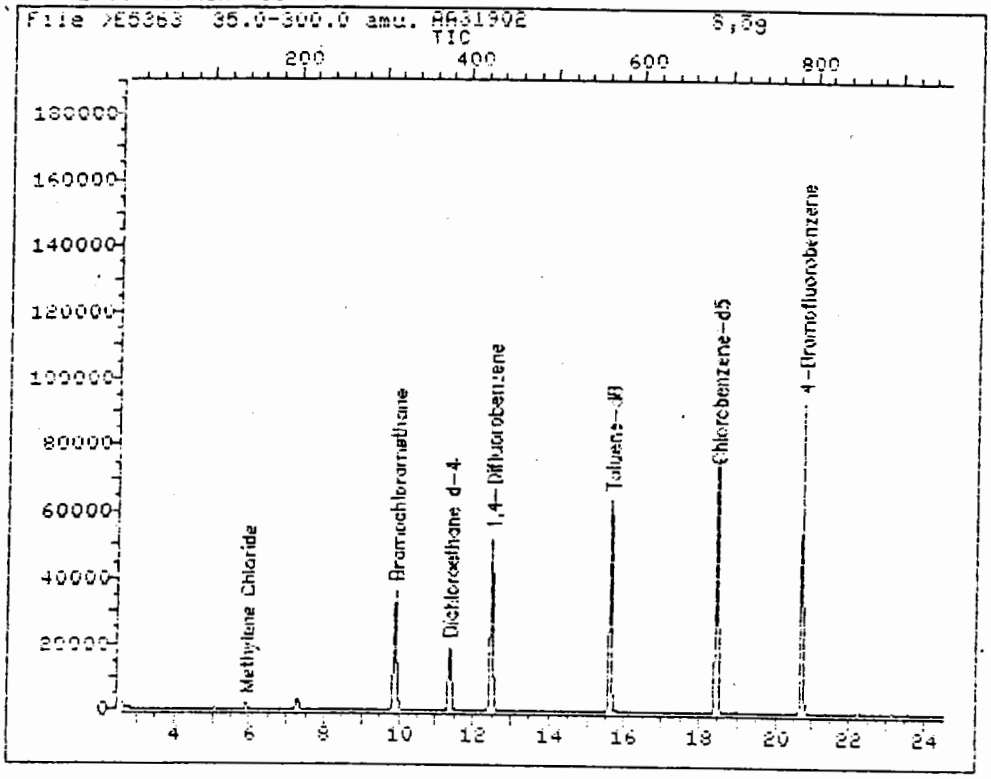
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11 110543	Hexane	7.28	6	J

Tentative Compound Summary: 6

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5363::D1
Name: AA31902
Misc: S,5g

Quant Output File: ^E5363::A2
Instrument ID: MSD_1

Id File: IDSW01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:19
Last Qcal Time: 950718 12:51

Operator ID: LIN
Quant Time : 950718 17:55
Injected at: 950718 17:26

QUANT REPORT

Operator ID: LIN
Output File: ^E5363::A2
Data File: >E5363::D1
Name: AA31902
Misc: 5,5g

Quant Rev: 7
Quant Time: 950718 17:55
Injected at: 950718 17:26
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDSV01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 17:18
Last Qcal Time: 950718 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.90	319	29537	50.00	ug/L	98
9)	Methylene Chloride	5.92	145	2430	3.36	ug/L	91
19)	1,2-Dichloroethane-d4	11.37	382	9148	51.15	ug/L	96
28)	*1,4-Difluorobenzene	12.47	430	119259	50.00	ug/L	98
39)	*Chlorobenzene-d5	18.44	690	109622	50.00	ug/L	94
46)	Toluene d-8	15.62	567	109319	47.06	ug/L	96
53)	Bromofluorobenzene	20.71	789	85492	46.39	ug/L	94

* Compound is ISTD

DB 7/25/95

HAMPTON-CLARKE/VERITECH
VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID : FIELD BLANK
Date Rcvd/Extd: 07/14/95-N/A
Sample Matrix : Water
Percent Solid : 0
Column : J&W DB-624 75M .53mm ID column

Lab Sample No. : AA31903
Lab File ID : >E5390
Date Analyzed : 07/19/95
Dilution Factor: 1
Sample Wt/Vol : 5.0ml

CONCENTRATION UNITS: UG/L (PPB)

CAS No.	COMPOUND	PQL	CONC	CAS NO.	COMPOUND	PQL	CONC
74873	Chloromethane	10	U	124481	Dibromochloromethane	5	U
74839	Bromomethane	10	U	79005	1,1,2-Trichloroethane	3	U
75014	Vinyl Chloride	5	U	71432	Benzene	1	U
75003	Chloroethane	10	U	10061026	Trans-1,3-Dichloropropene	5	U
75092	Methylene Chloride	10	93B	110758	2-Chloroethylvinylether	10	U
67641	Acetone	20	U	75252	Bromoform	4	U
75150	Carbon Disulfide	5	4J	108101	4-Methyl-2-Pentanone	25	U
75694	Trichlorofluoromethane	5	U	591786	2-Hexanone	20	U
75354	1,1-Dichloroethene	2	U	127184	Tetrachloroethene	1	U
75343	1,1-Dichloroethane	5	U	79345	1,1,2,2-Tetrachloroethane	2	U
156605	Trans-1,2-Dichloroethene	5	U	108883	Toluene	5	U
67663	Chloroform	5	U	108907	Chlorobenzene	4	U
107062	1,2-Dichloroethane	2	U	100414	Ethylbenzene	5	U
78933	2-Butanone	25	U	100425	Styrene	5	U
71556	1,1,1-Trichloroethane	5	U	108383	m&p-Xylenes	5	U
56235	Carbon Tetrachloride	2	U	95476	o-Xylene	5	U
108054	Vinyl Acetate	10	U	541731	1,3-Dichlorobenzene	5	U
75274	Bromodichloromethane	1	U	95501	1,2-Dichlorobenzene	5	U
78875	1,2-Dichloropropane	1	U	106467	1,4-Dichlorobenzene	5	U
10061015	cis-1,3-Dichloropropene	5	U	1634044	Methyl-t-butyl ether	5	U
79016	Trichloroethene	1	U	108203	Di-isopropyl-ether	5	U
				75650	t-Butyl Alcohol	100	U

TARGET COMPOUND SUMMARY: 0

DATA REPORTING QUALIFIERS

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value used when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the GC/MS instrument for that specific analyte.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.

AA31903

Lab Name: VERITECH, NJDEPE CERT.# 14622 Contract:-------

Lab Code: GC/MS Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: WATER Client ID: FIELD_BLANK

Sample wt/vol: 5.0 (g/ml) ml Lab File ID: >E5390

Level: (low/med) LOW Date Recvd/Ext: 07/14/95-N/A

% Solid: 0 Date Analyzed: 07/19/95

Column: CAP Dilution Factor: 1

Number of TICs found: 0 CONCENTRATION UNITS: ug/L

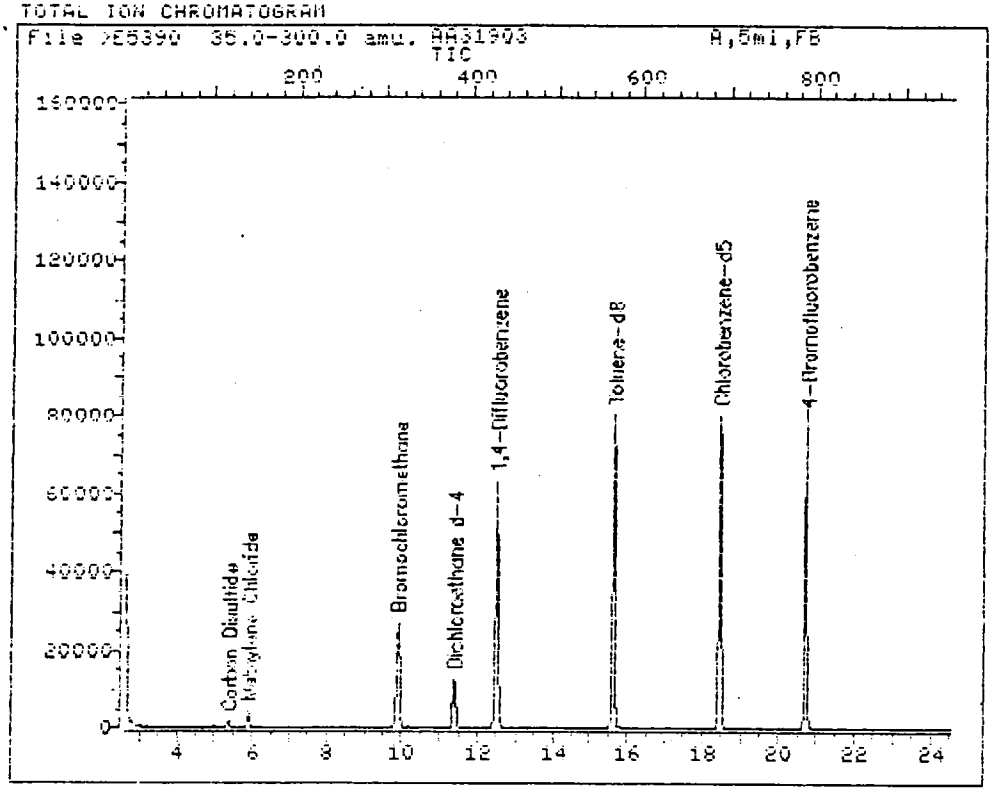
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Tentative Compound Summary: 0

DATA REPORTING QUALIFIERS

A - Indicates an aldol condensate
J - Indicates an estimated value
B - Indicates compound was found in the blank as well as in the sample

TOTAL ION CHROMATOGRAM



Data File: >E5390::D1
Name: AA31903
Misc: A,5ml,FB

Quant Output File: ^E5390::A2
Instrument ID: MSD_1

Id File: IDWU01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44
Last Qcal Time: 950719 13:11

Operator ID: LIN
Quant Time : 950719 17:27
Injected at: 950719 17:01

QUANT REPORT

Operator ID: LIN
Output File: ^E5390::A2
Data File: >E5390::D1
Name: AA31903
Misc: A,5ml,FB

Quant Rev: 7
Quant Time: 950719 17:27
Injected at: 950719 17:01
Dilution Factor: 1.00000
Instrument ID: MSD_1

ID File: IDWU01::D2
Title: J&W DB-624 75M .53mm ID column
Last Calibration: 950622 14:44
Last Qcal Time: 950719 13:11

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	9.91	318	22472	50.00	ug/L	92
9)	Methylene Chloride	5.91	144	5423	8.68	ug/L	90
13)	Carbon Disulfide	5.39	121	6069	3.92	ug/L	96
19)	1,2-Dichloroethane-d4	11.38	382	6052	46.23	ug/L	96
28)	*1,4-Difluorobenzene	12.49	430	144967	50.00	ug/L	97
39)	*Chlorobenzene-d5	18.45	690	110814	50.00	ug/L	94
46)	Toluene d-8	15.63	567	133706	52.90	ug/L	96
53)	Bromofluorobenzene	20.73	789	79562	45.27	ug/L	95

* Compound is ISTD

DB 7/25/95

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Veritech NJDEPE CERT.# 14622

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Dates Analyzed: 07/18/95 thru 07/19/95

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	FILE	TOT OUT
DAILY BLK(	W	94	99	97	^E5356	0
DAILY BLK(	S	100	96	99	^E5357	0
AA31868	W	94	98	98	^E5358	0
AA31875	W	99	99	98	^E5359	0
AA31883	S	107	96	98	^E5360	0
AA31884	S	103	96	97	^E5361	0
AA31896	S	107	96	97	^E5362	0
AA31902	S	102	94	93	^E5363	0
AA31897	S	104	97	99	^E5364	0
AA31876	S	102	96	97	^E5365	0
AA31878	W	103	97	97	^E5366	0
AA31878	W	102	98	97	^E5367	0
AA31877	W	100	97	98	^E5368	0
AA31879	W	99	96	104	^E5369	0
AA31891	W	99	95	98	^E5370	0
AA31901	W	101	105	105	^E5371	0
AA31898	S	103	100	96	^E5372	0
AA31899	S	106	98	95	^E5373	0
AA31900	S	101	84	121	^E5374	0

QC Limits For:	Soil	Water	Sur Conc(ug/L) Water	Sur Conc(ug/L) Soil
S1 (DCE) = 1,2-Dichloroethane-d4	70-121	76-114	50	50
S2 (TOL) = Toluene d-8	81-117	88-110	50	50
S3 (BFB) = Bromofluorobenzene	74-121	86-115	50	50

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of method/lab limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Veritech NJDEPE CERT.# 14622

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 07/19/95

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	FILE	TOT OUT
DAILY BLK(	S	91	103	96	^E5378	0
AA31883MS	S	96	100	100	^E5379	0
AA31883MSD	S	93	103	99	^E5380	0
SMB-SPK	S	96	100	98	^E5381	0

QC Limits For:	Soil	Water	Sur Conc(ug/L) Water	Sur Conc(ug/L) Soil
S1 (DCE) = 1,2-Dichloroethane-d4	70-121	76-114	50	50
S2 (TOL) = Toluene d-8	81-117	88-110	50	50
S3 (BFB) = Bromofluorobenzene	74-121	86-115	50	50

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of method/lab limits

2A
VOLATILE SURROGATE RECOVERIES

Lab Name: Veritech NJDEPE CERT.# 14622

Lab Code: 020406 Case No.:---- SAS No.:---- SDG No.:----

Date Analyzed: 07/19/95

LAB SAMP NO.	($)	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	FILE	TOT OUT
DAILY BLK(	W	95	99	97	^E5385	0
DAILY BLK(	S	95	99	96	^E5386	0
DAILY BLK(	W	98	94	100	^E5387	0
AA31900	S	98	102	98	^E5388	0
AA31901	W	97	98	98	^E5389	0
AA31903	W	92	106	91	^E5390	0
AA31907	W	95	100	97	^E5391	0
AA31911	S	97	109	86	^E5392	0
AA31912	S	98	109	92	^E5393	0
AA31950	S	98	98	96	^E5394	0
AA31951	S	96	97	98	^E5395	0
AA31952	S	98	99	98	^E5396	0
AA31953	S	101	65*	110	^E5397	1
AA31963	S	98	98	98	^E5398	0
AA31868MS	W	99	100	100	^E5399	0
AA31868MSD	W	99	98	102	^E5400	0
WMB-89K	W	104	92	99	^E5401	0

QC Limits For:	Soil	Water	Sur Conc(ug/L) Water	Sur Conc(ug/L) Soil
S1 (DCE) = 1,2-Dichloroethane-d4	70-121	76-114	50	50
S2 (TOL) = Toluene d-8	81-117	88-110	50	50
S3 (BFB) = Bromofluorobenzene	74-121	86-115	50	50

$ Column indicating Soil or Water matrix
# Column to be used to flag recovery values
* Values outside of method/lab limits

FORM 3

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Matrix Spike - Lab sample No.: AA31883

Non spiked file: ^E5360 Spiked file: ^E5379 Spike dup file: ^E5380

Compound	Spike Added (ug/Kg)	Sample Conc (ug/Kg)	MS Conc (ug/Kg)	MSD Conc (ug/Kg)	MS % Rec#	MSD % Rec#	% Rpd#	QC Limits Rpd	QC Limits Rec
1,1-Dichloroethene	50	0	49	53	98	106	8	22	59-172
Trichloroethene	50	1	50	48	98	94	4	24	62-137
Benzene	50	0	51	51	102	102	0	21	66-142
Toluene	50	0	52	51	104	102	2	21	59-139
Chlorobenzene	50	0	50	50	100	100	0	21	60-133

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 of 10 outside of limits

Comments:

FORM 3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Matrix Spike - Lab sample No.: AA31868

Non spiked file: ^E5358 Spiked file: ^E5399 Spike dup file: ^E5400

Compound	Spike Added (ug/L)	Sample Conc (ug/L)	MS Conc (ug/L)	MSD Conc (ug/L)	MS % Rec#	MSD % Rec#	% Rpd#	QC Limits Rpd	QC Limits Rec
1,1-Dichloroethene	50	0	45	42	90	84	7	14	61-145
Trichloroethene	50	0	50	52	100	104	4	14	71-120
Benzene	50	0	50	50	100	100	0	11	76-127
Toluene	50	0	52	53	104	106	2	13	76-125
Chlorobenzene	50	0	49	51	98	102	4	13	75-130

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 of 10 outside of limits

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622.

Lab file ID: >E5356 Lab Sample ID: DAILY BLK/M

Date Analyzed: 07/18/95 Time Analyzed: 13:27

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E5358	AA31868	14:26
>E5359	AA31875	15:02
>E5366	AA31835	19:11
>E5367	AA31875	19:48
>E5368	AA31877	20:25
>E5369	AA31879	21:02
>E5370	AA31881	21:38
>E5371	AA31901	22:15

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622.

Lab file ID: >E5357 Lab Sample ID: DAILY BLK'S

Date Analyzed: 07/18/95 Time Analyzed: 13:57

Matrix: Soil

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E5360	AA31883	15:38
>E5361	AA31884	16:14
>E5362	AA31876	16:50
>E5363	AA31902	17:26
>E5364	AA31897	18:02
>E5365	AA31876	18:36
>E5372	AA31898	22:51
>E5373	AA31899	23:26
>E5374	AA31900	00:02

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622,

Lab file ID: >E5378 Lab Sample ID: DAILY BLK(S

Date Analyzed: 07/19/95 Time Analyzed: 02:25

Matrix: Soil

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E5379	AA31883MS	03:01
>E5380	AA31883MSD	03:36
>E5381	SMB-SPK	04:12

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622.

Lab file ID: >E5385 Lab Sample ID: DAILY BLK(M

Date Analyzed: 07/19/95 Time Analyzed: 14:16

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E5389	AA31881	16:25
>E5399	AA31868MS	22:14
>E5400	AA31868MSD	22:49
>E5401	WMB-SPK	23:25

Comments:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: UEPITECH, NJDEPE CERT.# 14622.

Lab file ID: >E5386 Lab Sample ID: DAILY BLK(S

Date Analyzed: 07/19/95 Time Analyzed: 14:49

Matrix: Soil

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E5388	AA31900	15:49
>E5392	AA31911	18:03
>E5393	AA31912	18:39
>E5394	AA31950	19:15
>E5395	AA31951	19:51
>E5396	AA31952	20:27
>E5397	AA31953	21:02
>E5398	AA31963	21:38

Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622.

Lab file ID: >E5387 Lab Sample ID: DAILY BLK(A

Date Analyzed: 07/19/95 Time Analyzed: 15:19

Matrix: Water

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

LAB FILE NO.	LAB SAMPLE ID	DATE ANALYZED
>E5390	AA31903	17:01
>E5391	AA31947	17:32

Comments:

5A

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

Lab Name:VERITECH Contract: -----

Lab File ID: >E5024 BFB Injection date: 6/22/95

Instrument ID: MSD_1 BFB Injection time: 11:11

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	20.3
75	30-60% of mass 95	45.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	74.1
175	5.0 - 9.0% of mass 174	5.5(7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.7(99.6)1
177	5.0 - 9.0% of mass 176	4.9(6.6)2

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

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

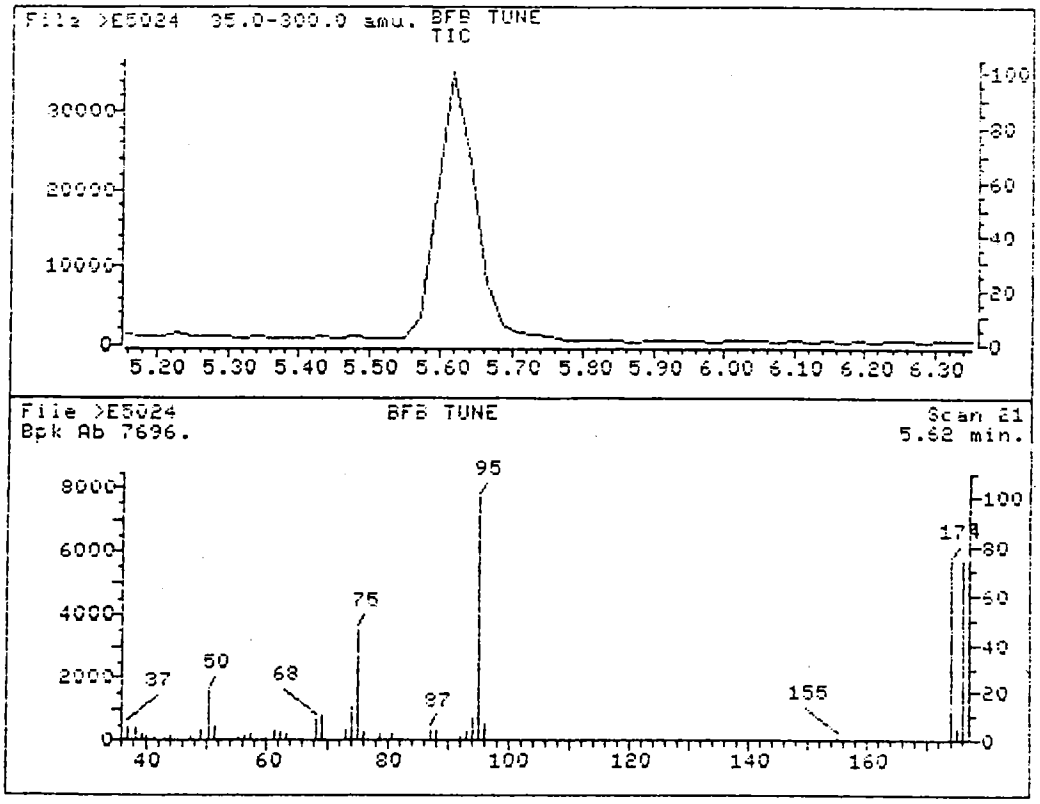
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(A)	>E5025	6/22/95	11:39
2	----------	DAILY CAL(S)	>E5026	6/22/95	12:08
3	----------	10PPB STD	>E5027	6/22/95	12:43
4	----------	20PPB STD	>E5028	6/22/95	13:15
5	----------	100PPB STD	>E5029	6/22/95	13:45
6	----------	200PPB STD	>E5030	6/22/95	14:15
7	----------	10PPB STD	>E5031	6/22/95	14:44
8	----------	20PPB STD	>E5032	6/22/95	15:14
9	----------	100PPB STD	>E5033	6/22/95	15:44
10	----------	200PPB STD	>E5034	6/22/95	16:14
11	----------	10PPB STD	>E5035	6/22/95	16:44
12	----------	DAILY BLK(S)	>E5036	6/22/95	17:19
13	----------	AA31230	>E5037	6/22/95	17:49
14	----------	DAILY BLK(ME	>E5038	6/22/95	18:24
15	----------	AA31203	>E5039	6/22/95	18:54
16	----------	AA31205	>E5040	6/22/95	19:31
17	----------	AA31212	>E5041	6/22/95	20:07
18	----------	AA31206	>E5042	6/22/95	20:43
19	----------	AA31207	>E5043	6/22/95	21:20
20	----------	AA31208	>E5044	6/22/95	21:56
21	----------	AA31213	>E5045	6/22/95	22:32

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.34	20.34	Ok
75	30-60% of mass 95	45.71	45.71	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.61	6.61	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	74.05	74.05	Ok
175	5-9% of mass 174	5.46	7.37	Ok
176	95-101% of mass 174	73.74	99.58	Ok
177	5-9% of mass 176	4.87	6.61	Ok

Injection Date: 06/22/95
Injection Time: 11:11
Data File: >E5024
Scan: 21



075

DB 7/25/95

>E5024 BFB TUNE
21

File: >E5024 Scan #: 21 Retn. time: 5.62

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	89.00	47.10	137.00	61.05	320.00	76.05	292.00	95.05	7696.00
37.00	479.00	49.05	321.00	62.05	297.00	78.95	179.00	96.05	509.00
38.10	403.00	50.05	1565.00	63.05	198.00	80.95	207.00	155.10	91.00
39.10	195.00	51.05	473.00	68.05	685.00	87.05	361.00	174.00	5699.00
40.00	119.00	55.05	99.00	69.05	806.00	88.05	339.00	175.00	420.00
41.10	101.00	56.05	119.00	73.05	336.00	92.05	168.00	176.00	5675.00
43.00	67.00	57.05	209.00	74.05	1045.00	93.05	271.00	177.00	375.00
44.00	158.00	59.95	65.00	75.05	3518.00	94.05	702.00		

5A

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

Lab Name: VERITECH Contract: -----

Lab File ID: >E5353 BFB Injection date: 7/18/95

Instrument ID: MSD_1 BFB Injection time: 11:51

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	18.9
75	30-60% of mass 95	42.6
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	81.2
175	5.0 - 9.0% of mass 174	6.2(7.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.6(99.2)1
177	5.0 - 9.0% of mass 176	5.3(6.6)2

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

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

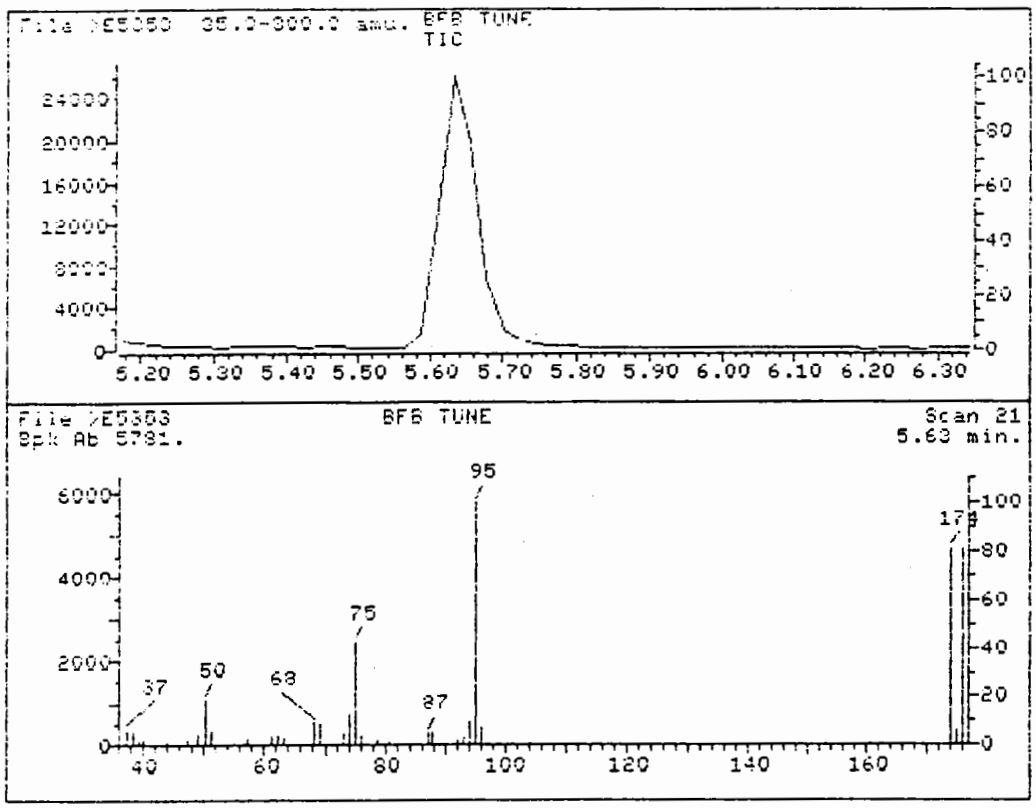
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(A)	>E5354	7/18/95	12:21
2	----------	DAILY CAL(S)	>E5355	7/18/95	12:51
3	----------	DAILY BLK(ME	>E5356	7/18/95	13:27
4	----------	DAILY BLK(S)	>E5357	7/18/95	13:57
5	----------	AA31868	>E5358	7/18/95	14:26
6	----------	AA31875	>E5359	7/18/95	15:02
7	----------	AA31883	>E5360	7/18/95	15:38
8	----------	AA31884	>E5361	7/18/95	16:14
9	----------	AA31876	>E5362	7/18/95	16:50
10	----------	AA31902	>E5363	7/18/95	17:26
11	----------	AA31897	>E5364	7/18/95	18:02
12	----------	AA31876	>E5365	7/18/95	18:36
13	----------	AA31835	>E5366	7/18/95	19:11
14	----------	AA31875	>E5367	7/18/95	19:48
15	----------	AA31877	>E5368	7/18/95	20:25
16	----------	AA31879	>E5369	7/18/95	21:02
17	----------	AA31881	>E5370	7/18/95	21:38
18	----------	AA31901	>E5371	7/18/95	22:15
19	----------	AA31898	>E5372	7/18/95	22:51
20	----------	AA31899	>E5373	7/18/95	23:26
21	----------	AA31900	>E5374	7/19/95	0:02

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	18.89	18.89	Ok
75	30-60% of mass 95	42.61	42.61	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.09	7.09	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	81.20	81.20	Ok
175	5-9% of mass 174	6.18	7.61	Ok
176	95-101% of mass 174	90.56	99.21	Ok
177	5-9% of mass 176	5.29	6.57	Ok

Injection Date: 07/18/95
Injection Time: 11:51
Data File: >E5353
Scan: 21



078

DB 7/05/95

>E5353 BFB TUNE
21

File: >E5353 Scan #: 21 Retn. time: 5.63

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	62.00	49.05	234.00	68.05	534.00	80.95	111.00	95.05	5781.00
37.10	353.00	50.05	1092.00	69.05	512.00	87.05	296.00	96.05	410.00
38.10	306.00	51.05	339.00	73.05	265.00	87.95	290.00	174.00	4694.00
39.10	124.00	57.05	148.00	74.05	724.00	92.05	132.00	175.00	357.00
40.00	96.00	61.05	216.00	75.05	2463.00	93.05	168.00	176.00	4657.00
44.00	125.00	62.05	192.00	76.05	199.00	94.05	560.00	177.00	306.00
47.10	124.00	63.05	165.00	78.95	110.00				

5A

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

Lab Name: VERITECH Contract: -----

Lab File ID: >E5375 BFB Injection date: 7/19/95

Instrument ID: MSD_1 BFB Injection time: 0:38

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	22.2
75	30-60% of mass 95	43.6
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	66.8
175	5.0 - 9.0% of mass 174	4.6(6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	67.1(100.4)1
177	5.0 - 9.0% of mass 176	4.2(6.3)2

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

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

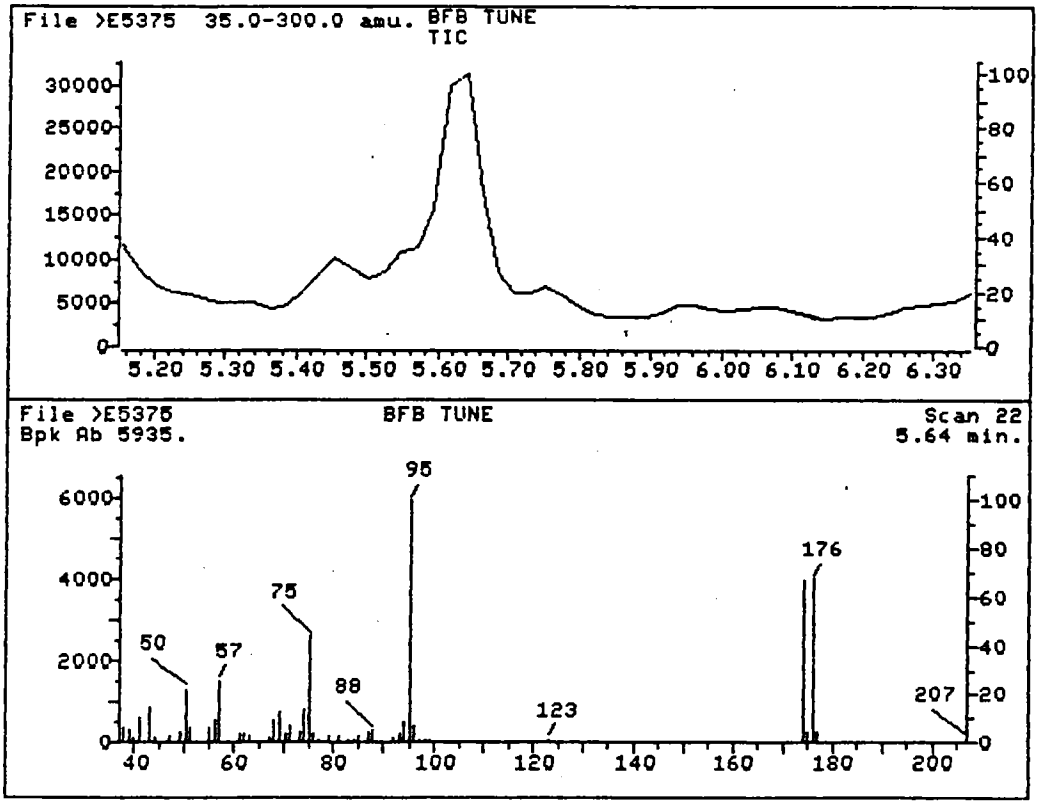
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(S)	>E5376	7/19/95	1:13
2	----------	BLANK	>E5377	7/19/95	1:49
3	----------	DAILY BLK(S)	>E5378	7/19/95	2:25
4	----------	AA31883MS	>E5379	7/19/95	3:01
5	----------	AA31883MSD	>E5380	7/19/95	3:36
6	----------	SMB-SPK	>E5381	7/19/95	4:12

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	22.19	22.19	Ok
75	30-60% of mass 95	43.56	43.56	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.93	6.93	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	66.82	66.82	Ok
175	5-9% of mass 174	4.58	6.86	Ok
176	95-101% of mass 174	67.11	100.43	Ok
177	5-9% of mass 176	4.23	6.30	Ok

Injection Date: 07/19/95
Injection Time: 00:38
Data File: >E5375
Scan: 22



081

DB 7/26/95

>E5375 BFB TUNE
22

File: >E5375 Scan #: 22 Retn. time: 5.64

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	413.00	51.05	358.00	70.15	201.00	84.15	86.00	97.15	85.00
38.00	345.00	55.05	365.00	71.15	418.00	85.15	177.00	98.15	81.00
39.10	292.00	56.05	565.00	73.05	252.00	87.05	284.00	99.15	70.00
40.00	133.00	57.05	1510.00	74.05	800.00	88.05	289.00	123.15	86.00
41.10	624.00	60.95	235.00	75.05	2585.00	92.05	123.00	174.00	3966.00
43.10	853.00	62.05	229.00	76.05	227.00	93.05	202.00	175.00	272.00
44.10	135.00	63.05	171.00	76.95	73.00	94.05	533.00	176.00	3983.00
47.10	148.00	67.05	108.00	78.95	142.00	95.05	5935.00	177.00	251.00
49.05	260.00	68.05	556.00	81.05	183.00	96.05	411.00	207.10	66.00
50.05	1317.00	69.05	783.00	83.05	85.00				

5A

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

Lab Name: VERITECH Contract: -----

Lab File ID: >E5382 BFB Injection date: 7/19/95

Instrument ID: MSD_1 BFB Injection time: 12:42

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15-40% of mass 95	21.5
75	30-60% of mass 95	43.2
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	5.0(7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	66.7(100.3)1
177	5.0 - 9.0% of mass 176	4.1(6.2)2

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

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

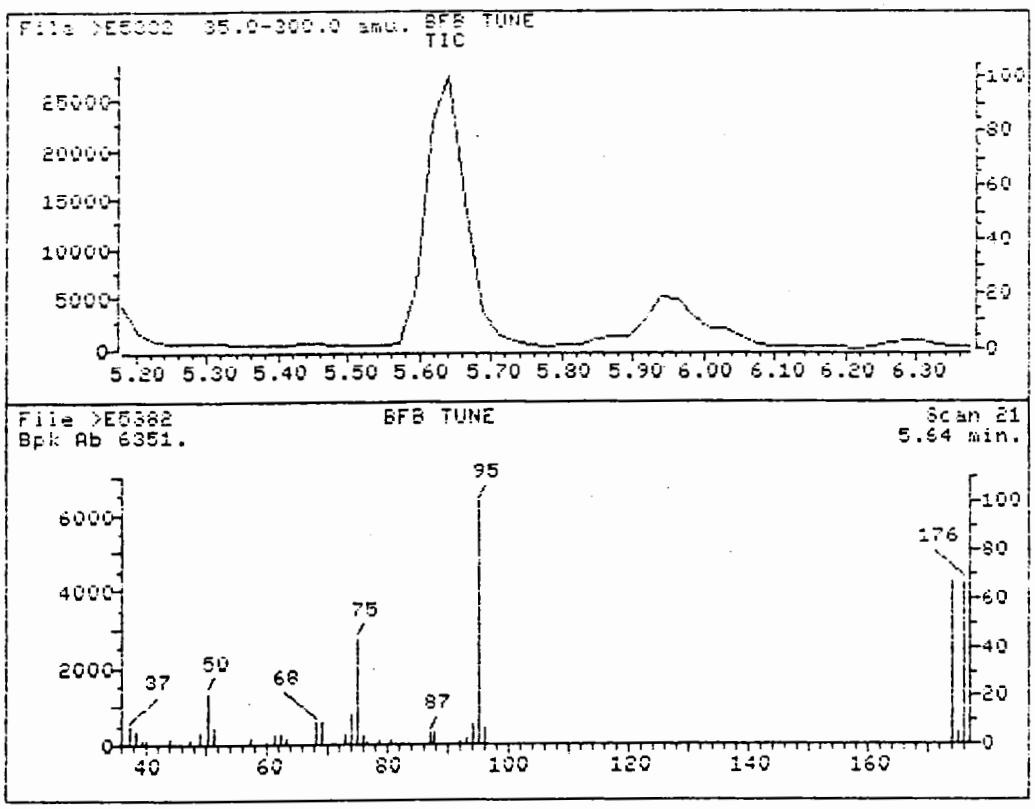
	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	DAILY CAL(A)	>E5383	7/19/95	13:11
2	----------	DAILY CAL(S)	>E5384	7/19/95	13:41
3	----------	DAILY BLK(ME	>E5385	7/19/95	14:16
4	----------	DAILY BLK(S)	>E5386	7/19/95	14:49
5	----------	DAILY BLK(A)	>E5387	7/19/95	15:19
6	----------	AA31900	>E5388	7/19/95	15:49
7	----------	AA31881	>E5389	7/19/95	16:25
8	----------	AA31903	>E5390	7/19/95	17:01
9	----------	AA31947	>E5391	7/19/95	17:32
10	----------	AA31911	>E5392	7/19/95	18:03
11	----------	AA31912	>E5393	7/19/95	18:39
12	----------	AA31950	>E5394	7/19/95	19:15
13	----------	AA31951	>E5395	7/19/95	19:51
14	----------	AA31952	>E5396	7/19/95	20:27
15	----------	AA31953	>E5397	7/19/95	21:02
16	----------	AA31963	>E5398	7/19/95	21:38
17	----------	AA31868MS	>E5399	7/19/95	22:14
18	----------	AA31868MSD	>E5400	7/19/95	22:49
19	----------	WMB-SPK	>E5401	7/19/95	23:25

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.49	21.49	Ok
75	30-60% of mass 95	43.24	43.24	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.82	6.82	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	66.51	66.51	Ok
175	5-9% of mass 174	4.98	7.48	Ok
176	95-101% of mass 174	66.71	100.31	Ok
177	5-9% of mass 176	4.11	6.16	Ok

Injection Date: 07/19/95
Injection Time: 12:42
Data File: >E5382
Scan: 21



DB 7/25/95

>E5382 BFB TUNE
21

File: >E5382 Scan #: 21 Retn. time: 5.64

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	467.00	50.05	1365.00	68.05	588.00	78.95	121.00	95.05	6351.00
38.10	366.00	51.05	422.00	69.05	586.00	80.95	136.00	96.05	433.00
39.10	144.00	57.05	167.00	73.05	263.00	87.05	334.00	174.00	4224.00
40.00	124.00	59.95	60.00	74.05	830.00	87.95	313.00	175.00	316.00
44.00	155.00	61.05	254.00	75.05	2746.00	92.05	133.00	176.00	4237.00
47.10	141.00	62.05	260.00	76.05	245.00	92.95	189.00	177.00	261.00
49.05	316.00	63.05	177.00	76.95	52.00	94.05	567.00		

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR WATER

Instrument ID: MSD_1
Calibration Date: 06/22/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E5027	>E5028	>E5025	>E5029	>E5030					
	RF	RF	RF	RF	RF					
Compound	10.0	20.0	50.0	100.0	200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Chloromethane	1.284	1.141	1.343	1.098	.9415	2.997	1.162	13.669	**	
Bromomethane	.7213	.7136	.7546	.7255	.6925	3.631	.7215	3.113		
Vinyl Chloride	1.358	1.225	1.372	1.218	1.089	3.125	1.253	9.289	*	
Chloroethane	.5155	.5221	.5696	.5295	.4852	3.654	.5244	5.794		
Trichlorofluoromethane	2.237	2.157	2.022	2.166	2.036	4.067	2.123	4.324		
t-Butyl Alcohol	.0289	.0300	.0368	.0307	.0323	6.337	.0317	9.766		(50.0,100.,250.,500.,1000)
Methyl-t-butyl ether	1.545	1.469	1.539	1.472	1.478	6.645	1.501	2.533		
Methylene Chloride	1.566	1.431	1.397	1.294	1.173	5.905	1.372	10.779		
Acrolein	--	--	--	.0121	.0115	4.781	.0118	3.553		
Acrylonitrile	.0572	.0892	.1164	.1240	.1299	6.479	.1033	29.167		
Acetone	.0953	.0973	.0940	.0849	.0842	5.083	.0911	6.728		
Carbon Disulfide	3.762	3.659	3.904	3.698	3.548	5.358	3.714	3.543		
1,1-Dichloroethene	1.149	1.090	1.098	1.059	1.011	4.945	1.081	4.706	*	
Di-isopropyl-ether	4.612	4.326	4.690	4.394	4.482	7.977	4.501	3.343		
1,1-Dichloroethane	2.976	2.919	3.002	2.877	2.836	7.610	2.922	2.348	**	
Trans-1,2-Dichloroethene	1.619	1.616	1.681	1.603	1.529	6.548	1.610	3.380		
Chloroform	3.258	3.159	3.215	3.127	3.107	10.18	3.173	1.969	*	
1,2-Dichloroethane-d4	.2646	.2797	.2821	.2736	.2810	11.38	.2744	2.670		(50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	1.317	1.332	1.347	1.352	1.333	11.57	1.336	1.024		
2-Butanone	.2005	.1609	.2306	.2105	.2178	9.456	.2041	12.989		
1,1,1-Trichloroethane	2.835	2.791	2.760	2.761	2.738	10.61	2.777	1.356		
Carbon Tetrachloride	2.778	2.805	2.813	2.888	2.868	11.04	2.830	1.620		
Vinyl Acetate	3.161	3.054	3.369	3.276	3.303	7.927	3.233	3.866		
Bromodichloromethane	3.011	3.002	3.138	3.126	3.150	14.13	3.086	2.356		
1,2-Dichloropropane	.3831	.3792	.3821	.3800	.3816	13.51	.3812	.418	*	
Trans-1,3-Dichloropropene	.2754	.2892	.3164	.3288	.3471	16.22	.3114	9.353		
Trichloroethene	.4943	.4882	.4872	.4767	.4609	13.05	.4815	2.724		
Dibromochloromethane	.3564	.3742	.3843	.4062	.4076	17.32	.3857	5.640		
1,1,2-Trichloroethane	.2171	.2177	.2182	.2224	.2244	16.56	.2200	1.467		
Benzene	.8682	.8588	.8850	.8559	.8418	11.53	.8619	1.855		
cis-1,3-Dichloropropene	.4322	.4324	.4613	.4686	.4830	15.08	.4555	4.959		
2-Chloroethylvinylether	.0861	.0992	.1112	.1146	.1222	14.92	.1066	13.297		
Bromoform	.3391	.3634	.3773	.3943	.3988	20.06	.3746	6.494	**	
2-Hexanone	.0683	.0797	.0902	.0923	.1078	17.12	.0876	16.853		
4-Methyl-2-Pentanone	.1370	.1372	.1571	.1485	.1706	15.44	.1501	9.477		
Tetrachloroethene	.6416	.6117	.6114	.5754	.5538	16.85	.5988	5.739		
1,1,2,2-Tetrachloroethane	.3695	.3775	.3974	.3888	.4167	20.98	.3900	4.700	**	
Toluene	.6975	.6664	.7071	.6622	.6793	15.76	.6825	2.850	*	
Toluene d-8	1.126	1.119	1.140	1.131	1.165	15.62	1.136	1.581		(50.0,50.0,50.0,50.0,50.0)
Chlorobenzene	.9903	.9503	.9695	.9293	.9442	18.51	.9567	2.474	**	

* - Indicates CCC Compound ** - Indicates SPCC Compound Units in ug/L
$RT - Avg Retention Times $RF - Avg Response Factor $RSD- Relative Standard Deviation

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR WATER

Instrument ID: MSD_1
Calibration Date: 06/22/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E5027	>E5028	>E5025	>E5029	>E5030					
	RF	RF	RF	RF	RF					
Compound	10.0	20.0	50.0	100.0	200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Ethylbenzene	1.500	1.453	1.512	1.459	1.456	18.75	1.476	1.880	*	
Styrene	.8206	.8079	.8372	.8006	.7634	19.75	.8059	3.419		
m&p-Xylenes	.5501	.5241	.5306	.4960	.4673	18.98	.5136	6.299		(20.0,40.0,100.,200.,400.)
o-Xylene	1.204	1.160	1.190	1.125	1.081	19.73	1.152	4.352		
Bromofluorobenzene	.7648	.7630	.7784	.7852	.8068	20.71	.7797	2.281		(50.0,50.0,50.0,50.0,50.0)
1,3-Dichlorobenzene	1.022	.9803	.9794	.9630	.9369	22.76	.9761	3.169		
1,4-Dichlorobenzene	1.044	.9947	.9998	.9787	.9582	22.93	.9950	3.185		
1,2-Dichlorobenzene	.8365	.8223	.8159	.8130	.8058	23.62	.8187	1.413		

* - Indicates CCC Compound
** - Indicates SPCC Compound
Units in ug/L
$RT - Avg Retention Times
$RF - Avg Response Factor
$RSD- Relative Standard Deviation

FORM6 (Page 2 of 2)

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR SOIL

Instrument ID: MSD_1
Calibration Date: 06/22/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E5035	>E5032	>E5026	>E5033	>E5034					
	RF	RF	RF	RF	RF					
Compound	10.0	20.0	50.0	100.0	200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Chloromethane	.7525	.7963	.9125	.8043	.6770	3.002	.7885	10.875	**	
Bromomethane	.2680	.2874	.3073	.2982	.2702	3.530	.2862	5.989		
Vinyl Chloride	.8777	.9024	.9742	.8993	.7748	3.126	.8857	8.115	*	
Chloroethane	.1034	.1213	.1500	.1375	.1303	3.622	.1285	13.627		
Trichlorofluoromethane	1.351	1.234	1.382	1.261	1.131	4.017	1.272	7.845		
t-Butyl Alcohol	.0796	.1025	.0916	.1011	.1035	6.379	.0957	10.625		(50.0,100.,250.,500.,1000)
Methyl-t-butyl ether	1.900	1.953	1.937	1.950	1.961	6.636	1.940	1.244		
Methylene Chloride	1.295	1.267	1.089	1.034	1.020	5.887	1.141	11.477		
Acrolein	--	--	.0145	--	--	4.775	.0145	--		
Acrylonitrile	.1210	.1781	.1946	.2048	.2097	6.471	.1817	19.811		
Acetone	.1518	.1996	.1557	.1450	.1538	5.092	.1612	13.570		
Carbon Disulfide	2.393	2.505	2.818	2.629	2.506	5.336	2.570	6.296		
1,1-Dichloroethene	.7529	.7600	.8030	.7683	.7157	4.922	.7600	4.125	*	
Di-isopropyl-ether	4.092	4.110	4.378	4.215	4.238	7.982	4.206	2.738		
1,1-Dichloroethane	2.208	2.254	2.343	2.278	2.220	7.601	2.261	2.377	**	
Trans-1,2-Dichloroethene	1.202	1.216	1.276	1.219	1.168	6.521	1.216	3.207		
Chloroform	2.650	2.585	2.674	2.590	2.536	10.17	2.607	2.114	*	
1,2-Dichloroethane-d4	.2816	.2838	.2869	.2879	.2903	11.37	.2861	1.204		(50.0,50.0,50.0,50.0,50.0)
1,2-Dichloroethane	1.346	1.365	1.391	1.362	1.372	11.56	1.367	1.183		
2-Butanone	.3123	.3565	.3622	.3739	.4496	9.411	.3709	13.432		
1,1,1-Trichloroethane	2.072	2.078	2.163	2.097	2.054	10.61	2.093	2.014		
Carbon Tetrachloride	2.072	2.115	2.207	2.197	2.093	11.03	2.137	2.871		
Vinyl Acetate	3.372	3.159	3.733	3.381	3.505	7.877	3.430	6.121		
Bromodichloromethane	2.726	2.766	2.934	2.910	2.892	14.13	2.846	3.277		
1,2-Dichloropropane	.4100	.4213	.4267	.4242	.4247	13.51	.4214	1.581	*	
Trans-1,3-Dichloropropene	.3787	.4180	.4350	.4502	.4750	16.21	.4314	8.381		
Trichloroethene	.4861	.4974	.4850	.4857	.4658	13.05	.4840	2.357		
Dibromochloromethane	.4958	.5526	.5477	.5528	.5606	17.32	.5419	4.828		
1,1,2-Trichloroethane	.3182	.3349	.3220	.3281	.3329	16.56	.3272	2.168		
Benzene	.8409	.8822	.8820	.8671	.8401	11.52	.8625	2.429		
cis-1,3-Dichloropropene	.5107	.5374	.5575	.5607	.5807	15.08	.5494	4.830		
2-Chloroethylvinylether	.1561	.1826	.1836	.2004	.2136	14.81	.1873	11.559		
Bromoform	.5398	.6235	.6238	.6299	.6519	20.06	.6138	6.996	**	
2-Hexanone	.2214	.2262	.2253	.2589	.2760	17.11	.2415	10.126		
4-Methyl-2-Pentanone	.3023	.3396	.3417	.3749	.3883	15.44	.3494	9.640		
Tetrachloroethene	.5420	.5547	.5602	.5412	.4852	16.95	.5367	5.576		
1,1,2,2-Tetrachloroethane	.6226	.7010	.6816	.7085	.7103	20.98	.6848	5.340	**	
Toluene	.6398	.6449	.6563	.6538	.6232	15.76	.6434	2.065	*	
Toluene d-8	1.051	1.053	1.077	1.095	1.071	15.62	1.070	1.699		(50.0,50.0,50.0,50.0,50.0)
Chlorobenzene	.9494	.9653	.9631	.9620	.9221	18.51	.9524	1.894	**	

* - Indicates CCC Compound ** - Indicates SPCC Compound Units in ug/L
$RT - Avg Retention Times $RF - Avg Response Factor $RSD- Relative Standard Deviation

Initial Calibration Data

Lab: Veritech
Cal Type: CAL FOR SOIL

Instrument ID: MSD_1
Calibration Date: 06/22/95

Minimum Avg RF for SPCC is: .300

Maximum %RSD for CCC is: 30

Laboratory ID:	>E5035	>E5032	>E5026	>E5033	>E5034					
	RF	RF	RF	RF	RF					
Compound	10.0	20.0	50.0	100.0	200.0	$RT	$RF	$RSD	*/**	Optional Cal Curve
Ethylbenzene	1.343	1.379	1.420	1.424	1.305	18.75	1.374	3.715	*	
Styrene	.8347	.8514	.8579	.8415	.7676	19.76	.8306	4.376		
m&p-Xylenes	.4973	.4987	.4959	.4769	.4288	18.98	.4795	6.200		(20.0,40.0,100.,200.,400.)
o-Xylene	1.132	1.151	1.155	1.121	1.023	19.73	1.116	4.822		
Bromofluorobenzene	.7914	.8093	.8348	.8221	.8159	20.71	.8147	1.969		(50.0,50.0,50.0,50.0,50.0)
1,3-Dichlorobenzene	1.076	1.065	1.036	1.015	.9337	22.76	1.025	5.510		
1,4-Dichlorobenzene	1.141	1.129	1.103	1.073	.9772	22.93	1.085	6.043		
1,2-Dichlorobenzene	1.001	.9893	.9750	.9617	.8944	23.62	.9643	4.339		

* - Indicates CCC Compound ** - Indicates SPCC Compound Units in ug/L
$RT - Avg Retention Times $RF - Avg Response Factor $RSD- Relative Standard Deviation

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Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E5354

Instrument ID : MSD_1
Calibration Date: 07/18/95
Injection Time : 1221

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	1.162	1.447	2.988	24.58	**	
Bromomethane	.7215	.5991	3.631	16.96		
Vinyl Chloride	1.253	1.402	3.126	11.92	*	
Chloroethane	.5244	.4908	3.654	6.41		
Trichlorofluoromethane	2.123	1.936	4.067	8.81		
t-Butyl Alcohol	.0317	.0313	6.341	1.47		(Conc=250)
Methyl-t-butyl ether	1.501	1.535	6.640	2.26		
Methylene Chloride	1.372	1.406	5.905	2.42		
Acrolein	--	--	--	--		
Acrylonitrile	.1033	.1024	6.479	.94		
Acetone	.0911	.0796	5.078	12.66		
Carbon Disulfide	3.714	3.530	5.377	4.97		
1,1-Dichloroethene	1.081	1.059	4.963	2.10	*	
Di-isopropyl-ether	4.501	5.091	7.972	13.10		
1,1-Dichloroethane	2.922	3.186	7.605	9.03	**	
Trans-1,2-Dichloroethene	1.610	1.836	6.548	14.07		
Chloroform	3.173	3.286	10.18	3.56	*	
1,2-Dichloroethane-d4	.2744	.2938	11.40	7.08		
1,2-Dichloroethane	1.336	1.303	11.58	2.47		
2-Butanone	.2041	.1792	9.419	12.16		
1,1,1-Trichloroethane	2.777	3.013	10.61	8.51		
Carbon Tetrachloride	2.830	3.080	11.05	8.84		
Vinyl Acetate	3.233	3.538	7.972	9.45		
Bromodichloromethane	3.086	3.160	14.13	2.41		
1,2-Dichloropropane	.3912	.3804	13.51	.22	*	
Trans-1,3-Dichloropropene	.3114	.3029	16.22	2.72		
Trichloroethene	.4815	.4938	13.05	2.56		
Dibromochloromethane	.3857	.3646	17.32	5.47		
1,1,2-Trichloroethane	.2200	.2090	16.56	4.96		
Benzene	.8619	.8651	11.53	.37		
cis-1,3-Dichloropropene	.4555	.4489	15.09	1.46		
2-Chloroethylvinylether	.1066	.1061	14.84	.51		
Bromoform	.3746	.3694	20.08	1.38	**	
2-Hexanone	.0876	.0828	17.12	5.56		
4-Methyl-2-Pentanone	.1501	.1463	15.46	2.56		
Tetrachloroethene	.5988	.6299	16.86	5.20		
1,1,2,2-Tetrachloroethane	.3900	.3659	21.00	6.16	**	
Toluene	.6825	.7004	15.76	2.62	*	
Toluene d-8	1.136	1.105	15.62	2.72		
Chlorobenzene	.9567	.9406	18.52	1.69	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E5354

Instrument ID : MSD_1
Calibration Date: 07/18/95
Injection Time : 1221

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.476	1.509	18.77	2.26	*	
Styrene	.8059	.8353	19.76	3.64		
m&p-Xylenes	.5136	.5368	18.98	4.51		(Conc=100)
o-Xylene	1.152	1.172	19.73	1.70		
Bromofluorobenzene	.7797	.7990	20.72	2.48		
1,3-Dichlorobenzene	.9761	.9848	22.77	.90		
1,4-Dichlorobenzene	.9950	1.006	22.95	1.08		
1,2-Dichlorobenzene	.8187	.8169	23.64	.22		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

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Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E5355

Instrument ID : MSD_1
Calibration Date: 07/18/95
Injection Time : 1251

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	.2985	1.006	3.905	27.53	**	
Bromomethane	.2862	.2659	3.511	7.10		
Vinyl Chloride	.8857	1.034	3.143	16.71	*	
Chloroethane	.1285	.1133	3.626	11.85		
Trichlorofluoromethane	1.272	1.449	4.039	13.92		
t-Butyl Alcohol	.0957	.0698	6.382	27.08		(Conc=250)
Methyl-t-butyl ether	1.940	1.954	6.658	.70		
Methylene Chloride	1.141	1.224	5.900	7.29		
Acrolein	--	--	--	--		
Acrylonitrile	.1817	.1676	6.474	7.73		
Acetone	.1612	.1223	5.096	24.10		
Carbon Disulfide	2.570	2.755	5.348	7.19		
1,1-Dichloroethene	.7600	.8453	4.935	11.23	*	
Di-isopropyl-ether	4.206	5.092	7.990	21.06		
1,1-Dichloroethane	2.261	2.682	7.623	18.65	**	
Trans-1,2-Dichloroethene	1.216	1.456	6.543	19.74		
Chloroform	2.607	2.948	10.17	13.10	*	
1,2-Dichloroethane-d4	.2861	.3034	11.39	6.05		
1,2-Dichloroethane	1.367	1.419	11.57	3.79		
2-Butanone	.3709	.4094	9.414	10.38		
1,1,1-Trichloroethane	2.093	2.452	10.61	17.16		
Carbon Tetrachloride	2.137	2.504	11.05	17.19		
Vinyl Acetate	3.430	4.095	7.875	19.40		
Bromodichloromethane	2.846	3.170	14.15	11.39		
1,2-Dichloropropane	.4214	.4344	13.53	3.09	*	
Trans-1,3-Dichloropropene	.4314	.4099	16.21	4.99		
Trichloroethene	.4940	.4905	13.04	1.33		
Dibromochloromethane	.5419	.5011	17.32	7.53		
1,1,2-Trichloroethane	.3272	.2999	16.56	8.35		
Benzene	.8625	.8910	11.53	3.30		
cis-1,3-Dichloropropene	.5494	.5461	15.09	.59		
2-Chloroethylvinylether	.1873	.1689	14.84	9.82		
Bromoform	.6138	.5637	20.07	8.16	**	
2-Hexanone	.2415	.1845	17.11	23.61		
4-Methyl-2-Pentanone	.3494	.2910	15.46	16.72		
Tetrachloroethene	.5367	.5540	16.86	3.23		
1,1,2,2-Tetrachloroethane	.6848	.5759	20.99	15.90	**	
Toluene	.6434	.6637	15.78	3.15	*	
Toluene d-8	1.070	1.060	15.64	.94		
Chlorobenzene	.9524	.9470	18.51	.56	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E5355

Instrument ID : MSD_1
Calibration Date: 07/18/95
Injection Time : 1251

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.374	1.421	18.77	3.42	*	
Styrene	.8306	.8617	19.75	3.74		
m&p-Xylenes	.4795	.5062	19.00	5.55		(Conc=100)
o-Xylene	1.116	1.147	19.73	2.77		
Bromofluorobenzene	.8147	.8405	20.72	3.17		
1,3-Dichlorobenzene	1.025	1.002	22.79	2.25		
1,4-Dichlorobenzene	1.085	1.072	22.95	1.16		
1,2-Dichlorobenzene	.9643	.9146	23.64	5.16		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

FORM7 (Page 2 of 2)

Continuing Calibration Data

Lab : Meritech
Cal Type : CAL FOR WATER
File name: ^E5383

Instrument ID : MSD_1
Calibration Date: 07/19/95
Injection Time : 1311

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	1.162	1.199	3.015	3.25	**	
Bromomethane	.7215	.5452	3.635	24.43		
Vinyl Chloride	1.253	1.237	3.130	1.25	*	
Chloroethane	.5244	.4687	3.658	10.62		
Trichlorofluoromethane	2.123	1.796	4.072	15.42		
t-Butyl Alcohol	.0317	.0343	6.346	7.96		(Conc=250)
Methyl-t-butyl ether	1.501	1.521	6.644	1.36		
Methylene Chloride	1.372	1.391	5.909	1.32		
Acrolein	--	--	--	--		
Acrylonitrile	.1033	.1234	6.484	19.39		
Acetone	.0911	.0928	5.082	1.95		
Carbon Disulfide	3.714	3.448	5.358	7.18		
1,1-Dichloroethene	1.081	1.056	4.968	2.31	*	
Di-isopropyl-ether	4.501	5.011	7.977	11.33		
1,1-Dichloroethane	2.922	3.092	7.609	5.82	**	
Trans-1,2-Dichloroethene	1.610	1.757	6.553	9.17		
Chloroform	3.173	3.150	10.18	.71	*	
1,2-Dichloroethane-d4	.2744	.2913	11.38	6.16		
1,2-Dichloroethane	1.336	1.251	11.56	6.38		
2-Butanone	.2041	.1991	9.401	2.42		
1,1,1-Trichloroethane	2.777	2.827	10.62	1.81		
Carbon Tetrachloride	2.830	2.886	11.03	1.96		
Vinyl Acetate	3.233	3.558	7.977	10.07		
Bromodichloromethane	3.086	3.036	14.13	1.60		
1,2-Dichloropropane	.3812	.3755	13.51	1.51	*	
Trans-1,3-Dichloropropene	.3114	.3020	16.22	3.00		
Trichloroethene	.4815	.4735	13.05	1.65		
Dibromochloromethane	.3857	.3537	17.33	8.32		
1,1,2-Trichloroethane	.2200	.2109	16.57	4.10		
Benzene	.8619	.8566	11.54	.62		
cis-1,3-Dichloropropene	.4555	.4420	15.98	2.96		
2-Chloroethylvinylether	.1066	.1059	14.82	.69		
Bromoform	.3746	.3532	20.06	5.72	**	
2-Hexanone	.0876	.0940	17.12	7.27		
4-Methyl-2-Pentanone	.1501	.1556	15.44	3.68		
Tetrachloroethene	.5988	.5984	16.87	.06		
1,1,2,2-Tetrachloroethane	.3900	.3802	20.98	2.51	**	
Toluene	.6825	.7304	15.76	7.01	*	
Toluene d-8	1.136	1.141	15.63	.40		
Chlorobenzene	.9567	.9299	18.52	2.80	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR WATER
File name: ^E5383

Instrument ID : MSD_1
Calibration Date: 07/19/95
Injection Time : 1311

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.476	1.552	18.75	5.18	*	
Styrene	.8059	.8210	19.76	1.86		
m&p-Xylenes	.5136	.5818	18.98	13.28		(Conc=100)
o-Xylene	1.152	1.238	19.74	7.46		
Bromofluorobenzene	.7797	.7830	20.71	.42		
1,3-Dichlorobenzene	.9761	.9610	22.77	1.54		
1,4-Dichlorobenzene	.9950	.9749	22.93	2.03		
1,2-Dichlorobenzene	.8187	.7863	23.62	3.96		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

FORM7 (Page 2 of 2)

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E5376

Instrument ID : MSD_1
Calibration Date: 07/19/95
Injection Time : 0113

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	.7885	1.061	3.006	34.53	**	
Bromomethane	.2862	.2256	3.511	21.18		
Vinyl Chloride	.8857	1.054	3.143	18.95	*	
Chloroethane	.1285	.0894	3.626	30.46		
Trichlorofluoromethane	1.272	1.267	4.039	.41		
t-Butyl Alcohol	.0957	.0900	6.382	5.90		(Conc=250)
Methyl-t-butyl ether	1.940	2.143	6.658	10.45		
Methylene Chloride	1.141	1.277	5.900	11.92		
Acrolein	--	--	--	--		
Acrylonitrile	.1817	.2063	6.474	13.56		
Acetone	.1612	.1547	5.096	4.05		
Carbon Disulfide	2.570	2.489	5.348	3.16		
1,1-Dichloroethene	.7600	.7581	4.958	.25	*	
Di-isopropyl-ether	4.206	5.357	7.990	27.34		
1,1-Dichloroethane	2.261	2.605	7.623	15.24	**	
Trans-1,2-Dichloroethene	1.216	1.376	6.543	13.17		
Chloroform	2.607	2.851	10.17	9.36	*	
1,2-Dichloroethane-d4	.2861	.3291	11.39	15.02		
1,2-Dichloroethane	1.367	1.429	11.57	4.50		
2-Butanone	.3709	.4103	9.414	10.61		
1,1,1-Trichloroethane	2.093	2.344	10.61	12.00		
Carbon Tetrachloride	2.137	2.392	11.05	11.94		
Vinyl Acetate	3.430	3.272	7.990	4.61		
Bromodichloromethane	2.846	3.170	14.12	11.38		
1,2-Dichloropropane	.4214	.4453	13.53	5.69	*	
Trans-1,3-Dichloropropene	.4314	.4291	16.21	.53		
Trichloroethene	.4840	.5176	13.04	6.94		
Dibromochloromethane	.5419	.5419	17.32	.01		
1,1,2-Trichloroethane	.3272	.3303	16.56	.94		
Benzene	.8625	.8942	11.53	3.68		
cis-1,3-Dichloropropene	.5494	.5645	15.09	2.76		
2-Chloroethylvinylether	.1873	.1943	14.84	3.73		
Bromoform	.6138	.6549	20.07	6.69	**	
2-Hexanone	.2415	.2245	17.11	7.03		
4-Methyl-2-Pentanone	.3494	.3471	15.43	.66		
Tetrachloroethene	.5367	.5405	16.86	.72		
1,1,2,2-Tetrachloroethane	.6848	.6106	20.99	10.84	**	
Toluene	.6434	.6370	15.75	1.00	*	
Toluene d-8	1.070	1.015	15.64	5.10		
Chlorobenzene	.9524	.9185	18.51	3.56	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E5376

Instrument ID : MSD_1
Calibration Date: 07/19/95
Injection Time : 0113

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.374	1.372	18.76	.13	*	
Styrene	.8306	.8326	19.75	.24		
m&p-Xylenes	.4795	.4834	18.99	.80		(Conc=100)
o-Xylene	1.116	1.118	19.73	.11		
Bromofluorobenzene	.8147	.8586	20.72	5.39		
1,3-Dichlorobenzene	1.025	.9977	22.76	2.68		
1,4-Dichlorobenzene	1.085	1.057	22.95	2.51		
1,2-Dichlorobenzene	.9643	.9273	23.64	3.84		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

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Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^F5384

Instrument ID : MSD_1
Calibration Date: 07/19/95
Injection Time : 1341

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Chloromethane	.7885	.7764	3.011	1.54	**	
Bromomethane	.2862	.2127	3.539	25.67		
Vinyl Chloride	.8857	.8487	3.126	4.18	*	
Chloroethane	.1285	.0958	3.631	25.42		
Trichlorofluoromethane	1.272	1.236	4.045	2.80		
t-Butyl Alcohol	.0957	.0940	6.365	1.77		(Conc=250)
Methyl-t-butyl ether	1.940	1.971	6.640	1.58		
Methylene Chloride	1.141	1.022	5.905	10.42		
Acrolein	.0145	.0154	4.280	6.77		
Acrylonitrile	.1817	.1956	6.480	7.66		
Acetone	.1612	.1396	5.101	13.38		
Carbon Disulfide	2.570	2.518	5.354	2.02		
1,1-Dichloroethene	.7600	.7529	4.941	.97	*	
Di-isopropyl-ether	4.206	4.861	7.996	15.57		
1,1-Dichloroethane	2.261	2.463	7.485	8.94	**	
Trans-1,2-Dichloroethene	1.216	1.321	6.526	8.62		
Chloroform	2.607	2.712	10.18	4.04	*	
1,2-Dichloroethane-d4	.2861	.3056	11.37	6.83		
1,2-Dichloroethane	1.367	1.383	11.58	1.15		
2-Butanone	.3709	.3851	9.420	3.83		
1,1,1-Trichloroethane	2.093	2.244	10.61	7.21		
Carbon Tetrachloride	2.137	2.254	11.05	5.46		
Vinyl Acetate	3.430	4.106	7.958	19.70		
Bromodichloromethane	2.846	2.965	14.13	4.20		
1,2-Dichloropropane	.4214	.4349	13.51	3.21	*	
Trans-1,3-Dichloropropene	.4314	.4251	16.22	1.47		
Trichloroethene	.4940	.4675	13.05	3.42		
Dibromochloromethane	.5419	.5117	17.32	5.57		
1,1,2-Trichloroethane	.3272	.3164	16.57	3.31		
Benzene	.8625	.8681	11.53	.66		
cis-1,3-Dichloropropene	.5494	.5525	15.10	.57		
2-Chloroethylvinylether	.1873	.1867	14.82	.32		
Bromoform	.6138	.5995	20.06	2.33	**	
2-Hexanone	.2415	.2355	17.12	2.49		
4-Methyl-2-Pentanone	.3494	.3531	15.44	1.07		
Tetrachloroethene	.5367	.5308	16.86	1.10		
1,1,2,2-Tetrachloroethane	.6848	.6459	21.00	5.68	**	
Toluene	.6434	.6525	15.76	1.40	*	
Toluene d-8	1.070	1.066	15.62	.31		
Chlorobenzene	.9524	.9301	18.52	2.34	**	

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

Continuing Calibration Data

Lab : Veritech
Cal Type : CAL FOR SOIL
File name: ^E5384

Instrument ID : MSD_1
Calibration Date: 07/19/95
Injection Time : 1341

Minimum RF for SPCC is: .300 Maximum % Diff for CCC is: 25

Compound	$RF	RF	RT	$DIF	*/**	
Ethylbenzene	1.374	1.395	18.75	1.51	*	
Styrene	.8306	.8464	19.76	1.90		
m&p-Xylenes	.4795	.4933	18.98	2.86		(Conc=100)
o-Xylene	1.116	1.132	19.74	1.41		
Bromofluorobenzene	.8147	.8305	20.73	1.95		
1,3-Dichlorobenzene	1.025	.9894	22.77	3.49		
1,4-Dichlorobenzene	1.085	1.062	22.93	2.10		
1,2-Dichlorobenzene	.9643	.9192	23.62	4.68		

* - Indicates CCC compound
** - Indicates SPCC compound
RT - Cont Cal Retention Times
RF - Response Factor from daily cal @ 50.00 ug/L
$DIFF- %Difference from average RF
$RF - Avg Response Factor from initial cal
@ - Indicates compound failed specified criteria

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8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: UCRITECH, NJDEPE CERT # 14622

Lab file ID: >E5025 Lab Sample ID: DAILY CAL(A

Date Analyzed: 06/22/95 Time Analyzed: 11:39

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	39959	9.90	194078	12.48	159040	18.45
UPPER LIMIT	79919		388156		318080	
LOWER LIMIT	19979		97039		79520	
LAB SAMPLE #						
DAILY CAL(	39959	9.90	194078	12.48	159040	18.45
10PPB STD	39922	9.90	193543	12.49	162894	18.44
20PPB STD	40919	9.90	199269	12.47	167490	18.45
100PPB STD	42315	9.90	204470	12.48	174193	18.45
200PPB STD	45366	9.91	219751	12.48	189493	18.45
DAILY BLK(	44429	9.90	216244	12.49	183136	18.44
AA31206	42374	9.90	192077	12.49	170482	18.46
AA31207	44309	9.90	203390	12.49	173968	18.44
AA31208	4415	9.92	14435	12.49	14122	18.46
AA31213	40547	9.90	195032	12.49	156975	18.44

IS1 (BCM) = Bromochloromethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard area values with an asterisk

9A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: UERITECH NJDEPE CERT # 14622

Lab file ID: >E5026 Lab Sample ID: DAILY CAL(S

Date Analyzed: 06/22/95 Time Analyzed: 12:08

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	55901	9.90	215733	12.47	189113	18.44
UPPER LIMIT	111802		431466		378226	
LOWER LIMIT	27951		107866		94557	
LAB SAMPLE #						
DAILY CAL(	55901	9.90	215733	12.47	189113	18.44
10PPB STD	61099	9.90	232473	12.47	212938	18.44
20PPB STD	62237	9.90	233551	12.47	211290	18.44
100PPB STD	64461	9.89	245239	12.49	212098	18.46
200PPB STD	61592	9.91	233742	12.48	211684	18.45
10PPB STD	58263	9.90	231422	12.47	209609	18.45
DAILY BLK(	57515	9.90	217032	12.49	197786	18.44
AA31230	46197	9.90	157995	12.50	121440	18.44
AA31203	48791	9.90	181353	12.49	149807	18.47
AA31205	35006	9.91	154278	12.48	103917	18.45
AA31212	46088	9.91	172509	12.48	139968	18.46

IS1 (BCM) = Bromochloromethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: UPRITECH, NJDEPE CERT.# 14622

Lab file ID: >E5336 Lab Sample ID: DAILY CAL(A

Date Analyzed: ~~07/14/95~~ 07/18/95 Time Analyzed: 13:55

SA 07/21/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	30457	9.88	165947	12.48	138223	18.45
UPPER LIMIT	60914		331694		276446	
LOWER LIMIT	15228		82923		69111	
LAB SAMPLE #						
DAILY CAL(	20815	9.90	113628	12.50	97743	18.47
DAILY BLK(	24442	9.90	133830	12.50	117373	18.47
AA31868	27721	9.90	144170	12.49	128094	18.46
AA31875	25152	9.90	134572	12.50	119156	18.45
AA31835	28115	9.89	149098	12.48	131486	18.46
AA31875	25383	9.88	137674	12.48	120269	18.45
AA31877	26656	9.89	145752	12.49	129018	18.44
AA31879	26122	9.91	141975	12.48	129711	18.46
AA31881	25976	9.90	135938	12.49	126396	18.45
AA31901	26389	9.90	137481	12.48	123159	18.46

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an esterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E5337 Lab Sample ID: DAILY CAL(S

Date Analyzed: ~~07/14/95~~ 07/18/95 Time Analyzed: 14:26

SA 7/31/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	45954	9.88	190057	12.48	173944	18.45
UPPER LIMIT	91908		380114		347888	
LOWER LIMIT	22977		95028		86972	
LAB SAMPLE #						
DAILY CAL(	31454	9.92	142050	12.49	130475	18.47
DAILY BLK(	35860	9.92	152283	12.49	146161	18.46
AA31883	32119	9.90	132147	12.49	124450	18.44
AA31884	32383	9.90	133699	12.48	127719	18.45
AA31876	34145	9.90	146580	12.47	136929	18.46
AA31902	29537	9.90	119259	12.47	109622	18.44
AA31897	31462	9.90	134767	12.47	122483	18.44
AA31876	34328	9.90	144073	12.49	135311	18.46
AA31898	29603	9.90	125390	12.48	117587	18.46
AA31899	29406	9.92	125075	12.50	118748	18.47
AA31900	32772	9.92	132603	12.49	79791	18.47

IS1 (BCM) = Bromochloromethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E5376 Lab Sample ID: DAILY CAL(S

Date Analyzed: 07/19/95 Time Analyzed: 01:13

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	31254	9.92	136123	12.49	131677	18.47
UPPER LIMIT	62508		272246		263354	
LOWER LIMIT	15627		68061		65838	
LAB SAMPLE #						
DAILY CAL(	42572	9.90	179144	12.50	162794	18.47
DAILY BLK(	43461	9.90	185888	12.50	169772	18.47
AA31900	43424	9.91	181557	12.49	157126	18.46
AA31911	40655	9.90	151816	12.50	113244	18.47
AA31912	41252	9.91	151219	12.50	109797	18.45
AA31950	41406	9.91	167865	12.49	148590	18.46
AA31951	38776	9.91	153767	12.50	140158	18.45
AA31952	39624	9.92	156003	12.50	140483	18.47
AA31953	35845	9.93	153549	12.50	107577	18.47
AA31963	37173	9.91	144483	12.51	132051	18.46

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: UERITECH, NJDEPE CERT # 14622

Lab file ID: >E5354 Lab Sample ID: DAILY CAL(A

Date Analyzed: ~~07/18/95~~ 07/19/95 Time Analyzed: 12:21

SA 07/31/95

	IS1(BCM) AREA	#	RT	IS2(DFB) AREA	#	RT	IS3(CBZ) AREA	#	RT
12 HOUR STD	20815		9.90	113678		12.50	97743		18.47
UPPER LIMIT	41630			227356			195486		
LOWER LIMIT	10408			56839			48871		
LAB SAMPLE #									
DAILY CAL(	29849		9.91	156652		12.48	130811		18.45
DAILY BLK(	27771		9.92	149984		12.49	124494		18.47
DAILY BLK(	38910		9.91	186362		12.50	166352		18.47
AA31981	34768		9.91	174427		12.50	146034		18.46
AA31903	22472		9.91	144967		12.48	110814		18.45
AA31947	31292		9.90	174965		12.49	143028		18.46
AA31868MS	34406		9.91	174957		12.50	145452		18.46
AA31868MSD	33339		9.91	165682		12.51	141461		18.46
WMB-SPK	29788		9.90	170575		12.50	158203		18.47

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: VERITECH, NJDEPE CERT.# 14622

Lab file ID: >E5355 Lab Sample ID: DAILY CAL(S

Date Analyzed: ~~07/18/95~~ 07/19/95 Time Analyzed: 12:51

SA 7/31/95

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	31454	9.92	142050	12.49	130475	18.47
UPPER LIMIT	62908		284100		260950	
LOWER LIMIT	15727		71025		65238	
LAB SAMPLE #						
DAILY CAL(	31254	9.92	136123	12.49	131677	18.47
BLANK	1838*	9.94	0*	0.00	3772*	18.46
DAILY BLK(	27911	9.92	127427	12.49	117692	18.46
AA31883MS	26484	9.92	105711	12.49	104085	18.47
AA31883MSD	29833	9.92	127689	12.49	120688	18.47
SMB-SPK	35210	9.92	149991	12.49	145006	18.47

IS1 (BCM) = Bromochlormethane @ 50ppb
IS2 (DFB) = 1,4-Difluorobenzene @ 50ppb
IS3 (CBZ) = Chlorobenzene-d5 @ 50ppb

UPPER LIMIT = + 100% of internal standard area of daily cal from previous daily cal.
LOWER LIMIT = -50% of internal standard area of daily cal from previous daily cal.

Column used to flag internal standard are values with an asterisk

METHOD DETECTION LIMTS FOR METHOD 8240

RUN 01/20/95

RUN AT 10PPB

FILE ==========>	^E35021	^E35031	^E35041	^E35051	^E35061	^E35071	^E35081	AVG	STDDEV	MDL
Chloromethane	6.15	6.14	6.18	5.21	5.18	5.46	4.96	5.61	.53	1.67
Bromomethane	16.24	16.37	16.51	14.73	16.04	16.48	14.90	15.89	.76	2.38
Vinyl Chloride	7.41	7.41	7.57	6.20	6.81	6.76	6.09	6.89	.60	1.88
Chloroethane	11.93	12.49	12.20	10.72	11.69	11.46	10.96	11.64	.64	2.01
Trichlorofluorometh	10.71	10.79	10.87	10.09	10.12	11.07	10.60	10.61	.37	1.18
t-Butyl Alcohol	53.71	40.30	48.65	46.62	46.34	32.20	41.75	44.22	6.90	21.70
Methyl-t-butyl ethe	11.37	10.53	11.17	10.87	10.71	10.31	10.57	10.79	.37	1.18
Methylene Chloride	15.78	14.01	14.20	14.17	13.93	13.19	13.63	14.13	.81	2.54
Acetone	21.65	18.19	25.59	13.45	12.47	10.63	10.63	16.09	5.85	18.38
Carbon Disulfide	8.48	8.48	8.69	7.69	8.00	8.41	7.81	8.22	.38	1.20
Di-isopropyl-ether	9.49	9.43	9.62	9.41	9.46	9.43	9.32	9.45	.09	.29
1,1-Dichloroethene	9.84	9.68	10.21	9.15	9.85	10.33	9.64	9.82	.39	1.23
1,1-Dichloroethane	9.59	9.69	9.99	9.57	9.59	10.03	9.79	9.75	.20	.61
Trans-1,2-Dichloroe	9.71	9.59	9.51	9.20	9.52	9.99	9.61	9.59	.24	.75
Chloroform	10.14	10.17	10.37	10.05	10.24	10.61	10.36	10.28	.19	.59
1,2-Dichloroethane	10.57	11.02	11.19	10.83	10.85	10.86	10.55	10.84	.23	.71
2-Butanone	10.16	9.58	10.85	9.47	9.88	8.51	8.68	9.59	.82	2.57
1,1,1-Trichloroetha	10.10	10.15	10.39	9.98	9.97	10.49	10.14	10.17	.20	.62
Carbon Tetrachlorid	9.66	9.67	9.81	9.51	9.39	9.95	9.80	9.68	.19	.60
Vinyl Acetate	9.14	8.85	8.95	8.84	8.84	8.12	8.28	8.72	.37	1.17
Bromodichloromethan	9.87	10.09	10.29	9.87	9.87	10.06	9.87	9.99	.16	.52
1,2-Dichloropropane	10.30	10.07	10.22	10.13	10.08	9.93	10.35	10.16	.15	.46
cis-1,3-Dichloropro	9.99	9.89	10.03	9.69	9.91	9.75	9.81	9.87	.12	.38
Trichloroethene	10.20	10.10	10.40	10.07	10.23	10.34	10.36	10.24	.13	.41
Dibromochloromethan	10.02	9.90	10.35	9.89	9.83	9.39	9.87	9.89	.28	.89
1,1,2-Trichloroetha	11.29	11.02	11.24	10.99	11.02	10.65	10.69	10.99	.24	.77
Benzene	10.18	9.80	10.02	9.94	9.92	10.03	10.24	10.02	.15	.47
Trans-1,3-Dichloropr	10.19	9.78	9.96	9.86	9.94	9.51	9.66	9.85	.22	.69
2-Chloroethylvinyle	10.25	9.84	10.28	9.76	9.84	9.10	9.74	9.83	.39	1.24
Bromoform	9.69	9.32	9.82	9.46	9.51	8.83	9.17	9.40	.33	1.04
2-Hexanone	11.13	10.15	11.38	11.01	10.63	10.56	10.47	10.76	.43	1.34
4-Methyl-2-Pentanon	12.38	9.65	10.76	10.83	10.09	9.52	9.43	10.38	1.05	3.29
Tetrachloroethene	9.75	9.82	10.09	9.84	9.82	10.06	9.90	9.90	.13	.41
1,1,2,2-Tetrachloro	11.05	11.12	12.01	12.46	12.47	10.17	11.65	11.56	.84	2.64
Toluene	9.93	10.03	10.25	10.45	10.25	10.23	10.32	10.21	.18	.55
Chlorobenzene	10.01	10.11	10.28	10.11	9.98	10.28	10.19	10.14	.12	.38
Ethylbenzene	9.99	10.15	10.37	10.28	10.20	10.27	10.38	10.23	.13	.42
Styrene	10.46	10.39	10.41	10.34	10.50	10.45	10.63	10.45	.10	.30
m&p-Xylenes	20.61	20.59	20.97	20.95	20.70	21.16	21.15	20.88	.24	.76
o-Xylene	10.58	10.39	10.71	10.69	10.70	10.75	10.87	10.67	.15	.48
1,3-Dichlorobenzene	10.01	9.91	9.95	10.04	10.14	9.63	9.81	9.93	.17	.53
1,4-Dichlorobenzene	9.92	9.99	9.93	10.00	10.20	9.60	10.02	9.95	.18	.57
1,2-Dichlorobenzene	9.88	9.96	9.98	9.89	10.12	9.57	9.78	9.88	.17	.55