Chem-Solv, Inc. Site
Cheswold, Kent County, Delaware

Remedial Investigation Report

Volume II

May 1991

BCM
Engineers, Planners, Scientists
and Laboratory Services

REPORT

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

CONTENTS

VOLUME II

Appendix A	Project Correspondence
Appendix B	DNREC Groundwater Sample Data Summary Target Compound Sheets
Appendix C	DNREC Water Quality Data Sheets
Appendix D	Stratigraphic Boring and Soil Boring Logs
Appendix E	Remedial Investigation Monitoring Well Logs
Appendix F	DNREC Monitoring Well Logs
Appendix G	DNREC Soil Analytical Results
Appendix H	Soil Analytical Results and Quality Assurance Review - December 1989 and February 1990

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX A

AR307656

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A

PROJECT CORRESPONDENCE

AR307657

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-1

DNREC MEMORANDUM DATED SEPTEMBER 18, 1984

AR307658

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903
TELEPHONE (302) 736-4761

MEMORANDUM

TO: SERT Members DATE: September 18, 1984

FROM: William G. Razor/George J. Bender

SUBJECT: Chem-Solv Solvent Recovery, Rural R.D. 4, Box 176-A, North duPont Highway, Dover, DE 19901, Spill Incident

At 1645 hours on September 7, 1984, I received a call from the DNREC Radio Room to call the Kent County Call Board. I called the Kent County Call Board and I was informed that an explosion had occurred at Chem Solv facility. The Cheswold Fire Company had requested the Division of Environmental Control to come and advise them on the danger of the exploded chemical materials. The writer and Mr. Alan Simpson went to the site and was briefed by Second Assistant Chief, Charlie Brown; Steve Martin, State Fire School; and Robert J. Montgomery, Deputy State Fire Marshall, State Fire Marshall's Office. It was pointed out during the briefing that this had been the third incident over the last three years and there was considerable concern by the Fire Company over the previous incidents and the potential for future hazardous occurrences if something was not done in the near future. Mr. Simpson and I then informed these agencies that we would discuss this matter with the owners of Chem Solv, Mr. Thomas Jaggers and Mr. Eugene Erbes.

The owners indicated that the one still had blown up from unknown causes. They indicated that the distilled material had not run off onto the ground while they were observing it. One of the firemen indicated that he had observed a chemical-like material running off the concrete pad towards the ground. However, the owners indicated that this was the water that had been sprayed on the fire and it was draining off the pad onto the ground. I then indicated that we would check out the contamination of the soil with the HNU meter by the following Monday, September 10, 1984.

The explosion had occurred near the still which was not permitted, which is based on the RCRA regulations exempting distilled recycled material. Chem Solv typically goes to companies in the Delmarva area and collects solvent-type materials that are amenable for purification by distillation. They take the contaminated solvents distill of the purified material and return the purified

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

material to the owner for re-use. This operation is legal under present RCRA regulations because it is a hazardous waste that is being recycled by distillation. The still bottoms, however, cannot be purified and are removed and placed in drums and classified as hazardous waste. The Chem Solv operation is presently operating under a RCRA interim authorization permit for storage of the still bottoms hazardous waste.

Mr. Simpson and I then accompanied the owners to an area where the hazardous waste was being stored and observed that most barrels were labelled in accordance with RCRA regulations. However, some barrels were not properly labeled as required by RCRA hazardous waste regulations.

I then informed Mr. Montgomery, State Fire Marshall's Office; Steve Martin, State Fire Schol and Second Assistant Chief, Mr. Brown, that I wanted to stabilize the smoldering fire before they left the scene. They extinguished the smoldering flames and then left the scene after the Division of Environmental Control had taken charge of the incident.

I informed the owners of the company that we would be back on Monday, September 10, 1984, with field investigators to conduct sampling and investigate the compliance of the operation with RCRA regulations. We left the scene at approximately 1800 hours.

On Monday; George Bender and the writer went to Chem Solv, discussed the incident with the owners and took the HNU meter around the property to detect if any organic chemicals had contaminated the soil. There was evidence of chemi[illegible] contaminated soil on the south edge of the concrete pad. We informed the owners that they would be responsible for excavating the soil. We also informed them that the Department of Health would take a water sample to determine baseline organic conditions at the property north of the site which is where Mr. Erbes lives.

On September 11, 1984, George Bender was contacted by Mr. Tom Jaggers of Chem Solv. Mr. Jaggers informed Mr. Bender that the contaminated soil had been removed and placed in 55-gallon drums. Approximately 30 drums have been filled with the contaminated soil.

Mr. Bender inspected the excavated area and obtained readings with the HNU of 10 - 20 ppm on the surface ranging from one - two feet below the original ground level. A hole was dug approximately one foot deep in the center of the contaminated area. HNU readings ranging from 100-150 ppm were obtained from the bottom of the hole. Mr. Bender informed Mr. Jaggers that additional excavation was necessary to remove all contaminated soil. Mr. Bender requested that at least three more feet of soil be removed from the contaminated area before another HNU check was made. As of September 17, 1984, no additional soil was removed.

Mr. Jaggers informed Mr. Bender that they were in the process of negotiating with the insurance company for damages at their site. Mr. Jaggers' insurance company had informed him that no settlement could be made for the removal of contaminated soil unless the State of Delaware brought suit against Chem Solv.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

On September 13th, a Secretary's Order was prepared to ensure Chem Solv complied with the Delaware Regulations Governing Hazardous Waste and other statutory requirements in a timely manner.

On September 17, 1984, Mark Boller and George Bender of the Water Resources Section visited Chem Solv. With the use of a three-inch hand auger, a hole was dug approximately five and one-half feet deep in the center of the contaminated area. Soil samples were removed during the digging operation and HNU readings of 100-200 ppm were obtained from these samples. The soil sample was taken at approximately seven feet below the original surface of the ground and transported to the laboratory for a volatile organic analysis.

Mr. Bender has been in contact with Steve Young in Water Supply and discussed the Chem Solv problem. Mr. Young informed Mr. Bender that the area of contamination at Chem Solv is considered a sensitive recharge zone for the Cheswold aquifer. Therefore, a clean up operation should begin at the earliest possible moment. Mr. Bender's recommendations for concluding this incident are as follows:

1. Chem Solv's insurance company takes responsibility for the clean up and installation of the groundwater monitoring system, overseen by the Solid Waste Management Branch.

2. If Chem Solv's insurance company does not take the responsibility for the clean up, the Division of Environmental Control will pursue one of the two following options:

(a) The Division of Environmental Control will assume complete authorization at Chem Solv for excavation of contaminated soil and installation of the ground water monitoring system whereas all expenses for contractors, materials, and time would be recovered from Chem Solv through a civil suit; or

(b) The Division of Environmental Control will contact U. S. EPA Region III and request EPA emergency response operations for this site. This would include emergency removal of contaminated soil, emergency implementation of groundwater monitoring system.

Mr. Bender recommended Option 1 be pursued first. If Option 1 cannot be placed in effect, Option 2(b) should be pursued as long as EPA does not insist on placing Chem Solv on a remedial action plan. This incident needs to be handled under emergency conditions to protect the Cheswold aquifer. Option 2(a) should be reserved as our last resort due to the time constraints of the Solid Waste Management Branch personnel.

/jw

cc: John E. Wilson, III
Robert J. Touhey

CADE 133-9 MARCH, 1987 133A-012	DNREC MEMORANDUM CHEM-SOLV SPILL INCIDENT	EXHIBIT I-3 AR307681

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-2

DNREC CESSATION OF OPERATION ORDER
DATED SEPTEMBER 21, 1984

AR307662

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

File

MW=OB

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
89 KINGS HIGHWAY
P. O. BOX 1401
DOVER, DELAWARE 19901

OFFICE OF THE SECRETARY

TELEPHONE: (302) 736-4403

ORDER NO. 84/SW-4

DATE OF ISSUANCE: September 21, 1984

ISSUED TO: Chem-Solv
Solvent Recovery
R. D. 4, Box 176-A
North duPont Highway
Dover, Delaware 19901

ATTN: Thomas H. P. Jaggers
Eugene Erbes
Owners

RE: Cessation of Operation causing violation of hazardous waste requirements

FINDINGS OF FACT

1. Chem-Solv, located R. D. 4, Box 176-A, North duPont Highway, Dover, Delaware, is classified as a hazardous waste generator, transporter, and storage facility.

2. As a result of the Department of Natural Resources and Environmental Control's (DNREC) response to the September 7, 1984, fire and explosion at the facility, the Solid Waste Management Branch of the DNREC has noted numerous violations of DNREC's Regulations Governing Hazardous Waste and statutory requirements at the above facility.

3. The major areas of violations are as follows:

   a) Spillage of hazardous waste onto the ground at the facility as a result of apparent improper management of hazardous waste and the unplanned release of hazardous waste during the September 7, 1984, fire and explosion.

   b) The lack of proper waste analysis of incoming hazardous waste for the purpose of recycling.

   c) The improper storage of hazardous waste. As observed during a September 10, 1984, inspection, the drum storage area was cluttered, drum lids were not secure, evidence of past leaks was observed throughout the storage area, pooled waste was found on drum lids, and odors originating from

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

wastes were detected in all areas. This is a lack of proper hazardous waste management techniques.

d) Improper labelling of drums, in violation of DNREC Regulations Governing Hazardous Waste and those of the U. S. Department of Transportation.

e) There are inadequate resources to deal with emergencies that may arise at the facility. The financial resources such as an adequate trust fund or insurance policies were not available to handle immediate removal of spilled materials.

4. The impact from these violations is summarized as follows:

a) The impact from the spillage has a potential hazard which may affect the local residents, employees, and environmental resources including ground water.

b) The distillation of the waste solvents without proper waste analysis poses an imminent hazard to public health and the environment.

c) Storage and housekeeping practices employed at this facility may create an extreme explosion, fire, or toxic vapor hazard. DNREC has recently observed vapors and residues throughout the facility. The fire chief responding to the September 7, 1984, incident has urged DNREC's actions to correct this situation.

5. The above-referenced violations and associated impacts may create an imminent and substantial hazard to the health of persons or the environment under 7 Del. C. §6308.

6. In order to remedy these violations and to eliminate the imminent and substantial hazard to health of persons or to the environment, the following action is required at a minimum:

a) Receipt of hazardous wastes at the above facility must cease until appropriate corrective action has been taken as approved by DNREC.

b) Spilled waste and contaminated soil must be immediately removed and disposed of in an approved hazardous waste landfill.

c) A waste analysis and operating plan, approved by DNREC, must be developed and adhered to in order to meet the requirements of the Delaware Regulations Governing Hazardous Waste.

d) A bond or equivalent financial mechanism must be purchased to ensure complete removal of all waste, recycleable products, and contaminated soil, rather than the closure trust fund now in place at the facility prior to resumption of handling of hazardous waste.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

e) A groundwater monitoring program must be implemented.

7. 7 Del. C. §6308 provides comprehensive authority for the Secretary to take whatever action is necessary to protect the health of persons or the environment, including permanent or temporary cessation of operation.

ORDER

In consideration of the foregoing findings and in the interest of furthering the purposes of 7 Del. C. Chapter 63 and in accordance with the provisions of 7 Del. C. §6308, it is hereby ordered that Chem-Solv immediately cease receiving hazardous waste on the effective date of this Order.

It is further ordered that:

1. All contaminated soil be immediately removed.

2. A complete groundwater monitoring program be immediately implemented.

3. An approved waste analysis and operating plan be developed.

4. Chem-Solv shall not conduct any further hazardous waste handling operations at this facility, except removal of existing waste from the Cheswold site, until the above Order conditions have been completed and until written permission to resume operations is granted by DNREC. If the existing wastes are removed from the site, Condition 3 and the respective requirements of the Delaware Regulations Governing Hazardous Waste must be adhered to, along with the receipt of written permission of DNREC prior to removal.

5. Should Chem-Solv elect to cease all operations, Conditions 1 and 2 must be complied with immediately, and a DNREC approved closure/post closure plan must be implemented.

6. A bond or equivalent financial mechanism must be purchased to ensure complete removal of all waste, recycleable products, and contaminated soil, rather than the closure trust fund now in place at the facility, prior to resumption of handling of hazardous waste.

The effective date of this Order is the date of issuance.

John E. Wilson, III; Secretary
Department of Natural Resources
and Environmental Control

JEW,III:GJB:lmw
cc: Charles M. Oberly, III; Attorney General
Bart Dalton; Chief Deputy Attorney General

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-3

LETTER DATED MAY 1, 1991, TO BCM FROM DNREC,
PROVIDING APPROVAL OF SAMPLING PLAN

AR307666

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4 1991

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
715 GRANTHAM LANE
WASTE MANAGEMENT SECTION NEW CASTLE, DELAWARE 19720-4801 TELEPHONE: (302) 323-4540

March 27, 1991

00-6012-02
BONAKER
S. HELBIG
F. POLI

Mary M. Mang
Assistant Vice President
BCM Engineers
One Plymouth Meeting
Plymouth Meeting, PA 19462

Subject: Chem-Solv Proposed Sampling Plan to Finalize the Remedial Investigation.

Dear Ms. Mang:

The Proposed Sampling Plan dated February 13, 1991, with the modifications in regards to the mercury sampling and analysis is found to be acceptable. The proposed schedule that is included has been discussed by Stephanie Dehnhard and myself. We have decided that it is one that will work if all goes according to plan. We, DNREC, EPA, and the PRPs and their representatives will need to cooperate and expedite the work as much as possible if the work is to be completed by the established SCAP commitment date. I believe that it can be done and am optimistic about it.

I appreciate the work that is being done by BCM at this site, especially the patience and perseverance of Peg Bonaker.

If you have any questions don't hesitate to let me know.

Respectfully,

Milton M Beck

Milton M Beck, DVM
Environmental Scientist
Superfund-Remedial

MMB/mmb
MMB2271c

pc: N.V. Raman
Brad Smith
Stephanie Dehnhard (3HW25)

AR307667

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-4

LETTER DATED DECEMBER 27, 1989, TO DNREC FROM BCM,
PROVIDING NOTIFICATION OF WORK STOPPAGE

AR307668

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM Engineers

Engineers, Planners, Scientists and Laboratory Services

One Plymouth Meeting • Plymouth Meeting, PA 19462 • (215) 825-3800

December 27, 1989

Milton M. Beck, D.V.M.
Delaware Department of Natural
Resources and Environmental Control
715 Grantham Lane
New Castle, DE 19720

Subject: Delay of Field Activities
Chem-Solv, Inc. Site, Cheswold, Delaware
BCM Project No. 00-6012-02

Dear Milton:

On behalf of the Chem-Solv, Inc. PRP Committee, BCM Engineers Inc. (BCM) is writing to notify the Delaware Department of Natural Resources and Environmental Control (DNREC) that all field activities for the Chem-Solv site have been halted as of December 20, 1989. This delay in the schedule is due to the extreme weather conditions. Completion of the scheduled field tasks has progressed slowly due to problems in starting the heavy equipment. In addition, the cold temperatures led to problems during decontamination of the sampling equipment (split spoons, trowels, and mixing pans) used in soil sampling activities. Two of the solutions used, nitric acid and deionized water, began to freeze on the equipment during the decontamination procedure. This raised concern that the equipment was not being properly decontaminated, and that cross-contamination of the soil samples might occur. Therefore, as discussed in your telephone conversation with Margaret Bonaker of BCM on December 19, 1989, the decision was made to stop all field activities until warmer weather arrives. Please note that January 1, 1990, which is 30 days after receipt by BCM of Work Plan approval, denotes the scheduled date for initiation of field activities at Chem-Solv. However, this deadline will be exceeded due to the delay in work for the reasons noted above.

In light of this delay, BCM would like to discuss with DNREC a revision of the project schedule. We look forward to hearing from you.

Very truly yours,

Margaret E. Bonaker

Margaret E. Bonaker
Geologist

Mary M. Mang
Assistant Vice President

/tlg 6625q
cc: M.C. Hwang, Miles and Stockbridge
F.M. Poli, BCM
R.D. Buller, BCM

AR307669

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-5

LETTER DATED JANUARY 22, 1990, TO BCM FROM DNREC,
PROVIDING APPROVAL OF WORK STOPPAGE

AR307670

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

RECEIVED
FEB - 5 1990

PROJECT FILE # ~~00-[illegible]~~
CC: Bonaker
Buller

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
715 GRANTHAM LANE
NEW CASTLE, DELAWARE 19720-4801

WASTE MANAGEMENT SECTION

TELEPHONE: (302) 323-4540

January 22, 1990

Mary M. Mang
Assistant Vice President
BCM Engineers
One Plymouth Meeting
Plymouth Meeting, PA 19462

Subject: Delay of Field Work at Chem-Solv, Inc. Site

Dear Ms. Mang:

Regarding your letter of December 27, 1989 about the delay of field work, I agree that the freezing weather conditions complicated the field work at the Chem-Solv site in December, 1989. Not only did the cold make all of the work go slower, but it began to make the work of questionable value. The freezing of the decontamination solutions to the sampling equipment would discredit the results of the analyses of samples collected. I believe adequate precautions were taken to maintain the value of the samples taken, but that was becoming more difficult with the passage of time, based on my observations during site visits. As I said in my conversations with Margaret Bonaker at the time, it was necessary to stop work while the samples could still be trusted. I realized at the time that a date to resume field work would depend both on weather conditions and availability of a drilling contractor.

Telephone conversations that I have had with Ms. Bonaker since stopping work indicates that the anticipated date to restart field work is March 12, 1990. The ROD deadline set by EPA is March 1, 1991. In order to be able to meet the ROD deadline, it is imperative that we be able to resume work as soon as possible. This may require the use of another drilling contractor to accomplish this. When you have a firm restart date, please let me know the date and the name of the contractor.

AR307671

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-6

LABORATORY AUDIT REPORT, DATED JANUARY 4, 1990

AR307672

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM Engineers

Engineers, Planners, Scientists and Laboratory Services

One Plymouth Meeting • Plymouth Meeting, PA 19462 • (215) 825-3800

January 3, 1990

Milton M. Beck, D.V.M.
State of Delaware
Department of Natural Resources and
Environmental Control
715 Grantham Lane
New Castle, DE 19720

Subject: Chem-Solv, Inc., Cheswold, Delaware
Laboratory Audit Report
BCM Project No. 00-6012-02

Dear Dr. Beck:

Enclosed please find the laboratory audit report for the Chem-Solv, Inc. site in Cheswold, Delaware. The audit was conducted at the Industrial Environmental Analysts, Inc. (IEA) laboratory located in Cary, North Carolina on December 19, 1989. In accordance with the administrative order of consent for the subject site, IEA was audited for inorganic contract laboratory protocol (CLP) compliance. Since IEA holds a current organic contract in the CLP program, the organic procedures were not required to be audited. This audit was performed during the first week of processing samples received from the Chem-Solv site.

If you have any questions concerning this report, please do not hesitate to contact me or Mary Mang at (215) 825-3800.

Very truly yours,

Atwood F. Davis

Atwood F. Davis, CPC
Section Manager
Quality Assurance

/mjo 01980
cc: M.C. Hwang, Miles and
Stockbridge
M.M. Mang, BCM
M.E. Bonaker, BCM

AR307673

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LABORATORY AUDIT REPORT

FOR

CHEM-SOLV, INC. SITE
CHESWOLD, DELAWARE

SUBMITTED IN ACCORDANCE WITH
ADMINISTRATIVE ORDER ON CONSENT
EXECUTIVE ORDER 12316, MAY 3, 1988

JANUARY 1990

BCM PROJECT NO. 00-6012-02

PREPARED BY

Atwood F. Davis

ATWOOD F. DAVIS, CPC
SECTION MANAGER - QUALITY ASSURANCE

.07674

BCM

Engineers, Planners, Scientists and Laboratory Services
One Plymouth Meeting • Plymouth Meeting, PA 19462 • Phone: (215) 825-3800

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

LABORATORY AUDIT REPORT OF
INDUSTRIAL ENVIRONMENTAL
ANALYSTS, INC.
FOR
CHEM-SOLV, INC.

1.0 INTRODUCTION

An audit of Industrial Environmental Analysts, Inc. (IEA) Cary, North Carolina facility was conducted on December 19, 1989, for the Chem-Solv Remedial Investigation/Feasibility Study (RI/FS) by BCM Engineers Inc. (BCM) in accordance with the Administrative Order on Consent (ACO) dated May 3, 1988, (Executive Order 12316, EPA Delegation Nos. 14-4 and 14-4A). The audit was performed during the first week of processing samples received from the site.

As specified in the ACO, any laboratory performing analyses for the RI/FS was required to undergo an audit of facilities and procedures to assure that project objectives and United States Environmental Protection Agency (USEPA) CLP protocols could be met. Laboratories with current CLP contracts were exempted from this requirement. Non-CLP laboratories were also required to analyze a performance sample supplied by USEPA and demonstrate acceptable results to be approved for analytical work for the investigation. The performance sample was to be analyzed within six months of the receipt of samples for the investigation.

The laboratory chosen for all analyses associated with the Chem-Solv site was IEA. IEA currently holds an active contract for full organics analysis in the CLP. IEA does not hold an inorganic CLP contract. The State of Delaware, Department of Natural Resources and Environmental Control (DNREC) and USEPA Region III determined that an audit and performance evaluation of IEA inorganic capabilities would be required to meet the specification of the ACO.

An inorganic performance sample was obtained from USEPA Region III Central Regional Laboratory (CRL) through the assigned CRL Quality Assurance Officer. IEA submitted performance sample results in July 1989, (within six months of initial site sample receipt), the results were acceptable and approval to use IEA was subsequently granted by DNREC and USEPA Region III.

The purpose of this audit is to assure that the laboratory complies with CLP protocols for the project analyses, and that the facility and its documentation are sufficient to meet CLP requirements. As determined by the CRL Quality Assurance Officer, BCM conducted the audit using the Laboratory Evaluation Checksheet from Appendix C of the current CLP Statement of Work 788.

AR307675

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

2.0 PROJECT DESCRIPTION

The project consists of a Remedial Investigation/Feasibility Study (RI/FS) being conducted on the Chem-Solv site in Cheswold, Delaware. Chem-Solv Inc. operated a solvent recycling facility on the site from 1982 until September 1984, when the State of Delaware DNREC issued a Cessation of Operation Order to Chem-Solv and undertook investigative studies and remedial actions from September 1984 until 1988. In early 1988, the United States Environmental Protection Agency (USEPA) as the lead agency initiated negotiations for performance of an RI/FS with the resultant ACO being prepared. DNREC is currently the lead agency overseeing all remedial activities at the Chem-Solv site.

AR307676

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

3.0 AUDIT ORGANIZATION

3.1 AUDITOR

BCM Section Manager - Quality Assurance: Atwood F. Davis, CPC

3.2 PERSONS CONTACTED PRIOR TO AUDIT

BCM Project Manager: Mary M. Mang
BCM Project Geologist: Margaret E. Bonaker
IEA Supervisor - Technical Support: Juliana L. Niemi

3.3 LABORATORY PERSONNEL CONTACTED DURING AUDIT

Laboratory Director: Mark Randall
Quality Assurance Manager: Patricia Ragsdale
Supervisor - Technical Support: Juliana Niemi
Manager - Inorganics: Darryl Johnson
Supervisor - Metals: Alan Lynch

The Laboratory Director and Supervisor-Technical Support accompanied the auditor during the audit.

AR307677

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

4.0 AUDIT SUMMARY

Notes taken during the audit activity were made on the Laboratory Evaluation Checksheet include as Attachment 1 to this report.

4.1 INITIAL INTERVIEW

The auditor conducted an overview interview with all IEA personnel listed in Section 3.3 before beginning the actual audit of the laboratory. The purpose of the audit, site background, and project requirements were discussed.

Laboratory performance evaluation requirements were reviewed. The Laboratory Director stated that the inorganic performance sample analyzed for the Chem-Solv project was performed in early July and was a Water Study (WS) sample from USEPA Environmental Monitoring and Support Laboratory - Cincinnati (EMSL - Ci). The laboratory director indicated that the laboratory has also recently performed WS-025 and WP-023 performance samples as a part of their certification program for the State of North Carolina.

The laboratory had a copy of the approved Chem-Solv Quality Assurance Project Plan (QAPjP) which was present during the interview, the Laboratory Director, Quality Assurance Manager, and Supervisor-Technical Support (Laboratory Project Manager) were familiar with the contents of the QAPjP. The Supervisor-Technical Support requested an additional copy for project use/reference and noted the need to ammend the project organization in Section 2.2 to include herself as the laboratory's assigned project manager, this addenda is included as Attachment 2.

During the initial interview, review of the inorganic personnel and years of experience was conducted. Upon conclusion of the initial interview the Laboratory Director and Supervisor-Technical Support escorted the auditor through the laboratory facility.

4.2 LABORATORY FACILITY

4.2.1 General

IEA is a consulting laboratory located in the Research Triangle Park area of North Carolina. The laboratory currently holds an active CLP Organics Contract and is preparing to bid on a CLP Inorganic contract. The laboratory also holds current certification with the State of North Carolina and numerous other state programs.

AR307678

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

4.2.2 Laboratory Address/Phone

The laboratory mailing address is:

P.O. Box 12846
Research Triangle Park, NC 27709

The facility is located at:

1901 North Harrison Avenue
Cary, NC 27511
(919) 467-9919

4.2.3 Layout/Security

The laboratory facility occupies one two-story building and the building is limited/restricted access. The upper floor consists of administrative offices with a reception area, Receptionist and visitor's log. Visitors are given visitor's badges, all employees wear identification badges. The lower floor contains all laboratory analytical, preparation and sample storage areas. Entrance to the laboratory areas is restricted by keypad locks on the entry doors. The sample storage areas were padlocked to restrict access to authorized personnel only. All entry doors and storage areas were observed to be locked during the audit.

4.3 ORGANIZATION AND PERSONNEL

Section I of Attachment 1 outlines inorganic department personnel. Specific experience requirements under the CLP are not required of the inorganic laboratory since they are not in the program. However, review of personnel credentials included in Attachment 3 of the approved QAPjP and personnel experience levels indicated during the audit reveal that all CLP minimum experience requirements were met or exceeded.

4.4 SAMPLE RECEIPT AND STORAGE AREA

Section II of Attachment 1 outlines the audit of sample receiving and storage. Written standard operating procedures (SOPs) were available in the area. Adequate storage capacity and proper temperatures maintenance for cold storage was evident. Temperatures are monitored 24 hours per day on a cylinder chart. Only samples are stored in the area; standards and reagents are stored in individual laboratory/preparation areas. Samples are stored by sample delivery group as defined by CLP protocol.

AR307679

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

Sample documentation, internal chain-of-custody, and receiving notes are kept in file folders by case or sample delivery group. Documentation for Chem-Solv samples received as of the day of the audit was available and was checked by the auditor. At the time of audit, Chem-Solv samples were not yet digested, therefore another CLP-style case of samples was checked for proper control samples, duplicates, spikes and blanks, all internal quality control samples were found to be in order.

Overall, the receiving and storage area was maintained in a manner consistent with CLP protocol requirements.

4.4 SAMPLE PREPARATION AREA

Section III of Attachment 1 outlines the audit of sample preparation. The overall area was well maintained, with adequate space and had proper hoods to conduct trace level analytical preparation. The hoods are flow checked quarterly with posted results/date on each hood. The analytical balance was last serviced on December 1, 1989. SOP for balance use specified daily check with Class S weights, a logbook was kept near the balance and was current. The lab reagent water source consisted of reverse osmosis with cartridge filtration. A log sheet was posted next to the unit which recorded water reagent blank checks. The unit had an attached specific conductivity monitor for routine monitoring of water quality.

All standards and reagents were labeled and dated upon receipt. All reagents and standards were found to be within expiration dates. A logbook of reagent and standards was kept in the area which recorded usage dates, date opened and standard/spiking preparations. All primary standards are purchased and EPA traceable. Standards were labeled, dated and initialed.

The UV visible spectrophotometer was operational; analytical notebooks for cyanide and SOPs were present. The spectrophotometer maintenance logs could not be located by the analyst. The laboratory director indicated, if necessary, copies could be forwarded. Maintenance of spectrophotometer is not generally problematic, and usually consists of cleaning optics and replacing sources. The analyst noted that the source was replaced within the past several months and that standards and control samples indicated that the unit was operating well.

SOPs were available in the sample preparation area and CLP protocols were noted. CLP preparation logs are kept in a sequential logbook that all preparation technicians use and are countersigned/stamped by the supervisor. Glassware washing SOPs were posted at the cleaning station. The pH of samples were recorded in the digestion records. Drying oven temperatures were posted on the oven and were current. The sample preparation area SOPs and records indicate that the laboratory is familiar with and routinely uses CLP protocols.

AR307680

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

4.5 ANALYTICAL INSTRUMENTATION

Section IV of Attachment 1 outlines analytical instrumentation. The laboratory has one inductively coupled plasma (ICP) unit and three atomic absorption (AA) spectrophotometers. All units appeared well maintained and an electronics technician is kept on staff for maintenance. The instrumentation available is adequate to meet project objectives and CLP performance requirements. Calibration and maintenance records were available and current. The ICP and primary AA unit are data system controlled and have auto-sampling units. The backup AA unit is routinely used for Cold vapor mercury analysis. Reagents' standards and matrix modifiers were labeled, dated, and initialed.

SOPs and method manuals were available in the area for the analysts. Most data is generated via instrument printout and filed. Analysts appeared familiar with instrument operation and CLP protocols. The audit of the analytical area indicates that the laboratory has the equipment and expertise to meet project requirements and routinely performs CLP protocols.

4.6 DATA HANDLING, QUALITY CONTROL AND SOPs

Data handling, quality control and SOPs are outlined in Sections V and VI of Attachment 1.

Data handling protocols and procedures indicate that supervisory review and sign-off are routinely conducted. When quality control criteria are exceeded proper annotation and corrective actions (e.g., reanalysis, redigestion) are taken. Data handling is achieved by a laboratory information management system (LIMS). The LIMS is a commercially available PC-based system which was installed as a hardware and software package. The LIMS in use was designed and tested by Radian. The laboratory tested the system in-house concurrently with its former system before change-over.

Quality control manuals and SOPs were readily available to the analysts. Specific SOPs were kept in the analytical/preparation areas. Documentation and maintenance procedures were generally well kept. Outdated SOPs are kept for reference. Data reliability and validity is assured by supervisory review, quality assurance review, laboratory quality control samples and EPA traceable blind performance samples.

AR307681

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

5.0 SUMMARY

An exit interview with the Supervisor-Technical Support concluded the audit. At that time the auditor reviewed findings and left an additional copy of the approved QAPjP for the laboratory's use on the project. A copy of a laboratory CLP inorganics deliverables package was given to the auditor for review for conformance to CLP. Forms were computer generated and the package included all quarterly report forms. The auditor requested that quarterly forms be submitted in the data deliverables for the Chem-Solv project.

The overall review of the laboratory indicates that the laboratory appears to have the expertise, experience and capability to perform CLP-level inorganics analyses and to submit deliverables that are CLP equivalent. It is evident that IEA, as an organic CLP contractor, has adopted CLP protocol and procedures as a standard mode of operation which has been carried over into the inorganic analytical areas.

AR307682

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

ATTACHMENT 1

AR307683

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX

LABORATORY EVALUATION CHECKSHEET EXAMPLE*

Laboratory: IEA

Date: 12/~~12~~ 19/89

Type of Evaluation: Chem-Solv Inorganic Audit
ACO Required

Personnel Contacted:

Name	Title
Mark Randall	Laboratory Director
Patty Ragsdale	Quality Assurance Mgr
Julie Niemi	Supervisor Technical Products Sup
Darryl Johnson	Inorganics Manager
Alan Lynch	Metals Supervisor

Laboratory Evaluation Team:

Name	Title
Atwood F. Davis	Quality Assurance Manager

* Some items may not be applicable for preaward laboratory evaluation.

AR307684

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Attachment 1
Laboratory Evaluation Checklist

I. ORGANIZATION AND PERSONNEL

ITEM	YES	NO	COMMENT
Inorganics Laboratory Supervisor (individual responsible for overall technical effort): Name: Darryl Johnson Experience: 3 years minimum requirement	✓		
ICP Spectroscopist Name: Alan Lynch Supervisor Experience: 2 year minimum requirement (Randy) Rousseau 2yrs. (Mike) Osborn 1yr.	✓		
ICP Operator: Name: As above Experience: 1 year minimum requirement	✓		
AA Operator: Name: Dianne Grundey Experience: 1 year minimum requirement	✓		3yrs
Inorganic Sample Preperation Specialist: Name: Carla Malonda Fred Hachette - 2nd shift Experience: 6 months minimum requirement	✓		
Classical Techniques (Cyanide) Analyst: Name: Ann Morris 5yrs. David Bubacz 2yrs. Experience: 6 months minimum requirement	✓		
Do personnel assigned to this project have the appropriate educational background to successfully accomplish the objectives of the program?	✓		

AR307685

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

I. ORGANIZATION AND PERSONNEL (Continued)

ITEM	YES	NO	COMMENT
Quality Assurance Supervisor Name: Patty Lagsdal 12yrs	✓		
Glassware Preparation Technician Name: Robert Howard	✓		
Is the organization adequately staffed to meet project commitments in a timely manner?	✓		
Were all personnel involved with the CLP analysis available during the evaluation? (List those not present.)	✓		All but 2nd shift Personnel

Additional Comments
LAB REC'D COPIES of Chem Soil QAP.P. reviewed and signed distribution list prior to audit. QAP.P was copied on site present at initial meeting

AR307686

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

II. SAMPLE RECEIPT AND STORAGE AREA

ITEM	YES	NO	COMMENT
Are written Standard Operating Procedures (SOPs) developed for receipt and storage of samples?	✓		In with CLP
Is the appropriate portion of the SOP available to the sample custodian at the sample receipt/storage area?	✓		
Are the sample shipping containers opened in a manner which prevents possible laboratory contamination?	✓		Fume hood
Are soil and cyanide samples that require refrigeration at 4°C stored in such a way as to maintain their preservation? (Exhibit D)	✓		
Are adequate facilities provided for storage of samples, including cold storage?	✓		
Is the temperature of the cold storage recorded daily in a permanent record?	✓		
Are temperature excursions (plus/minus 4°C) noted and are appropriate actions taken when required.	✓		
Are the sample receipt/storage and temperature records maintained in a manner consistent with GLP?	✓		24 hr. recorder Cylinder chart
Are standards stored separately from sample digestates?	NA		Standards stored in CATS Area

AR307687

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

II. SAMPLE RECEIPT AND STORAGE AREA (Continued)

ITEM	YES	NO	COMMENT
Do the digested cases examined contain LCS's, duplicates, and matrix spikes? Cases EXAMINED CLP style CASE ONSITE (Exhibit E)	✓		
Has the supervisor of the individual maintaining the notebook/bench sheet personally examined and reviewed the notebook/bench sheet periodically, and signed his/her name therein, together with the date and appropriate comments as to whether or not the notebook/bench sheet is being maintained in an appropriate manner?	✓		Internal C-of-C forms for tracking

Additional Comments

ENTIRE LABORATORY AREA UNDER SECURITY, LIMITED ACCESS. TWO floors upper administrative area with receptionist, lower floor lab area all doors access via touchpad locks

AR307688

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

III. SAMPLE PREPARATION AREA

When touring the facilities, give special attention to: (a) the overall appearance of organization and neatness, (b) the proper maintenance of facilities and instrumentation, (c) the general adequacy of the facilities to accomplish the required work.

ITEM	YES	NO	COMMENT
Is the laboratory maintained in a clean and organized manner?	✓		
Does the laboratory appear to have adequate workspace (120 sq. feet, 6 linear feet of unencumbered bench space per analyst)?	✓		
Are contamination-free areas provided for trace level analytical work?	✓		
Are the hoods in good condition and functional?	✓		Checked Listed on Quarterly Hood
Are chemical waste disposal policies/procedures well defined and followed by the laboratory?	✓		Acid Wastes Neutralized Haz Waste Accumulated for C
Does the laboratory have a source of distilled/demineralized water?	✓		From I/D LAB Bottled DI + RO
Is the conductivity of distilled/demineralized water routinely checked and recorded?	✓		MILLIPORE RO Log Sheet Posted SP Cond. Meter on line
Is the analytical balance located away from draft and areas subject to rapid temperature changes?	✓		
Has the balance been calibrated within one year by a certified technician?	✓		Serviced 12/1/89 SOP & daily log At Class Site

AR307689

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

III. SAMPLE PREPARATION AREA (Continued)

ITEM	YES	NO	COMMENT
Is the balance routinely checked with the appropriate range of class S weights daily before use and are the results recorded in a logbook?	√		
Is the sample preparation portion of the SOP available to the analyst at the sample preparation area?	√		
Are unexpired standards used to prepare instrument calibration standards?	√		Use expiration date on bottle generally < 1 yr
Are fresh analytical standards prepared at a frequency consistent with the IFB requirement?	√		
Are chemicals and standards dated upon receipt?	√		Rec'd Open date plus Logbook
Are reagent inventories maintained on a first-in, first-out basis?	√		DATE Open in Logbook
Are reference materials properly labeled with concentrations, date of preparation, and the identity of the person preparing the sample?	√		
Is a spiking/calibration standards preparation and tracking logbook(s) maintained?	√		Same as Reagent Log
Are the primary standards traceable to EPA standards where possible?	√		
Do the analysts record bench data in a neat and accurate manner? (Exhibit G)	√		CLP Prep book Sequential book not analyst assigned

AR307690

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

III. SAMPLE PREPARATION AREA (Continued)

ITEM	YES	NO	COMMENT
Is the SOP for glassware washing posted at the cleaning station?	✓		Posted
Is a UV-Visible spectrophotometer operational and properly maintained?	✓		Spectronic 1201 (1)
Is the mercury analyzer operational and well maintained (i.e., properly vented)?	✓		Flame backup unit used for CVAA
Are sufficient cyanide distillation apparatus available to routinely analyze all samples within the required holding period?	✓		
Is the pH of the samples recorded and available for data review? (Exhibit D)	✓		In digestate books
Are digestion logbooks/bench sheets maintained in a neat and organized manner? (Exhibit G)	✓		Reviewed
Is an adequate drying oven available with a temperature measurement device? Thermometer in oven	✓		Records listed posted on oven
Has the supervisor of the individual maintaining the notebook/bench sheet personally examined and reviewed the notebook/bench sheet periodically, and signed his/her name therein, together with the date and appropriate comments as to whether or not the notebook/bench sheet is being maintained in an appropriate manner?	✓		Supervisor reviewed Stamped & dated

Additional Comments Stds noted labeled/DATED/INITIALED

(1) MAINT LOG NOT FOUND BUT ANALYST NOTED THAT ONE WAS KEPT Recently changed source (≈ 3 mo.)

AR307691

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IV. SAMPLE ANALYSIS INSTRUMENTATION

A. ICP/DS Instrumentation

Installation	Manufacturer	Model	Type: Sequential or Simultaneous	Date
ICP ID #	PE	Plasma II	Seq. dual monochr.	1985
Data System	PE	7500		1985
ICP ID #	—	—	—	—
Data System				

ITEM	YES	NO	COMMENT
Are calibration intensity and gains kept in a permanent record so that instrument performance can be measured over time?	✓		In Data System Maint. Log. Stds. Drem
Is a permanent service record maintained in a logbook?	✓		Logbook Reviewed DATQ/Stamp
Has the instrument been modified in any way?		✓	
Is the instrument properly vented?	✓		
Is a mass flow controller used?	✓		
Is an auto-sampler used?	✓		
Is the interference correction automatically performed?	✓		

AR307692

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Sequential correction factors

ITEM	YES	NO	COMMENT
Are interelement correction factors updated every six months or more frequently?		✓	Elect. Tech ON STAFF
Is service maintenance by contract?		↓	↓ 0.2D
Is preventative maintenance applied?	✓		

Additional Comments D.L. studies evident raw data filed, checked

QUARTERLY FORMS for detection limits in packages for Chem Soil was requested

AR307693

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IV. SAMPLE ANALYSIS INSTRUMENTATION (Continued)

B. Atomic Absorption (AA) Spectrometer

	Manufacturer	Model / Revision		Installation Date
AA ID #	PE	5100	AS-60 Zeeman	1988
Data System	Epson	Equity		1988
AA ID #	PE	3030	AS-60 Zeeman	1987
Data System				
AA ID #				
Data System				
AA ID #	PE	5000	Dr background	~1980 Backup Unit/Flame
Data System				

DLs listed on 30

Mostly EDL in use for HCL

AR307691

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IV. SAMPLE ANALYSIS INSTRUMENTATION (Continued)

ITEM	YES	NO	COMMENT
Is there a methods manual available to the operator?	✓		
Are element specific SOP's listing instrument conditions, background correction, instrument conditions, and required instrument sensitivity available to the analyst?	✓		Individual Notebook & SOW
Are calibration results (i.e., sensitivity) kept in a permanent record so that instrument performance can be measured over time?	✓		Data System & Record Book
Is a permanent service record maintained in a logbook?	✓		Examined Still Well Kept
Has the instrument been modified in any way?		✓	
Is the instrument properly vented?	✓		
Is the unit equipped with flameless accessory?	✓		
Are L'vov platforms used?	✓		
Is an auto-sampler used?	✓		AS-600
Are EPA or instrument manufacturer matrix modifiers used?	✓		Dated/ Labeled Signed
Is the unit equipped with electrodeless discharge lamps?	✓		
Is service maintenance by contract?		✓	Electr. Tech on STAFF
Is preventative maintenance applied?	✓		Well Maintained

AR307698

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IV. SAMPLE ANALYSIS INSTRUMENTATION (Continued)

Additional Comments

AR307696

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

V. DATA HANDLING AND REVIEW

ITEM	YES	NO	COMMENT
Are manual data calculations spot-checked by a second person?	✓		
Do records indicate that appropriate corrective action has been taken when analytical results fail to meet QC criteria?	✓		
Is a Laboratory Information Management System (LIMS) used? Manufacturer/Model: RADIAN SAM R2 Band	✓		
Is the operation of the LIMS validated with a test set of data and is the data maintained for on-site inspection?	✓		Tested before ONLINE, WAS TESTED CONCURRENTLY with other system

Additional Comments

AR307697

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

VI. QUALITY CONTROL MANUAL AND SOP'S

ITEM	YES	NO	COMMENTS
Does the laboratory maintain a project specific Quality Control Manual?	✓		
Does the manual address the important elements of a QC program, including the following:			
Personnel?	✓		
Facilities and equipment?	✓		
Operation of instruments?	✓		SPECIFIC SOPS each area
Documentation of procedures?	✓		
Preventive maintenance?	✓		MAINT. LOGS
Reliability of data?	✓		LCS EPA VIALS WS, WP
Data validation? DATA REVIEW BY SUPEVISOR			
Feedback and corrective action? CORRECTIVE ACTION LOGS IN ORGANIC			PER STATEMENT OF WORK
Are files of outdated SOP's stored for reference?	✓		OLD SOPS Kept

Additional Comments

Blank water for field/trip blanks prepped from Barnstead DI system in glass carbons heat/purged N2 in bottle shipping area. Bottle prep requirements and SOPs were posted in area and are based upon CLP requirements.

AR307698

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

VII. SUMMARY CHECKSHEET

ITEM	YES	NO	COMMENT
Do responses to the evaluation indicate that project and supervisory personnel are aware of QA/QC and its application to the project?	✓		
Do project and supervisory personnel place positive emphasis on QA/QC?	✓		
Have responses with respect to QA/QC aspects of the project been open and direct?	✓		
Has a cooperative attitude been displayed by all project and supervisory personnel?	✓		
Does the organization place the proper emphasis on quality assurance?	✓		
Have any QA/QC deficiencies been discussed before leaving?			None Evident
Is the overall quality assurance adequate to accomplish the objectives of the project?	✓		
Has corrective action(s), recommended during previous evaluations, been implemented? If not, provide details in Section VII. B.	NA		

Additional Comments

AR307699

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

ATTACHMENT 2

AR307700

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

QUALITY ASSURANCE PROJECT PLAN
ADDENDUM

FOR

CHEM-SOLV INC.
CHESWOLD, DELAWARE

BCM PROJECT NO. 00-6012-02

Addendum to Section 2.2 of the approved Quality Assurance Project Plan dated October 1989.

2.2 IEA LABORATORY PERSONNEL

Add:

Laboratory Supervisor Technical Support	Juliana Niemi - Responsible for laboratory project management and project coordination

Atwood F. Davis

Atwood F. Davis, CPC
Section Manager - Quality Assurance

EFFECTIVE: January 3, 1990

AR307701

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-7

WORK PLAN ADDENDUM, DATED APRIL 1, 1990

AR307702

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM Engineers

Engineers, Planners, Scientists and Laboratory Services

One Plymouth Meeting • Plymouth Meeting, PA 19462 • (215) 825-3800

April 3, 1990

Milton M. Beck, D.V.M.
State of Delaware
Department of Natural Resources and
Environmental Control
715 Grantham Lane
New Castle, DE 19720

Subject: April 1990 Groundwater Sampling
Chem-Solv, Inc. Site, Cheswold, Delaware
BCM Project No. 00-6012-02

Dear Dr. Beck:

The purpose of this letter is to submit proposed revisions to the groundwater sampling event scheduled for April 1990. This letter serves as an addendum to the Remedial Investigation/Feasibility Study Work Plan (Work Plan) for the Chem-Solv, Inc. (Chem-Solv) Site submitted by BCM Engineers Inc. (BCM) to the State of Delaware Department of Natural Resources and Environmental Control (DNREC) in October 1989 and approved December 1, 1989.

This addendum will address two issues: the selection of alternate monitoring wells to be sampled during the April 1990 groundwater sampling event and alterations/revisions to groundwater sampling protocol contained in the Chem-Solv Quality Assurance Project Plan (QAPjP).

Selection of Alternate Monitoring Wells

The groundwater investigation described in Section 4.5 of the Work Plan includes a groundwater sampling event. Thirteen monitoring wells, including the seven wells installed by BCM as part of the Remedial Investigation, and the inactive recovery system are to be be sampled and analyzed for Target Compound List organic compounds and Target Analyte List inorganic compounds (Table 1). However, monitoring well 28A, which was located along the southwestern edge of the Gearhart property, was paved over when the existing driveway was repaved (Figure 1). Therefore, an alternate well will have to be sampled in place of well 28A. In our March 21, 1990, telephone conversation, monitoring wells 24A, 25A, 27A, 41A, and 42A were discussed as potential alternate sampling locations for well 28A.

AR307703

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

Since wells 24A, 25A, 27A, and 41A could not be located during the recent field investigation activities, it was necessary to attempt to locate the wells with a magnetometer.

On March 28, 1990, BCM used a magnetometer to locate monitoring wells 24A, 25A, and 39A, that are located in the Route 13 median, just south of the intersection of Routes 13 and 42. All three wells were located. In addition, wells 27A and 41A, which are located on either side of well 28A, were located. However, the outer casing for well 27A has been destroyed and subsequently the well is partially plugged with sediment and cannot be sampled. Therefore, BCM recommends well 41A be sampled as replacement for well 28A since it is located downgradient of the site and is in the direct path of the determined groundwater flow direction.

Revisions to Groundwater Sampling Protocol

A general description of the groundwater sampling event, including a list of the monitoring wells to be sampled and the analytical parameters, is contained in Section 4.5.5 of the Work Plan. Section 4.3 of the QAPjP (Appendix B of the Work Plan) contains the detailed specifications for groundwater sampling. Revisions to specific sections of the QAPjP are underlined in the following paragraphs.

Section 4.3.3, item 3.

> "Each well will be purged of three to five times the volume of standing water in the well with a centrifugal pump, a peristaltic pump, or a PVC or Teflon bailer. During pumping, the suction hose will be lowered into the top of the water column so that groundwater is pumped from the entire water yielding interval. To verify adequacy of purging, up to five volumes of standing water in the well will be pumped until specific conductivity, temperature, and pH of the groundwater stabilize. If well yield does not sustain continuous pumping, the well will be pumped or bailed dry once. The suction hose will be removed from the well while the pump is running to prevent backflow into the well."

Section 4.3.3, item 4.

> "Where possible, the sample will be bailed from the entire depth of the well and placed in appropriate laboratory-prepared sample containers. Due to the small inner diameter (5/8 inch) of many of the existing wells, groundwater samples from wells 22A, 26A, 39A, and 41A will be obtained using a peristaltic pump with Teflon tubing. Samples for volatile organic analyses will be collected from the first bailer of water and preserved as outlined in Section 4.3.3.3. Samples for metals analyses will be collected as filtered and unfiltered samples. Filters used in the

#R307704

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

nitrogen pressurized stainless steel filtration apparatus will be pre-rinsed using demonstrated analyte-free water and then pre-rinsed with a portion of the sample prior to filtration of the actual sample."

Section 4.3.3, item 5.

"The sampling process, using either a bailer or a peristaltic pump with Teflon tubing, will continue until the required volume of sample is obtained."

Section 4.3.3, item 6.

"The sample containers will then be rinsed, labeled, and placed in a chilled environment (4°C) for shipment to the Industrial and Environmental Analysts, Inc. laboratory in Cary, North Carolina."

Section 4.3.3.2, paragraph 1, Using Pumps to Purge.

"If peristaltic or centrifugal pumps are used, only the intake line will be placed into the water column. To minimize contamination, the line placed into the water will be either Teflon, when using the peristaltic pumps, or polyethylene, when centrifugal pumps are used. The peristaltic pump will use 1/4-inch diameter Teflon tubing. Since Teflon tubing is very rigid, it can not be used inside the peristaltic pump; a 6 inch long length of 1/4-inch diameter silicon tubing will be used inside the pump assembly. Teflon fittings will be used to connect the silicon and Teflon tubing. Prior to insertion into the well, the Teflon or polyethylene tubing will be decontaminated in accordance with the procedures outlined in Section 4.1.2, unless dedicated tubing is used for each well."

Section 4.3.3.3, paragraph 1.

"Special sample handling procedures will be instituted when trace contaminant samples are being collected. All sampling equipment, including pumps, bailers, drilling equipment, water level measurement equipment, etc., which come into contact with the water in the well must be cleaned in accordance with the cleaning procedures described in Section 4.1.2. Electric w level indicators will be cleaned with soap and an analyte-water rinse only since the solvents included in the stan cleaning procedure may damage the probe. Pumps will n for sampling unless the well has dedicated in-place p

AR30 15

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

pump or the well diameter is too small for a bailer to be used. For wells with small diameters, a peristaltic pump with Teflon tubing will be utilized for sampling."

Section 4.3.3.3, Volatile Organics Sampling, paragraph 3.

"When collecting water samples for volatile organics, three 40-ml vials will be collected from each location. In accordance with current USEPA Region III requirements, the volatile organics samples will be preserved with 1:1 hydrochloric acid (HCl) to a pH less than 2.0 to extend the analytical holding time. To determine the proper amount of HCl needed at each location to preserve the sample, one 40-ml vial will be filled with groundwater obtained as the well is purged prior to sampling; the sample will be obtained after specific conductivity, temperature, and pH have stabilized during the purging process. HCl will be added dropwise to the vial. The vial will be capped and shaken, reopened, and the pH will be measured with pH test paper (strips) by touching the water on the inside of the cap. Upon determination of the number of drops required to achieve the proper pH, the test vial will be discarded. The remaining two vials will be acidified (with the same number of drops of HCl) immediately upon collection of the first bailer from each well. The method of using purge water to determine the number of drops of HCl needed to preserve the sample allows the volatile sample to be obtained immediately from the first bailer as the well is sampled."

If you have any questions or comments regarding this addendum, please contact us immediately.

Very truly yours,

Margaret E. Bonaker

Margaret E. Bonaker
Geologist

Mary M. Mang

Mary M. Mang
Assistant Vice President

/bvi 7355q
Enclosures
cc: M.C. Hwang, Miles and Stockbridge
F.M. Poli, P.E., BCM
R.D. Buller, P.G., BCM

AR307706

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TABLE 1

GROUNDWATER SAMPLING INVESTIGATION

CHEM-SOLV, INC. SITE RI/FS
CHESWOLD, DELAWARE

WELL	WELL DIAMETER (inches)	PURGE METHOD	SAMPLE METHOD	ANALYTICAL PARAMETERS
22A	5/8	PERISTALTIC PUMP	PERISTALTIC PUMP	TCL ORGANICS; TALINORGANICS
26A	5/8	PERISTALTIC PUMP	PERISTALTIC PUMP	TCL ORGANICS; TALINORGANICS
39A	5/8	PERISTALTIC PUMP	PERISTALTIC PUMP	TCL ORGANICS; TALINORGANICS
41A	5/8	PERISTALTIC PUMP	PERISTALTIC PUMP	TCL ORGANICS; TALINORGANICS
5B	1.5	CENTRIFUGAL PUMP	~~TEFLON BAILER~~ Teflon bailer	TCL ORGANICS; TALINORGANICS
9B	4	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
RECOVERY SYSTEM	NA	IN-PLACE PUMP	IN-PLACE PUMP	TCL ORGANICS; TALINORGANICS
MWI-1-43	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
MWI-2-40	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
MWS-3-17	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
MWI-4-40	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
MWS-5-18	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
MWS-6-25	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS
MWS-7-25	2	CENTRIFUGAL PUMP	TEFLON BAILER	TCL ORGANICS; TALINORGANICS

NA Not applicable
TCL Target Compound List
TAL Target Analyte List

Source: BCM Engineers Inc. (BCM Project No. 00-6012-02)

HR307707

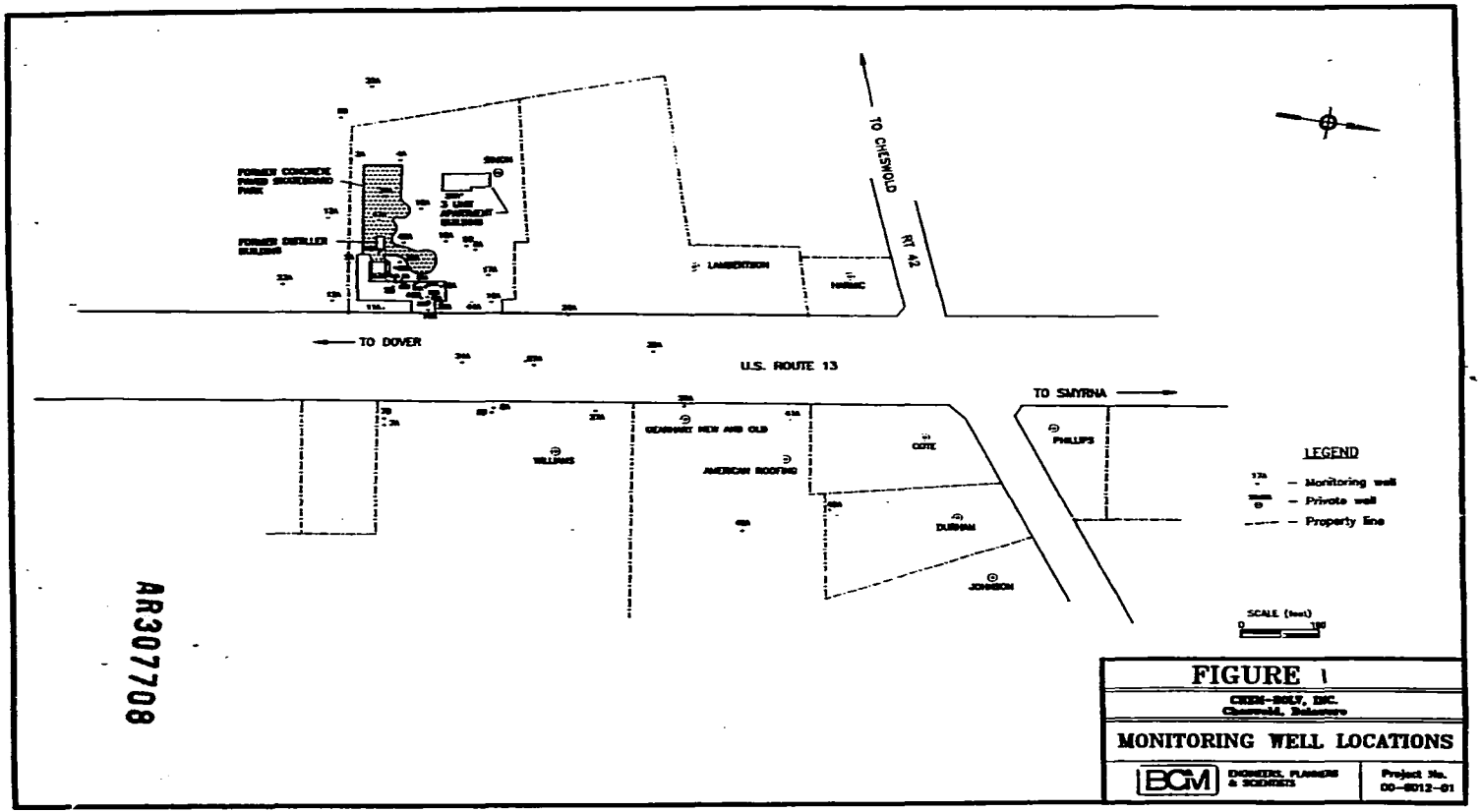


FIGURE 1

CREM-BOLT, INC.
Cheswold, Delaware

MONITORING WELL LOCATIONS

BCM ENGINEERS, PLANNERS & SCIENTISTS

Project No. 00-8012-01

AR307708

If the page filmed in this frame is not as readable as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-8

LETTER DATED OCTOBER 17, 1990, TO BCM FROM DNREC,
PROVIDING DNREC UST INFORMATION

AR307709

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

DONAHER/PETERSON/MANG/00-6012-02

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
715 GRANTHAM LANE
WASTE MANAGEMENT SECTION NEW CASTLE, DELAWARE 19720-4801 TELEPHONE: (302) 323-4540

October 17, 1990

Ms. Mary M. Mang
Assistant Vice President
BCM Engineers
One Plymouth Meeting
Plymouth Meeting, PA 19462

SUBJECT: Field Notes on Leaking Underground Storage Tanks (LUST) around Bishop's Corner, Cheswold, Delaware

Dear Ms. Mang:

The Underground Storage Tank Branch recently gave me a copy of a tank removal report. The tank removal was on Rt 42, just west of Rt 13 and the tank had been leaking. I subsequently found field notes in the Underground Storage Tank Branch on other sites around that intersection with LUST problems.

I am enclosing copies of the field notes and LUST report. They will help to explain some of the groundwater contamination situation at Bishop's Corner.

If you have any questions, please call me at (302) 323-4541.

Respectfully,

Milton M Beck

Milton M Beck, DVM
Environmental Scientist
Superfund - Remedial

MMB:sfh
MMB2249

Enclosures

pc: N. V. Raman
Brad L. Smith
Stephanie Dehnhard (3HW25)

AR307710

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ORICAL A. D CULTURAL AFFAIRS

TOR

Date of Application

Estimated Date of Construction

Pump Installer

License

License No.

WELL INFORMATION (circle one)

Purpose: Potential Commercial Option to convert

Use: Domestic Public Commercial

Agriculture Other

Describe Other

Is this a replacement well? yes no

Reason for replacement:

Date abandoned well is to be sealed:

How

Has an application been made for an approved sewage disposal system? yes no

Permit Number 84 82LC

LOCATION MAPS

Road Map

152

Shops Corner

42

345

PROPOSED WELL CONSTRUCTION

Method of drilling: Rotary

Approximate total depth of well: 140 ft.

Name of aquifer: Mrocks

Casing diameter (s) inner to outer (in.): 4

Casing Material: PVC

Screen Material: PVC

Tentative Screen Setting: between ___ and ___ ft.

Estimated length of screen ___ ft.

Will the well be gravel packed? yes no

Type of grout: Cut Fr. m 0 ft to 20 ft.

Desired capacity of the well: 10 gpm

Maximum daily use: 500 gpd

I hereby affirm the information I have furnished is accurate and correct.

Applicant (circle) Representative

30'

100'

165'

Site Plan (include suitable plot plan if available)

For Official Use Only — Do Not Write Below This Line

AR 30 77 11

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Grit

Permit Number 5 L 250

Jim Davis

129 144 feet

Static water level 12 ft below

Pumping water level 50 ft. below

5 hours at 20 gpm

12 inches above grade

Method of Drilling: Jet ☐ Dug ☐ Driven ☐ Rotary Med ☑ Rev. ☐ Air ☐ Other

4. Test well ☐ Observation ☐ Production ☑

5. Total Well Depth 144 feet

Date Completed 6/23/82 (Month Day Year)

6. If this is a replacement well, how was previous well abandoned?

7. Casing Material: Steel ☐ PVC ☑ Concrete ☐

Diameter 4 in. from 0 to 144 feet

8. Screen Material: Steel ☐ PVC ☑ Concrete ☐

Diameter 4 inches

Setting from 129 to 144 feet

9. Grout Type Cement ☐ Bentonite Clay ☑

Other

from 3 to 68 feet

10. Minimum Backfill of Well Annulus

Type [illegible] from 60 to 127 feet

15. Type of Permanent Pump Installed

Pump Manuf.

Rated capacity

Pump intake setting ft. [illegible] grade

16. The completed well is

a. at least 5' from an overhang

b. at least 50' from any septic tank

c. at least 10' from town sewer line

d. at least 100' from the nearest edge of any tilefield (if well is cased less than 50')

e. at least 50' from the edge of any tilefield if casing (not including screen) is more than 50' in depth

17. The nearest neighbors (circle one) septic tank tilefield, cesspool, or privy is ____ from completed well.

18. Is completed well located as shown on application form?

If no, describe location change

440

400

RECEIVED

JUL 30 1982

WATER SUPPLY

Company Name [illegible]

Signature of Water Well Contractor

AR307712

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

DRILLERS LOG	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
[illegible]	[illegible]	1
Gray Clay	1	4
Tan Sand	4	18
White Sand	18	43
Gray Clay	43	47
Fine Gray Sand	47	59
Gray Clay	59	71
Brn Clay	71	9[illegible]
Gray Sand & Shell	9[illegible]	105
Gray Clay	105	1[illegible]
Gray Sand & Shell	1[illegible]	104

AR307713

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Greg Force Field Book #2

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Tank #2 registered 35 on HNU
0 on explosimeter.

Tank #1 0 explosimeter 2 on
HNU from vent pipe hole
on northern end of pipe.

East end of pit near northern end
of tank #1 strong ~~[illegible]~~ diesel odor
in soil starting @ ~5' below
ground surface. registers 20
on HNU. no explosimeter
reading registered in soil w/in
pit put HNU values up to
7 from soil being excavated.

Freeman Hosky Install tanks.

Biddle Towing Dewitt, Dover
is pulling tanks out.

Dirt is piled up to 5' around
tank excavation.
(of hooks broke off from top of tank #1 when
they first tried to pull it out of pit.

Bottom of the pit ~12' deep
No water in pit.

Tank #1 10,000 gal
pulling #1 onto @ 11:45 finished pulling
tank @ noon.

Drisgle is the one who
originally emptied tanks and
[illegible] drain & dispose of
product (1½") left in large tank
#1

After Tank #1 was removed
I checked the bottom of the pit
w/ HNU meter. No readings registered
at pit bottom but continued
to read ~30 at area in
NW corner & near the western
edge of tank #2 also checked along
space between the bottom of
Tank #2 and dirt near bottom
of tank (along south edge of tank) HNU
~30

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Lambertson doesn't know what he wants to do with the tanks yet. He said he got an offer from Milford public [illegible] to take them.

Tank #2 ~ 2,000 - 3 k gal
Diesel fuel in Tank #1 & 2

Mitigation pit is a tanish orange fine coarse grain sand w/ gray to brown thin layers of silt

pulling Tank #2 out @ 12:25 pm
broke vent pipe off from top of tank

Tank #3 ~ 500 gal fuel oil

~ 27' water well ~ 20' from SW corner of large tank pit, going to have it abandoned

New ~ 10' water well behind building ~ 30' [illegible] white

Mr. Lambertson
734-9649

Tanks #1 & 2 where moved & being temp. stored at back of lot.
~ 1" product in smaller tank (#2) also

Arrived back in office @ 1:00 pm
talked w/ Curt about what's found @ site and he said to have Lambertson fill the pit back in and to leave the shallow well open & available for sampling.
I called Mr. Lambertson @ 1:15 and told him to fill the pit in w/ original dirt and to leave his shallow well open. He said that he was going to go ahead and dig the known contaminated dirt out of the pit and place it on a plastic sheet then cover it w/ plastic. He also said that he would not [illegible] would be done w/ the old tanks.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LIST # III Curt Herman

12

12/1/87 Pee Wee's Truck Stop

arrived at the site @ 1030 hours
John Mohrman
Mike Apgar
Curt Herman

We arrived @ the scene and entered the two trailers with the explosimeter and the HNu. The 2 trailers we entered were the trailers suspected of having a vapor problem.
* In all areas in the trailers where we took readings the instruments did not detect the presence of hydrocarbons. We left the 24 hour toll free number with Coy Salvary, the manager of the facility (Troy's Mobile Homes & Modulars) and told him to call if he noticed any vapors in the future.
We used the hammer probe to probe about 5 holes to a depth of approximately 4.5 feet.

13

AR307717

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Site #3 15

Marstellers Gulf
Rte 13 & Rte 42 &
Cheswold, De 19936

734 3307
Bruce Marstellers (owner)
674-5800 office
1280 South Governors Avenue
Dover, De 19901

Site #4
Del Mar Ford Tractor
Woody Turner - manager
P.O. Box 167
Cheswold, De 19936
Site # - 678-8484

3 underground storage tanks
* Paradise Oil a own them.

Site #5
Ree Wee's Truck Stop

AR307718

Site #1 14

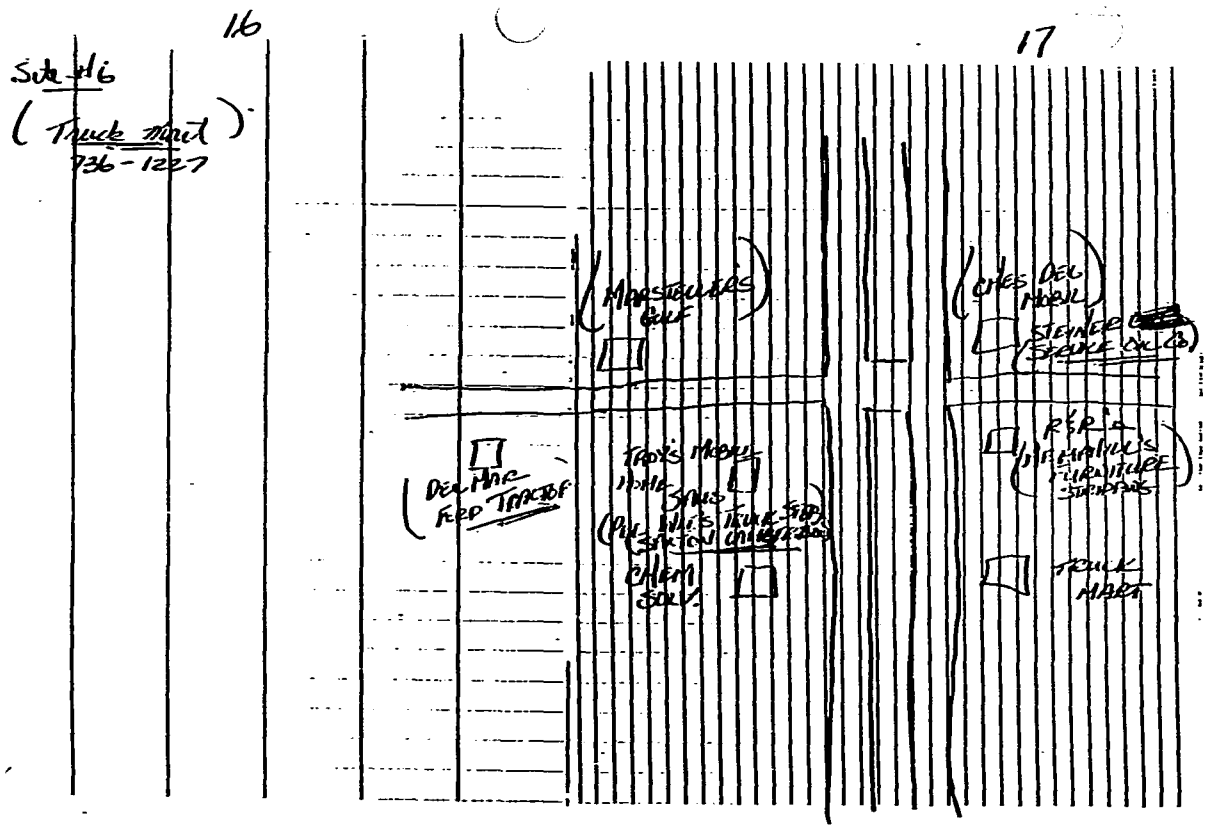
owner
422-6631 - Service Oil Co.
— Don Steiner
Cheswold, De 19936
Ches-Del Mobil - manager
Rte Rte 13 & 42 Freddy Saylor
674-9364 pay phone
3 underground storage tanks
(1) 6,000 gallon - unleaded
(2) 3,000 gallon - super unleaded regular.

Site #2

Robert Hemphill - current owner
Rte 13 & 42
Cheswold, De 19936 678-9009
bought from
— Alan Cole —

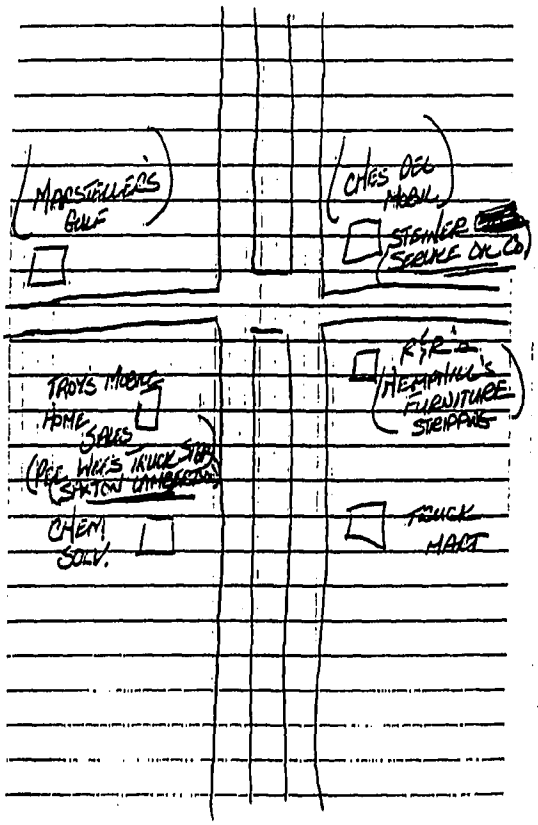
removed 3 - 4,000 gallons
underground storage tanks
tanks were never registered
tanks were removed on April — 1987.
The tanks were cracked and there
was no product in them nor sludge
the tanks

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.



AR307719

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.



AR307720

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ARTESIAN LABORATORIES, INC.

A wholly owned subsidiary of Artesian Resources Corporation

Mr. Edwin T. Walls
Eastern Petroleum Services, Inc.
1002 North Walnut Street
Milford, Delaware 19963

Account Number: 70602000
Date Sampled: 06/27/90
Date Received: 06/28/90
Sampled By: Client
Lab Number: BD 15104
Report Date: 07/11/90

Sample Name: Composite

Project: Shore Stop
Route # 42
Cheswold, DE 19936

ANALYSIS RESULTS

SAMPLE RESULTS	mg/kg	Date/Time Analyzed	Tech
T. Petroleum Hydrocarbons	410.	070690-1030	MC
Benzene	2.1	070590-0900	CM
Toluene	16.	070590-0900	CM
Xylene	> 300.	070590-0900	CM
Ethylbenzene	10.	070590-0900	CM

Formerly Marsteller's Gulf
notes in Curt Herman. field
Notes III

RECEIVED
AUG 3 2007 1992

DISCLAIMER: Liability to Artesian Laboratories, Inc. not to exceed cost of analysis.

Post Office Box 15004
Wilmington, Delaware 19850
(302) 453-6920

Delaware Department of Public Health Approved
Maryland Department of Public Health Certified
Pennsylvania Department of Environmental Resources Certified

Post Office Box 955
Dover, Delaware 19903
(302) 734-8417

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK BRANCH
715 Grantham Lane
New Castle, Delaware 19720
(302) 323 - 4588

UNDERGROUND STORAGE TANK REGISTRATION FORM
(FOR EXISTING TANKS, RETROFITTING OF EXISTING TANKS, REMOVAL/ABANDONMENT OF EXISTING TANKS, AND INSTALLATION OF NEW TANKS)

FACILITY NUMBER _____

A permit is required to install new or retrofit existing underground storage tanks. Existing, new retrofitted and abandoned tanks all must be in accordance with the provisions of the Delaware Regulations Governing Underground Storage Tanks. For all new tank installations, a detailed site plan and the canary copy of this form must be submitted to the Office of the State Fire Marshal for approval.

Please fill out all application sections; no more than five tanks may be registered on one form. Assign each tank a number and maintain that number consistently throughout the form.

1. **Facility Information**
Name: SHORE STOP
Street: RT42 & 13
City: CHESWOLD State: DE Zip: 19936
Phone: _____ County: KENT

2. **Owner Information**
Name: REGENT INVESTMENTS
Street: P.O. BOX 416
City: POCOMOKE State: MD Zip: 21851
County: _____

3. **Type of Ownership**
( ) Federal (GSA facility ID # _____
( ) State ( ) County
( ) Municipal ( ) Public School District
(X) Private or Corporate ( ) Volunteer Fire or Ambulance Company
( ) Other _____

4. **Facility/Industry Classification**
(mark all that apply)
( ) Automotive ( ) Government
( ) Chemical ( ) Manufacturing
( ) Construction ( ) Petroleum
( ) Education ( ) Service
( ) Farm ( ) Transportation
(X) Other (please specify) CONVENIENCE STORE

5. **Contact Person**
Name: VERNON REDDEN
Title: OPERATIONS MANAGER
Phone: 301-957-0468

6. **Contractor Information**
Name: EASTERN PETROLEUM SERVICES, INC.
Title: PRESIDENT / ED WALLS
Street: 1002 N WALNUT STREET
City: MILFORD State: DE Zip: 19963
Operating License #/State: 259197 DE
Phone: 302-422-5959

7. Does the facility have a water well? (X) Yes ( ) No
If so, how far is the well from the nearest tank?
150 ft.

8. How close is the tank to a public or off site private drinking water well?
N/A ft.

9. How close is the tank field to an occupied building?
125 ft.

10. Does the building have a basement?
( ) yes (X) no

11. Is any routine tank inspection/testing conducted?
( ) yes (X) no (If yes, attach copy of last test results.)

12. Are inventory records kept and reconciled on a regular basis?
(X) yes: (X) daily ( ) weekly ( ) monthly ( ) other
( ) no:

13. *New tank(s)* *Tank Status*
a. Date tank to be installed ___/___/___
b. Type of pump system:
( ) Positive Pressure
( ) Suction
(proceed to # 19, Tank and Piping Construction)

14. **Existing tanks**
a. (X) Existing, in use
(proceed to # 15)
b. ( ) Existing, not in use
Date tank(s) last used: ___/___/___
Gallons remaining: Tank No. 1 _____ 2 _____
3 _____ 4 _____ 5 _____
(proceed to # 19, Tank and Piping Construction)
c. ( ) Abandoned, in place
(proceed to # 16, 17 and 18)
d. (X) Remove from ground
Date tank(s) removed: 5 / 10 / 90
e. ( ) Retrofitting
Date tank(s) retrofitted or to be retrofitted:
___/___/___

15. Age in years of each tank being reported or year tank installed:
Tank No. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

16. If abandoned in place, date tank(s) abandoned:
___/___/___

17. If removed/~~abandoned~~ type of substance last stored:
Tank 1: UNLEADED GAS Tank 4: KEROSENE
Tank 2: UNLEADED GAS Tank 5: _____
Tank 3: UNLEADED GAS

18. Do abandoned tanks contain inert materials? ( ) yes ( ) no
Please specify tank number(s) _____
If yes, type of inert material:
( ) concrete ( ) grout ( ) sand ( ) soil
If no, amount of substance left in tank(s): Tank No 1 _____ gals.
2 _____ gals. 3 _____ gals. 4 _____ gals. 5 _____ gals.
(proceed to # 19, Tank and Piping Construction)

AR387722
RECEIVED
MAY 2 1990
STATE OF DELAWARE
U.S.T. BRANCH

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Tank and Piping Construction (place an X in all boxes that apply)

TANKS	TANK NO. 1		TANK NO. 2		TANK NO. 3		TANK NO. 4		TANK NO. 5	
19. Material of Construction	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
steel	☒		☒		☒		☒		☐	
concrete	☐		☐		☐		☐		☐	
fiberglass plastic	☐		☐		☐		☐		☐	
double-wall steel	☐		☐		☐		☐		☐	
double-wall fiberglass	☐		☐		☐		☐		☐	
20. Internal Protection										
internal lining	☐		☐		☐		☐		☐	
none	☐		☐		☐		☐		☐	
unknown	☒		☒		☒		☒		☐	
21. External Corrosion Protection										
cathodic protection	☐		☐		☐		☐		☐	
asphalt tar coated	☐		☐		☐		☐		☐	
epoxy coated	☐		☐		☐		☐		☐	
fiberglass plastic	☐		☐		☐		☐		☐	
none	☐		☐		☐		☐		☐	
unknown	☒		☒		☒		☒		☐	
other (specify)										
22. Piping										
bare steel		☐		☐		☐		☐		☐
galvanized steel		☐		☐		☐		☐		☐
fiberglass plastic		☒		☒		☒		☒		☐
cathodic protection		☐		☐		☐		☐		☐
coated / wrapped		☐		☐		☐		☐		☐
unknown		☐		☐		☐		☐		☐
other (specify)										
23. Monitoring and Detection System										
line leak detector	☐		☐		☐		☐		☐	
continuous in-tank gauging system	☐		☐		☐		☐		☐	
groundwater monitoring wells	☐		☐		☐		☐		☐	
vapor detection tubes	☐		☐		☐		☐		☐	
on-site spill recovery system	☐		☐		☐		☐		☐	
emergency power shut-off	☐		☐		☐		☐		☐	
Continuous interstitial space monitoring system	☐		☐		☐		☐		☐	
other (specify)										
24. Substances stored or to be stored (mark one x)										
heating oil (No. 2)	☐		☐		☐		☐		☐	
heating oil (No. 4)	☐		☐		☐		☐		☐	
heavy heating oil (No. 6)	☐		☐		☐		☐		☐	
light diesel fuel (No. 1-D)	☐		☐		☐		☐		☐	
medium diesel fuel (No. 2-D)	☐		☐		☐		☐		☐	
kerosene	☐		☐		☐		☒		☐	
leaded gasoline	☐		☐		☐		☐		☐	
unleaded gasoline	☒		☒		☒		☐		☐	
alcohol enriched gasoline	☐		☐		☐		☐		☐	
waste oil	☐		☐		☐		☐		☐	
aviation fuel	☐		☐		☐		☐		☐	
mixture (specify)	☐		☐		☐		☐		☐	
hazardous substance	☐		☐		☐		☐		☐	
CAS number										
CERCLA number										
unknown	☐		☐		☐		☐		☐	
other (please specify)										
25. Tank Capacity in Gallons	10,000		8,000		4,000		2,000			

26. **Owner or Owners Agent Certification**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information submitted is true, accurate, and complete.

Ed Walls / President

Signature

ED WALLS PRESIDENT

Print or Type name and Title

RECEIVED

2 1990

Date

STATE OF DELAWARE
U.S.T. BRANCH

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-9

INTERIM DOCUMENT, DATED JUNE 1, 1990

AR307724

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM Engineers

Engineers, Planners, Scientists and Laboratory Services

One Plymouth Meeting • Plymouth Meeting, PA 19462 • (215) 825-3800

June 1, 1990

Mr. Roy Smith
U.S. Environmental Protection Agency
841 Chestnut Building
Philadelphia, PA 19107

Subject: Chem-Solv, Inc. Site, Cheswold, Delaware
BCM Project No. 00-6012-02

Dear Roy:

Enclosed is a copy of the Interim Document for the Chem-Solv, Inc. (Chem-Solv) site in Cheswold, Delaware. This document, which was prepared by BCM Engineers Inc. (BCM) as a result of issues discussed in our April 24, 1990 meeting, provides evidence that soil does not represent a human or environmental exposure pathway of concern for the site. Our conclusions are based on an evaluation of the data, and a comparison of the maximum detected concentrations to risk-based acceptable levels. As discussed in our meeting of April 24, 1990, there is sufficient evidence to indicate that previous soil remedial actions by the Delaware Department of Natural Resources and Environmental Control (DNREC) have reduced the chemicals associated with site activities below levels of concern.

To ensure that everyone is in agreement, this report also summarizes several other points discussed during the meeting. We appreciate the opportunity to present the data for your preliminary review of our position. Should you have any questions please do not hesitate to contact us.

Very truly yours,

Margaret J. Nicholson for
Linda Henry, Ph.D.
Senior Toxicologist

Robert D. Buller for
Mary M. Mang
Assistant Vice President

/gme 7817q
Attachment
cc: M.M. Beck, DNREC
S.P. Dehnhard, EPA
M.C. Hwang, Miles and Stockbridge
G.S. Spengler, Texaco
M.E. Bonaker, BCM
R.S. Buller, BCM
M.J. Nicholson, BCM

AR307725

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

INTERIM DOCUMENT

FOR

CHEM-SOLV, INC. SITE
CHESWOLD, DELAWARE

BCM PROJECT NO. 00-6012-02

JUNE 1, 1990

PREPARED BY

Marjorie T. Buchanan for
LINDA L. HENRY Ph.D.
SENIOR TOXICOLOGIST

AND

Robert D. Bullen for:
MARY M. MANG
ASSISTANT VICE PRESIDENT

/7817q

BCM

AR307726

Engineers, Planners, Scientists and Laboratory Services
One Plymouth Meeting • Plymouth Meeting, PA 19462 • Phone: (215) 825-3800

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

CONTENTS

1.0 SITE DESCRIPTION AND BACKGROUND 1

2.0 COMPOUNDS OF CONCERN IN SOIL 5

2.1 Data Review 5
2.2 Volatile Organic Compounds 5
2.3 Semivolatile Organic Compounds 5
2.4 Pesticides 11
2.5 Inorganic Compounds 11

3.0 ENVIRONMENTAL ASSESSMENT 12

4.0 OTHER ISSUES 13

4.1 Data Handling 13
4.2 IRIS Toxicological Profiles 13
4.3 Historical Groundwater Data 15

TABLES

Table 1 Statistical Summary of Soil Analytical Results - June 1990 6

Table 2 Summary of Soil Analytical Results 7

Table 3 Calculation of Average Concentrations - Example Illustrations 14

FIGURES

Figure 1 Site Location Map 3

Figure 2 Site Plan Map 4

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

1.0 SITE DESCRIPTION AND BACKGROUND

Chem-Solv, Inc. (Chem-Solv) operated a solvent recovery facility in Cheswold, Kent County, Delaware (Figure 1) from 1982 to 1984. The facility occupied the southern third of a 1.5-acre property located on the west side of U.S. Route 13 (DuPont Highway), and consisted of a small concrete block office building and a distiller building on a concrete pad (Figure 2). A three-unit apartment building occupies the northern portion of the property. A concrete-paved skateboard park which was adjacent to the office building was dismantled in 1988. In the past, a mobile home had been located inside of the northwestern corner of the property.

At the Chem-Solv facility, spent industrial solvents were distilled and purified. The recovered product was then returned to the original generator for reuse. The residues remaining after the distillation process, referred to as "still bottoms", were stored onsite in 55-gallon drums on a concrete pad. Chem-Solv was classified as a hazardous waste generator, transporter, and storage facility that had a Resource Conservation and Recovery Act (RCRA) interim status.

On September 7, 1984, an explosion and fire occurred at the facility. The Delaware Department of Natural Resources and Environmental Control (DNREC) was notified of the incident and immediately initiated a site investigation to determine the nature and extent of potential soil and groundwater contamination. At the time of the fire, witnesses observed a "chemical" material running off the drum storage pad and onto the ground.

On September 21, 1984, DNREC issued a Cessation of Operation Order (Order) to Chem-Solv. The Order required Chem-Solv to remove contaminated soil from the site, as well as to initiate a groundwater monitoring program. In addition, hazardous waste handling operations, with the exception of removal of existing waste at the site, were ordered to be ceased.

From September 1984 to June 1986, DNREC installed 50 onsite and offsite monitoring wells. Groundwater samples obtained from the wells contained volatile organic compounds (primarily trichloroethene; toluene; xylenes; 1,1,1-trichloroethene; and ethylbenzene) at total concentrations up to 1,74[illegible] micrograms per kilogram (ug/kg).

During April 1985, approximately 1,300 cubic yards of soil were excavated from the area of the concrete pad in an effort to reduce the quantity of contaminants that might be contained in the soil. The soil was shredded, tested, and replaced in the excavation. DNREC has indicated that the shredding operation effectively removed volatile organic compounds.

AR307728

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

A recovery system was operated by DNREC from December 1985 until mid-September 1988, when the air stripping tower collapsed. DNREC then continued operation of the recovery system with direct discharge to the Kent County sewer system until November 1988. The system is currently shut down.

An Administrative Order on Consent (ACO) was signed in September 1988 by the EPA, DNREC, and several of the Chem-Solv, Inc. potentially responsible parties (PRPs). The Order consisted primarily of an agreement to perform an RI/FS in accordance with CERCLA as amended by SARA.

In December 1989 and February 1990, BCM obtained soil samples from seven onsite soil borings. These soil samples were analyzed for Target Compound List (TCL) organics and Target Analyte List (TAL) inorganics. The results of these analyses are summarized and evaluated in this report.

AR307729

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

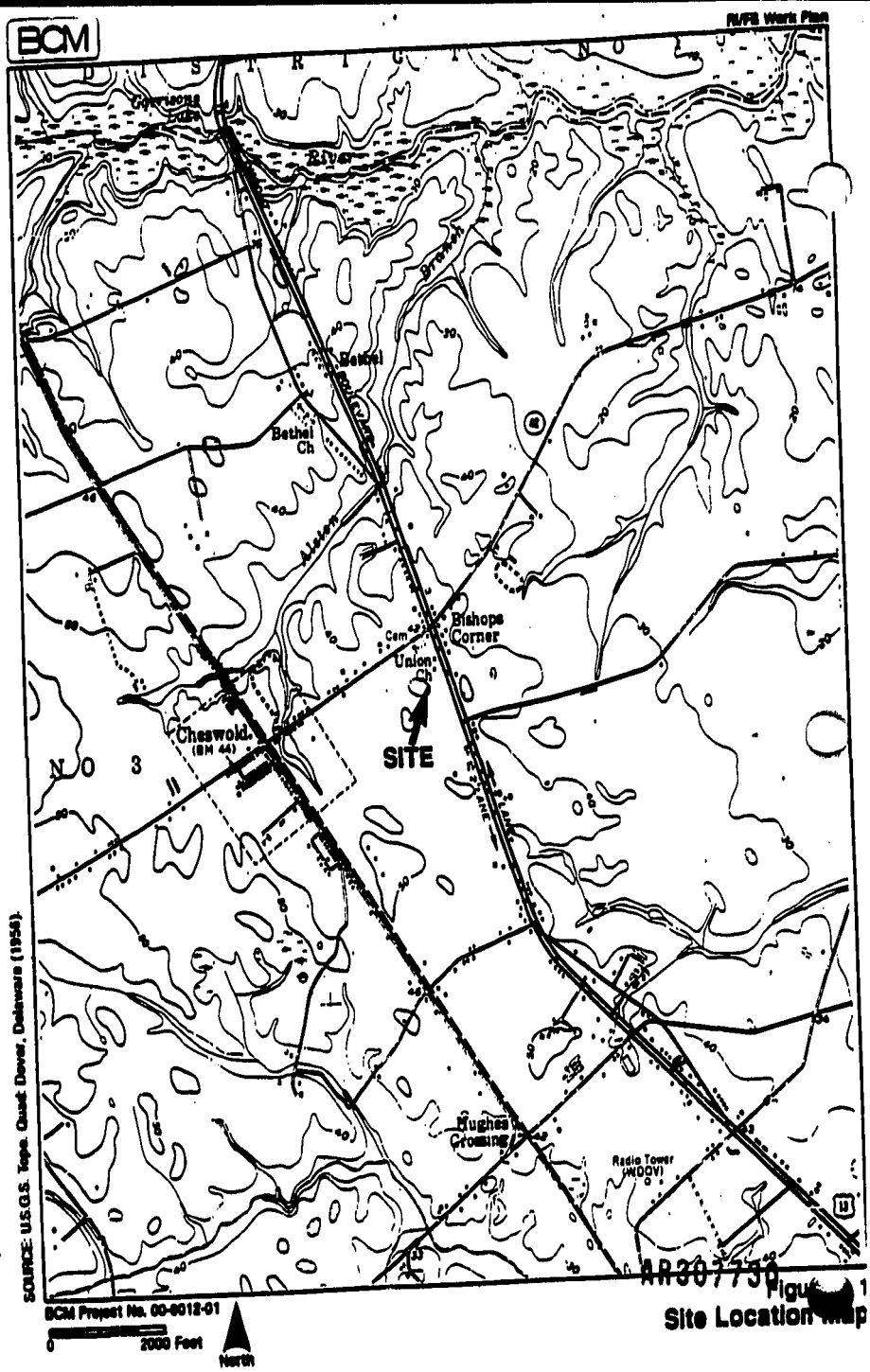


Figure 1
Site Location Map

AR307730

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

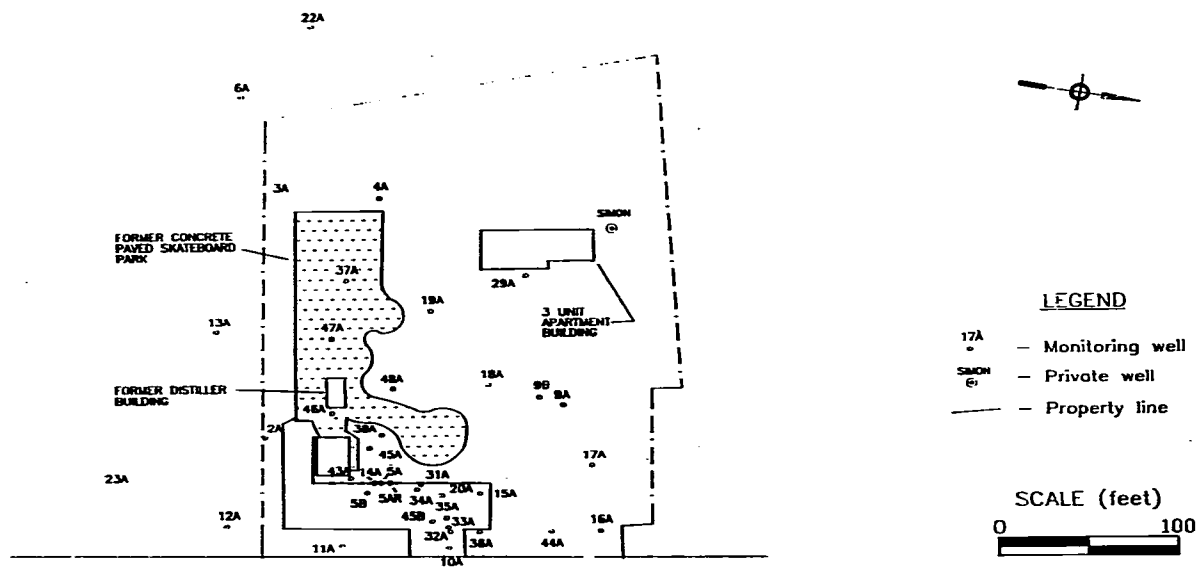


FIGURE 2

CHEMSOLV, INC.
Chesnold, Delaware

SITE PLAN

BCM ENGINEERS, PLANNERS & SCIENTISTS

Project No. 00-8012-01

AR307731

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

2.0 COMPOUNDS OF CONCERN IN SOIL

A review of the compounds detected in the soil samples indicates that there are no chemicals of concern based on low ratings for potential exposure, concentration, toxicity, frequency of detection, and relevance to typical background data. Only three site-related volatile organic compounds were detected in three surface samples at concentrations less than 10 micrograms per kilogram (ug/kg); acetone was detected in 16 samples, but these results were questioned due to blank contamination. Other compounds, including pesticides and metals, were detected onsite, but these compounds represent background conditions (see April 24, 1990 meeting minutes).

2.1 DATA REVIEW

Maximum and arithmetic average values, frequency of detection, and quantitation limits were compiled from data from the remedial investigation soil boring program conducted during December 1989 and February 1990 (Table 1). Literature values for concentrations of metals typical for the area were also included. A summary of the parameters detected in the soil samples is presented in Table 2.

2.2 VOLATILE ORGANIC COMPOUNDS

Three volatile organic compounds (chloroform, methylene chloride, and trichloroethene) were detected in 7 of 21 soil samples. Chloroform was found in four samples with a maximum concentration of 8 ug/kg. However, chloroform was only detected in samples collected from the deeper soils (8 to 20 feet). Therefore, human or environmental exposure to chloroform is unlikely.

Methylene chloride was detected in one surface sample at 4 ug/kg. Trichloroethene (TCE) was detected in two surface samples with a maximum concentration of 6 ug/kg. For methylene chloride and TCE, the 1×10^{-6} cancer risk levels or unit specific dose (assuming lifetime soil ingestion of 200 mg/day by a 70 kilogram adult) are 47,000 ug/kg and 32,000 ug/kg respectively. Thus, no unacceptable risk exists for methylene chloride and TCE at the levels detected.

2.3 SEMIVOLATILE ORGANIC COMPOUNDS

Three semivolatile organic chemicals, benzoic acid, bis (2-ethylhexyl) phthalate (DEPH), and isophorone, were detected in a total of eight soil samples. DEPH, a common laboratory contaminant, was detected in five sample

AR307732

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TABLE 1

STATISTICAL SUMMARY OF SOIL ANALYTICAL RESULTS
JUNE 1990

CHEM-SOLV, INC. SITE
CHESWOLD, DELAWARE

Data Summary	Frequency of Detection		Quantitation Limit *	Sampling		Concentrations in Soils				
						Northern Delaware [a]	Delaware [b]		Southern NJ [a] MD - Delaware	Eastern U.S. [d] Geometric Mean
	No. of Analysis	No. of Detects (valid)		Maximum	Arithmetic Average **		Mean	SD		
Volatile Organics, ug/kg										
Methylene Chloride	21	11 (1)	5	15 (4.0)	NA	--	--	--	--	--
Acetone	21	16 (0)	10	400.0 (--)	38.2	--	--	--	--	--
Chloroform	21	4 (4)	5	8.0 (8.0)	3.6	--	--	--	--	--
Trichloroethene	21	2 (2)	5	6.0 (6.0)	3.1	--	--	--	--	--
Semi-Volatile Organics, ug/kg										
Benzoic Acid	15	1	2,000	290	NA	--	--	--	--	--
bis(2-ethylhexyl) phthalate	15	5	390	510	198.8	--	--	--	--	--
Isophorone	15	2	390	3,100	497.1	--	--	--	--	--
Metals, mg/kg										
Aluminum	14	14	71	17,900	12,563	30,000	--	--	700-30,000	--
Arsenic	14	14	1.9	10.7	3.7	<0.1-2.6	--	--	19-41 e	--
Barium	14	14	1.7	103.1	53.7	500	--	--	10-300	300
Beryllium	14	5	0.7	0.89	0.3	<1	--	--	<1	--
Cadmium	14	11	0.61	1.7	0.6	--	0.17	0.06	--	1.8 c
Calcium	14	14	8.2	1,880	655.8	130-2,300	--	--	130-5,200	--
Chromium	14	14	2.1	15.8	10.2	50	--	--	1-30	36
Cobalt	14	13	2.4	9.0	4.3	3-5	--	--	<3	7
Copper	14	14	3.9	14.0	6.0	<1-10	5	2.2	<1-20	14
Iron	14	14	5.1	15,600	9,914	<7,000	--	--	100-10,000	15,000
Lead	14	13	7.2	72.2	20.4	20	10	2	<10-20	14
Magnesium	14	14	4.4	1,030	591.5	0-1,500	--	--	50-3,000	--
Manganese	14	14	4.0	255	134.7	150	--	--	<2-300	285
Nickel	14	12 (9)	3.7	8.8	5.7	7-10	6.6	4.4	<5-10	13
Potassium	14	14 (10)	674	831	517.8	16,000	--	--	2,200-11,000	--
Selenium	14	1	0.21	0.27	0.2	0.5	--	--	<0.1-0.3	--
Sodium	14	13 (6)	16.2	141.0	59.1	3,000-5,000	--	--	<500-5,000	--
Vanadium	14	14	8.1	23.1	16.1	30-50	--	--	<7-50	66
Zinc	14	14 (13)	4	96.6	39.6	82 c	25	9	<5-198 c	36
Pesticides, ug/kg										
4,4'-DDE	14	10	0.1	275	59.7	--	--	--	--	--
4,4'-DDT	14	9	0.1	92.5	24.8	--	--	--	--	--
4,4'-DDD	14	2	0.1	23	3.1	--	--	--	--	--

* Quantitation limit varies between samples
** One half of the quantitation limit was used when the chemical concentration was not detected. Duplicate samples were averaged.
SD Standard deviation
-- Data not available
NA Not applicable - Average concentration exceeds the maximum concentration.
Valid - value not questionable due to related blanks
a Shacklette & Boerngen, 1984. Element Concentrations in Soils and other Surficial Materials of the Conterminous United States.
b Logan, T.G. and Ryan, J.A., 1987. Land Application of Sludge. Lewis Publishers, Chelsea, MI.
c Pennsylvania State University, 1985. Criteria and Recommendations for Land Application of Sludges in the Northeast. Bulletin 851, March 1985
d USEPA, 1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water - Part 1. EPA/600/6-85/002a. September 1985 Revised.
e USEPA, 1984. Health Assessment Document for Inorganic Arsenic. EPA-600/8-83-021F. March 1984.

Compiled by: BCM Engineers Inc. (BCM Project No. 00-6012-02)

AR307772

If the page printed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TABLE 2

SUMMARY OF SOIL ANALYTICAL RESULTS
CHEM-SOLV, INC. SITE
CHENDLE, DELAWARE

IEA Sample No. :	BCH05	BCH06	BCH07	BCH08	BCH11	BCH12	BCH16 BCH18 **	BCH17 BCH11 **	BCH20 BCH14 **	BCH21 BCH15 **	BCH22 BCH16 **	BCH25	BCH26
BCN Sample No. :	000839	000840	000844	000845	000848	000849	000852	000853	000856	000857	000858	000861	000862
Sample Date :	12/13/89	12/13/89	12/14/89	12/14/89	12/15/89	12/14/89	12/18/89	12/18/89	12/19/89	12/19/89	12/19/89	12/26/89	12/19/89
Sample Depth :	CSB-7	CSB-7	CSB-6	CSB-6	CSB-6	CSB-7	CSB-12	CSB-12	CSB-11	CSB-11B	CSB-11	CSB-11	CSB-12
PARAMETERS, units	(4-6)	(8-10)	(0.5-2)	(6-7.3)	(19.6-19.9)	(20.5-20.8)	(0.5-2)	(2-4)	(0.5-2)	(0.5-2)	(6-8)	(20.4-20.7)	(21.7-22)
Volatile Organics, ug/kg													
Methylene Chloride	11.0 U	7.0 BH	12.0 BH	4.0 BJH	3.0 BJH	3.0 BJH	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	5.0 U	5.0 U
Acetone	40.0 BH	89.0 BH	12.0 BH	73.0 BH	13.0 BH	54.0 BH	11.0 U	11.0 U	12.0 U	12.0 U	11.0 U	10.0 U	10.0 U
Chloroform	15.0 U	8.0	6.0 U	5.0 J	4.0 J	4.0 J	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	5.0 U	5.0 U
Trichloroethene	11.0 U	6.0 U	6.0 U	6.0 U	5.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 J	6.0 U	5.0 U	5.0 U
Semi-Volatile Organics, ug/kg													
Benzoic Acid	1,800.0 U	2,000.0 U	1,900.0 U	1,900.0 U	NA	NA	290.0 J	1,800.0 U	1,900.0 U	1,900.0 U	1,800.0 U	NA	NA
bis(2-ethylhexyl) phthalate	370.0 U	390.0 U	370.0 U	380.0 U	NA	NA	220.0 J	370.0 U	390.0 U	380.0 U	370.0 U	NA	NA
Metals, mg/kg													
Aluminum	15,700.0	11,300.0	17,900.0	15,100.0	NA	NA	10,200.0	8,680.0	12,500.0	11,300.0	16,200.0	NA	NA
Arsenic	1.6 B	0.67 B	2.0 B	0.69 B	NA	NA	6.2	1.5 B	7.9	8.2	0.67 B	NA	NA
Barium	29.5 B	33.8 B	49.0	34.0 B	NA	NA	58.8	28.5 B	109.0	97.2	37.5 B	NA	NA
Cadmium	0.7 U	0.71 U	0.62 U	0.65 U	NA	NA	0.66 U	0.67 U	0.73 U	0.74 U	0.65 U	NA	NA
Calcium	272.0 BJ	245.0 BJ	576.0 BJ	234.0 BJ	NA	NA	1,130.0 J	502.0 BJ	1,070.0 BJ	979.0 BJ	270.0 BJ	NA	NA
Chromium	8.8	9.0	15.8	7.3	NA	NA	10.9	7.4	12.0	10.8	8.0	NA	NA
Cobalt	4.1 B	2.4 U	3.3 B	2.2 B	NA	NA	2.6 B	9.0 B	3.3 B	4.1 B	4.5 B	NA	NA
Copper	3.8 B	2.5 B	4.6 B	1.8 B	NA	NA	6.2	3.5 B	10.4	11.4	2.0 B	NA	NA
Iron	9,590.0	7,440.0	15,600.0	8,630.0	NA	NA	9,310.0	9,080.0	10,100.0	9,270.0	7,860.0	NA	NA
Lead	7.0	3.8	7.0	5.3	NA	NA	35.9	9.7	80.0	69.6	5.3	NA	NA
Magnesium	465.0 B	948.0 B	1,030.0	411.0 B	NA	NA	757.0 B	399.0 B	879.0 B	891.0 B	347.0 B	NA	NA
Manganese	88.9	69.6	75.7	61.9	NA	NA	136.0	135.0	242.0	258.0	173.0	NA	NA
Nickel	8.3 BH	7.8 BH	8.8	7.9 B	NA	NA	7.2 BH	3.7 U	4.8 B	6.8 B	3.6 U	NA	NA
Potassium	521.0 BH	765.0 BH	831.0 BH	374.0 BH	NA	NA	433.0 B	404.0 B	781.0 B	703.0 B	451.0 B	NA	NA
Selenium	0.26 U	1.4 U	0.26 U	0.25 U	NA	NA	0.25 U	0.23 U	0.34 B	0.26 U	0.26 U	NA	NA
Sodium	19.8 BH	29.1 BH	19.6 BH	20.8 BH	NA	NA	27.1 BH	16.2 U	31.7 BH	34.6 BH	38.1 BH	NA	NA
Vanadium	17.2	15.3	25.1	16.3	NA	NA	16.8	14.8	16.6	16.4	13.4	NA	NA
Zinc	14.7	14.5	28.8	13.6 B	NA	NA	44.2	14.9	91.9	83.4	12.5	NA	NA
Pesticides, ug/kg													
4,4'-DDE	18.0 U	18.0 U	18.0 U	18.0 U	NA	NA	150.0	16.0 J	240.0	310.0	18.0 U	NA	NA
4,4'-DDT	18.0 U	18.0 U	18.0 U	18.0 U	NA	NA	51.0	18.0 U	86.0	99.0	18.0 U	NA	NA
4,4'-DDD	18.0 U	18.0 U	18.0 U	18.0 U	NA	NA	18.0 U	18.0 U	20.0	23.0	18.0 U	NA	NA

J = Estimated value
B = For organic analyses: analyte found in blank
For inorganic analyses: analyte <CRDL and >IDL
H = Result questioned due to blank contamination
* = Trip and field blanks reported in ug/l
** = Samples were given different IEA sample numbers for organic and inorganic analyses
NA = Not analyzed
IEA = Industrial & Environmental Analysts, Inc.

Source: BCN Engineers Inc. (Project No. 88-6012-02)

If the page printed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR307734

IEA Sample No. :	BCH01	BCH02	BCH03	BCH04	BCH09	BCH10 BCH09 **	BCH13	BCH14	BCH15	BCH18 BCH12 **	BCH19 BCH13 **	BCH23	BCH24
BCR Sample No. :	000847	000846	000841	000842	000850	000851	000855	000854		000859	000860	000843	000844
Sample Date :	12/13/89	12/13/89	12/14/89	12/14/89	12/15/89	12/15/89	12/18/89	12/18/89		12/19/89	12/19/89	12/20/89	12/20/89
Sample Name :	Field Blank *	Trip Blank *	Trip Blank *	Field Blank *	Trip Blank *	Field Blank *	Field Blank *	Trip Blank *	Trip Blank *	Trip Blank *	Field Blank *	Trip Blank *	Field Blank *
PARAMETERS, units													
Volatile Organics, ug/kg													
Methylene Chloride	120.0 U	5.0 U	4.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	2,080.0	10.0 U	10.0 U	15.0	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Chloroform	120.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	4.0 BJ	7.0 BQ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	120.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Semi-Volatile Organics, ug/kg													
Benzoic Acid	50.0 U	NA	NA	50.0 U	NA	NA	50.0 U	NA	NA	NA	50.0 U	NA	NA
Bis(2-ethylhexyl) phthalate	9.0 J	NA	NA	10.0	NA	NA	10.0 U	NA	NA	NA	10.0 U	NA	NA
Metals, mg/kg													
Aluminum	71.2 U	71.2 U	71.2 U	71.2 U	NA	71.2 U	NA	NA	NA	71.2 U	71.2 U	NA	NA
Arsenic	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	NA	NA	1.0 U	1.0 U	NA	NA
Barium	1.7 U	1.7 U	1.7 U	1.7 U	NA	2.1 B	NA	NA	NA	1.7 U	1.7 B	NA	NA
Cadmium	3.2 U	3.2 U	3.2 U	3.2 U	NA	3.2 U	NA	NA	NA	3.2 U	3.2 U	NA	NA
Calcium	41.7 B	8.2 U	8.2 U	44.6 B	NA	126.0 B	NA	NA	NA	137.0 B	208.0 B	NA	NA
Chromium	4.1 U	4.1 U	4.1 U	4.1 U	NA	4.1 U	NA	NA	NA	4.1 U	4.1 U	NA	NA
Cobalt	10.7 U	10.7 U	10.7 U	10.7 U	NA	10.7 U	NA	NA	NA	10.7 U	10.7 U	NA	NA
Copper	3.9 U	3.9 U	3.9 U	3.9 U	NA	3.9 U	NA	NA	NA	3.9 U	3.9 U	NA	NA
Iron	131.0	8.3 BQ	12.5 BQ	66.6 B	NA	29.1 BQ	NA	NA	NA	15.9 BQ	22.6 BQ	NA	NA
Lead	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	NA	NA	1.0 U	1.0 U	NA	NA
Magnesium	4.4 U	4.4 U	4.4 U	4.4 U	NA	4.4 U	NA	NA	NA	4.4 U	4.4 U	NA	NA
Manganese	4.0 U	4.0 U	4.0 U	4.0 U	NA	4.0 U	NA	NA	NA	4.0 U	4.0 U	NA	NA
Nickel	18.6 B	18.0 U	18.0 U	18.0 U	NA	21.0 B	NA	NA	NA	18.0 U	18.0 U	NA	NA
Potassium	1,180.0 B	674.0 U	1,030.0 B	697.0 B	NA	674.0 U	NA	NA	NA	781.0 B	674.0 U	NA	NA
Selenium	1.2 U	1.2 U	1.2 U	1.2 U	NA	1.2 U	NA	NA	NA	1.2 U	1.2 U	NA	NA
Sodium	193.0 B	77.0 U	84.3 B	195.0 B	NA	644.0 B	NA	NA	NA	473.0 B	778.0 B	NA	NA
Vanadium	8.1 U	8.1 U	8.1 U	8.1 U	NA	8.1 U	NA	NA	NA	8.1 U	8.1 U	NA	NA
Zinc	12.3 B	4.1 B	10.8 B	17.3 B	NA	4.0 U	NA	NA	NA	4.0 U	7.2 B	NA	NA
Pesticides, ug/kg													
4,4'-DDE	0.10 U	NA	NA	0.10 U	NA	NA	0.10 U	NA	NA	NA	0.10 U	NA	NA
4,4'-DDT	0.10 U	NA	NA	0.10 U	NA	NA	0.10 U	NA	NA	NA	0.10 U	NA	NA
4,4'-DDD	0.10 U	NA	NA	0.10 U	NA	NA	0.10 U	NA	NA	NA	0.10 U	NA	NA

J = Estimated value
B = For organic analyses: analyte found in blank
For inorganic analyses: analyte <CRDL and >IDL
Q = Result questioned due to blank contamination
* = Trip and field blanks reported in ug/l
** = Samples were given different IEA sample numbers for organic and inorganic analyses
NA = Not analyzed
IEA = Industrial & Environmental Analysts, Inc.

Source: BCR Engineers Inc. (Project No. 00-6012-02)

AR307735

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA Sample No. :	BCH28	BCH29	BCH30	BCH33	BCH36	BCH37	BCH43	BCH39	BCH38	BCH42	BCH31	BCH32	BCH34
BCR Sample No. :	004996	004997	004998		006791	006792	006793	006794	006795	006796	004999	005000	
Sample Date :	02/22/90	02/22/90	02/22/90	02/26/90	02/26/90	02/26/90	02/27/90	02/26/90	02/26/90	02/27/90	2/22/90	2/22/90	2/26/90
Sample Name :	CSB-8	CSB-8D	CSB-8	CSB-8A	CSB-9	CSB-9	CSB-9	LSB-10	CSB-10	CSB-10	Trip	Field	Trip
PARAMETERS, units	(0.5-2)	(0.5-2)	(2-4)	(18-20)	(2-4)	(4-5.5)	(19.5-20)	(0.5-2)	(2-4)	(18-18.5)	Blank *	Blank *	Blank *
Volatile Organics, ug/kg													
Methylene Chloride	9.0 BQ	9.0 BQ	8.0 BQ	10.0 BQ	4.0 J	6.0 U	6.0 B	6.0 U	6.0 U	15.0 BQ	5.0 U	5.0 U	5.0 U
Acetone	10.0 BJQ	12.0 BQ	12.0 BQ	12.0 BQ	14.0 BQ	18.0 BQ	15.0 BQ	11.0 BJ	12.0 BJ	19.0 BQ	10.0 U	10.0 U	10.0 U
Chloroform	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5.0 J	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Semi-Volatile Organics, ug/kg													
Benzoic Acid	1,900.0 U	1,900.0 U	1,900.0 U	NA	1,900.0 U	1,900.0 U	NA	2,000.0 U	1,900.0 U	NA	NA	50.0 U	NA
Bis(2-ethylhexyl) phthalate	370.0 U	380.0 U	78.0 J	NA	110.0 J	510.0	NA	390.0 U	160.0 J	NA	NA	10.0 U	NA
Isophorone	370.0 U	380.0 U	370 U	NA	380 U	370 U	NA	3100	1600	NA	NA	10 U	NA
Metals, mg/kg													
Aluminum	10,700.0	14,500.0	13,000.0	NA	10,800.0	15,400.0	NA	8,590.0	8,510.0	NA	71.2 U	71.2 U	NA
Arsenic	3.5	2.7	4.0	NA	10.7	2.1	NA	5.3	5.6	NA	1.0 U	1.0 U	NA
Barium	42.0	58.5	59.8	NA	100.0	44.5 B	NA	72.9	53.9	NA	1.9 B	3.7 B	NA
Beryllium	0.13 U	0.67 B	0.63 B	NA	0.89 B	0.59 B	NA	0.65 B	0.7 B	NA	0.7 U	0.7 U	NA
Cadmium	0.61 U	1.2	1.7	NA	1.5	1.2	NA	0.61 U	0.62 U	NA	3.2 U	3.2 U	NA
Calcium	509.0 B	593.0 B	593.0 B	NA	1,880.0	461.0 B	NA	656.0 B	764.0 B	NA	80.4 B	157.0 B	NA
Chromium	8.2	12.6	12.1	NA	11.2	8.0	NA	10.6	11.9	NA	4.1 U	4.1 U	NA
Cobalt	3.7 B	5.4 B	5.8 B	NA	4.1 B	6.0 B	NA	4.4 B	3.0 B	NA	10.7 U	10.7 U	NA
Copper	5.7	6.5	5.2	NA	14.0	3.9 B	NA	11.2	8.2	NA	3.9 U	3.9 U	NA
Iron	8,430.0	11,900.0	12,700.0	NA	11,600.0	10,000.0	NA	8,390.0	8,720.0	NA	9.2 B	15.8 B	NA
Lead	10.9	6.7	11.2	NA	31.9	7.2 U	NA	49.5	32.8	NA	31.5 U	31.5 U	NA
Magnesium	578.0 B	853.0 B	803.0 B	NA	707.0 B	408.0 B	NA	623.0 B	591.0 B	NA	4.6 U	4.6 U	NA
Manganese	126.0	129.0	138.0	NA	255.0	101.0	NA	131.0	143.0	NA	4.0 U	4.0 U	NA
Nickel	4.4 B	4.9 B	4.5 B	NA	5.9 B	4.9 B	NA	6.2 B	4.4 B	NA	21.8 B	18.0 U	NA
Potassium	433.0 B	456.0 B	587.0 B	NA	469.0 B	570.0 B	NA	392.0 B	345.0 B	NA	674.0 U	680.0 B	NA
Selenium	0.26 U	0.25 U	0.27 B	NA	0.21 U	0.19 U	NA	0.26 U	0.23 U	NA	1.2 U	1.2 U	NA
Sodium	69.1 B	82.2 B	102.0 B	NA	127.0 B	107.0 B	NA	141.0 B	79.9 B	NA	351.0 B	492.0 B	NA
Vanadium	14.7	18.6	19.7	NA	13.5	16.2	NA	13.5	13.1	NA	8.1 U	8.1 U	NA
Zinc	24.0	32.1	25.5	NA	73.9	16.0	NA	91.0	96.6	NA	4.0 U	4.4 B	NA
Pesticides, ug/kg													
4,4'-DDE	44.0	56.0	37.0	NA	110.0	8.6 J	NA	100.0	46.0	NA	NA	0.10 U	NA
4,4'-DDT	25.0	31.0	17.0	NA	61.0	3.9 J	NA	31.0	8.4 J	NA	NA	0.10 U	NA

J = Estimated value
B = For organic analyses: analyte found in blank
For inorganic analyses: analyte <CRDL and >IDL
Q = Result questioned due to blank contamination
* = Trip and field blanks reported in ug/l
** = Samples were given different IEA sample numbers for organic and inorganic analyses
NA = Not analyzed
IEA = Industrial & Environmental Analysts, Inc.

Source: BCR Engineers Inc. (Project No. 00-6012-02)

AR307736

If the page printed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA Sample No. :	BCH35	BCH40	BCH41
BCH Sample No. :			
Sample Date :	2/26/90	2/27/90	2/27/90
Sample Name :	Field Blank *	Field Blank *	Trip Blank *
PARAMETERS, units			
Volatile Organics, ug/kg			
Methylene Chloride	5.0 U	5.0 U	5.0 U
Acetone	10.0 U	10.0 U	10.0 U
Chloroform	5.0 U	5.0 U	5.0 U
Trichloroethene	5.0 U	5.0 U	5.0 U
Semi-Volatile Organics, ug/kg			
Benzoic Acid	NA	50.0 U	NA
bis(2-ethylhexyl) phthalate	NA	10.0 U	NA
Isophorone	NA	10.0 U	NA
Metals, mg/kg			
Aluminum	NA	71.2 U	71.2 U
Arsenic	NA	1.0 U	1.0 U
Barium	NA	2.2 B	1.7 U
Beryllium	NA	0.87 B	0.7 U
Cadmium	NA	3.2 U	3.2 U
Calcium	NA	221.0 B	69.5 B
Chromium	NA	4.1 U	4.1 U
Cobalt	NA	10.7 U	10.7 U
Copper	NA	3.9 U	3.9 U
Iron	NA	47.7 B	5.1 B
Lead	NA	31.5 U	31.5 U
Magnesium	NA	4.4 U	4.4 U
Manganese	NA	4.0 U	4.0 U
Nickel	NA	18.0 U	18.0 U
Potassium	NA	710.0 B	674.0 U
Selenium	NA	1.2 U	1.2 U
Sodium	NA	520.0 B	256.0 B
Vanadium	NA	8.1 U	8.1 U
Zinc	NA	5.6 B	6.6 B
Pesticides, ug/kg			
4,4'-DDE	NA	0.10 U	NA
4,4'-DDT	NA	0.10 U	NA

J = Estimated value
B = For organic analyses: analyte found in blank
For inorganic analyses: analyte <CRDL and >IDL
Q = Result questioned due to blank contamination
* = Trip and field blanks reported in ug/l
** = Samples were given different IEA sample numbers for organic and inorganic analyses
NA = Not analyzed
IEA = Industrial & Environmental Analysts, Inc.

Source: BCM Engineers Inc. (Project No. 00-6012-02)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

with a maximum concentration of 510 ug/kg. Only one of these samples was obtained from surface soils; the remaining samples were collected from depths of 2 to 5.5 feet. The unit specific dose for DEPH is 25,000 ug/kg.

Isophorone was detected twice in one boring with a maximum concentration of 3,100 ug/kg. The unit specific dose for isophorone is 25,000 ug/kg.

Benzoic acid, a non-carcinogen, was detected in only one sample at 290 ug/kg.

2.4 PESTICIDES

The pesticide DDT and its breakdown products, DDE and DDD, were found in 10 samples collected at locations throughout the site, at a maximum total concentration of 390 ug/kg. Because the site is surrounded by agricultural fields, the presence of DDT in the soils is not unexpected. DDT and its breakdown products are very persistent pesticides. Literature values report DDT concentrations as high as 1,000 ug/kg in agricultural fields as late as 1983, 11 years after DDT use was banned (ATSDR, 1988). In addition, DDT is not considered site-related as the facility was used only for waste solvent recycling. Finally, the maximum total concentration is well below the unit specific dose of 1,000 ug/kg.

2.5 INORGANIC COMPOUNDS

Inspection of Table 1 shows that the concentrations of metals found in the site soils are well within background ranges for this area, with the possible exception of lead. The maximum onsite lead concentration is 72.2 milligrams per kilogram (mg/kg) compared with the highest value for the area of 20 mg/kg. The average onsite lead concentration is 20.4 mg/kg, and therefore, typical of background conditions.

The presence of lead above background in isolated locations is not unexpected due to the proximity of the site to a major highway. The impact of the highway and agricultural fields can be seen in the slightly elevated concentrations of arsenic and cadmium. Elevated concentrations of both these metals are typically associated with fertilizer use and fossil fuel combustion. In addition, the levels of lead are still well below the 500 to 1,000 mg/kg recommended by the Center for Disease Control (ATSDR, 1988).

AR307738

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

3.0 ENVIRONMENTAL ASSESSMENT

BCM recommends that soil not be considered as an environmental pathway because no significant amounts of site-related compounds were detected in the soil samples. Also, BCM recommends that the need for an environmental assessment in the form of a quantitative terrestrial survey be reviewed by EPA since conducting this survey will yield misleading results because the extensive soil remediation activities have changed the character of the soil in the area potentially affected by site operations. In April 1985, approximately 1,300 cubic yards of soil was excavated, stripped, and backfilled. These activities changed the physical and chemical characteristics of soils over a large portion of the site due to mixing of shallow and deep soils.

Differences in plant species can also be due to the excavation activities. It is not possible to separate out any changes in the terrestrial community due to these activities from those associated with site contamination. Since there is little or no site-related contamination in the soil, it is likely that any observed impacts will be due to excavation.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

4.0 OTHER ISSUES

4.1 DATA HANDLING

All compounds which were detected or had an estimated concentration were initially considered a compound or chemical of concern for soils. Average concentrations were calculated for each compound or chemical of concern based on the following rules.

BCM will use one half the detection limit for samples when the compound is not detected. When a compound is detected (quantified or estimated) but its presence in the sample is questionable due to its presence in a related blank sample, one half the reported sample value will be used. Questionable data is defined as sample concentrations that are within a factor of 10 of the blank concentration for methylene chloride, toluene, acetone, phthalate esters, and methanol. For any other compounds detected in a related blank, a factor of 5 is used.

Table 3 presents seven example situations to illustrate how data values for each chemical of concern will be selected for use in calculating the average concentrations. For Example Numbers 1 and 2, the concentration detected in the sample will be the value used to calculate the average since there is no blank contamination for Example 1 and since the detected sample concentration is greater than 10 times the associated blank contamination value for Example 2. For Example 3 and 4, a value that is one half the parameter detection limit will be used to calculate the average concentration since the parameter was not detected in the sample. For Example 5, a value that is one half the reported sample concentration will be used for the average calculation, since the sample concentration is within a factor of 10 of the blank concentration and th value is therefore questioned. Examples 6 and 7 illustrate that estimated sample concentrations (the reported concentration is less than the quantitation limit but greater than the detection limit) will be evaluated using the same rules outlined for quantified concentrations to calculate average values.

4.2 IRIS TOXICOLOGICAL PROFILES

BCM proposes to use Integrated Risk Information System (IRIS) toxicological profiles for the toxicity assessment. The 1989 EPA risk assessment guidance document indicates that this practice is acceptable. It is recommended that preference be given to IRIS files over all other sources of information.

AR307740

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

TABLE 3

CALCULATION OF AVERAGE CONCENTRATIONS
EXAMPLE ILLUSTRATIONS

CHEM-SOLV, INC. SITE
CHESWOLD, DELAWARE

Example No.	Sample Concentration (ug/l*)	Blank Concentration (ug/l)	Parameter Detection Limit (ug/l*)	Parameter Concentration Used to Calculate Average (ug/l*)
1	30	10 U	1	30
2	200	12	1	200
3	10 U	10 U	1	0.5
4	10 U	12	1	0.5
5	30	12	1	15
6	8 J	12	1	4
7	8 J	10 U	1	8

J Estimated valued below parameter quantitation limit but above the detection limit
U Parameter undetected at the quantitation limit
* Units of ug/kg for solid samples and ug/l for aqueous samples

BCM Project No. 00-6012-02

/7817q

AR307741

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

4.3 HISTORICAL GROUNDWATER DATA

Currently, BCM has no field or laboratory quality assurance/quality control samples, or analytical documentation for groundwater analytical data obtained by DNREC. Therefore, this data will not be included in the analytical data base for the Chem-Solv risk assessment.

7817q

AR307742

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-10

EPA APPROVAL OF INTERIM DOCUMENT, DATED JUNE 14, 1990

AR307743

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

RECEIVED
JUN 20 1990
STATE OF DELAWARE
DNREC SUPERFUND BRANCH

June 14, 1990

Milton M. Beck, D.V.M.
Dept of Natural Resources and
Environmental Control
715 Grantham Lane
New Castle, Delaware 19720

RE: Chem-Solv, Inc. Site
Comments on Interim Document by BCM Engineers - June 1, 1990

Dear Milton:

On June 6, 1990, I received from BCM Engineers, the Interim Document for the Chem-Solv, Inc. site dated June 1, 1990. The document contained validated soil sampling data and recommendations as to BCM's approach to writing the risk assessment for the RI report. I circulated this document to Roy Smith, the EPA toxicologist, and to Bob Davis, the EPA ecologist, for review. They submitted the following comments.

Generally, after conducting his own screening of the soil data, Roy agrees with BCM's conclusion that on-site soils do not pose a human health threat. I've attached his comments.

Bob also agrees with BCM's conclusion that on-site soils do not pose an environmental threat and that a quantitative terrestrial survey is not necessary. However, he feels that an environmental description of the site and surrounding area is necessary and recommends a revegetation program to prevent erosion.

In addition, Bob feels that the groundwater, if found to be contaminated at some distance off-site, might have adverse effects on the Alston Branch and/or the Leipsic River if it discharges there. In that case, more extensive sampling would need to be conducted in those surface waters. It is my feeling that this scenario is unlikely since significant contamination is not expected to extend off-site at such a distance.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

In conclusion, EPA feels comfortable with BCM using the information and conclusions found in the Interim Document to proceed with writing the draft RI report. If you have any questions about these comments, please contact me at 215-597-3167.

Sincerely,

Stephanie Dehnhard

Stephanie Dehnhard
Remedial Project Manager
DE/MD Section

enclosures

AR307745

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Subject: Chem-Solv: Environmental Assessment & Restoration DATE: 6/20/90

From: Robert S. Davis, (3HW13)
Biologist

To: Stephanie Papa (3RW23)
RPM

From your explanation regarding current conditions of the site, it is understandable that ecological characterization is of minor importance. As I understand it, the site is only about 2 acres in size and soil contamination is minor due to previous removal of the soil, and treatment followed by replacement. However, ground water contamination is suspected and will soon be verified or eliminated through sampling and analysis.

As you explained, the site has little if any vegetation on it and the plants that are found there are merely some scattered grasses and weeds. It is my recommendation that the PRP carry out a soil nutrient analysis and with the information in hand plan a revegetation program. The site should be revegetated using pioneer species of the locale. This will enable them to control sheet and wind erosion and complete a step towards final remediation.

Since it is yet to be determined whether or not ground water poses a problem for surface waters, it is suggested that a second phase be planned to characterize the ecological situation. This plan would be put into effect only if it were determined that extensive contamination is the case and that impacts to surface ecosystems, especially aquatic systems, is the case.

Thank you for the opportunity to comment and please feel free to contact me if you have any questions.

AR307746

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Review of Chem-Solv "Interim Document" DATE: 7 June 1990

FROM: Roy L. Smith, Ph.D.
Toxicologist (3HW15)

TO: Stephanie Denhard
DR/MD Section (3HW25)

RLSmith

To test BCM's conclusions, I conducted my own screening of the Chem-Solv soil data. Of all the TCL/TAL substances detected, only arsenic, beryllium, and lead appeared at levels of concern in any sample. Arsenic and beryllium were not site-associated contaminants and were within the background range for the area. The slightly elevated lead concentration was almost certainly due to the influence of the adjacent highway, as BCM suggests. In summary, I agree with BCM's conclusion that on-site soils do not pose a human health threat.

I didn't review the section on environmental assessment (pg. 12), which is outside my field. I suggest you have Bob Davis look at it.

Let me know if I can provide any other assistance with the site.

AR307747

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A-11

LETTER DATED JULY 6, 1990, TO BCM FROM SAM FOGEL (ABB BIOREMEDIATION SYSTEMS DIVISION) REGARDING THE SOURCE OF THE ORGANIC COMPOUNDS FOUND IN WELLS 26A AND MWS-7-25

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ABB
ASEA BROWN BOVERI

July 6, 1990

Linda Henry, Ph.D.
BCM Engineers
One Plymouth Meeting
Plymouth Meeting, PA 19462

RECEIVED
... 12 1990

RE: Data Evaluation, Chem-Solv Site

Dear Dr. Henry,

Per your request, I have reviewed the analytical results and site map that you sent me on June 29, 1990 for the Chem-Solv site in Cheswold, Delaware. This letter contains my interpretation of this data regarding:

1) the relationship between the 1,1,1 trichloroethane (1,1,1-TCA), tetrachloroethene (PCE) and trichloroethene (TCE) concentrations in wells on the Chem-Solv site and concentrations of 1,2 dichloroethane (1,2-DCA) observed in off-site well MWS-7-25; and

2) the probable source of the benzene, xylene, toluene, and other tentatively identified hydrocarbons (TICs) located in on-site and off-site wells.

In making my analysis of these results, I assumed that the compound identifications and quantitations reported were valid and accurate. Review of the supporting data for these results (e.g., sampling and analytical procedures, chromatograms, and quality control data), would enable me to comment with greater confidence on the source(s) of contamination and the fate of the contaminants.

dg2:bcmeng.1

ABB Environmental Services Inc.

Bioremediation Systems

Corporate Place 128
107 Audubon Road
Wakefield, Massachusetts 01880

Telephone (617) 245-6606
Fax (617) 246-5060

AR307749

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Chlorinated Solvent Degradation.

None of the solvents observed in the wells on the Chem-Solv site (1,1,1-TCA, TCE, or PCE) breakdown biotically or abiotically in the environment to 1,2-DCA. In general, these compounds are quite persistent in the subsurface. Their fate is generally dominated by their relatively high volatility (i.e., they can volatilize from groundwater). However, there are two commonly accepted and fairly well understood pathways for biotic degradation of these compounds. Under anaerobic conditions, 1,1,1-TCA, TCE, and PCE can be degraded through reductive dehalogenation. PCE can be reductively dehalogenated to TCE which can in turn be dehalogenated to 1,2 dichloroethene (1,2-DCE). 1,2-DCE can be further reduced to vinyl chloride (VC) which may be reduced to ethylene (but not to 1,2-DCA). The rates of these reactions favor the more highly chlorinated compounds. This means that PCE degrades to TCE faster than TCE degrades to 1,2-DCE. The difference in reaction rates often results in a build-up of 1,2-DCE or VC. 1,1,1-TCA can also be degraded through reductive dehalogenation to 1,1 dichloroethane and then further to chloroethane. Anaerobic degradation of these chlorinated solvents has been documented by many authors, such as Bouwer and McCarty (1983), Vogel and McCarty (1985, 1987), Dooley-Danna *et al.* (1989), Freedman and Gossett (1989), and Fogel and Dooley-Danna (1990).

It is also well documented that chlorinated solvents can also be degraded aerobically by methane-utilizing bacteria (Fogel *et al.*, 1986a, 1986b, 1987a; Leahy *et al.*, 1987; Vogel *et al.*, 1987; and Little *et al.*, 1988). This is a rather specialized process in which chlorinated aliphatic compounds are *co-oxidized* along with methane to CO_2. PCE and 1,1,1-TCA are not very amenable to this reaction, while 1,2-DCE, TCE, and 1,2-DCA are more readily degraded (DCE faster than TCE faster than DCA). None of the chlorinated aliphatics degrade by this pathway to 1,2-DCA.

Source of Detected Hydrocarbons

Benzene, xylene, toluene, and other hydrocarbons (tentatively identified by GC/MS, or TICs) were detected in wells 26A and MWS-7-25. These compounds are all representative of

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

compounds that are observed in the subsurface after gasoline or other petroleum hydrocarbons (e.g., #2 fuel oil or jet fuel) are spilled (Fogel *et al.*, 1987b; Johnson *et al.*, 1990). In addition to alkanes and substituted aromatics, alcohols and phenols are reported as TICs. These compounds are common intermediates and products of biodegradation of petroleum hydrocarbons (Fogel *et al.*, 1987b; Singer and Finnerty, 1984). The specific source of the petroleum hydrocarbons in the wells is less easily established. Different petroleum product "weather" differently and present a different "fingerprint" depending on the extent of weathering. However, all of the compounds reported are relatively low molecular weight compounds, indicating that the source or sources were a light petroleum fraction such as gasoline or jet fuel. This interpretation could be supported with a GC/MS re-constructed or total ion chromatograph. However, the most appropriate evidence would be a GC/FID generated chromatograph.

I believe that this analysis addresses the issues that we discussed on the phone and that you requested in your letter of June 29. I am enclosing a copy of the Johnson *et al.*, 1990 paper for your review. I am also enclosing a copy of my resume, and a copy of our (Bioremediation Systems Division) qualification statement for your information. If you would like clarification of any of the above material, or if we can be of further assistance, please feel free to call me or Daniel Groher at (617)245-6606.

Sincerely,

Sam Fogel

Sam Fogel, PhD.
Director, ABB Bioremediation
Systems Division

Enclosures

cc. Daniel Groher, ABB

dg2:bcmeng.1

AR307751
070690

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

REFERENCES

Bouwer, E. J., and P. L. McCarty. 1983. Transformations of 1- and 2-carbon halogenated aliphatic organic compounds under methanogenic conditions. Appl. Environ. Microbiol. 45:1286.

Dooley-Danna, M., S. Fogel and M. Findlay. 1989. The sequential anaerobic/aerobic biodegradation of chlorinated ethenes in an aquifer simulator. Intl. Ass. on Water Pollution Research and Control Intl. Sym. on Processes Governing the Movement and Fate of Contaminants in the Subsurface Environment. Stanford University, July 23-26, 1989.

Fogel, M., A. Taddeo, and S. Fogel. 1986a. Biodegradation of chlorinated ethenes by a methane-utilizing mixed culture. Appl. Environ. Microbiol. 51:720-724.

Fogel S., M. Leahy, M. Findlay, M. Young and M. Danna. 1986b. Final report to the National Science Foundation: The biodegradation of chlorinated aliphatic compounds by methane-oxidizing bacteria: mechanisms and products.

Fogel, S., M. Fogel, and A. Moore. 1987a. Biodegradation of chlorinated chemicals in groundw by methane-oxidizing bacteria. In: Proceedings of National Water Well Association Conference on Petroleum Hydrocarbons and Organic Chemicals in Groundwater. Nov. 17-19, 1987, Houston, Texas.

Fogel, S., M.C. Leahy, J. Schneider, M. Danna, and A. Vira. 1987b. Biodegradation of jet fuel adsorbed to soil. Final Report to U.S. Air Force. SBIR Contract No. F08635-86-C0232. 68 pages.

Fogel, S., and M. Dooley-Danna. 1990. Bench-Scale Testing Biological Degradation for DDT Removal from Soil, Leetown Pesticide Site - REM III Program EPA Contract No. 68-01-7258, Subcontract No. 4938-895-2111.

Freedman, D.L. and J.M. Gossett. 1989. Biological reductive dechlorination of tetrachloroethylene and trichloroethylene to ethylene under methanogenic conditions. Appl. Environ. Microbiol. 55:2144-2151

Johnson, P.C., M.W. Kemblowski and J.D. Colthart. 1990. Quantitative analysis for the cleanup of hydrocarbon-contaminated soils by in-situ soil venting. Ground Water 28(3):413-429, May-June 1990.

dg2:bcmeng.1

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Leahy, M.C., M. Danna, M. Young and M. Findlay. 1987. Epoxide formation from the biodegradation of cis- and trans-1,2-dichloroethylene. Am. Soc. Microbiol. Ann. Meeting. March 1987, Atlanta, GA.

Leahy, M.C., M. Findlay and S. Fogel. 1989. Biodegradation of chlorinated aliphatics by a methanogenic consortium in a biological reactor. HMCRI Second Nat. Conf. on Bioremediation. Nov., 1989. Washington, D.C.

Little, C.D., A.V. Palumbo, S.E. Herbes, M.E. Lidstrom, R.L. Tyndall, and P.J. Gilmer. 1988. Trichloroethylene biodegradation by a methane oxidizing bacterium. Appl. Environ. Microbiol. 54:981-956.

Singer, M.E. and W.R. Finnerty. 1984. Microbial metabolism of straight-chain and branched alkanes. In: Petroleum Microbiology, R.M. Atlas - Editor. Macmillan Publishing Co., Inc. New York. 692 pages.

Vogel, T.M. and P.L. McCarty. 1985. Biotransformation of tetrachloroethylene to trichloroethylene, dichloroethylene, vinyl chloride, and carbon dioxide under methanogenic conditions. Appl. Environ. Microbiol. 49:1080-1083.

Vogel, T.M. and P.L. McCarty. 1987. Abiotic and biotic transformations of 1,1,1-trichloroethane under methanogenic conditions. Environ. Sci. Technol. 21:1208-1213.

Vogel, T.M., C.S. Criddle and P.L. McCarty. 1987. Transformation of halogenated aliphatic compounds. Environ. Sci. Technol. 21:722-736.

dg2:bcmeng.1

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX B

AR307754

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX B

DNREC GROUNDWATER SAMPLE DATA SUMMARY TARGET COMPOUND SHEETS

AR307755

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE ANALYSIS SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 10-3-84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	Trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
3776	OB-1	AQ	ug/l						5.1		650				660		
3777	OB-2								210		500						
3778	OB-2 Dup.								220		560						
3779	OB-3																
3780	OB-4			1.4					23		250						
3781	OB-5						7.0		110		770						
3782	Blank																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

O Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR307756

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number _____
EPA Number _____

☒ Organic ☐ Inorganic

Site Name Chem Solv.
Date of Sample 10-3-84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
3776	OB-1	AQ	ug/l	150		250	27										
3777	OB-2	↓	↓														
3778	OB-2 Dip.																
3779	OB-3																
3780	OB-4																
3781	OB-5																
3782	Blank																

AR307757

NOTE: For a review of this data and non-target, tentatively identified ...

If the page printed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
4574	7b	AQ	ug/l														Sample Date 11-6-84
4575	8b																
4576	8b dup.																
4577	Blank																
4578	9A																Sample Date 12-6-84
4579	9b										2.6						
4580	OM-1 ?								1800		110,000				3.74		
4581	6																
4582	OM-3										12.8						

AR307758

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv.

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
4574	7b	AQ	ug/l														Sample Date 11-6-84
4575	8b																
4576	8b dup.																
4577	Blank																
4578	9A																Sample Date 12-6-84
4579	9b																
4580	OM-1 ?			159	111	230	106										
4581	6																
4582	OM-3																

AR307759

NOTE: For a review of this data and non-target, tentatively identified compounds please see the Analytical Quality Assurance section of this report.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 12-5-84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
4543	OB-5	AQ	ug/l								9400				6.2		
4544	Blank																
4545	MW-7A																
4546	MW-8A																
4547	MW-8A dup.																
4548	E. ERBES Domestic well																
4549	Harmac Domestic well																
4550	Williams Domestic well																
4551	Domestic well																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data

AR307760

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem-Solv.

Date of Sample 12-5-84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
4543	OB-5	AQ	ug/l														
4544	Blank																
4545	MW-7A																
4546	MW-8A																
4547	MW-8A dup																
4548	E. Erbes Domestic Well																
4449	Hermac Domestic Well																
4550	Williams Domestic Well																
4551	Domestic Well																

NOTE: For a review of this data and non-target tentatively identified compounds please see the Analytical Quality Assurance section of this report.

AR307761

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
355	MW 5	AQ	ug/l								4400						Sample Date 1-29-85
356	Blank 2										1.0						
357	MW 2										340						
358	MW 3										34						
359	MW 3 dup.										31						
360	Blank 1																
361	MW 6b																
362	MW 7a																
363	MW 7b																
364	MW 8a																
365	MW 8b																
382	MW 9										130,000						Sample Date 1-31-85

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number _____
EPA Number _____

☒ Organic ☐ Inorganic

Site Name ChemSolv
Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
355	MW5	AQ	ug/l														Sample Date 1-29-85
356	Blank 2																
357	MW2																
358	MW3																
359	MW3 dup																
360	Blank 1																
361	MW 6b																
362	MW 7a																
363	MW 7b																
364	MW 8a																
365	MW 8b																
382	MW 7																Sample Date 1-31-85

NOTE: For a review of this data and [illegible] tentatively identified [illegible]

AR307763

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4-22-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1163	7A	AQ	ug/l														
1164	7B																
1165	8A																
1166	8B																
1167	9A										2.2						
1168	9B						1.3		2.1	38	2.1						
1169	6B																
1170	Blank																
1171	8A Dup.																
1172	ERBES																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data

AR307764

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4-22-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
1163	7A	AQ	ug/l														
1164	7B																
1165	8A																
1166	8B																
1167	9A																
1168	7B																
1169	6B																
1170	Blank																
1171	8A dup.																
1172	ERBES																

NOTE: For a review of this data and non-target tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307765

TDD Number _____

EPA Number _____

SAMPLE A SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4-23-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	Trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1192	#2	AQ	ug/l		6.4				160		125						
1193	#3								3		16						
1194	#4								79		430						
1195	#5				8	11	76		1300		1600				64		
1196	Cassaway																
1197	Burns									29							
1198	Harmic																
1199	Truckmart																
1200	Freedom Homes																
1201	#2 Dup.				6.1				165		130						
1202	Byguk																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

A307766

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number _____
EPA Number _____

☒ Organic ☐ Inorganic

Site Name Chem Solv
Date of Sample 4-23-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
1192	# 2	Aq	ug/l														
1193	# 3																
1194	# 4																
1195	# 5			35													
1196	Cassaway																
1197	Burns																
1198	Harmic																
1199	Truck Mart																
1200	Freedom Homes																
1201	#2 Dup.																
1202	Blank																

AA307767

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE [illegible] A SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
2570	OB-5	AQ	ug/l						26		250	360			4.0		Sample Date 8-14-85
2696	OB-14	AQ	ug/l	110	3200	165	53	7.9	18000		17000				7.2	2.8	Sample Date 8-22-85
2697	OB-10			11	510	141	669	30	4200		80,000				2300		
2698	OB-11			113	3.5		1.9		110		390				3.9		
2699	OB-12						1.03		22		300				2.6		
2700	OB-13								20		320				2.7		
2701	OB-5B										3.4				1.7		
2702	OB-5B dup.														2.3		
2703	OB-15			414	390	1000	170		4700		29,000				110		
2704	OB-16			3.2	6.7	7.4	1.4		86		1200				4.0		
2705	OB-18				2.9	4.1	1.0		65		590				3.2		
2706	OB-19			2.9	2.6	4.4			67		940				11		
2707	OB-17								24		350						

AR307768

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number _____
EPA Number _____

☒ Organic ☐ Inorganic

Site Name Chem Solv
Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
2570	OB-5	AQ	ug/l														Sample Date 8-14-85
2696	OB-14	AQ	ug/l														Sample Date 8-22-85
2697	OB-10			1100													
2698	OB-11																
2699	OB-12																
2700	OB-13																
2701	OB-5B																
2702	OB-5B dup.																
2703	OB-15			88													
2704	OB-16																
2705	OB-[illegible]																
2706	OB-[illegible]																
2707	OB-[illegible]																

NOTE: For a review of this data and non-target tentatively identified [illegible]

AR307769

TDD Number _____

EPA Number _____

SAMPLE [illegible] SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Sol'N

Date of Sample 8-26-85

Compounds Detected

Sample Number	Sample Description and Location OB SAR - time	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
2738	5 min	AQ	ug/l		1092	120	260		10500		21000				69		
2739	20 min				940	130	160		10600		21000				66		
2740	60 min				103	130	260		9500		19000				61		
2741	120 min				104	150	176		10900		22000				61		
2742	180 min				114	160	180		12000		25000				62		

AR307770

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number _____
EPA Number _____

☒ Organic ☐ Inorganic

Site Name Chem Solv
Date of Sample 8-26-85

Compounds Detected

Sample Number	Sample Description and Location OB-SAR-time	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
2738	5 min	AQ	ug/l	32													
2739	20 min	↓	↓	29													
2740	60 min	↓	↓	27													
2741	120 min	↓	↓	29													
2742	180 min	↓	↓	30													

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307771

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE [illegible] SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 8-28-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
2772	8A	AQ	ug/l														
2773	8B																
2774	7A																
2775	7B																
2776	6B																
2777	9A										1.1						
2778	9B			1.2						13							
2779	(Equip Blank from 7B) Blank																
2780	4				4.1				93		510						
2781	3								32		110						
2782	2			6.1	8.6	4.4			195		846						
2783	SAR307772				780	160	280		12500		28400				23		
2784	2 dup	✓	✓	6.0	12	4.3			190		850						

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 8-28-85

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene											Remarks
2772	8A	AQ	ug/l															
2773	8B																	
2774	7A																	
2775	7B																	
2776	6B																	
2777	9A																	
2778	9B																	
2779	Blank																	
2780	4																	
2781	3																	
2782	2																	
2783	5			40														
2784	2 dup	✓	✓															

Compounds Detected

NOTE: For a review of this data and non-target tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv.

Date of Sample 10-4-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
3306	OB-23A	AQ	ug/l														
3307	OB-22A																
3308	OB-29A										1.9						
3309	OB-24A			91	4.8						128						
3310	OB-25A				4.0	9.0	2.0		14		389						
3311	OB-27A								5.0		197						
3312	OB-28A			1.6					4.9		207						
3313	OB-26A			1.9							2.4	144					
3314	Test														25		
3315	OB-25A dup.			1.7	2.2	8.5	1.8		14		390						
3313	OB-26A			1.8							1.8	162					No explanation for sample Re-run

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR307774

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 10-4-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
3306	OB-23A	AG	ug/l														
3307	OB-22A																
3308	OB-29A																
3309	OB-24A																
3310	OB-25A																
3311	OB-27A																
3312	OB-28A																
3313	OB-26A																
3314	test																
3315	OB-25A dup																
3316	OB26-A																

NOTE: For a review of this data and non-target tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307775

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem Solv.

Date of Sample 10/85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	PH	ALK. mg/l CaCO3	Hardness, mg/l	Iron, ug/l	Mn, ug/l	Total Diss. Fe	Acidity, mg/l CaCO3							Remarks
3408	OB 20A	AQ		6.4	92	150											Sample Date 10-9-85
3409	OB 32 AR	AQ		6.4	80	124											"
3617	OB 34 AR	AQ				158	360	6130	<100	79							Sample Date 10-24-85
3618	OB 35 AR	AQ				116	140	5880	<100	55							"

AR307715

NOTE: For review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◊ Denotes results of questionable qualitative significance based upon quality assurance review of data

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 1-26-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
~~3408~~																	
4020	1-Before Treatment	AQ	ug/l	76	10.0	865	375	6.0	8000		34200		5.5	58	305		
4021	1-After Treatment	AQ	ug/l						5.3		29.1		1.2		7.3		

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307777

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-26-85

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene										Remarks
4020	1-Before Treatment	AQ	ug/l	125													
4021	1-After Treatment	AQ	ug/l														

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307778

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromo form	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
116	Before	AQ	ug/l		627	2283	337		8320		27000						Sample Date 1-2-86
117	After								3.5								"
646	Before treatment				143	91			86		2352						Sample Date 2-27-86
647	After Treatment										0.3						"

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307779

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chrom Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Methane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
116	Before	AQ	ug/l															Sample Date 1-2-86
117	After	↓	↓															"
646	Before																	Sample Date 2-27-86
647	After	↓	↓															"

AR307780

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Soln

Date of Sample 3.11.86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
766	OB-12A	AQ	ug/L														
767	OB-3A								1.5		2.5						
768	OB-13A																
769	OB-4A								47		73						
770	OB-10A										4.0						
771	OB-14A				51	1.0			192		249						
772	OB-17A																
773	OB-18A					2.0		2.0	1.0		20	3.5				1.0	
774	OB-19A								15		31						
775	Recovery				129	74	28		171		217						
776	Blank																

AR307701

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 3.11.86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromomethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
766	OB-12A	AQ	ug/L														
767	OB-3A																
768	OB-13A																
769	OB-4A																
770	OB-10A																
771	OB-14A																
772	OB-17A							3.0									
773	OB-18A			4.5				1.0	7.0								
774	OB-19A																
775	Recovery																
776	Blank																

A3077782

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 3-11-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
777	OB-24	AQ	ug/L		2.0				75		21						
778	OB-25	↓	↓		1.0		2.5		4.0		152						
779	OB-28								3.0		138						
780	Curley							25				110					

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR307783

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 3-16-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
777	OB-24	AG	ug/l														
778	OB-25	↓	↓														
779	OB-28																
780	Curley																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR307784

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number _____
EPA Number _____

☒ Organic ☐ Inorganic

Site Name Chem Solv
Date of Sample 4-8-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1092	Gearhart	AQ	ug/l					55				10					
1093	Gearhart											3.1			3.0		
1094	Chemsolv			4.0	2350				712*					16*	8		
1095	Chemsolv																
1096	Gearhart											2.3					

* Did not separate. Could be either 1,1,1-Trichloroethane or CCl_4 or a combination of both.

* Did not separate from Istd. This value (16) obtained when run on another column

— GC. Conditions do not accompany chromatograms

#s from separate report packet. Samples run twice - on second run only Benzene & Toluene in sample

1092 were detected with values of 9.9 & 2.4 respectively

AR307785

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4.8.86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1092	Gearhart	AQ	ug/l				2.6										
1093	Gearhart	↓	↓	2.2	2.3	2.9	2.7										
1094	Chem Solv							1.0		1.0	712*						
1095	Chem Solv																
1096	Gearhart	↓	↓	2.7	2.6	2.6	2.5										

AR307786

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4/28/~~86~~ 86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1364	Before treatment	AQ	µg/L	104*	66		58		104*		104*						* Separation not achieved - could be any combination of 3
1365	After treatment	↓	↓														
1366	Blank																

0787

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4-28-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1364	Before	AQ	ug/l														
1365	After	↓	↓														
1366	Blank	↓	↓														

AR307788

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 5/13/86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
1592	14	AQ	ug/l						24		61						
1593	11								4.1		33						
1594	12										6.1						
1595	10										4.2						
1596	17																
1597	18																
1598	19				4.9				44								
1599	24								5.3		26						
1600	28								3.1	1.1	236						
1601	Blank																
1602	Gr[illegible]dt UT					2.9		34	20	1.5	208	297					
1603	Recovery UT			5.4	58	98	9.6	349			2087	31					
1604	Recovery T																
1605	[illegible] dup.							1.[illegible]	2.7		226						

NOTE: For [illegible]iew of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

AR307769

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 5-13-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1592	14	AQ	ug/l														
1593	11																
1594	12																
1595	10																
1596	17																
1597	18																
1598	19																
1599	24																
1600	28																
1601	Blank																
1602	Gerhardt UT																
1603	Recovery UT																
1604	Recovery T																
1605	28 dup.	↓	↓														

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AM307780

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
2050	OB-45B 5min	AQ	ug/l								1.2						Sample Date 6-18-86
2051	OB-48B 35min																"
2305	Recovery Ra			3.4	2.4		7.8		553		1524	37		4.9			Sample Date 7-14-86
2306	Recovery AT																
2307	Share Raw							33		1.8		146					
2308	Share Treated																

AR307791

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
2050	OB-45B 5min	AQ	ug/l														Sample Date 6-8-86
2051	OB-48B 35min																"
2305	Recovery Rig																Sample Date 7-14-86
2306	Recovery AT																
2307	Shore Raw																
2308	Shore Treated																

AR307792

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv.

Date of Sample 7-28-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromo form	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
2572	42	AQ	ug/l				2.9										
2573	39			2.0	2.7	1.9	1.6	1.9	8.0		460	30					
2574	26											133					
2575	25										1.6				6.5		
2576	27								2.4		100						
2577	28					1.0		1.4			204						
2578	41										55						
2579	40																
2580	24							1.2			6.5						
2581	Blank																
2582	24 dup.	↓	↓								5.4						

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR307793

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 7-28-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Methane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
2572	42	AQ	ug/L															
2573	39																	
2574	26																	
2575	25																	
2576	27																	
2577	38																	
2578	41																	
2579	40																	
2580	24																	
2581	Blank																	
2582	Dup.																	

B307794

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page printed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 7-29-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	Trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
2617	11	AQ	ug/L														
2618	16																
2619	19																
2620	37							16	3.1		3.0						
2621	38			14			399	9.5	117		904						
2622	Recovery-Rinse			11	8.7			519	111		96						
2623	10								1.5								
2624	15										11						
2625	Blank after 38										2.7						
2626	38 dup.	↓	↓	12			371	8.8	101		851						

AR307795

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 7-29-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	P-xylene	M-xylene	O-xylene	Chloromethane	Bromomethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
2617	11	AQ	ug/l														
2618	16																
2619	19																
2620	37																
2621	38																
2622	Recovery Run																
2623	10																
2624	15			35													
2625	Blank after 38																
2626	38 dup.	✓	✓														

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
3548	Raw (Recovery)	AQ	ug/l		5.7	5.6	6.9		43		165						Sample Date 9-25-86
3549	Treated (Recovery)																
3550	Blank																
4169	38A					1.5	1.1		3.5		6.6						Sample Date 11-17-86
4170	Recovery Raw			2.3	2.3	19			254		84						
4171	Recovery Treated								3.0		5.2						
4172	10A																
4173	15A					1.7	1.4		5.6		630						
4174	16A										1.7						

AR307797

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloroethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
3548	Raw (Recovery)	AQ	ug/l														Sample Date 9-25-86
3549	Treated (Recovery)																
3550	Blank																
4169	3A																Sample Date 11-17-86
4170	Recovery Raw											47					
4171	Recovery Treated																
4172	10 A											1.8					
4173	15 A											11.5					
4174	16A																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR307798

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-17-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
4175	~~25~~ 24	AQ	ug/l								3.2						
4176	25																
4177	39			3.1		2.5	1.1	1.3	4.4		233	13					
4178	Blank																
4179	28			1.4		1.9		7.4			123						
4180	27								1.4		74						
4181	26											287			13		
4182	Duplicate?			3.0	0.7	2.3	1.0	1.1	3.5		208	12			44		
4182	Dup.			3.1	0.7	2.7	1.0	1.3	4.7		202	10			20		
4177	39 Dup.			3.4		2.9	1.0		3.4		378	12					
4177	X2	✓	✓								273						

R07789

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-17-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
4175	24	AQ	ug/L														
4176	25																
4177	39																
4178	Blank																
4179	28																
4180	27																
4181	26			5.6													
4182	Duplicate			4.6													
4182	dup.																
4177	dup.																
4177	x2																

AR307800

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-15-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
4193	5A - Bailed	AQ	ug/l	2.8	16	15	34		296		1400						
4194	5A - Pump			2.6	22	15	32		224		1152						
4195	5B - Pump										3.3						
4196	2A - Bailed								2.0		7.9						
4197	2A - Pump				1.0		1.0		3.8	30	17						
4198	9B - Pump								5.5		39						
4199	9B - Bailed						1.0		2.9	32							
4200	Blank After 5A Pumped						1.4		12		76						
4201	Duplicate Durham								3.3		14						
4202	Blank After 5A Bailed								4.4		19						

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-18-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
4193	5A Bailed	AQ	ug/l														
4194	5A Pump																
4195	5B Pump																
4196	2A Bailed																
4197	2A Pump																
4198	9B Pump																
4199	9B Bailed																
4200	Blank After 5A Pumped																
4201	Duplicate Durham																
4202	Blank After 5A Bailed																

AR307802

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-18-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromo form	1,1,2,2-Tetra-chloroethane	Toluene	chlorobenzene	Remarks
4203	41 A	AQ	ug/L								7.3						
4204	42A																
4205	Durham																
4206	Johnson																
4207	Curley (Gerhart)							1.3									
4208	Shore - Raw							30		1.0							
4209	Shore - Treated																

AR307803

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-18-86

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	P-xylene	m-xylene	O-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
4203	41 A	AQ	ug/l														
4204	42A																
4205	Durham																
4206	Johnson																
4207	Curley (Gearhart)																
4208	Shore - Raw																
4209	Shore-Treated																

AR307804

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem Solv

Date of Sample 6-8-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Spec. cond. umhos/cm	pH	Alkalinity mg/L $CaCO_3$	Acidity mg/L $CaCO_3$	T. Dis. solids mg/L	Iron ug/L	Manganese ug/L							Remarks
1836	Gearhart/Shawe			276	7.5	126	4	210	110	190							
1837	Gearhart/Curley			73.4	6.4	14	1	66	<100	<30							
1838	American Roofing			224	4.3	0	68	154	545	60							
1839	Durham			288	7.8	126	1	215	<100	<30							
1840	Lambertson			254	6.0	46	84	154	12525	160							
1841	Johnson			426	6.5	118	30	266	<100	<30							
1887	Henderson																Visited but no data

AR307805

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 6-8-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1836	Gearhart/Shaw	AQ	µg/L				2.3										
1837	Gearhart/Curley									1.0							
1838	American Roofing									1.9							
1839	Durham																
1840	Lambertson								1.4								
1841	Johnson																
1887	Henderson																

AR307806

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 6-8-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride	Dibromochloromethane				Remarks
1836	Gearhart/Shawe	AQ	ug/l										1.0				
1837	Gearhart/Curley																
1838	American Roofing																
1839	Durham																
1840	Lambertson																
1841	Johnson																
1887	Henderson																

NOTE: For a review of this data and non-target tentatively identified

AR307807

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem Solv

Date of Sample 6-8-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Spec. Cond. umhos/cm	pH	Alkalinity mg/L as CaCO3	Acidity mg/L as CaCO3	Total Solids mg/L	Iron ug/L	Manganese ug/L							Remarks
1877	28A																No Data
1878	39A																
1879	25A																
1880	24A																
1881	Dup																
1882	Williams			170.6	5.0	4		121	165	<30							
1883	Cote			123.4	5.6	13		80	11550	185							No Data
1886	42A																

AR307808

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR307809

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 6-5-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	Trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
1877	28A	AQ	ug/l			1.8			2.2		67						
1878	39A			3.0		3.6	1.1	1.6	4.0		171						
1879	35A										2.6						
1880	24A																
1881	24A DUP										2.6						
1882	Williams																
1883	Cole																
1886	42A							1.1									
1878	39A dup.			2.9		3.2	1.1	1.5	3.7		112						
1879	35A dup								1.2		2.1						
1881	dup	✓	✓								2.7						

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR307810

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 6-8-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1877	28A	AQ	ug/L							2-4							
1878	39A																
1879	25A																
1880	24A																
1881	24A Dup																
1882	Williams																
1883	Cole																
1886	42A																
1878	dup.																
1879	dup																
1881	dup																

NOTE: For a review of this data and non-target tentatively identified

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

A039781

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1899	26A	AQ	ug/l									21			4.9		Sample Date 6-9-87
1900	27A										22						
1901	15A					1.0			1.6		461						
1902	16A											4.5					
1903	18A								8.6		58						
1912	46A					1.0											Sample Date 6-10-87
1913	47A					1.3					11						
1914	Blank																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR307812

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1899	26A	Aq	ug/l			2.3	2.8										Sample Date 6.9.87
1900	27A																
1901	15A																
1902	16A																
1903	18A																
1912	46A																Sample Date 6.10.87
1913	47A																
1914	Blank																

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this

AR307816

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 6-16-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromo form	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
2032	10 A	AQ	ug/l								1.1						
2033	WP 2						1.3				18.5						
2034	46 A				2.0	7.7			232		1016						
2035	45 A			1.6	2.7	15	14		78		195						
2036	45 Aa								7.8		176						
2037	11 A																
2032	dup.										1.1						

AR307814

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chemsolv

Date of Sample 6-16-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride	Dichlorodifluoromethane				Remarks
2032	10A	AQ	ug/l														
2033	WP2										1.3						
2034	48A												9.4				
2035	45A																
2036	45AA																
2037	11A																
2032	dup.																

AR307815

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
3688	Recovery Wells	AQ	ug/l		2.27	6.14	1.64		69.1		703						Sample Date 9.4.87
4347	Recovery Wells				1.46	2.17			24.1		247						Sample Date 10.15.87
4348	Deep Gearhart / Shave Well																"
5088	Chem Solv Recovery Wells					2.6	1.0		30		127						Sample Date 12/1/87
5089	Troy's Mobile Homes								1.4								"
5304	Rec. Wells				1.4	1.7			18		82						Sample Date 12.17.87

AR307816

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	P-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
3658	Recovery wells	AQ	ug/L														Sample Date 9-4-87
4347	Recovery Wells											1.79					Sample Date 10-15-87
4348	Deep Gearhart/ Stone well																"
5068	Chem Solv Recovery Well																Sample Date 12-1-87
5069	Troy's Mobile Homes																"
5364	Rec. wells																Sample Date 12-17-87

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR307817

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 12-22-87

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetra-chloroethane	Toluene	chlorobenzene	Remarks
5329	Well 48A	AQ	ug/l			2.6			5.7		41						
5330	Well 47A										1.7						
5331	Well 46A					3.3											
5332	Blank extrap																
5333	Well 45A			1.4					8.1		28						
5334	Rec Wells				2.0	1.8			21		110						
5335	Recliquote				2.1	2.0			23		110						

AR307818

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
5329	Well 48A	AQ	ug/l														
5330	well 47A																
5331	Well 46A									9.1							
5332	Blank on trip																
5333	Well 45A																
5334	Rec. wells																
5335	Recliquate																

AR307819

NOTE: For a review of this data and non-target tentatively identified compounds [illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromo form	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
132	Well 42A	AQ	ug/L					1.3				2.2					Sample Date 1.5.88
133	Well 39A			1.9		1.4		1.2	0.63		14						
134	Well 26A							1.01				550			16		
135	Durham																
136	Amer. Roofing							1.6									
137	Field Blank																
152	Rec Wells				1.9	1.7	0.77		21		103						Sample Date 1.6.88
153	Well 24A																
154	Well 27A	✓	✓								13						

AR307820

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
132	Well 42A	AQ	ug/l														Sample Date 1-5-88
133	Well 39A																
134	Well 26A																
135	Durham																
136	Amer. Roofing																
137	Field Blank																
152	Rec. Wells																Sample Date 1-6-88
153	Well 24A																
154	Well 27A																

AR307821

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____
EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv
Date of Sample 3-21-88

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
				Compounds Detected													
1140	45A	AQ	ug/L	3.6					13								
1141	69																
1142	46A																
1143	Am Roofing							1.3									
1144	Rep. well																
1145	42A							1.0									
1146	16A																
1147	26A														10		
1148	26 Ab											290			15		
1149	48 A								7.6		50						
1150	Rep wells								1.6		11.5						
1151	25A																
1152	22A	✓	✓								18						

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 3-21-88

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1140	45A	AQ	ug/L														
1141	69																
1142	46A																
1143	Am Roofing																
1144	Rep. Well																
1145	42A																
1146	16A																
1147	26A																
1148	26Ab																
1149	48A																
1150	Rec. Wells																
1151	25A																
1152	39A	✓	✓														

AR307823

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4.14.88

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
1483	Durham	AQ	ug/L					0.56									
1484	OB 45 B																
1485	OB 45 B 2																
1486	Blank on trip																
1487	9B									13							
1488	48A																
1489	Rec Wells 1				1.7												
1490	Rec Wells 2	✓	✓		1.8												

AR307824

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 4-14-88

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromomethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1483	Durham	AG	ug/l														
1484	OB45B																
1485	OB45B2																
1486	Blank w/Trip																
1487	TB																
1488	48A																
1489	Rec Wells 1																
1490	Rec Wells 2																

AR307825

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloro-ethane	1,1-Dichloro-ethylene	Trans-1,2-Dichloro-ethylene	Chloroform	1,2-Dichloro-ethane	1,1,1-Trichloro-ethane	1,2-Dichloro-propane	Trichloroethylene	Benzene	Bromo form	1,1,2,2-Tetra-chloroethane	Toluene	Chlorobenzene	Remarks
1977	Rec Wells	AQ	ug/L						6.4		43						Sample Date 5-17-88
1978	DUP								25		135						"
2461	Rec Wells			0.9	2.5				23		121						Sample Date 6-15-88
2462	Blank on Trip																"
3077	Trip Blank																Sample Date 7-26-88
3078	39A			1.8				0.88									
3079	Lambertson Tch						6.9										
3080	Shane/Gearhart																
3081	Gearhart/Ann Bogan							1.7									
3082	Johnson							0.53									
3083	Durham							0.53									
3084	Rec wells				2.5				57		107	6.7					

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR387826

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample _____

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
1977	Rec Wells	AQ	ug/l														Sample Date 5-17-88
1978	DUP																"
2461	Rec Wells																Sample Date 6-15-88
2462	Blank on Trip																"
3077	Trip Blank																Sample Date 7-26-88
3078	39 A																
3079	Lambertson Tch																
3080	Shane/Greenhart																
3081	Greenhart/Ag																
3082	Johnson																
3083	Durham																
3084	Rec Wells	✓	✓														

AR 007827

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name: Chrm Solv

Date of Sample: 11-15-88

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	1,1-Dichloroethane	1,1-Dichloroethylene	trans-1,2-Dichloroethylene	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	1,2-Dichloropropane	Trichloroethylene	Benzene	Bromoform	1,1,2,2-Tetrachloroethane	Toluene	Chlorobenzene	Remarks
4527	Well 42A	AQ	ug/l					1.04				2.63*					*Suspected contam source
4528	Durham 70'							1.02									
4529	Durham 123'				3.51												
4530	Johnson																
4531	Rec Wells				3.51				37.3		81.7						
4532	Gearhart / Am-Roofing							2.2									
4533	Gearhart / Shaner																
4534	Trip Blank																

AR307828

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample 11-15-88

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Ethylbenzene	p-xylene	m-xylene	o-xylene	Chloromethane	Bromodichloromethane	Methane	Vinyl Chloride	Carbon Tetrachloride	Methylene Chloride					Remarks
4527	Well 42A	AQ	ug/l															
4528	Durham 70'																	
4529	Durham 123'																	
4530	Johnson																	
4531	Rec wells																	
4532	Gemhart / Am Roofing																	
4533	Gemhart / Shane																	
4537	Trip Blank																	

AR307829

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX C

AR307830

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX C

DNREC WATER QUALITY DATA SHEETS

AR307831

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
10-03-84	3776	OB-1A	1, 1-Dichloroethane	nd	ug/1
10-03-84	3776	OB-1A	1,1,1-Trichloroethane	5.1	ug/1
10-03-84	3776	OB-1A	Trichloroethylene	650.0	ug/1
10-03-84	3776	OB-1A	Benzene	<16.0	ug/1
10-03-84	3776	OB-1A	Toluene	660.0	ug/1
10-03-84	3776	OB-1A	Ethylbenzene	150.0	ug/1
10-03-84	3776	OB-1A	P-xylene	<16.0	ug/1
10-03-84	3776	OB-1A	M-xylene	250.0	ug/1
10-03-84	3776	OB-1A	O-xylene	27.0	ug/1
10-03-84	3777	OB-2A	1, 1-Dichloroethane	nd	ug/1
10-03-84	3777	OB-2A	1,1,1-Trichloroethane	210.0	ug/1
10-03-84	3777	OB-2A	Trichloroethylene	500.0	ug/1
10-03-84	3777	OB-2A	Benzene	nd	ug/1
10-03-84	3777	OB-2A	Toluene	nd	ug/1
10-03-84	3777	OB-2A	Ethylbenzene	nd	ug/1
10-03-84	3777	OB-2A	P-xylene	nd	ug/1
10-03-84	3777	OB-2A	M-xylene	nd	ug/1
10-03-84	3777	OB-2A	O-xylene	nd	ug/1
10-03-84	3779	OB-3A	Chloromethane	nd	ug/1
10-03-84	3779	OB-3A	1, 1-Dichloroethane	nd	ug/1
10-03-84	3779	OB-3A	1,1,1-Trichloroethane	nd	ug/1
10-03-84	3779	OB-3A	Benzene	nd	ug/1
10-03-84	3779	OB-3A	Toluene	nd	ug/1
10-03-84	3779	OB-3A	Ethylbenzene	nd	ug/1
10-03-84	3779	OB-3A	P-xylene	nd	ug/1
10-03-84	3779	OB-3A	M-xylene	nd	ug/1

AR307832

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	U
10-03-84	3779	OB-3A	O-xylene	nd	u
10-03-84	3780	OB-4A	1, 1-Dichloroethane	1.4	u
10-03-84	3780	OB-4A	1,1,1-Trichloroethane	23.0	u
10-03-84	3780	OB-4A	Trichloroethylene	250.0	u
10-03-84	3780	OB-4A	Benzene	nd	u
10-03-84	3780	OB-4A	Toluene	nd	u
10-03-84	3780	OB-4A	Ethylbenzene	nd	u
10-03-84	3780	OB-4A	P-xylene	nd	u
10-03-84	3780	OB-4A	M-xylene	nd	u
10-03-84	3780	OB-4A	O-xylene	nd	u
10-03-84	3781	OB-5A	Chloroform	7.0	u
10-03-84	3781	OB-5A	1,1,1-Trichloroethane	110	u
10-03-84	3781	OB-5A	Trichloroethylene	770.0	u
10-03-84	3781	OB-5A	Benzene	nd	u
10-03-84	3781	OB-5A	Toluene	nd	u
10-03-84	3781	OB-5A	Ethylbenzene	nd	u
10-03-84	3781	OB-5A	P-xylene	nd	u
10-03-84	3781	OB-5A	M-xylene	nd	u
10-03-84	3781	OB-5A	O-xylene	nd	u
12-05-84	4543	OB-5A	2-Chlorophenol	nd	u
12-05-84	4543	OB-5A	2-Nitrophenol	nd	u
12-05-84	4543	OB-5A	Phenol	nd	u
12-05-84	4543	OB-5A	2,4-Dimethylphenol	nd	u
12-05-84	4543	OB-5A	2,4-Dichlorophenol	nd	u
12-05-84	4543	OB-5A	2,4,6-Trichlorophenol	[illegible]	[illegible]
12-05-84	4543	OB-5A	4-Chloro-3-methylphenol	nd	u

AR307833

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

E	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
2-05-84	4543	OB-5A	2,4-Dinitrophenol	nd	ug/l
2-05-84	4543	OB-5A	2-Methyl-4,6-dinitrophenol	nd	ug/l
2-05-84	4543	OB-5A	Pentachlorophenol	nd	ug/l
2-05-84	4543	OB-5A	4-Nitrophenol	nd	ug/l
2-05-84	4543	OB-5A	1,3-Dichlorobenzene	nd	ug/l
2-05-84	4543	OB-5A	1,4-Dichlorobenzene	nd	ug/l
2-05-84	4543	OB-5A	Hexachloroethane	nd	ug/l
2-05-84	4543	OB-5A	Bis (2-chloroisopropyl)ether	nd	ug/l
2-05-84	4543	OB-5A	Hexachlorocyclopentadiene	nd	ug/l
2-05-84	4543	OB-5A	2-Chloronaphthalene	nd	ug/l
2-05-84	4543	OB-5A	Acenaphthylene	nd	ug/l
2-05-84	4543	OB-5A	Acenaphthene	nd	ug/l
2-05-84	4543	OB-5A	Dimethyl phthalate	nd	ug/l
2-05-84	4543	OB-5A	2,6-Dinitrotoluene	nd	ug/l
2-05-84	4543	OB-5A	Fluorene	nd	ug/l
2-05-84	4543	OB-5A	2,4-Dinitrotoluene	nd	ug/l
2-05-84	4543	OB-5A	1,2-Diphenylhydrazine	nd	ug/l
2-05-84	4543	OB-5A	Diethyl phthalate	nd	ug/l
2-05-84	4543	OB-5A	N-nitrosodiphenylamine	nd	ug/l
2-05-84	4543	OB-5A	Hexachlorobenzene	nd	ug/l
2-05-84	4543	OB-5A	4-Bromophenyl phenyl ether	nd	ug/l
2-05-84	4543	OB-5A	Phenanthrene	nd	ug/l
2-05-84	4543	OB-5A	Anthracene	nd	ug/l
2-05-84	4543	OB-5A	Dibutylphthalate	nd	ug/l
2-05-84	4543	OB-5A	Fluoranthene	nd	ug/l
05-84	4543	OB-5A	Pyrene		

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

ATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
12-05-84	4543	OB-5A	Benzidine	nd	ug
12-05-84	4543	OB-5A	Butyl benzyl phthalate	nd	ug
12-05-84	4543	OB-5A	Bis (2-ethyl hexyl) phthalate	nd	ug
12-05-84	4543	OB-5A	Chrysene	nd	ug
12-05-84	4543	OB-5A	Benzo(a)anthracene	nd	ug
12-05-84	4543	OB-5A	3,3' -Dichlorobenzidine	nd	ug
12-05-84	4543	OB-5A	Dioctylphalate	nd	ug.
12-05-84	4543	OB-5A	Benzo(b)fluoranthene	nd	ug.
12-05-84	4543	OB-5A	Benzo(k)fluoranthene	nd	ug.
12-05-84	4543	OB-5A	Benzo(a)pyrene	nd	ug.
12-05-84	4543	OB-5A	Indeno(1,2,3-c,d)pyrene	nd	ug.
12-05-84	4543	OB-5A	Dibenzo(a,h)anthracene	n	.
12-05-84	4543	OB-5A	Benzo(g,h,i)perylene	nd	ug.
12-05-84	4543	OB-5A	N-nitrosidimethyl amine	nd	ug.
12-05-84	4543	OB-5A	Chloromethane	nd	ug/
2-05-84	4543	OB-5A	Bromomethane	nd	ug/
2-05-84	4543	OB-5A	Vinyl Chloride	nd	ug/
2-05-84	4543	OB-5A	Chloroethane	nd	ug/
2-05-84	4543	OB-5A	Methylene Chloride	nd	ug/
2-05-84	4543	OB-5A	1, 1-Dichloroethane	nd	ug/
2-05-84	4543	OB-5A	trans-1,2-Dichloroethylene	nd	ug/
2-05-84	4543	OB-5A	Chloroform	nd	ug/
2-05-84	4543	OB-5A	1,2 - Dichloroethane	nd	ug/
2-05-84	4543	OB-5A	1,1,1-Trichloroethane	nd	ug/
2-05-84	4543	OB-5A	Carbon Tetrachloride	nd	
-05-84	4543	OB-5A	Bromodichloromethane	nd	ug/

AR307835

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4543	OB-5A	1,2-Dichloropropane	nd	ug/l
12-05-84	4543	OB-5A	trans-1,3-Dichloropropene	nd	ug/l
12-05-84	4543	OB-5A	Trichloroethylene	9400.0	ug/l
12-05-84	4543	OB-5A	Dibronochloromethane	nd	ug/l
12-05-84	4543	OB-5A	cis -1,3 -Dichloropropene	nd	ug/l
12-05-84	4543	OB-5A	1,1,2-Trichloroethane	nd	ug/l
12-05-84	4543	OB-5A	Benzene	nd	ug/l
12-05-84	4543	OB-5A	2-Chloroethylvinyl Ether	nd	ug/l
12-05-84	4543	OB-5A	Bromoform	nd	ug/l
12-05-84	4543	OB-5A	Tetrachloroethylene	nd	ug/l
12-05-84	4543	OB-5A	1,1,2,2-Tetrachloroethane	nd	ug/l
12-05-84	4543	OB-5A	Toluene	6.2	ug/l
12-05-84	4543	OB-5A	Chlorobenzene	nd	ug/l
12-05-84	4543	OB-5A	Ethylbenzene	nd	ug/l
12-05-84	4543	OB-5A	1,1 - Dichloroethylene	nd	ug/l
12-05-84	4543	OB-5A	P-xylene	nd	ug/l
12-05-84	4543	OB-5A	M-xylene	nd	ug/l
12-05-84	4543	OB-5A	O-xylene	nd	ug/l
12-05-84	4545	OB-7A	2-Chlorophenol	nd	ug/l
12-05-84	4545	OB-7A	2-Nitrophenol	nd	ug/l
12-05-84	4545	OB-7A	Phenol	nd	ug/l
12-05-84	4545	OB-7A	2,4-Dimethylphenol	nd	ug/l
12-05-84	4545	OB-7A	2,4-Dichlorophenol	nd	ug/l
12-05-84	4545	OB-7A	2,4,6-Trichlorophenol	nd	ug/l
12-05-84	4545	OB-7A	4-Chloro-3-methylphenol	nd	ug/l
12-05-84	4545	OB-7A	2,4-Dinitrophenol	nd	ug/l

AR307836

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
12-05-84	4545	OB-7A	2-Methyl-4,6-dinitrophenol	nd	ug
12-05-84	4545	OB-7A	Pentachlorophenol	nd	ug
12-05-84	4545	OB-7A	4-Nitrophenol	nd	ug
12-05-84	4545	OB-7A	1,3-Dichlorobenzene	nd	ug
12-05-84	4545	OB-7A	1,4-Dichlorobenzene	nd	ug
12-05-84	4545	OB-7A	Hexachloroethane	nd	ug
12-05-84	4545	OB-7A	Bis (2-chloroisopropyl)ether	nd	ug
12-05-84	4545	OB-7A	Hexachlorocyclopentadiene	nd	ug
12-05-84	4545	OB-7A	2-Chloronapthalene	nd	ug
12-05-84	4545	OB-7A	Acenaphthylene	nd	ug
12-05-84	4545	OB-7A	Acenaphthene	nd	ug
12-05-84	4545	OB-7A	Dimethyl phthalate	[illegible]	[illegible]
12-05-84	4545	OB-7A	2,6-Dinitrotoluene	nd	ug
12-05-84	4545	OB-7A	Fluorene	nd	ug
12-05-84	4545	OB-7A	2,4-Dinitrotoluene	nd	ug
12-05-84	4545	OB-7A	1,2-Diphenylhydrazine	nd	ug,
12-05-84	4545	OB-7A	Diethyl phthalate	nd	ug,
12-05-84	4545	OB-7A	N-nitrosodiphenylamine	nd	ug,
12-05-84	4545	OB-7A	Hexachlorobenzene	nd	ug,
12-05-84	4545	OB-7A	4-Bromophenyl phenyl ether	nd	ug,
12-05-84	4545	OB-7A	Phenanthrene	nd	ug,
12-05-84	4545	OB-7A	Anthracene	nd	ug,
12-05-84	4545	OB-7A	Dibutylphthalate	nd	ug,
12-05-84	4545	OB-7A	Fluoranthene	nd	ug,
12-05-84	4545	OB-7A	Pyrene	nd	ug,
12-05-84	4545	OB-7A	Benzidine	nd	ug,

AR307337

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4545	OB-7A	Butyl benzyl phthalate	nd	ug/1
12-05-84	4545	OB-7A	Bis (2-ethyl hexyl) phthalate	nd	ug/1
12-05-84	4545	OB-7A	Chrysene	nd	ug/1
12-05-84	4545	OB-7A	Benzo(a)anthracene	nd	ug/1
12-05-84	4545	OB-7A	3,3' -Dichlorobenzidine	nd	ug/1
12-05-84	4545	OB-7A	Dioctylphalate	nd	ug/1
12-05-84	4545	OB-7A	Benzo(b)fluoranthene	nd	ug/1
12-05-84	4545	OB-7A	Benzo(k)fluoranthene	nd	ug/1
12-05-84	4545	OB-7A	Benzo(a)pyrene	nd	ug/1
12-05-84	4545	OB-7A	Indeno(1,2,3-c,d)pyrene	nd	ug/1
12-05-84	4545	OB-7A	Dibenzo(a,h)anthracene	nd	ug/1
12-05-84	4545	OB-7A	Benzo(g,h,i)perylene	nd	ug/1
12-05-84	4545	OB-7A	N-nitrosidimethyl amine	nd	ug/1
12-05-84	4545	OB-7A	Chloromethane	nd	ug/1
12-05-84	4545	OB-7A	Bromomethane	nd	ug/1
12-05-84	4545	OB-7A	Vinyl Chloride	nd	ug/1
12-05-84	4545	OB-7A	Chloroethane	nd	ug/1
12-05-84	4545	OB-7A	Methylene Chloride	nd	ug/1
12-05-84	4545	OB-7A	1, 1-Dichloroethane	nd	ug/1
12-05-84	4545	OB-7A	trans-1,2-Dichloroethylene	nd	ug/1
12-05-84	4545	OB-7A	Chloroform	nd	ug/1
12-05-84	4545	OB-7A	1,2 - Dichloroethane	nd	ug/1
12-05-84	4545	OB-7A	1,1,1-Trichloroethane	nd	ug/1
12-05-84	4545	OB-7A	Carbon Tetrachloride	nd	ug/1
12-05-84	4545	OB-7A	Bromodichloromethane	nd	ug/1
12-05-84	4545	OB-7A	1,2-Dichloropropane	nd	ug/1

AR307838

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN
12-05-84	4545	OB-7A	trans-1,3-Dichloropropene	nd u
12-05-84	4545	OB-7A	Trichloroethylene	nd u
12-05-84	4545	OB-7A	Dibronochloromethane	nd u
12-05-84	4545	OB-7A	cis -1,3 -Dichloropropene	nd u
12-05-84	4545	OB-7A	1,1,2-Trichloroethane	nd u
12-05-84	4545	OB-7A	Benzene	nd u
12-05-84	4545	OB-7A	2-Chloroethylvinyl Ether	nd u
12-05-84	4545	OB-7A	Bromoform	nd u
12-05-84	4545	OB-7A	Tetrachloroethylene	nd u
12-05-84	4545	OB-7A	1,1,2,2-Tetrachloroethane	nd u
12-05-84	4545	OB-7A	Toluene	nd u
12-05-84	4545	OB-7A	Chlorobenzene	nd u
12-05-84	4545	OB-7A	Ethylbenzene	[illegible]
12-05-84	4545	OB-7A	1,1 - Dichloroethylene	nd u
12-05-84	4545	OB-7A	P-xylene	nd u
12-05-84	4545	OB-7A	M-xylene	nd u
12-05-84	4545	OB-7A	O-xylene	nd u
12-05-84	4546	OB-8A	2-Chlorophenol	nd u
12-05-84	4546	OB-8A	2-Nitrophenol	nd u
12-05-84	4546	OB-8A	Phenol	nd u
12-05-84	4546	OB-8A	2,4-Dimethylphenol	nd u
12-05-84	4546	OB-8A	2,4-Dichlorophenol	nd u
12-05-84	4546	OB-8A	2,4,6-Trichlorophenol	nd u
12-05-84	4546	OB-8A	4-Chloro-3-methylphenol	nd u
12-05-84	4546	OB-8A	2,4-Dinitrophenol	nd u
12-05-84	4546	OB-8A	2-Methyl-4,6-dinitrophenol	nd u

AR307839

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4546	OB-8A	Pentachlorophenol	nd	ug/l
12-05-84	4546	OB-8A	4-Nitrophenol	nd	ug/l
12-05-84	4546	OB-8A	1,3-Dichlorobenzene	nd	ug/l
12-05-84	4546	OB-8A	1,4-Dichlorobenzene	nd	ug/l
12-05-84	4546	OB-8A	Hexachloroethane	nd	ug/l
12-05-84	4546	OB-8A	Bis (2-chloroisopropyl)ether	nd	ug/l
12-05-84	4546	OB-8A	Hexachlorocyclopentadiene	nd	ug/l
12-05-84	4546	OB-8A	2-Chloronaphthalene	nd	ug/l
12-05-84	4546	OB-8A	Acenaphthylene	nd	ug/l
12-05-84	4546	OB-8A	Acenaphthene	nd	ug/l
12-05-84	4546	OB-8A	Dimethyl phthalate	nd	ug/l
12-05-84	4546	OB-8A	2,6-Dinitrotoluene	nd	ug/l
12-05-84	4546	OB-8A	Fluorene	nd	ug/l
12-05-84	4546	OB-8A	2,4-Dinitrotoluene	nd	ug/l
12-05-84	4546	OB-8A	1,2-Diphenylhydrazine	nd	ug/l
12-05-84	4546	OB-8A	Diethyl phthalate	nd	ug/l
12-05-84	4546	OB-8A	N-nitrosodiphenylamine	nd	ug/l
12-05-84	4546	OB-8A	Hexachlorobenzene	nd	ug/l
12-05-84	4546	OB-8A	4-Bromophenyl phenyl ether	nd	ug/l
12-05-84	4546	OB-8A	Phenanthrene	nd	ug/l
12-05-84	4546	OB-8A	Anthracene	nd	ug/l
12-05-84	4546	OB-8A	Dibutylphthalate	nd	ug/l
12-05-84	4546	OB-8A	Fluoranthene	nd	ug/l
12-05-84	4546	OB-8A	Pyrene	nd	ug/l
12-05-84	4546	OB-8A	Benzidine	nd	ug/l
12-05-84	4546	OB-8A	Butyl benzyl phthalate	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN.	UI
12-05-84	4546	OB-8A	Bis (2-ethyl hexyl) phthalate	nd	ug
12-05-84	4546	OB-8A	Chrysene	nd	ug
12-05-84	4546	OB-8A	Benzo(a)anthracene	nd	ug
12-05-84	4546	OB-8A	3,3' -Dichlorobenzidine	nd	ug
12-05-84	4546	OB-8A	Dioctylphalate	nd	ug
12-05-84	4546	OB-8A	Benzo(b)fluoranthene	nd	ug
12-05-84	4546	OB-8A	Benzo(k)fluoranthene	nd	ug
12-05-84	4546	OB-8A	Benzo(a)pyrene	nd	ug
12-05-84	4546	OB-8A	Indeno(1,2,3-c,d)pyrene	nd	ug
12-05-84	4546	OB-8A	Dibenzo(a,h)anthracene	nd	ug
12-05-84	4546	OB-8A	Benzo(g,h,i)perylene	nd	ug
12-05-84	4546	OB-8A	N-nitrosidimethyl amine	nd	ug
12-05-84	4546	OB-8A	Chloromethane	[illegible]	ug
12-05-84	4546	OB-8A	Bromomethane	nd	ug
12-05-84	4546	OB-8A	Vinyl Chloride	nd	ug
12-05-84	4546	OB-8A	Chloroethane	nd	ug
12-05-84	4546	OB-8A	Methylene Chloride	nd	ug
12-05-84	4546	OB-8A	1, 1-Dichloroethane	nd	ug
12-05-84	4546	OB-8A	trans-1,2-Dichloroethylene	nd	ug
12-05-84	4546	OB-8A	Chloroform	nd	ug
12-05-84	4546	OB-8A	1,2 - Dichloroethane	nd	ug
12-05-84	4546	OB-8A	1,1,1-Trichloroethane	nd	ug
12-05-84	4546	OB-8A	Carbon Tetrachloride	nd	ug
12-05-84	4546	OB-8A	Bromodichloromethane	nd	ug
12-05-84	4546	OB-8A	1,2-Dichloropropane	nd	ug
12-05-84	4546	OB-8A	trans-1,3-Dichloropropene	nd	ug

AR307844

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
12-05-84	4546	OB-8A	Trichloroethylene	nd	ug/l
12-05-84	4546	OB-8A	Dibronochloromethane	nd	ug/l
12-05-84	4546	OB-8A	cis -1,3 -Dichloropropene	nd	ug/l
12-05-84	4546	OB-8A	1,1,2-Trichloroethane	nd	ug/l
12-05-84	4546	OB-8A	Benzene	nd	ug/l
12-05-84	4546	OB-8A	2-Chloroethylvinyl Ether	nd	ug/l
12-05-84	4546	OB-8A	Bromoform	nd	ug/l
12-05-84	4546	OB-8A	Tetrachloroethylene	nd	ug/l
12-05-84	4546	OB-8A	1,1,2,2-Tetrachloroethane	nd	ug/l
12-05-84	4546	OB-8A	Toluene	nd	ug/l
12-05-84	4546	OB-8A	Chlorobenzene	nd	ug/l
12-05-84	4546	OB-8A	Ethylbenzene	nd	ug/l
12-05-84	4546	OB-8A	1,1 - Dichloroethylene	nd	ug/l
12-05-84	4546	OB-8A	P-xylene	nd	ug/l
12-05-84	4546	OB-8A	M-xylene	nd	ug/l
12-05-84	4546	OB-8A	O-xylene	nd	ug/l
12-05-84	4548	Simon	2-Chlorophenol	nd	ug/l
12-05-84	4548	Simon	2-Nitrophenol	nd	ug/l
12-05-84	4548	Simon	Phenol	nd	ug/l
12-05-84	4548	Simon	2,4-Dimethylphenol	nd	ug/l
12-05-84	4548	Simon	2,4-Dichlorophenol	nd	ug/l
12-05-84	4548	Simon	2,4,6-Trichlorophenol	nd	ug/l
12-05-84	4548	Simon	4-Chloro-3-methylphenol	nd	ug/l
12-05-84	4548	Simon	2,4-Dinitrophenol	nd	ug/l
12-05-84	4548	Simon	2-Methyl-4,6-dinitrophenol	nd	ug/l
12-05-84	4548	Simon	Pentachlorophenol	nd	ug/l

AR307842

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN.	U
12-05-84	4548	Simon	4-Nitrophenol	nd	u
12-05-84	4548	Simon	1,3-Dichlorobenzene	nd	u
12-05-84	4548	Simon	1,4-Dichlorobenzene	nd	u
12-05-84	4548	Simon	Hexachloroethane	nd	u
12-05-84	4548	Simon	Bis (2-chloroisopropyl)ether	nd	u
12-05-84	4548	Simon	Hexachlorocyclopentadiene	nd	u
12-05-84	4548	Simon	2-Chloronaphthalene	nd	u
12-05-84	4548	Simon	Acenaphthylene	nd	u
12-05-84	4548	Simon	Acenaphthene	nd	u
12-05-84	4548	Simon	Dimethyl phthalate	nd	u
12-05-84	4548	Simon	2,6-Dinitrotoluene	nd	u
12-05-84	4548	Simon	Fluorene	nd	u
12-05-84	4548	Simon	2,4-Dinitrotoluene		
12-05-84	4548	Simon	1,2-Diphenylhydrazine	nd	u
12-05-84	4548	Simon	Diethyl phthalate	nd	u
12-05-84	4548	Simon	N-nitrosodiphenylamine	nd	u
12-05-84	4548	Simon	Hexachlorobenzene	nd	ug
12-05-84	4548	Simon	4-Bromophenyl phenyl ether	nd	ug
12-05-84	4548	Simon	Phenanthrene	nd	ug
12-05-84	4548	Simon	Anthracene	nd	ug
12-05-84	4548	Simon	Dibutylphthalate	nd	ug
12-05-84	4548	Simon	Fluoranthene	nd	ug
12-05-84	4548	Simon	Pyrene	nd	ug
12-05-84	4548	Simon	Benzidine	nd	ug
12-05-84	4548	Simon	Butyl benzyl phthalate	nd	ug
12-05-84	4548	Simon	Bis (2-ethyl hexyl) phthalate	nd	ug

AR307843

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4548	Simon	Chrysene	nd	ug/l
12-05-84	4548	Simon	Benzo(a)anthracene	nd	ug/l
12-05-84	4548	Simon	3,3' -Dichlorobenzidine	nd	ug/l
12-05-84	4548	Simon	Dioctylphalate	nd	ug/l
12-05-84	4548	Simon	Benzo(b)fluoranthene	nd	ug/l
12-05-84	4548	Simon	Benzo(k)fluoranthene	nd	ug/l
12-05-84	4548	Simon	Benzo(a)pyrene	nd	ug/l
12-05-84	4548	Simon	Indeno(1,2,3-c,d)pyrene	nd	ug/l
12-05-84	4548	Simon	Dibenzo(a,h)anthracene	nd	ug/l
12-05-84	4548	Simon	Benzo(g,h,i)perylene	nd	ug/l
12-05-84	4548	Simon	N-nitrosidimethyl amine	nd	ug/l
12-05-84	4548	Simon	Chloromethane	nd	ug/l
12-05-84	4548	Simon	Bromomethane	nd	ug/l
12-05-84	4548	Simon	Vinyl Chloride	nd	ug/l
12-05-84	4548	Simon	Chloroethane	nd	ug/l
12-05-84	4548	Simon	Methylene Chloride	nd	ug/l
12-05-84	4548	Simon	1, 1-Dichloroethane	nd	ug/l
12-05-84	4548	Simon	trans-1,2-Dichloroethylene	nd	ug/l
12-05-84	4548	Simon	Chloroform	nd	ug/l
12-05-84	4548	Simon	1,2 - Dichloroethane	nd	ug/l
12-05-84	4548	Simon	1,1,1-Trichloroethane	nd	ug/l
12-05-84	4548	Simon	Carbon Tetrachloride	nd	ug/l
12-05-84	4548	Simon	Bromodichloromethane	nd	ug/l
12-05-84	4548	Simon	1,2-Dichloropropane	nd	ug/l
12-05-84	4548	Simon	trans-1,3-Dichloropropene	nd	ug/l
12-05-84	4548	Simon	Trichloroethylene	nd	ug/l

AR307844

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN...
12-05-84	4548	Simon	Dibronochloromethane	nd
12-05-84	4548	Simon	cis -1,3 -Dichloropropene	nd
12-05-84	4548	Simon	1,1,2-Trichloroethane	nd
12-05-84	4548	Simon	Benzene	nd
12-05-84	4548	Simon	2-Chloroethylvinyl Ether	nd
12-05-84	4548	Simon	Bromoform	nd
12-05-84	4548	Simon	Tetrachloroethylene	nd
12-05-84	4548	Simon	1,1,2,2-Tetrachloroethane	nd
12-05-84	4548	Simon	Toluene	nd
12-05-84	4548	Simon	Chlorobenzene	nd
12-05-84	4548	Simon	Ethylbenzene	nd
12-05-84	4548	Simon	1,1 - Dichloroethylene	nd
12-05-84	4548	Simon	P-xylene	
12-05-84	4548	Simon	M-xylene	nd
12-05-84	4548	Simon	O-xylene	nd
12-05-84	4549	Harmic	2-Chlorophenol	nd
12-05-84	4549	Harmic	2-Nitrophenol	nd
12-05-84	4549	Harmic	Phenol	nd
12-05-84	4549	Harmic	2,4-Dimethylphenol	nd
12-05-84	4549	Harmic	2,4-Dichlorophenol	nd
12-05-84	4549	Harmic	2,4,6-Trichlorophenol	nd
12-05-84	4549	Harmic	4-Chloro-3-methylphenol	nd
12-05-84	4549	Harmic	2,4-Dinitrophenol	nd
12-05-84	4549	Harmic	2-Methyl-4,6-dinitrophenol	nd
12-05-84	4549	Harmic	Pentachlorophenol	nd
12-05-84	4549	Harmic	4-Nitrophenol	nd

AR307840

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
12-05-84	4549	Harmic	1,3-Dichlorobenzene	nd	ug
12-05-84	4549	Harmic	1,4-Dichlorobenzene	nd	ug
12-05-84	4549	Harmic	Hexachloroethane	nd	ug
12-05-84	4549	Harmic	Bis (2-chloroisopropyl)ether	nd	ug
12-05-84	4549	Harmic	Hexachlorocyclopentadiene	nd	ug
12-05-84	4549	Harmic	2-Chloronaphthalene	nd	ug
12-05-84	4549	Harmic	Acenaphthylene	nd	ug
12-05-84	4549	Harmic	Acenaphthene	nd	ug
12-05-84	4549	Harmic	Dimethyl phthalate	nd	ug
12-05-84	4549	Harmic	2,6-Dinitrotoluene	nd	ug
12-05-84	4549	Harmic	Fluorene	nd	ug
12-05-84	4549	Harmic	2,4-Dinitrotoluene	nd	ug
12-05-84	4549	Harmic	1,2-Diphenylhydrazine	nd	ug
12-05-84	4549	Harmic	Diethyl phthalate	nd	ug
12-05-84	4549	Harmic	N-nitrosodiphenylamine	nd	ug
12-05-84	4549	Harmic	Hexachlorobenzene	nd	ug
12-05-84	4549	Harmic	4-Bromophenyl phenyl ether	nd	ug
12-05-84	4549	Harmic	Phenanthrene	nd	ug
12-05-84	4549	Harmic	Anthracene	nd	ug
12-05-84	4549	Harmic	Dibutylphthalate	nd	ug
12-05-84	4549	Harmic	Fluoranthene	nd	ug
12-05-84	4549	Harmic	Pyrene	nd	ug
12-05-84	4549	Harmic	Benzidine	nd	ug
12-05-84	4549	Harmic	Butyl benzyl phthalate	nd	ug
12-05-84	4549	Harmic	Bis (2-ethyl hexyl) phthalate	nd	ug
12-05-84	4549	Harmic	Chrysene	nd	ug

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN	U
12-05-84	4549	Harmic	Benzo(a)anthracene	nd	u
12-05-84	4549	Harmic	3,3' -Dichlorobenzidine	nd	u
12-05-84	4549	Harmic	Dioctylphalate	nd	u
12-05-84	4549	Harmic	Benzo(b)fluoranthene	nd	u
12-05-84	4549	Harmic	Benzo(k)fluoranthene	nd	u
12-05-84	4549	Harmic	Benzo(a)pyrene	nd	u
12-05-84	4549	Harmic	Indeno(1,2,3-c,d)pyrene	nd	u
12-05-84	4549	Harmic	Dibenzo(a,h)anthracene	nd	u
12-05-84	4549	Harmic	Benzo(g,h,i)perylene	nd	u
12-05-84	4549	Harmic	N-nitrosidimethyl amine	nd	u
12-05-84	4549	Harmic	Chloromethane	nd	u
12-05-84	4549	Harmic	Bromomethane	nd	u
12-05-84	4549	Harmic	Vinyl Chloride		u
12-05-84	4549	Harmic	Chloroethane	nd	u
12-05-84	4549	Harmic	Methylene Chloride	nd	u
12-05-84	4549	Harmic	1, 1-Dichloroethane	nd	u
12-05-84	4549	Harmic	trans-1,2-Dichloroethylene	nd	u
12-05-84	4549	Harmic	Chloroform	nd	u
12-05-84	4549	Harmic	1,2 - Dichloroethane	nd	u
12-05-84	4549	Harmic	1,1,1-Trichloroethane	nd	u
12-05-84	4549	Harmic	Carbon Tetrachloride	nd	u
12-05-84	4549	Harmic	Bromodichloromethane	nd	u
12-05-84	4549	Harmic	1,2-Dichloropropane	nd	u
12-05-84	4549	Harmic	trans-1,3-Dichloropropene	nd	u
12-05-84	4549	Harmic	Trichloroethylene	nd	u
12-05-84	4549	Harmic	Dibronochloromethane	nd	u

AR307847

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4549	Harmic	cis -1,3 -Dichloropropene	nd	ug/l
12-05-84	4549	Harmic	1,1,2-Trichloroethane	nd	ug/l
12-05-84	4549	Harmic	Benzene	nd	ug/l
12-05-84	4549	Harmic	2-Chloroethylvinyl Ether	nd	ug/l
12-05-84	4549	Harmic	Bromoform	nd	ug/l
12-05-84	4549	Harmic	Tetrachloroethylene	nd	ug/l
12-05-84	4549	Harmic	1,1,2,2-Tetrachloroethane	nd	ug/l
12-05-84	4549	Harmic	Toluene	nd	ug/l
12-05-84	4549	Harmic	Chlorobenzene	nd	ug/l
12-05-84	4549	Harmic	Ethylbenzene	nd	ug/l
12-05-84	4549	Harmic	1,1 - Dichloroethylene	nd	ug/l
12-05-84	4549	Harmic	P-xylene	nd	ug/l
12-05-84	4549	Harmic	M-xylene	nd	ug/l
12-05-84	4549	Harmic	O-xylene	nd	ug/l
12-05-84	4550	Williams	2-Chlorophenol	nd	ug/l
12-05-84	4550	Williams	2-Nitrophenol	nd	ug/l
12-05-84	4550	Williams	Phenol	nd	ug/l
12-05-84	4550	Williams	2,4-Dimethylphenol	nd	ug/l
12-05-84	4550	Williams	2,4-Dichlorophenol	nd	ug/l
12-05-84	4550	Williams	2,4,6-Trichlorophenol	nd	ug/l
12-05-84	4550	Williams	4-Chloro-3-methylphenol	nd	ug/l
12-05-84	4550	Williams	2,4-Dinitrophenol	nd	ug/l
12-05-84	4550	Williams	2-Methyl-4,6-dinitrophenol	nd	ug/l
12-05-84	4550	Williams	Pentachlorophenol	nd	ug/l
12-05-84	4550	Williams	4-Nitrophenol	nd	ug/l
12-05-84	4550	Williams	1,3-Dichlorobenzene	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
12-05-84	4550	Williams	1,4-Dichlorobenzene	nd ug
12-05-84	4550	Williams	Hexachloroethane	nd ug
12-05-84	4550	Williams	Bis (2-chloroisopropyl)ether	nd ug
12-05-84	4550	Williams	Hexachlorocyclopentadiene	nd ug
12-05-84	4550	Williams	2-Chloronaphthalene	nd ug
12-05-84	4550	Williams	Acenaphthylene	nd ug
12-05-84	4550	Williams	Acenaphthene	nd ug
12-05-84	4550	Williams	Dimethyl phthalate	nd ug
12-05-84	4550	Williams	2,6-Dinitrotoluene	nd ug
12-05-84	4550	Williams	Fluorene	nd ug
12-05-84	4550	Williams	2,4-Dinitrotoluene	nd ug
12-05-84	4550	Williams	1,2-Diphenylhydrazine	nd ug
12-05-84	4550	Williams	Diethyl phthalate	[illegible]
12-05-84	4550	Williams	N-nitrosodiphenylamine	nd ug
12-05-84	4550	Williams	Hexachlorobenzene	nd ug
12-05-84	4550	Williams	4-Bromophenyl phenyl ether	nd ug
12-05-84	4550	Williams	Phenanthrene	nd ug
12-05-84	4550	Williams	Anthracene	nd ug
12-05-84	4550	Williams	Dibutylphthalate	nd ug
12-05-84	4550	Williams	Fluoranthene	nd ug
12-05-84	4550	Williams	Pyrene	nd ug
12-05-84	4550	Williams	Benzidine	nd ug
12-05-84	4550	Williams	Butyl benzyl phthalate	nd ug
12-05-84	4550	Williams	Bis (2-ethyl hexyl) phthalate	nd ug
12-05-84	4550	Williams	Chrysene	nd ug
12-05-84	4550	Williams	Benzo(a)anthracene	nd ug

AR307849

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT!
12-05-84	4550	Williams	3,3' -Dichlorobenzidine	nd	ug/l
12-05-84	4550	Williams	Dioctylphalate	nd	ug/l
12-05-84	4550	Williams	Benzo(b)fluoranthene	nd	ug/l
12-05-84	4550	Williams	Benzo(k)fluoranthene	nd	ug/l
12-05-84	4550	Williams	Benzo(a)pyrene	nd	ug/l
12-05-84	4550	Williams	Indeno(1,2,3-c,d)pyrene	nd	ug/l
12-05-84	4550	Williams	Dibenzo(a,h)anthracene	nd	ug/l
12-05-84	4550	Williams	Benzo(g,h,i)perylene	nd	ug/l
12-05-84	4550	Williams	N-nitrosidimethyl amine	nd	ug/l
12-05-84	4550	Williams	Chloromethane	nd	ug/l
12-05-84	4550	Williams	Bromomethane	nd	ug/l
12-05-84	4550	Williams	Vinyl Chloride	nd	ug/l
12-05-84	4550	Williams	Chloroethane	nd	ug/l
12-05-84	4550	Williams	Methylene Chloride	nd	ug/l
12-05-84	4550	Williams	1, 1-Dichloroethane	nd	ug/l
12-05-84	4550	Williams	trans-1,2-Dichloroethylene	nd	ug/l
12-05-84	4550	Williams	Chloroform	nd	ug/l
12-05-84	4550	Williams	1,2 - Dichloroethane	nd	ug/l
12-05-84	4550	Williams	1,1,1-Trichloroethane	nd	ug/l
12-05-84	4550	Williams	Carbon Tetrachloride	nd	ug/l
12-05-84	4550	Williams	Bromodichloromethane	nd	ug/l
12-05-84	4550	Williams	1,2-Dichloropropane	nd	ug/l
12-05-84	4550	Williams	trans-1,3-Dichloropropene	nd	ug/l
12-05-84	4550	Williams	Trichloroethylene	nd	ug/l
12-05-84	4550	Williams	Dibromochloromethane	nd	ug/l
12-05-84	4550	Williams	cis -1,3 -Dichloropropene	nd	ug/l

AR307850

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN	U
12-05-84	4550	Williams	1,1,2-Trichloroethane	nd	u
12-05-84	4550	Williams	Benzene	nd	u
12-05-84	4550	Williams	2-Chloroethylvinyl Ether	nd	u
12-05-84	4550	Williams	Bromoform	nd	u
12-05-84	4550	Williams	Tetrachloroethylene	nd	u
12-05-84	4550	Williams	1,1,2,2-Tetrachloroethane	nd	u
12-05-84	4550	Williams	Toluene	nd	u
12-05-84	4550	Williams	Chlorobenzene	nd	u
12-05-84	4550	Williams	Ethylbenzene	nd	u
12-05-84	4550	Williams	1,1 - Dichloroethylene	nd	u
12-05-84	4550	Williams	P-xylene	nd	u
12-05-84	4550	Williams	M-xylene	nd	u
12-05-84	4550	Williams	O-xylene		u
12-05-84	4551	Gassaway	2-Chlorophenol	nd	u
12-05-84	4551	Gassaway	2-Nitrophenol	nd	u
12-05-84	4551	Gassaway	Phenol	nd	u
12-05-84	4551	Gassaway	2,4-Dimethylphenol	nd	u
12-05-84	4551	Gassaway	2,4-Dichlorophenol	nd	u
12-05-84	4551	Gassaway	2,4,6-Trichlorophenol	nd	u
12-05-84	4551	Gassaway	4-Chloro-3-methylphenol	nd	u
12-05-84	4551	Gassaway	2,4-Dinitrophenol	nd	u
12-05-84	4551	Gassaway	2-Methyl-4,6-dinitrophenol	nd	u
12-05-84	4551	Gassaway	Pentachlorophenol	nd	u
12-05-84	4551	Gassaway	4-Nitrophenol	nd	u
12-05-84	4551	Gassaway	1,3-Dichlorobenzene	nd	u
12-05-84	4551	Gassaway	1,4-Dichlorobenzene	nd	u

AR307851

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
12-05-84	4551	Gassaway	Hexachloroethane	nd	ug/l
12-05-84	4551	Gassaway	Bis (2-chloroisopropyl)ether	nd	ug/l
12-05-84	4551	Gassaway	Hexachlorocyclopentadiene	nd	ug/l
12-05-84	4551	Gassaway	2-Chloronaphthalene	nd	ug/l
12-05-84	4551	Gassaway	Acenaphthylene	nd	ug/l
12-05-84	4551	Gassaway	Acenaphthene	nd	ug/l
12-05-84	4551	Gassaway	Dimethyl phthalate	nd	ug/l
12-05-84	4551	Gassaway	2,6-Dinitrotoluene	nd	ug/l
12-05-84	4551	Gassaway	Fluorene	nd	ug/l
12-05-84	4551	Gassaway	2,4-Dinitrotoluene	nd	ug/l
12-05-84	4551	Gassaway	1,2-Diphenylhydrazine	nd	ug/l
12-05-84	4551	Gassaway	Diethyl phthalate	nd	ug/l
12-05-84	4551	Gassaway	N-nitrosodiphenylamine	nd	ug/l
12-05-84	4551	Gassaway	Hexachlorobenzene	nd	ug/l
12-05-84	4551	Gassaway	4-Bromophenyl phenyl ether	nd	ug/l
12-05-84	4551	Gassaway	Phenanthrene	nd	ug/l
12-05-84	4551	Gassaway	Anthracene	nd	ug/l
12-05-84	4551	Gassaway	Dibutylphthalate	nd	ug/l
12-05-84	4551	Gassaway	Fluoranthene	nd	ug/l
12-05-84	4551	Gassaway	Pyrene	nd	ug/l
12-05-84	4551	Gassaway	Benzidine	nd	ug/l
12-05-84	4551	Gassaway	Butyl benzyl phthalate	nd	ug/l
12-05-84	4551	Gassaway	Bis (2-ethyl hexyl) phthalate	nd	ug/l
12-05-84	4551	Gassaway	Chrysene	nd	ug/l
12-05-84	4551	Gassaway	Benzo(a)anthracene	nd	ug/l
12-05-84	4551	Gassaway	3,3' -Dichlorobenzidine	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
12-05-84	4551	Gassaway	Dioctylphalate	nd ug
12-05-84	4551	Gassaway	Benzo(b)fluoranthene	nd ug
12-05-84	4551	Gassaway	Benzo(k)fluoranthene	nd ug
12-05-84	4551	Gassaway	Benzo(a)pyrene	nd ug
12-05-84	4551	Gassaway	Indeno(1,2,3-c,d)pyrene	nd ug
12-05-84	4551	Gassaway	Dibenzo(a,h)anthracene	nd ug
12-05-84	4551	Gassaway	Benzo(g,h,i)perylene	nd ug
12-05-84	4551	Gassaway	N-nitrosidimethyl amine	nd ug
12-05-84	4551	Gassaway	Chloromethane	nd ug
12-05-84	4551	Gassaway	Bromomethane	nd ug
12-05-84	4551	Gassaway	Vinyl Chloride	nd ug
12-05-84	4551	Gassaway	Chloroethane	nd ug
12-05-84	4551	Gassaway	Methylene Chloride	[illegible]
12-05-84	4551	Gassaway	1, 1-Dichloroethane	nd ug
12-05-84	4551	Gassaway	trans-1,2-Dichloroethylene	nd ug
12-05-84	4551	Gassaway	Chloroform	nd ug
12-05-84	4551	Gassaway	1,2 - Dichloroethane	nd ug
12-05-84	4551	Gassaway	1,1,1-Trichloroethane	nd ug
12-05-84	4551	Gassaway	Carbon Tetrachloride	nd ug
12-05-84	4551	Gassaway	Bromodichloromethane	nd ug
12-05-84	4551	Gassaway	1,2-Dichloropropane	nd ug
12-05-84	4551	Gassaway	trans-1,3-Dichloropropene	nd ug
12-05-84	4551	Gassaway	Trichloroethylene	nd ug
12-05-84	4551	Gassaway	Dibromochloromethane	nd ug
12-05-84	4551	Gassaway	cis -1,3 -Dichloropropene	nd ug
12-05-84	4551	Gassaway	1,1,2-Trichloroethane	nd ug

AR307853

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4551	Gassaway	Benzene	nd	ug/l
12-05-84	4551	Gassaway	2-Chloroethylvinyl Ether	nd	ug/l
12-05-84	4551	Gassaway	Bromoform	nd	ug/l
12-05-84	4551	Gassaway	Tetrachloroethylene	nd	ug/l
12-05-84	4551	Gassaway	1,1,2,2-Tetrachloroethane	nd	ug/l
12-05-84	4551	Gassaway	Toluene	nd	ug/l
12-05-84	4551	Gassaway	Chlorobenzene	nd	ug/l
12-05-84	4551	Gassaway	Ethylbenzene	nd	ug/l
12-05-84	4551	Gassaway	1,1 - Dichloroethylene	nd	ug/l
12-05-84	4551	Gassaway	P-xylene	nd	ug/l
12-05-84	4551	Gassaway	M-xylene	<2.0	ug/l
12-05-84	4551	Gassaway	O-xylene	nd	ug/l
12-05-84	4578	OB-9A	2-Chlorophenol	nd	ug/l
12-05-84	4578	OB-9A	2-Nitrophenol	nd	ug/l
12-05-84	4578	OB-9A	Phenol	nd	ug/l
12-05-84	4578	OB-9A	2,4-Dimethylphenol	nd	ug/l
12-05-84	4578	OB-9A	2,4-Dichlorophenol	nd	ug/l
12-05-84	4578	OB-9A	2,4,6-Trichlorophenol	nd	ug/l
12-05-84	4578	OB-9A	4-Chloro-3-methylphenol	nd	ug/l
12-05-84	4578	OB-9A	2,4-Dinitrophenol	nd	ug/l
12-05-84	4578	OB-9A	2-Methyl-4,6-dinitrophenol	nd	ug/l
12-05-84	4578	OB-9A	Pentachlorophenol	nd	ug/l
12-05-84	4578	OB-9A	4-Nitrophenol	nd	ug/l
12-05-84	4578	OB-9A	1,3-Dichlorobenzene	nd	ug/l
12-05-84	4578	OB-9A	1,4-Dichlorobenzene	nd	ug/l
12-05-84	4578	OB-9A	Hexachloroethane	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN	J
12-05-84	4578	OB-9A	Bis (2-chloroisopropyl)ether	nd	u
12-05-84	4578	OB-9A	Hexachlorocyclopentadiene	nd	u
12-05-84	4578	OB-9A	2-Chloronaphthalene	nd	u
12-05-84	4578	OB-9A	Acenaphthylene	nd	u
12-05-84	4578	OB-9A	Acenaphthene	nd	u
12-05-84	4578	OB-9A	Dimethyl phthalate	nd	u
12-05-84	4578	OB-9A	2,6-Dinitrotoluene	nd	u
12-05-84	4578	OB-9A	Fluorene	nd	u
12-05-84	4578	OB-9A	2,4-Dinitrotoluene	nd	u
12-05-84	4578	OB-9A	1,2-Diphenylhydrazine	nd	u
12-05-84	4578	OB-9A	Diethyl phthalate	nd	u
12-05-84	4578	OB-9A	N-nitrosodiphenylamine	nd	u
12-05-84	4578	OB-9A	Hexachlorobenzene	[illegible]	u
12-05-84	4578	OB-9A	4-Bromophenyl phenyl ether	nd	u
12-05-84	4578	OB-9A	Phenanthrene	nd	u
12-05-84	4578	OB-9A	Anthracene	nd	u
12-05-84	4578	OB-9A	Dibutylphthalate	nd	u
12-05-84	4578	OB-9A	Fluoranthene	nd	u
12-05-84	4578	OB-9A	Pyrene	nd	u
12-05-84	4578	OB-9A	Benzidine	nd	u
12-05-84	4578	OB-9A	Butyl benzyl phthalate	nd	u
12-05-84	4578	OB-9A	Bis (2-ethyl hexyl) phthalate	nd	u
12-05-84	4578	OB-9A	Chrysene	nd	u
12-05-84	4578	OB-9A	Benzo(a)anthracene	nd	u
12-05-84	4578	OB-9A	3,3' -Dichlorobenzidine	nd	u
12-05-84	4578	OB-9A	Dioctylphalate	nd	u

AR307855

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
12-05-84	4578	OB-9A	Benzo(b)fluoranthene	nd	ug
12-05-84	4578	OB-9A	Benzo(k)fluoranthene	nd	ug
12-05-84	4578	OB-9A	Benzo(a)pyrene	nd	ug
12-05-84	4578	OB-9A	Indeno(1,2,3-c,d)pyrene	nd	ug
12-05-84	4578	OB-9A	Dibenzo(a,h)anthracene	nd	ug
12-05-84	4578	OB-9A	Benzo(g,h,i)perylene	nd	ug
12-05-84	4578	OB-9A	N-nitrosidimethyl amine	nd	ug
12-05-84	4578	OB-9A	Chloromethane	nd	ug
12-05-84	4578	OB-9A	Bromomethane	nd	ug
12-05-84	4578	OB-9A	Vinyl Chloride	nd	ug
12-05-84	4578	OB-9A	Chloroethane	nd	ug
12-05-84	4578	OB-9A	Methylene Chloride	nd	ug
12-05-84	4578	OB-9A	1, 1-Dichloroethane	nd	ug
12-05-84	4578	OB-9A	trans-1,2-Dichloroethylene	nd	ug
12-05-84	4578	OB-9A	Chloroform	nd	ug
12-05-84	4578	OB-9A	1,2 - Dichloroethane	nd	ug
12-05-84	4578	OB-9A	1,1,1-Trichloroethane	nd	ug
12-05-84	4578	OB-9A	Carbon Tetrachloride	nd	ug
12-05-84	4578	OB-9A	Bromodichloromethane	nd	ug
12-05-84	4578	OB-9A	1,2-Dichloropropane	nd	ug
12-05-84	4578	OB-9A	trans-1,3-Dichloropropene	nd	ug
12-05-84	4578	OB-9A	Trichloroethylene	nd	ug
12-05-84	4578	OB-9A	Dibromochloromethane	nd	ug
12-05-84	4578	OB-9A	cis -1,3 -Dichloropropene	nd	ug
12-05-84	4578	OB-9A	1,1,2-Trichloroethane	nd	ug
12-05-84	4578	OB-9A	Benzene	nd	ug

AR307856

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN.	U
12-05-84	4578	OB-9A	2-Chloroethylvinyl Ether	nd	u
12-05-84	4578	OB-9A	Bromoform	nd	u
12-05-84	4578	OB-9A	Tetrachloroethylene	nd	u
12-05-84	4578	OB-9A	1,1,2,2-Tetrachloroethane	nd	u
12-05-84	4578	OB-9A	Toluene	nd	u
12-05-84	4578	OB-9A	Chlorobenzene	nd	u
12-05-84	4578	OB-9A	Ethylbenzene	nd	u
12-05-84	4578	OB-9A	1,1 - Dichloroethylene	nd	u
12-05-84	4578	OB-9A	P-xylene	nd	u
12-05-84	4578	OB-9A	M-xylene	nd	u
12-05-84	4578	OB-9A	O-xylene	nd	u
12-05-84	4579	OB-9B	2-Chlorophenol	nd	u
12-05-84	4579	OB-9B	2-Nitrophenol		u
12-05-84	4579	OB-9B	Phenol	nd	u
12-05-84	4579	OB-9B	2,4-Dimethylphenol	nd	u
12-05-84	4579	OB-9B	2,4-Dichlorophenol	nd	u
12-05-84	4579	OB-9B	2,4,6-Trichlorophenol	nd	u
12-05-84	4579	OB-9B	4-Chloro-3-methylphenol	nd	u
12-05-84	4579	OB-9B	2,4-Dinitrophenol	nd	u
12-05-84	4579	OB-9B	2-Methyl-4,6-dinitrophenol	nd	u
12-05-84	4579	OB-9B	Pentachlorophenol	nd	u
12-05-84	4579	OB-9B	4-Nitrophenol	nd	u
12-05-84	4579	OB-9B	1,3-Dichlorobenzene	nd	u
12-05-84	4579	OB-9B	1,4-Dichlorobenzene	nd	u
12-05-84	4579	OB-9B	Hexachloroethane	nd	u
12-05-84	4579	OB-9B	Bis (2-chloroisopropyl)ether	nd	u

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4579	OB-9B	Hexachlorocyclopentadiene	nd	ug/l
12-05-84	4579	OB-9B	2-Chloronaphthalene	nd	ug/l
12-05-84	4579	OB-9B	Acenaphthylene	nd	ug/l
12-05-84	4579	OB-9B	Acenaphthene	nd	ug/l
12-05-84	4579	OB-9B	Dimethyl phthalate	nd	ug/l
12-05-84	4579	OB-9B	2,6-Dinitrotoluene	nd	ug/l
12-05-84	4579	OB-9B	Fluorene	nd	ug/l
12-05-84	4579	OB-9B	2,4-Dinitrotoluene	nd	ug/l
12-05-84	4579	OB-9B	1,2-Diphenylhydrazine	nd	ug/l
12-05-84	4579	OB-9B	Diethyl phthalate	nd	ug/l
12-05-84	4579	OB-9B	N-nitrosodiphenylamine	nd	ug/l
12-05-84	4579	OB-9B	Hexachlorobenzene	nd	ug/l
12-05-84	4579	OB-9B	4-Bromophenyl phenyl ether	nd	ug/l
12-05-84	4579	OB-9B	Phenanthrene	nd	ug/l
12-05-84	4579	OB-9B	Anthracene	nd	ug/l
12-05-84	4579	OB-9B	Dibutylphthalate	nd	ug/l
12-05-84	4579	OB-9B	Fluoranthene	nd	ug/l
12-05-84	4579	OB-9B	Pyrene	nd	ug/l
12-05-84	4579	OB-9B	Benzidine	nd	ug/l
12-05-84	4579	OB-9B	Butyl benzyl phthalate	nd	ug/l
12-05-84	4579	OB-9B	Bis (2-ethyl hexyl) phthalate	nd	ug/l
12-05-84	4579	OB-9B	Chrysene	nd	ug/l
12-05-84	4579	OB-9B	Benzo(a)anthracene	nd	ug/l
12-05-84	4579	OB-9B	3,3' -Dichlorobenzidine	nd	ug/l
12-05-84	4579	OB-9B	Dioctylphalate	nd	ug/l
12-05-84	4579	OB-9B	Benzo(b)fluoranthene	nd	ug/l

AR307858

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENT..	UN
12-05-84	4579	OB-9B	Benzo(k)fluoranthene	nd	ug
12-05-84	4579	OB-9B	Benzo(a)pyrene	nd	ug
12-05-84	4579	OB-9B	Indeno(1,2,3-c,d)pyrene	nd	ug
12-05-84	4579	OB-9B	Dibenzo(a,h)anthracene	nd	ug
12-05-84	4579	OB-9B	Benzo(g,h,i)perylene	nd	ug
12-05-84	4579	OB-9B	N-nitrosidimethyl amine	nd	ug
12-05-84	4579	OB-9B	Chloromethane	nd	ug
12-05-84	4579	OB-9B	Bromomethane	nd	ug
12-05-84	4579	OB-9B	Vinyl Chloride	nd	ug
12-05-84	4579	OB-9B	Chloroethane	nd	ug
12-05-84	4579	OB-9B	Methylene Chloride	nd	ug
12-05-84	4579	OB-9B	1, 1-Dichloroethane	nd	ug
12-05-84	4579	OB-9B	trans-1,2-Dichloroethylene		g
12-05-84	4579	OB-9B	Chloroform	nd	ug
12-05-84	4579	OB-9B	1,2 - Dichloroethane	nd	ug
12-05-84	4579	OB-9B	1,1,1-Trichloroethane	nd	ug
12-05-84	4579	OB-9B	Carbon Tetrachloride	nd	ug
12-05-84	4579	OB-9B	Bromodichloromethane	nd	ug
12-05-84	4579	OB-9B	1,2-Dichloropropane	nd	ug
12-05-84	4579	OB-9B	trans-1,3-Dichloropropene	nd	ug
12-05-84	4579	OB-9B	Trichloroethylene	2.6	ug
12-05-84	4579	OB-9B	Dibronochloromethane	nd	ug
12-05-84	4579	OB-9B	cis -1,3 -Dichloropropene	nd	ug
12-05-84	4579	OB-9B	1,1,2-Trichloroethane	nd	ug
12-05-84	4579	OB-9B	Benzene	nd	ug
12-05-84	4579	OB-9B	2-Chloroethylvinyl Ether		ug

AR307859

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4579	OB-9B	Bromoform	nd	ug/l
12-05-84	4579	OB-9B	Tetrachloroethylene	nd	ug/l
12-05-84	4579	OB-9B	1,1,2,2-Tetrachloroethane	nd	ug/l
12-05-84	4579	OB-9B	Toluene	nd	ug/l
12-05-84	4579	OB-9B	Chlorobenzene	nd	ug/l
12-05-84	4579	OB-9B	Ethylbenzene	nd	ug/l
12-05-84	4579	OB-9B	1,1 - Dichloroethylene	nd	ug/l
12-05-84	4579	OB-9B	P-xylene	nd	ug/l
12-05-84	4579	OB-9B	M-xylene	nd	ug/l
12-05-84	4579	OB-9B	O-xylene	nd	ug/l
12-05-84	4580	OB-1A	2-Chlorophenol	nd	ug/l
12-05-84	4580	OB-1A	2-Nitrophenol	nd	ug/l
12-05-84	4580	OB-1A	Phenol	nd	ug/l
12-05-84	4580	OB-1A	2,4-Dimethylphenol	nd	ug/l
12-05-84	4580	OB-1A	2,4-Dichlorophenol	nd	ug/l
12-05-84	4580	OB-1A	2,4,6-Trichlorophenol	nd	ug/l
12-05-84	4580	OB-1A	4-Chloro-3-methylphenol	nd	ug/l
12-05-84	4580	OB-1A	2,4-Dinitrophenol	nd	ug/l
12-05-84	4580	OB-1A	2-Methyl-4,6-dinitrophenol	nd	ug/l
12-05-84	4580	OB-1A	Pentachlorophenol	nd	ug/l
12-05-84	4580	OB-1A	4-Nitrophenol	nd	ug/l
12-05-84	4580	OB-1A	1,3-Dichlorobenzene	nd	ug/l
12-05-84	4580	OB-1A	1,4-Dichlorobenzene	nd	ug/l
12-05-84	4580	OB-1A	Hexachloroethane	nd	ug/l
12-05-84	4580	OB-1A	Bis (2-chloroisopropyl)ether	nd	ug/l
12-05-84	4580	OB-1A	Hexachlorocyclopentadiene	nd	ug/l

AR307860

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION	U
12-05-84	4580	OB-1A	2-Chloronaphthalene	nd	u
12-05-84	4580	OB-1A	Acenaphthylene	nd	u
12-05-84	4580	OB-1A	Acenaphthene	nd	u
12-05-84	4580	OB-1A	Dimethyl phthalate	nd	u
12-05-84	4580	OB-1A	2,6-Dinitrotoluene	nd	u
12-05-84	4580	OB-1A	Fluorene	nd	u
12-05-84	4580	OB-1A	2,4-Dinitrotoluene	nd	u
12-05-84	4580	OB-1A	1,2-Diphenylhydrazine	nd	u
12-05-84	4580	OB-1A	Diethyl phthalate	nd	u
12-05-84	4580	OB-1A	N-nitrosodiphenylamine	nd	u
12-05-84	4580	OB-1A	Hexachlorobenzene	nd	u
12-05-84	4580	OB-1A	4-Bromophenyl phenyl ether	nd	u
12-05-84	4580	OB-1A	Phenanthrene		
12-05-84	4580	OB-1A	Anthracene	nd	ug
12-05-84	4580	OB-1A	Dibutylphthalate	nd	ug
12-05-84	4580	OB-1A	Fluoranthene	nd	ug
12-05-84	4580	OB-1A	Pyrene	nd	ug
12-05-84	4580	OB-1A	Benzidine	nd	ug
12-05-84	4580	OB-1A	Butyl benzyl phthalate	nd	ug
12-05-84	4580	OB-1A	Bis (2-ethyl hexyl) phthalate	nd	ug
12-05-84	4580	OB-1A	Chrysene	nd	ug
12-05-84	4580	OB-1A	Benzo(a)anthracene	nd	ug
12-05-84	4580	OB-1A	3,3' -Dichlorobenzidine	nd	ug
12-05-84	4580	OB-1A	Dioctylphalate	nd	ug
12-05-84	4580	OB-1A	Benzo(b)fluoranthene	nd	ug
12-05-84	4580	OB-1A	Benzo(k)fluoranthene	nd	ug

AR307861

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4580	OB-1A	Benzo(a)pyrene	nd	ug/l
12-05-84	4580	OB-1A	Indeno(1,2,3-c,d)pyrene	nd	ug/l
12-05-84	4580	OB-1A	Dibenzo(a,h)anthracene	nd	ug/l
12-05-84	4580	OB-1A	Benzo(g,h,i)perylene	nd	ug/l
12-05-84	4580	OB-1A	N-nitrosidimethyl amine	nd	ug/l
12-05-84	4580	OB-1A	Chloromethane	nd	ug/l
12-05-84	4580	OB-1A	Bromomethane	nd	ug/l
12-05-84	4580	OB-1A	Vinyl Chloride	nd	ug/l
12-05-84	4580	OB-1A	Chloroethane	nd	ug/l
12-05-84	4580	OB-1A	Methylene Chloride	nd	ug/l
12-05-84	4580	OB-1A	1, 1-Dichloroethane	nd	ug/l
12-05-84	4580	OB-1A	trans-1,2-Dichloroethylene	nd	ug/l
12-05-84	4580	OB-1A	Chloroform	nd	ug/l
12-05-84	4580	OB-1A	1,2 - Dichloroethane	nd	ug/l
12-05-84	4580	OB-1A	1,1,1-Trichloroethane	1800.0	ug/l
12-05-84	4580	OB-1A	Carbon Tetrachloride	nd	ug/l
12-05-84	4580	OB-1A	Bromodichloromethane	nd	ug/l
12-05-84	4580	OB-1A	1,2-Dichloropropane	nd	ug/l
12-05-84	4580	OB-1A	trans-1,3-Dichloropropene	nd	ug/l
12-05-84	4580	OB-1A	Trichloroethylene	110000.0	ug/l
12-05-84	4580	OB-1A	Dibromochloromethane	nd	ug/l
12-05-84	4580	OB-1A	cis -1,3 -Dichloropropene	nd	ug/l
12-05-84	4580	OB-1A	1,1,2-Trichloroethane	nd	ug/l
12-05-84	4580	OB-1A	Benzene	nd	ug/l
12-05-84	4580	OB-1A	2-Chloroethylvinyl Ether	nd	ug/l
12-05-84	4580	OB-1A	Bromoform	nd	ug/l

AR307862

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCEN...	U
12-05-84	4580	OB-1A	Tetrachloroethylene	nd	u
12-05-84	4580	OB-1A	1,1,2,2-Tetrachloroethane	nd	u
12-05-84	4580	OB-1A	Toluene	324.0	u
12-05-84	4580	OB-1A	Chlorobenzene	nd	u
12-05-84	4580	OB-1A	Ethylbenzene	159.0	u
12-05-84	4580	OB-1A	1,1 - Dichloroethylene	nd	u
12-05-84	4580	OB-1A	P-xylene	111.0	u
12-05-84	4580	OB-1A	M-xylene	230.0	u
12-05-84	4580	OB-1A	O-xylene	106.0	u
12-05-84	4581	OB-6A	2-Chlorophenol	nd	u
12-05-84	4581	OB-6A	2-Nitrophenol	nd	u
12-05-84	4581	OB-6A	Phenol	nd	u
12-05-84	4581	OB-6A	2,4-Dimethylphenol		u
12-05-84	4581	OB-6A	2,4-Dichlorophenol	nd	u
12-05-84	4581	OB-6A	2,4,6-Trichlorophenol	nd	u
12-05-84	4581	OB-6A	4-Chloro-3-methylphenol	nd	u
12-05-84	4581	OB-6A	2,4-Dinitrophenol	nd	ug
12-05-84	4581	OB-6A	2-Methyl-4,6-dinitrophenol	nd	ug
12-05-84	4581	OB-6A	Pentachlorophenol	nd	ug
12-05-84	4581	OB-6A	4-Nitrophenol	nd	ug
12-05-84	4581	OB-6A	1,3-Dichlorobenzene	nd	ug
12-05-84	4581	OB-6A	1,4-Dichlorobenzene	nd	ug
12-05-84	4581	OB-6A	Hexachloroethane	nd	ug
12-05-84	4581	OB-6A	Bis (2-chloroisopropyl)ether	nd	ug
12-05-84	4581	OB-6A	Hexachlorocyclopentadiene	nd	ug
12-05-84	4581	OB-6A	2-Chloronaphthalene	nd	ug

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
12-05-84	4581	OB-6A	Acenaphthylene	nd	ug/l
12-05-84	4581	OB-6A	Acenaphthene	nd	ug/l
12-05-84	4581	OB-6A	Dimethyl phthalate	nd	ug/l
12-05-84	4581	OB-6A	2,6-Dinitrotoluene	nd	ug/l
12-05-84	4581	OB-6A	Fluorene	nd	ug/l
12-05-84	4581	OB-6A	2,4-Dinitrotoluene	nd	ug/l
12-05-84	4581	OB-6A	1,2-Diphenylhydrazine	nd	ug/l
12-05-84	4581	OB-6A	Diethyl phthalate	nd	ug/l
12-05-84	4581	OB-6A	N-nitrosodiphenylamine	nd	ug/l
12-05-84	4581	OB-6A	Hexachlorobenzene	nd	ug/
12-05-84	4581	OB-6A	4-Bromophenyl phenyl ether	nd	ug/
12-05-84	4581	OB-6A	Phenanthrene	nd	ug/
12-05-84	4581	OB-6A	Anthracene	nd	ug/
12-05-84	4581	OB-6A	Dibutylphthalate	nd	ug/
12-05-84	4581	OB-6A	Fluoranthene	nd	ug/
12-05-84	4581	OB-6A	Pyrene	nd	ug/
12-05-84	4581	OB-6A	Benzidine	nd	ug/l
12-05-84	4581	OB-6A	Butyl benzyl phthalate	nd	ug/l
12-05-84	4581	OB-6A	Bis (2-ethyl hexyl) phthalate	nd	ug/l
12-05-84	4581	OB-6A	Chrysene	nd	ug/
12-05-84	4581	OB-6A	Benzo(a)anthracene	nd	ug/
12-05-84	4581	OB-6A	3,3' -Dichlorobenzidine	nd	ug/
12-05-84	4581	OB-6A	Dioctylphalate	nd	ug/
12-05-84	4581	OB-6A	Benzo(b)fluoranthene	nd	ug/
12-05-84	4581	OB-6A	Benzo(k)fluoranthene	nd	ug/
12-05-84	4581	OB-6A	Benzo(a)pyrene	nd	ug/

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRA	U
12-05-84	4581	OB-6A	Indeno(1,2,3-c,d)pyrene	nd	u
12-05-84	4581	OB-6A	Dibenzo(a,h)anthracene	nd	:
12-05-84	4581	OB-6A	Benzo(g,h,i)perylene	nd	u
12-05-84	4581	OB-6A	N-nitrosidimethyl amine	nd	u
12-05-84	4581	OB-6A	Chloromethane	nd	u
12-05-84	4581	OB-6A	Bromomethane	nd	u
12-05-84	4581	OB-6A	Vinyl Chloride	nd	u
12-05-84	4581	OB-6A	Chloroethane	nd	u
12-05-84	4581	OB-6A	Methylene Chloride	nd	u
12-05-84	4581	OB-6A	1, 1-Dichloroethane	nd	u
12-05-84	4581	OB-6A	trans-1,2-Dichloroethylene	nd	u
12-05-84	4581	OB-6A	Chloroform	nd	u
12-05-84	4581	OB-6A	1,2 - Dichloroethane		u
12-05-84	4581	OB-6A	1,1,1-Trichloroethane	nd	u
12-05-84	4581	OB-6A	Carbon Tetrachloride	nd	u
12-05-84	4581	OB-6A	Bromodichloromethane	nd	u
12-05-84	4581	OB-6A	1,2-Dichloropropane	nd	u
12-05-84	4581	OB-6A	trans-1,3-Dichloropropene	nd	u
12-05-84	4581	OB-6A	Trichloroethylene	nd	u
12-05-84	4581	OB-6A	Dibromochloromethane	nd	u
12-05-84	4581	OB-6A	cis -1,3 -Dichloropropene	nd	u
12-05-84	4581	OB-6A	1,1,2-Trichloroethane	nd	u
12-05-84	4581	OB-6A	Benzene	nd	u
12-05-84	4581	OB-6A	2-Chloroethylvinyl Ether	nd	u
12-05-84	4581	OB-6A	Bromoform	nd	u
12-05-84	4581	OB-6A	Tetrachloroethylene	nd	u

AR307865

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4581	OB-6A	1,1,2,2-Tetrachloroethane	nd	ug/l
12-05-84	4581	OB-6A	Toluene	nd	ug/l
12-05-84	4581	OB-6A	Chlorobenzene	nd	ug/l
12-05-84	4581	OB-6A	Ethylbenzene	nd	ug/l
12-05-84	4581	OB-6A	1,1 - Dichloroethylene	nd	ug/l
12-05-84	4581	OB-6A	P-xylene	nd	ug/l
12-05-84	4581	OB-6A	M-xylene	nd	ug/l
12-05-84	4581	OB-6A	O-xylene	nd	ug/l
12-05-84	4582	OB-3A	2-Chlorophenol	nd	ug/l
12-05-84	4582	OB-3A	2-Nitrophenol	nd	ug/l
12-05-84	4582	OB-3A	Phenol	nd	ug/l
12-05-84	4582	OB-3A	2,4-Dimethylphenol	nd	ug/l
12-05-84	4582	OB-3A	2,4-Dichlorophenol	nd	ug/l
12-05-84	4582	OB-3A	2,4,6-Trichlorophenol	nd	ug/l
12-05-84	4582	OB-3A	4-Chloro-3-methylphenol	nd	ug/l
12-05-84	4582	OB-3A	2,4-Dinitrophenol	nd	ug/l
12-05-84	4582	OB-3A	2-Methyl-4,6-dinitrophenol	nd	ug/l
12-05-84	4582	OB-3A	Pentachlorophenol	nd	ug/l
12-05-84	4582	OB-3A	4-Nitrophenol	nd	ug/l
12-05-84	4582	OB-3A	1,3-Dichlorobenzene	nd	ug/l
12-05-84	4582	OB-3A	1,4-Dichlorobenzene	nd	ug/l
12-05-84	4582	OB-3A	Hexachloroethane	nd	ug/l
12-05-84	4582	OB-3A	Bis (2-chloroisopropyl)ether	nd	ug/l
12-05-84	4582	OB-3A	Hexachlorocyclopentadiene	nd	ug/l
12-05-84	4582	OB-3A	2-Chloronaphthalene	nd	ug/l
12-05-84	4582	OB-3A	Acenaphthylene	nd	ug/l

AR307866

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
12-05-84	4582	OB-3A	Acenaphthene	nd ug
12-05-84	4582	OB-3A	Dimethyl phthalate	nd ug
12-05-84	4582	OB-3A	2,6-Dinitrotoluene	nd ug
12-05-84	4582	OB-3A	Fluorene	nd ug
12-05-84	4582	OB-3A	2,4-Dinitrotoluene	nd ug
12-05-84	4582	OB-3A	1,2-Diphenylhydrazine	nd ug
12-05-84	4582	OB-3A	Diethyl phthalate	nd ug
12-05-84	4582	OB-3A	N-nitrosodiphenylamine	nd ug
12-05-84	4582	OB-3A	Hexachlorobenzene	nd ug
12-05-84	4582	OB-3A	4-Bromophenyl phenyl ether	nd ug
12-05-84	4582	OB-3A	Phenanthrene	nd ug
12-05-84	4582	OB-3A	Anthracene	nd ug
12-05-84	4582	OB-3A	Dibutylphthalate	[illegible]
12-05-84	4582	OB-3A	Fluoranthene	nd ug
12-05-84	4582	OB-3A	Pyrene	nd ug
12-05-84	4582	OB-3A	Benzidine	nd ug
12-05-84	4582	OB-3A	Butyl benzyl phthalate	nd ug
12-05-84	4582	OB-3A	Bis (2-ethyl hexyl) phthalate	nd ug
12-05-84	4582	OB-3A	Chrysene	nd ug
12-05-84	4582	OB-3A	Benzo(a)anthracene	nd ug
12-05-84	4582	OB-3A	3,3' -Dichlorobenzidine	nd ug
12-05-84	4582	OB-3A	Dioctylphalate	nd ug
12-05-84	4582	OB-3A	Benzo(b)fluoranthene	nd ug
12-05-84	4582	OB-3A	Benzo(k)fluoranthene	nd ug
12-05-84	4582	OB-3A	Benzo(a)pyrene	nd ug
12-05-84	4582	OB-3A	Indeno(1,2,3-c,d)pyrene	nd ug

AR307867

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
12-05-84	4582	OB-3A	Dibenzo(a,h)anthracene	nd	ug/l
12-05-84	4582	OB-3A	Benzo(g,h,i)perylene	nd	ug/l
12-05-84	4582	OB-3A	N-nitrosidimethyl amine	nd	ug/l
12-05-84	4582	OB-3A	Chloromethane	nd	ug/l
12-05-84	4582	OB-3A	Bromomethane	nd	ug/l
12-05-84	4582	OB-3A	Vinyl Chloride	nd	ug/l
12-05-84	4582	OB-3A	Chloroethane	nd	ug/l
12-05-84	4582	OB-3A	Methylene Chloride	nd	ug/l
12-05-84	4582	OB-3A	1, 1-Dichloroethane	nd	ug/l
12-05-84	4582	OB-3A	trans-1,2-Dichloroethylene	nd	ug/l
12-05-84	4582	OB-3A	Chloroform	nd	ug/l
12-05-84	4582	OB-3A	1,2 - Dichloroethane	nd	ug/l
12-05-84	4582	OB-3A	1,1,1-Trichloroethane	nd	ug/l
12-05-84	4582	OB-3A	Carbon Tetrachloride	nd	ug/l
12-05-84	4582	OB-3A	Bromodichloromethane	nd	ug/l
12-05-84	4582	OB-3A	1,2-Dichloropropane	nd	ug/l
12-05-84	4582	OB-3A	trans-1,3-Dichloropropene	nd	ug/l
12-05-84	4582	OB-3A	Trichloroethylene	12.8	ug/l
12-05-84	4582	OB-3A	Dibromochloromethane	nd	ug/l
12-05-84	4582	OB-3A	cis -1,3 -Dichloropropene	nd	ug/l
12-05-84	4582	OB-3A	1,1,2-Trichloroethane	nd	ug/l
12-05-84	4582	OB-3A	Benzene	nd	ug/l
12-05-84	4582	OB-3A	2-Chloroethylvinyl Ether	nd	ug/l
12-05-84	4582	OB-3A	Bromoform	nd	ug/l
12-05-84	4582	OB-3A	Tetrachloroethylene	nd	ug/l
12-05-84	4582	OB-3A	1,1,2,2-Tetrachloroethane	nd	ug/l

AR307868

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNI
12-05-84	4582	OB-3A	Toluene	nd	ug/
12-05-84	4582	OB-3A	Chlorobenzene	nd	ug/
12-05-84	4582	OB-3A	Ethylbenzene	nd	ug/
12-05-84	4582	OB-3A	1,1 - Dichloroethylene	nd	ug/
12-05-84	4582	OB-3A	P-xylene	nd	ug/
12-05-84	4582	OB-3A	M-xylene	nd	ug/
12-05-84	4582	OB-3A	O-xylene	nd	ug/
01-29-85	355	OB-5A	Trichloroethylene	4400.0	ug/
01-29-85	357	OB-2A	Trichloroethylene	340.0	ug/
01-29-85	358	OB-3A	Trichloroethylene	34.0	ug/
01-29-85	361	OB-6B	Trichloroethylene	nd	ug/
01-29-85	362	OB-7A	Trichloroethylene	nd	ug/
1-29-85	363	OB-7B	Trichloroethylene	nd	ug/
1-29-85	364	OB-8A	Trichloroethylene	nd	ug/
1-29-85	365	OB-8B	Trichloroethylene	nd	ug/1
1-31-85	382	OB-1A	Trichloroethylene	130000.0	ug/1
4-22-85	1163	OB-7A	Trichloroethylene	nd	ug/1
4-22-85	1163	OB-7A	1,1,1-Trichloroethane	nd	ug/1
4-22-85	1163	OB-7A	1,2-Dichloropropane	nd	ug/1
4-22-85	1163	OB-7A	Chloroform	nd	ug/1
4-22-85	1164	OB-7B	Trichloroethylene	nd	ug/1
4-22-85	1164	OB-7B	1,1,1-Trichloroethane	nd	ug/1
4-22-85	1164	OB-7B	1,2-Dichloropropane	nd	ug/1
4-22-85	1164	OB-7B	Chloroform	nd	ug/1
4-22-85	1165	OB-8A	Trichloroethylene	nd	ug/1
4-22-85	1165	OB-8A	1,1,1-Trichloroethane	nd	ug/1

AR307868

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
04-22-85	1165	OB-8A	1,2-Dichloropropane	nd	ug/l
04-22-85	1165	OB-8A	Chloroform	nd	ug/l
04-22-85	1166	OB-8B	Trichloroethylene	nd	ug/l
04-22-85	1166	OB-8B	1,1,1-Trichloroethane	nd	ug/l
04-22-85	1166	OB-8B	1,2-Dichloropropane	nd	ug/l
04-22-85	1166	OB-8B	Chloroform	nd	ug/l
04-22-85	1167	OB-9A	Trichloroethylene	2.2	ug/l
04-22-85	1167	OB-9A	1,1,1-Trichloroethane	nd	ug/l
04-22-85	1167	OB-9A	1,2-Dichloropropane	nd	ug/l
04-22-85	1167	OB-9A	Chloroform	nd	ug/l
04-22-85	1168	OB-9B	Trichloroethylene	2.1	ug/l
04-22-85	1168	OB-9B	1,1,1-Trichloroethane	2.1	ug/l
04-22-85	1168	OB-9B	1,2-Dichloropropane	38.0	ug/l
04-22-85	1168	OB-9B	Chloroform	1.3	ug/l
04-22-85	1169	OB-6B	Trichloroethylene	nd	ug/l
04-22-85	1169	OB-6B	1,1,1-Trichloroethane	nd	ug/l
04-22-85	1169	OB-6B	1,2-Dichloropropane	nd	ug/l
04-22-85	1169	OB-6B	Chloroform	nd	ug/l
04-22-85	1172	Simon	Trichloroethylene	nd	ug/l
04-22-85	1172	Simon	1,1,1-Trichloroethane	nd	ug/l
04-22-85	1172	Simon	1,2-Dichloropropane	nd	ug/l
04-22-85	1172	Simon	Chloroform	nd	ug/l
04-23-85	1192	OB-2A	1,2-Dichloropropane	nd	ug/l
04-23-85	1192	OB-2A	1,1,1-Trichloroethane	160.0	ug/l
04-23-85	1192	OB-2A	Trichloroethylene	12.5	ug/l
04-23-85	1192	OB-2A	1,1 - Dichloroethylene	6.4	ug/l

AR307870

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
04-23-85	1192	OB-2A	trans-1,2-Dichloroethylene	nd	ug
04-23-85	1192	OB-2A	Chloroform	nd	ug
04-23-85	1192	OB-2A	Toluene	nd	ug
04-23-85	1192	OB-2A	Ethylbenzene	nd	ug
04-23-85	1193	OB-3A	1,2-Dichloropropane	nd	ug
04-23-85	1193	OB-3A	1,1,1-Trichloroethane	3.1	ug
04-23-85	1193	OB-3A	Trichloroethylene	16.0	ug
04-23-85	1193	OB-3A	1,1 - Dichloroethylene	nd	ug
04-23-85	1193	OB-3A	trans-1,2-Dichloroethylene	nd	ug
04-23-85	1193	OB-3A	Chloroform	nd	ug
04-23-85	1193	OB-3A	Toluene	nd	ug
04-23-85	1193	OB-3A	Ethylbenzene	nd	ug
04-23-85	1194	OB-4A	1,2-Dichloropropane		g
04-23-85	1194	OB-4A	1,1,1-Trichloroethane	79.0	ug
04-23-85	1194	OB-4A	Trichloroethylene	430.0	ug
04-23-85	1194	OB-4A	1,1 - Dichloroethylene	nd	ug
04-23-85	1194	OB-4A	trans-1,2-Dichloroethylene	nd	ug/
04-23-85	1194	OB-4A	Chloroform	nd	ug/
04-23-85	1194	OB-4A	Toluene	nd	ug/
04-23-85	1194	OB-4A	Ethylbenzene	nd	ug.
04-23-85	1195	OB-5A	1,2-Dichloropropane	nd	ug.
04-23-85	1195	OB-5A	1,1,1-Trichloroethane	1300.0	ug.
04-23-85	1195	OB-5A	Trichloroethylene	1600.0	ug.
04-23-85	1195	OB-5A	1,1 - Dichloroethylene	67.0	ug.
04-23-85	1195	OB-5A	trans-1,2-Dichloroethylene	11.0	ug.
04-23-85	1195	OB-5A	Chloroform	6.0	ug.

AR307876

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
04-23-85	1195	OB-5A	Toluene	64.0	ug/l
04-23-85	1195	OB-5A	Ethylbenzene	35.0	ug/l
04-23-85	1196	Gassaway	1,2-Dichloropropane	nd	ug/l
04-23-85	1196	Gassaway	1,1,1-Trichloroethane	nd	ug/l
04-23-85	1196	Gassaway	Trichloroethylene	nd	ug/l
04-23-85	1196	Gassaway	1,1 - Dichloroethylene	nd	ug/l
04-23-85	1196	Gassaway	trans-1,2-Dichloroethylene	nd	ug/l
04-23-85	1196	Gassaway	Chloroform	nd	ug/l
04-23-85	1196	Gassaway	Toluene	nd	ug/l
04-23-85	1196	Gassaway	Ethylbenzene	nd	ug/l
04-23-85	1197	Gearhart - old	1,2-Dichloropropane	2.9	ug/l
04-23-85	1197	Gearhart - old	1,1,1-Trichloroethane	nd	ug/l
04-23-85	1197	Gearhart - old	1,1 - Dichloroethylene	nd	ug/l
04-23-85	1197	Gearhart - old	Trichloroethylene	nd	ug/l
04-23-85	1197	Gearhart - old	trans-1,2-Dichloroethylene	nd	ug/l
04-23-85	1197	Gearhart - old	Chloroform	nd	ug/l
04-23-85	1197	Gearhart - old	Toluene	nd	ug/l
04-23-85	1197	Gearhart - old	Ethylbenzene	nd	ug/l
04-23-85	1198	Harmic	1,2-Dichloropropane	nd	ug/l
04-23-85	1198	Harmic	1,1,1-Trichloroethane	nd	ug/l
04-23-85	1198	Harmic	Trichloroethylene	nd	ug/l
04-23-85	1198	Harmic	1,1 - Dichloroethylene	nd	ug/l
04-23-85	1198	Harmic	trans-1,2-Dichloroethylene	nd	ug/l
04-23-85	1198	Harmic	Chloroform	nd	ug/l
04-23-85	1198	Harmic	Toluene	nd	ug/l
04-23-85	1198	Harmic	Ethylbenzene	nd	ug/l

AR307872

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
04-23-85	1199	Williams	1,2-Dichloropropane	nd	ug
04-23-85	1199	Williams	1,1,1-Trichloroethane	nd	ug
04-23-85	1199	Williams	Trichloroethylene	nd	ug
04-23-85	1199	Williams	1,1 - Dichloroethylene	nd	ug
04-23-85	1199	Williams	trans-1,2-Dichloroethylene	nd	ug,
04-23-85	1199	Williams	Chloroform	nd	ug,
04-23-85	1199	Williams	Toluene	nd	ug,
04-23-85	1199	Williams	Ethylbenzene	nd	ug,
04-23-85	1200	Lambertson	1,2-Dichloropropane	nd	ug,
04-23-85	1200	Lambertson	1,1,1-Trichloroethane	nd	ug,
04-23-85	1200	Lambertson	Trichloroethylene	nd	ug,
04-23-85	1200	Lambertson	1,1 - Dichloroethylene	nd	ug,
04-23-85	1200	Lambertson	trans-1,2-Dichloroethylene	nd	ug/
04-23-85	1200	Lambertson	Chloroform	nd	ug/
04-23-85	1200	Lambertson	Toluene	nd	ug/
04-23-85	1200	Lambertson	Ethylbenzene	nd	ug/
08-14-85	2570	OB-5A	Trichloroethylene	250.0	ug/
08-14-85	2570	OB-5A	1,1,1-Trichloroethane	26.0	ug/
08-14-85	2570	OB-5A	Benzene	360.0	ug/
08-14-85	2570	OB-5A	Toluene	4.0	ug/
08-22-85	2696	OB-14A	1,1 - Dichloroethylene	1200.0	ug/
08-22-85	2696	OB-14A	1, 1-Dichloroethane	110.0	ug/
08-22-85	2696	OB-14A	trans-1,2-Dichloroethylene	165.0	ug/
08-22-85	2696	OB-14A	Chloroform	53.0	ug/
08-22-85	2696	OB-14A	1,1,1-Trichloroethane	18000.0	ug/
08-22-85	2696	OB-14A	Trichloroethylene	17000.0	ug/

AR307873

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-22-85	2696	OB-14A	Toluene	7.2	ug/l
08-22-85	2696	OB-14A	1,2-Dichloropropane	nd	ug/l
08-22-85	2696	OB-14A	Ethylbenzene	nd	ug/l
08-22-85	2696	OB-14A	Chlorobenzene	2.8	ug/l
08-22-85	2696	OB-14A	1,2 - Dichloroethane	7.9	ug/l
08-22-85	2697	OB-10A	1,1 - Dichloroethylene	510.0	ug/l
08-22-85	2697	OB-10A	1, 1-Dichloroethane	11.0	ug/l
08-22-85	2697	OB-10A	trans-1,2-Dichloroethylene	141.0	ug/l
08-22-85	2697	OB-10A	Chloroform	669.0	ug/l
08-22-85	2697	OB-10A	1,1,1-Trichloroethane	4200.0	ug/l
08-22-85	2697	OB-10A	Trichloroethylene	80000.0	ug/l
08-22-85	2697	OB-10A	Toluene	2300.0	ug/l
08-22-85	2697	OB-10A	1,2-Dichloropropane	nd	ug/l
08-22-85	2697	OB-10A	Ethylbenzene	1100.0	ug/l
08-22-85	2697	OB-10A	Chlorobenzene	nd	ug/l
08-22-85	2697	OB-10A	1,2 - Dichloroethane	30.0	ug/l
08-22-85	2698	OB-11A	1,1 - Dichloroethylene	3.5	ug/l
08-22-85	2698	OB-11A	1, 1-Dichloroethane	113.0	ug/l
08-22-85	2698	OB-11A	trans-1,2-Dichloroethylene	nd	ug/l
08-22-85	2698	OB-11A	Chloroform	1.9	ug/l
08-22-85	2698	OB-11A	1,1,1-Trichloroethane	110.0	ug/l
08-22-85	2698	OB-11A	Trichloroethylene	390.0	ug/l
08-22-85	2698	OB-11A	Toluene	3.9	ug/l
08-22-85	2698	OB-11A	1,2-Dichloropropane	nd	ug/l
08-22-85	2698	OB-11A	Ethylbenzene	nd	ug/l
08-22-85	2698	OB-11A	Chlorobenzene	nd	ug/l

AR307874

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNI
08-22-85	2698	OB-11A	1,2 - Dichloroethane	nd	ug/
08-22-85	2699	OB-12A	1,1 - Dichloroethylene	nd	ug/
08-22-85	2699	OB-12A	1, 1-Dichloroethane	nd	ug/
08-22-85	2699	OB-12A	trans-1,2-Dichloroethylene	nd	ug/
08-22-85	2699	OB-12A	Chloroform	1.03	ug/
08-22-85	2699	OB-12A	1,1,1-Trichloroethane	22.0	ug/
08-22-85	2699	OB-12A	Trichloroethylene	300.0	ug/
08-22-85	2699	OB-12A	Toluene	2.6	ug/
08-22-85	2699	OB-12A	1,2-Dichloropropane	nd	ug/
08-22-85	2699	OB-12A	Ethylbenzene	nd	ug/
08-22-85	2699	OB-12A	Chlorobenzene	nd	ug/
08-22-85	2699	OB-12A	1,2 - Dichloroethane	nd	ug/
08-22-85	2700	OB-13A	1,1 - Dichloroethylene	nd	ug/
08-22-85	2700	OB-13A	1, 1-Dichloroethane	nd	ug/
08-22-85	2700	OB-13A	trans-1,2-Dichloroethylene	nd	ug/
08-22-85	2700	OB-13A	Chloroform	nd	ug/
08-22-85	2700	OB-13A	1,1,1-Trichloroethane	20.0	ug/
08-22-85	2700	OB-13A	Trichloroethylene	320.0	ug/
08-22-85	2700	OB-13A	Toluene	2.7	ug/
08-22-85	2700	OB-13A	1,2-Dichloropropane	nd	ug/
08-22-85	2700	OB-13A	Ethylbenzene	nd	ug/
08-22-85	2700	OB-13A	Chlorobenzene	nd	ug/
08-22-85	2700	OB-13A	1,2 - Dichloroethane	nd	ug/
08-22-85	2701	OB-5B	1,1 - Dichloroethylene	nd	ug/
08-22-85	2701	OB-5B	1, 1-Dichloroethane	nd	ug/
08-22-85	2701	OB-5B	trans-1,2-Dichloroethylene	nd	ug/

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-22-85	2701	OB-5B	Chloroform	nd	ug/1
08-22-85	2701	OB-5B	1,1,1-Trichloroethane	nd	ug/1
08-22-85	2701	OB-5B	Trichloroethylene	3.4	ug/1
08-22-85	2701	OB-5B	Toluene	1.7	ug/1
08-22-85	2701	OB-5B	1,2-Dichloropropane	nd	ug/1
08-22-85	2701	OB-5B	Ethylbenzene	nd	ug/1
08-22-85	2701	OB-5B	Chlorobenzene	nd	ug/1
08-22-85	2701	OB-5B	1,2 - Dichloroethane	nd	ug/1
08-22-85	2703	OB-15A	1,1 - Dichloroethylene	390.0	ug/1
08-22-85	2703	OB-15A	1, 1-Dichloroethane	414.0	ug/1
08-22-85	2703	OB-15A	trans-1,2-Dichloroethylene	1000.0	ug/1
08-22-85	2703	OB-15A	Chloroform	170.0	ug/1
08-22-85	2703	OB-15A	1,1,1-Trichloroethane	4700.0	ug/1
08-22-85	2703	OB-15A	Trichloroethylene	29000.0	ug/1
08-22-85	2703	OB-15A	Toluene	110.0	ug/1
08-22-85	2703	OB-15A	1,2-Dichloropropane	nd	ug/1
08-22-85	2703	OB-15A	Ethylbenzene	88.0	ug/1
08-22-85	2703	OB-15A	Chlorobenzene	nd	ug/1
08-22-85	2703	OB-15A	1,2 - Dichloroethane	nd	ug/1
08-22-85	2704	OB-16A	1,1 - Dichloroethylene	6.7	ug/1
08-22-85	2704	OB-16A	1, 1-Dichloroethane	3.2	ug/1
08-22-85	2704	OB-16A	trans-1,2-Dichloroethylene	7.4	ug/1
08-22-85	2704	OB-16A	Chloroform	1.4	ug/1
08-22-85	2704	OB-16A	1,1,1-Trichloroethane	86.0	ug/1
08-22-85	2704	OB-16A	Trichloroethylene	1200.0	ug/1
08-22-85	2704	OB-16A	Toluene	1.0	ug/1

AR307876

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

'ATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
8-22-85	2704	OB-16A	1,2-Dichloropropane	nd	ug/l
8-22-85	2704	OB-16A	Ethylbenzene	nd	ug/l
8-22-85	2704	OB-16A	Chlorobenzene	nd	ug/l
8-22-85	2704	OB-16A	1,2 - Dichloroethane	nd	ug/l
8-22-85	2705	OB-18A	1,1 - Dichloroethylene	2.9	ug/l
8-22-85	2705	OB-18A	1, 1-Dichloroethane	nd	ug/l
8-22-85	2705	OB-18A	trans-1,2-Dichloroethylene	4.1	ug/l
8-22-85	2705	OB-18A	Chloroform	1.0	ug/l
8-22-85	2705	OB-18A	1,1,1-Trichloroethane	65.0	ug/l
8-22-85	2705	OB-18A	Trichloroethylene	890.0	ug/l
8-22-85	2705	OB-18A	Toluene	3.2	ug/l
8-22-85	2705	OB-18A	1,2-Dichloropropane	nd	ug/l
8-22-85	2705	OB-18A	Ethylbenzene	nd	ug/l
8-22-85	2705	OB-18A	Chlorobenzene	nd	ug/l
8-22-85	2705	OB-18A	1,2 - Dichloroethane	nd	ug/l
8-22-85	2706	OB-19A	1,1 - Dichloroethylene	2.6	ug/l
8-22-85	2706	OB-19A	1, 1-Dichloroethane	2.9	ug/l
8-22-85	2706	OB-19A	trans-1,2-Dichloroethylene	4.4	ug/l
8-22-85	2706	OB-19A	Chloroform	nd	ug/l
8-22-85	2706	OB-19A	1,1,1-Trichloroethane	67.0	ug/l
8-22-85	2706	OB-19A	Trichloroethylene	940.0	ug/l
8-22-85	2706	OB-19A	Toluene	11.0	ug/l
8-22-85	2706	OB-19A	1,2-Dichloropropane	nd	ug/l
8-22-85	2706	OB-19A	Ethylbenzene	nd	ug/l
8-22-85	2706	OB-19A	Chlorobenzene	nd	ug/l
8-22-85	2706	OB-19A	1,2 - Dichloroethane	nd	ug/l

AR307877

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-22-85	2707	OB-17A	1,1 - Dichloroethylene	nd	ug/l
08-22-85	2707	OB-17A	1, 1-Dichloroethane	nd	ug/l
08-22-85	2707	OB-17A	trans-1,2-Dichloroethylene	nd	ug/l
08-22-85	2707	OB-17A	Chloroform	nd	ug/l
08-22-85	2707	OB-17A	1,1,1-Trichloroethane	24.0	ug/l
08-22-85	2707	OB-17A	Trichloroethylene	350.0	ug/l
08-22-85	2707	OB-17A	Toluene	nd	ug/l
08-22-85	2707	OB-17A	1,2-Dichloropropane	nd	ug/l
08-22-85	2707	OB-17A	Ethylbenzene	nd	ug/l
08-22-85	2707	OB-17A	Chlorobenzene	nd	ug/l
08-22-85	2707	OB-17A	1,2 - Dichloroethane	nd	ug/l
08-25-85	2772	OB-8A	1,1 - Dichloroethylene	nd	ug/l
08-25-85	2772	OB-8A	1, 1-Dichloroethane	nd	ug/l
08-25-85	2772	OB-8A	Trans-1,2-Dichloroethane	nd	ug/l
08-25-85	2772	OB-8A	1,1,1-Trichloroethane	nd	ug/l
08-25-85	2772	OB-8A	Trichloroethylene	nd	ug/l
08-25-85	2772	OB-8A	Toluene	nd	ug/l
08-25-85	2772	OB-8A	1,2-Dichloropropane	nd	ug/l
08-25-85	2772	OB-8A	Ethylbenzene	nd	ug/l
08-25-85	2772	OB-8A	Chloroform	nd	ug/l
08-25-85	2773	OB-8B	1,1 - Dichloroethylene	nd	ug/l
08-25-85	2773	OB-8B	1, 1-Dichloroethane	nd	ug/l
08-25-85	2773	OB-8B	Trans-1,2-Dichloroethane	nd	ug/l
08-25-85	2773	OB-8B	1,1,1-Trichloroethane	nd	ug/l
08-25-85	2773	OB-8B	Trichloroethylene	nd	ug/l
08-25-85	2773	OB-8B	Toluene	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR
08-25-85	2773	OB-8B	1,2-Dichloropropane	nd
08-25-85	2773	OB-8B	Ethylbenzene	nd
08-25-85	2773	OB-8B	Chloroform	nd
08-25-85	2774	OB-7A	1,1 - Dichloroethylene	nd
08-25-85	2774	OB-7A	1, 1-Dichloroethane	nd
08-25-85	2774	OB-7A	Trans-1,2-Dichloroethane	nd
08-25-85	2774	OB-7A	1,1,1-Trichloroethane	nd
08-25-85	2774	OB-7A	Trichloroethylene	nd
08-25-85	2774	OB-7A	Toluene	nd
08-25-85	2774	OB-7A	1,2-Dichloropropane	nd
08-25-85	2774	OB-7A	Ethylbenzene	nd
08-25-85	2774	OB-7A	Chloroform	nd
08-25-85	2775	OB-7B	1,1 - Dichloroethylene	
08-25-85	2775	OB-7B	1, 1-Dichloroethane	nd
08-25-85	2775	OB-7B	Trans-1,2-Dichloroethane	nd
08-25-85	2775	OB-7B	1,1,1-Trichloroethane	nd
08-25-85	2775	OB-7B	Trichloroethylene	nd
08-25-85	2775	OB-7B	Toluene	nd
08-25-85	2775	OB-7B	1,2-Dichloropropane	nd
08-25-85	2775	OB-7B	Ethylbenzene	nd
08-25-85	2775	OB-7B	Chloroform	nd
08-25-85	2776	OB-6B	1,1 - Dichloroethylene	nd
08-25-85	2776	OB-6B	1, 1-Dichloroethane	nd
08-25-85	2776	OB-6B	Trans-1,2-Dichloroethane	nd
08-25-85	2776	OB-6B	1,1, -Trichloroethane	nd
08-25-85	2776	OB-6B	Trichloroethylene	nd

AR307879

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-25-85	2776	OB-6B	Toluene	nd	ug/l
08-25-85	2776	OB-6B	1,2-Dichloropropane	nd	ug/l
08-25-85	2776	OB-6B	Ethylbenzene	nd	ug/l
08-25-85	2776	OB-6B	Chloroform	nd	ug/l
08-25-85	2777	OB-9A	1,1 - Dichloroethylene	nd	ug/l
08-25-85	2777	OB-9A	1, 1-Dichloroethane	nd	ug/l
08-25-85	2777	OB-9A	Trans-1,2-Dichloroethane	nd	ug/l
08-25-85	2777	OB-9A	1,1,1-Trichloroethane	nd	ug/l
08-25-85	2777	OB-9A	Trichloroethylene	nd	ug/l
08-25-85	2777	OB-9A	Toluene	nd	ug/l
08-25-85	2777	OB-9A	1,2-Dichloropropane	nd	ug/l
08-25-85	2777	OB-9A	Ethylbenzene	nd	ug/l
08-25-85	2777	OB-9A	Chloroform	nd	ug/l
08-25-85	2778	OB-9B	1,1 - Dichloroethylene	nd	ug/l
08-25-85	2778	OB-9B	1, 1-Dichloroethane	1.2	ug/l
08-25-85	2778	OB-9B	Trans-1,2-Dichloroethane	nd	ug/l
08-25-85	2778	OB-9B	1,1,1-Trichloroethane	nd	ug/l
08-25-85	2778	OB-9B	Trichloroethylene	nd	ug/l
08-25-85	2778	OB-9B	Toluene	nd	ug/l
08-25-85	2778	OB-9B	1,2-Dichloropropane	13.0	ug/l
08-25-85	2778	OB-9B	Ethylbenzene	nd	ug/l
08-25-85	2778	OB-9B	Chloroform	nd	ug/l
08-25-85	2780	OB-4A	1,1 - Dichloroethylene	4.1	ug/l
08-25-85	2780	OB-4A	1, 1-Dichloroethane	nd	ug/l
08-25-85	2780	OB-4A	Trans-1,2-Dichloroethane	nd	ug/l
08-25-85	2780	OB-4A	1,1,1-Trichloroethane	93.0	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
08-25-85	2780	OB-4A	Trichloroethylene	510.0 ug
08-25-85	2780	OB-4A	Toluene	nd ug
08-25-85	2780	OB-4A	1,2-Dichloropropane	nd ug
08-25-85	2780	OB-4A	Ethylbenzene	nd ug
08-25-85	2780	OB-4A	Chloroform	nd ug
08-25-85	2781	OB-3A	1,1 - Dichloroethylene	nd ug
08-25-85	2781	OB-3A	1, 1-Dichloroethane	nd ug
08-25-85	2781	OB-3A	Trans-1,2-Dichloroethane	nd ug
08-25-85	2781	OB-3A	1,1,1-Trichloroethane	32.0 ug
08-25-85	2781	OB-3A	Trichloroethylene	110.0 ug
08-25-85	2781	OB-3A	Toluene	nd ug
08-25-85	2781	OB-3A	1,2-Dichloropropane	nd ug
08-25-85	2781	OB-3A	Ethylbenzene	[illegible] ug
08-25-85	2781	OB-3A	Chloroform	nd ug
08-25-85	2782	OB-2A	1,1 - Dichloroethylene	8.6 ug
08-25-85	2782	OB-2A	1, 1-Dichloroethane	6.1 ug
08-25-85	2782	OB-2A	Trans-1,2-Dichloroethane	4.4 ug
08-25-85	2782	OB-2A	1,1,1-Trichloroethane	195.0 ug
08-25-85	2782	OB-2A	Trichloroethylene	846.0 ug
08-25-85	2782	OB-2A	Toluene	nd ug
08-25-85	2782	OB-2A	1,2-Dichloropropane	nd ug
08-25-85	2782	OB-2A	Ethylbenzene	nd ug
08-25-85	2782	OB-2A	Chloroform	nd ug
08-25-85	2783	OB-5A	1,1 - Dichloroethylene	780.0 ug
08-25-85	2783	OB-5A	1, 1-Dichloroethane	nd ug
08-25-85	2783	OB-5A	Trans-1,2-Dichloroethane	160.0 ug

AR307881

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-25-85	2783	OB-5A	1,1,1-Trichloroethane	12500.0	ug/l
08-25-85	2783	OB-5A	Trichloroethylene	28400.0	ug/l
08-25-85	2783	OB-5A	Toluene	23.0	ug/l
08-25-85	2783	OB-5A	1,2-Dichloropropane	nd	ug/l
08-25-85	2783	OB-5A	Ethylbenzene	4.0	ug/l
08-25-85	2783	OB-5A	Chloroform	280.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	1,1 - Dichloroethylene	1092.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	1, 1-Dichloroethane	nd	ug/l
08-26-85	2738	OB-5AR 5 mins.	trans-1,2-Dichloroethylene	120.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	Chloroform	260.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	1,1,1-Trichloroethane	10500.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	Trichloroethylene	21000.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	Toluene	69.0	ug/l
08-26-85	2738	OB-5AR 5 mins.	Ethylbenzene	32.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	1,1 - Dichloroethylene	940.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	1, 1-Dichloroethane	nd	ug/l
08-26-85	2739	OB-5AR 20 mins.	trans-1,2-Dichloroethylene	130.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	Chloroform	160.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	1,1,1-Trichloroethane	10600.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	Trichloroethylene	21000.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	Toluene	66.0	ug/l
08-26-85	2739	OB-5AR 20 mins.	Ethylbenzene	29.0	ug/l
08-26-85	2740	OB-5AR 60 mins.	1,1 - Dichloroethylene	103.0	ug/l
08-26-85	2740	OB-5AR 60 mins.	1, 1-Dichloroethane	nd	ug/l
08-26-85	2740	OB-5AR 60 mins.	trans-1,2-Dichloroethylene	[illegible]	ug/l
08-26-85	2740	OB-5AR 60 mins.	Chloroform	260.0	ug/l

AR307882

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-26-85	2740	OB-5AR 60 mins.	1,1,1-Trichloroethane	9500.0	ug/1
08-26-85	2740	OB-5AR 60 mins.	Trichloroethylene	19000.0	ug/1
08-26-85	2740	OB-5AR 60 mins.	Toluene	61.0	ug/1
08-26-85	2740	OB-5AR 60 mins.	Ethylbenzene	27.0	ug/1
08-26-85	2741	OB-5AR 120 mins	1,1 - Dichloroethylene	104.0	ug/1
08-26-85	2741	OB-5AR 120 mins	1, 1-Dichloroethane	nd	ug/1
08-26-85	2741	OB-5AR 120 mins	trans-1,2-Dichloroethylene	150.0	ug/1
08-26-85	2741	OB-5AR 120 mins	Chloroform	176.0	ug/1
08-26-85	2741	OB-5AR 120 mins	1,1,1-Trichloroethane	10900.0	ug/1
08-26-85	2741	OB-5AR 120 mins	Trichloroethylene	22000.0	ug/1
08-26-85	2741	OB-5AR 120 mins	Toluene	61.0	ug/1
08-26-85	2741	OB-5AR 120 mins	Ethylbenzene	29.0	ug/1
08-26-85	2742	OB-5AR 180 mins	1,1 - Dichloroethylene	114.0	
08-26-85	2742	OB-5AR 180 mins	1, 1-Dichloroethane	nd	ug/1
08-26-85	2742	OB-5AR 180 mins	trans-1,2-Dichloroethylene	160.0	ug/1
08-26-85	2742	OB-5AR 180 mins	Chloroform	180.0	ug/1
08-26-85	2742	OB-5AR 180 mins	1,1,1-Trichloroethane	12000.0	ug/1
08-26-85	2742	OB-5AR 180 mins	Trichloroethylene	25000.0	ug/1
08-26-85	2742	OB-5AR 180 mins	Toluene	62.0	ug/1
08-26-85	2742	OB-5AR 180 mins	Ethylbenzene	30.0	ug/1
08-29-85	2796	Williams	Trichloroethylene	1.3	ug/1
08-29-85	2796	Williams	1,2-Dichloropropane	nd	ug/1
08-29-85	2797	Gearhart - old	Trichloroethylene	nd	ug/1
08-29-85	2797	Gearhart - old	1,2-Dichloropropane	6.1	ug/1
08-29-85	2798	Cote	Trichloroethylene	nd	ug/1
08-29-85	2798	Cote	1,2-Dichloropropane	nd	ug/1

AR307883

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
08-29-85	2799	Durham	Trichloroethylene	nd	ug/l
08-29-85	2799	Durham	1,2-Dichloropropane	nd	ug/l
08-29-85	2800	Johnson	Trichloroethylene	nd	ug/l
08-29-85	2800	Johnson	1,2-Dichloropropane	nd	ug/l
08-29-85	2801	Harmic	Trichloroethylene	nd	ug/l
08-29-85	2801	Harmic	1,2-Dichloropropane	nd	ug/l
08-29-85	2802	Lambertson	Trichloroethylene	nd	ug/l
08-29-85	2802	Lambertson	1,2-Dichloropropane	nd	ug/l
08-29-85	2803	Simon	Trichloroethylene	nd	ug/l
08-29-85	2803	Simon	1,2-Dichloropropane	nd	ug/l
08-29-85	2805	American Roof.	Trichloroethylene	nd	ug/l
08-29-85	2805	American Roof.	1,2-Dichloropropane	nd	ug/l
09-12-85	2987	OB-1A	Total Iron	nd	mg/l
09-12-85	2987	OB-1A	Total Dissolved Iron	nd	mg/l
09-12-85	2987	OB-1A	Manganese	10920.0	mg/l
09-12-85	2988	OB-1B	Total Iron	nd	mg/l
09-12-85	2988	OB-1B	Total Dissolved Iron	nd	mg/l
09-12-85	2988	OB-1B	Manganese	9280.0	mg/l
09-12-85	2989	OB-2A	Total Iron	nd	mg/l
09-12-85	2989	OB-2A	Total Dissolved Iron	nd	mg/l
09-12-85	2989	OB-2A	Manganese	8830.0	mg/l
09-12-85	2990	OB-2B	Total Iron	nd	mg/l
09-12-85	2990	OB-2B	Total Dissolved Iron	nd	mg/l
09-12-85	2990	OB-2B	Manganese	8860.0	mg/l
10-04-85	3306	OB-23A	1,1 - Dichloroethylene	nd	ug/l
10-04-85	3306	OB-23A	1, 1-Dichloroethane	nd	ug/l

AR307884

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
10-04-85	3306	OB-23A	trans-1,2-Dichloroethylene	nd	ug/1
10-04-85	3306	OB-23A	Chloroform	nd	ug/1
10-04-85	3306	OB-23A	1,2 - Dichloroethane	nd	ug/1
10-04-85	3306	OB-23A	1,1,1-Trichloroethane	nd	ug/1
10-04-85	3306	OB-23A	Trichloroethylene	nd	ug/1
10-04-85	3306	OB-23A	Benzene	nd	ug/1
10-04-85	3306	OB-23A	Toluene	nd	ug/1
10-04-85	3307	OB-22A	1,1 - Dichloroethylene	nd	ug/1
10-04-85	3307	OB-22A	1, 1-Dichloroethane	nd	ug/1
10-04-85	3307	OB-22A	trans-1,2-Dichloroethylene	nd	ug/1
10-04-85	3307	OB-22A	Chloroform	nd	ug/1
10-04-85	3307	OB-22A	1,2 - Dichloroethane	nd	ug/1
10-04-85	3307	OB-22A	1,1,1-Trichloroethane	nd	ug/1
10-04-85	3307	OB-22A	Trichloroethylene	nd	ug/1
10-04-85	3307	OB-22A	Benzene	nd	ug/1
10-04-85	3307	OB-22A	Toluene	nd	ug/1
10-04-85	3308	OB-29A	1,1 - Dichloroethylene	nd	ug/1
10-04-85	3308	OB-29A	1, 1-Dichloroethane	nd	ug/1
10-04-85	3308	OB-29A	trans-1,2-Dichloroethylene	nd	ug/1
10-04-85	3308	OB-29A	Chloroform	nd	ug/1
10-04-85	3308	OB-29A	1,2 - Dichloroethane	nd	ug/1
10-04-85	3308	OB-29A	1,1,1-Trichloroethane	nd	ug/1
10-04-85	3308	OB-29A	Trichloroethylene	1.9	ug/1
10-04-85	3308	OB-29A	Benzene	nd	ug/1
10-04-85	3308	OB-29A	Toluene	nd	ug/1
10-04-85	3309	OB-24A	1,1 - Dichloroethylene	[illegible]	ug/1

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

ATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
0-04-85	3309	OB-24A	1, 1-Dichloroethane	91.0	ug/l
0-04-85	3309	OB-24A	trans-1,2-Dichloroethylene	nd	ug/l
0-04-85	3309	OB-24A	Chloroform	nd	ug/l
0-04-85	3309	OB-24A	1,2 - Dichloroethane	nd	ug/l
0-04-85	3309	OB-24A	1,1,1-Trichloroethane	nd	ug/l
0-04-85	3309	OB-24A	Trichloroethylene	128.0	ug/l
0-04-85	3309	OB-24A	Benzene	nd	ug/l
0-04-85	3309	OB-24A	Toluene	nd	ug/l
0-04-85	3310	OB-25A	1,1 - Dichloroethylene	4.0	ug/l
0-04-85	3310	OB-25A	1, 1-Dichloroethane	nd	ug/l
0-04-85	3310	OB-25A	trans-1,2-Dichloroethylene	9.0	ug/l
0-04-85	3310	OB-25A	Chloroform	2.0	ug/l
0-04-85	3310	OB-25A	1,2 - Dichloroethane	nd	ug/l
0-04-85	3310	OB-25A	1,1,1-Trichloroethane	14.0	ug/l
0-04-85	3310	OB-25A	Trichloroethylene	389.0	ug/l
0-04-85	3310	OB-25A	Benzene	nd	ug/l
0-04-85	3310	OB-25A	Toluene	nd	ug/l
0-04-85	3311	OB-27A	1,1 - Dichloroethylene	nd	ug/l
0-04-85	3311	OB-27A	1, 1-Dichloroethane	nd	ug/l
0-04-85	3311	OB-27A	trans-1,2-Dichloroethylene	nd	ug/l
0-04-85	3311	OB-27A	Chloroform	nd	ug/l
0-04-85	3311	OB-27A	1,2 - Dichloroethane	nd	ug/l
0-04-85	3311	OB-27A	1,1,1-Trichloroethane	5.0	ug/l
0-04-85	3311	OB-27A	Trichloroethylene	197.0	ug/l
0-04-85	3311	OB-27A	Benzene	nd	ug/l
0-04-85	3311	OB-27A	Toluene	nd	ug/l

AR307886

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
10-04-85	3312	OB-28A	1,1 - Dichloroethylene	nd	ug/l
10-04-85	3312	OB-28A	1, 1-Dichloroethane	1.6	ug/l
10-04-85	3312	OB-28A	trans-1,2-Dichloroethylene	nd	ug/l
10-04-85	3312	OB-28A	Chloroform	nd	ug/l
10-04-85	3312	OB-28A	1,2 - Dichloroethane	nd	ug/l
10-04-85	3312	OB-28A	1,1,1-Trichloroethane	4.9	ug/l
10-04-85	3312	OB-28A	Trichloroethylene	207.0	ug/l
10-04-85	3312	OB-28A	Benzene	nd	ug/l
10-04-85	3312	OB-28A	Toluene	nd	ug/l
10-04-85	3313	OB-26A	1,1 - Dichloroethylene	nd	ug/l
10-04-85	3313	OB-26A	1, 1-Dichloroethane	1.9	ug/l
10-04-85	3313	OB-26A	trans-1,2-Dichloroethylene	nd	ug/l
10-04-85	3313	OB-26A	Chloroform	nd	
10-04-85	3313	OB-26A	1,2 - Dichloroethane	nd	ug/l
10-04-85	3313	OB-26A	1,1,1-Trichloroethane	nd	ug/l
10-04-85	3313	OB-26A	Trichloroethylene	[illegible].4	ug/l
10-04-85	3313	OB-26A	Benzene	144.0	ug/l
10-04-85	3313	OB-26A	Toluene	nd	ug/l
10-09-85	3408	OB-20A	pH	6.4	mg/l
10-09-85	3408	OB-20A	Alkalinity	92.0	mg/l
10-09-85	3408	OB-20A	Hardness	150.0	mg/l
10-09-85	3409	OB-32AR	pH	6.4	mg/l
10-09-85	3409	OB-32AR	Alkalinity	80.0	mg/l
10-09-85	3409	OB-32AR	Hardness	124.0	mg/l
10-24-85	3617	OB-34AR	Acidity	79.0	mg/l
10-24-85	3617	OB-34AR	Hardness	158.0	mg/l

AR307887

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
10-24-85	3617	OB-34AR	Total Iron	.36	mg/l
10-24-85	3617	OB-34AR	Manganese	6.1	mg/l
10-24-85	3617	OB-34AR	Total Dissolved Iron	nd	mg/l
10-24-85	3618	OB-35AR	Acidity	55.0	mg/l
10-24-85	3618	OB-35AR	Hardness	116.0	mg/l
10-24-85	3618	OB-35AR	Total Iron	.14	mg/l
10-24-85	3618	OB-35AR	Manganese	5.88	mg/l
10-24-85	3618	OB-35AR	Total Dissolved Iron	nd	mg/l
11-26-85	4020	Recovery RAW	Ethylbenzene	125.0	ug/l
11-26-85	4020	Recovery RAW	1,1 - Dichloroethylene	10.0	ug/l
11-26-85	4020	Recovery RAW	1, 1-Dichloroethane	76.0	ug/l
11-26-85	4020	Recovery RAW	trans-1,2-Dichloroethylene	865.0	ug/l
11-26-85	4020	Recovery RAW	Chloroform	375.0	ug/l
11-26-85	4020	Recovery RAW	1,2 - Dichloroethane	6.0	ug/l
11-26-85	4020	Recovery RAW	1,1,1-Trichloroethane	8000.0	ug/l
11-26-85	4020	Recovery RAW	Trichloroethylene	34200.0	ug/l
11-26-85	4020	Recovery RAW	Bromoform	5.5	ug/l
11-26-85	4020	Recovery RAW	Tetrachloroethylene	58.0	ug/l
11-26-85	4020	Recovery RAW	Toluene	305.0	ug/l
11-26-85	4021	Recovery TR	1,1 - Dichloroethylene	nd	ug/l
11-26-85	4021	Recovery TR	Toluene	1.3	ug/l
11-26-85	4021	Recovery TR	1, 1-Dichloroethane	nd	ug/l
11-26-85	4021	Recovery TR	trans-1,2-Dichloroethylene	nd	ug/l
11-26-85	4021	Recovery TR	Chloroform	nd	ug/l
11-26-85	4021	Recovery TR	1,2 - Dichloroethane	nd	ug/l
11-26-85	4021	Recovery TR	1,1,1-Trichloroethane	5.3	ug/l

AR307888

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PAGE NO: 00030
02/04/87

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
11-26-85	4021	Recovery TR	Trichloroethylene	29.1	[illegible]
11-26-85	4021	Recovery TR	Bromoform	1.2	ug/l
11-26-85	4021	Recovery TR	Tetrachloroethylene	nd	ug/l
11-26-85	4021	Recovery TR	Ethylbenzene	nd	ug/l
01-02-86	116	Recovery RAW	1,1 - Dichloroethylene	6.7	ug/l
01-02-86	116	Recovery RAW	trans-1,2-Dichloroethylene	2283.0	ug/l
01-02-86	116	Recovery RAW	Chloroform	337.0	ug/l
01-02-86	116	Recovery RAW	1,1,1-Trichloroethane	8320.0	ug/l
01-02-86	116	Recovery RAW	Trichloroethylene	27006.0	ug/l
01-02-86	117	Recovery TR	1,1 - Dichloroethylene	nd	ug/l
01-02-86	117	Recovery TR	trans-1,2-Dichloroethylene	nd	ug/l
01-02-86	117	Recovery TR	Chloroform	nd	ug/l
01-02-86	117	Recovery TR	1,1,1-Trichloroethane	3.5	ug/l
01-02-86	117	Recovery TR	Trichloroethylene	nd	ug/l
01-02-86	646	Recovery RAW	1,1 - Dichloroethylene	43.0	ug/l
01-02-86	646	Recovery RAW	trans-1,2-Dichloroethylene	91.0	ug/l
01-02-86	646	Recovery RAW	1,1,1-Trichloroethane	86.0	ug/l
01-02-86	646	Recovery RAW	Trichloroethylene	2352.0	ug/l
01-02-86	647	Recovery TR	1,1 - Dichloroethylene	nd	ug/l
01-02-86	647	Recovery TR	trans-1,2-Dichloroethylene	nd	ug/l
01-02-86	647	Recovery TR	1,1,1-Trichloroethane	nd	ug/l
01-02-86	647	Recovery TR	Trichloroethylene	0.3	ug/l
02-19-86	H357	Johnson	Trichloroethylene	nd	ug/l
02-19-86	H358	Durham	Trichloroethylene	nd	ug/l
02-19-86	H360	Killen	Trichloroethylene	nd	ug/l
02-19-86	H361	Phillips	Trichloroethylene	nd	ug/l
02-19-86	H362	Lambertson	1,1,1-Trichloroethane	0.5	ug/l
02-19-86	H362	Lambertson	Trichloroethylene	0.1	ug/l
02-19-86	H363	Simon	Trichloroethylene	nd	ug/l
02-19-86	H364	Williams	Trichloroethylene	nd	ug/l

AR307889

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
02-19-86	H365	American Roof.	1,1,1-Trichloroethane	0.1	ug/l
02-19-86	H365	Gearh - Curley	Trichloroethylene	0.6	ug/l
02-19-86	H366	Gearhart - new	1,2 - Dichloroethane	31.0	ug/l
02-19-86	H366	Gearhart - old	Trichloroethylene	0.5	ug/l
02-19-86	H367	Cote	Trichloroethylene	nd	ug/l
02-19-86	H368	Harmic	Trichloroethylene	nd	ug/l
03-11-86	766	OB-12A	Chloromethane	nd	ug/l
03-11-86	766	OB-12A	1, 1-Dichloroethane	nd	ug/l
03-11-86	766	OB-12A	trans-1,2-Dichloroethylene	nd	ug/l
03-11-86	766	OB-12A	Chloroform	nd	ug/l
03-11-86	766	OB-12A	1,2 - Dichloroethane	nd	ug/l
03-11-86	766	OB-12A	1,1,1-Trichloroethane	nd	ug/l
03-11-86	766	OB-12A	Bromodichloromethane	nd	ug/l
03-11-86	766	OB-12A	Trichloroethylene	nd	ug/l
03-11-86	766	OB-12A	Chlorobenzene	nd	ug/l
03-11-86	766	OB-12A	Benzene	nd	ug/l
03-11-86	766	OB-12A	Toluene	nd	ug/l
03-11-86	766	OB-12A	Ethylbenzene	nd	ug/l
03-11-86	767	OB-3A	Chloromethane	nd	ug/l
03-11-86	767	OB-3A	1, 1-Dichloroethane	nd	ug/l
03-11-86	767	OB-3A	trans-1,2-Dichloroethylene	nd	ug/l
03-11-86	767	OB-3A	Chloroform	nd	ug/l
03-11-86	767	OB-3A	1,2 - Dichloroethane	nd	ug/l
03-11-86	767	OB-3A	1,1,1-Trichloroethane	1.50	ug/l
03-11-86	767	OB-3A	Bromodichloromethane	nd	ug/l
03-11-86	767	OB-3A	Trichloroethylene	2.50	ug/l

AR307890

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
03-11-86	767	OB-3A	Chlorobenzene	nd	ug/l
03-11-86	767	OB-3A	Benzene	nd	ug/l
03-11-86	767	OB-3A	Toluene	nd	ug/l
03-11-86	767	OB-3A	Ethylbenzene	nd	ug/l
03-11-86	768	OB-13A	Chloromethane	nd	ug/l
03-11-86	768	OB-13A	1, 1-Dichloroethane	nd	ug/l
03-11-86	768	OB-13A	trans-1,2-Dichloroethylene	nd	ug/l
03-11-86	768	OB-13A	Chloroform	nd	ug/l
03-11-86	768	OB-13A	1,2 - Dichloroethane	nd	ug/l
03-11-86	768	OB-13A	1,1,1-Trichloroethane	nd	ug/l
03-11-86	768	OB-13A	Bromodichloromethane	nd	ug/l
03-11-86	768	OB-13A	Trichloroethylene	nd	ug/l
03-11-86	768	OB-13A	Chlorobenzene	nd	ug/l
03-11-86	768	OB-13A	Benzene	nd	ug/l
03-11-86	768	OB-13A	Toluene	nd	ug/l
03-11-86	768	OB-13A	Ethylbenzene	nd	ug/l
03-11-86	769	OB-4A	Chloromethane	nd	ug/l
03-11-86	769	OB-4A	1, 1-Dichloroethane	nd	ug/l
03-11-86	769	OB-4A	trans-1,2-Dichloroethylene	nd	ug/l
03-11-86	769	OB-4A	Chloroform	nd	ug/l
03-11-86	769	OB-4A	1,2 - Dichloroethane	nd	ug/l
03-11-86	769	OB-4A	1,1,1-Trichloroethane	47.0	ug/l
03-11-86	769	OB-4A	Bromodichloromethane	nd	ug/l
03-11-86	769	OB-4A	Trichloroethylene	73.0	ug/l
03-11-86	769	OB-4A	Chlorobenzene	nd	ug/l
03-11-86	769	OB-4A	Benzene	nd	ug/l

AR307891

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
03-11-86	769	OB-4A	Toluene	nd	ug/l
03-11-86	769	OB-4A	Ethylbenzene	nd	ug/l
03-11-86	770	OB-10A	Chloromethane	nd	ug/l
03-11-86	770	OB-10A	1, 1-Dichloroethane	nd	ug/l
03-11-86	770	OB-10A	trans-1,2-Dichloroethylene	nd	ug/l
03-11-86	770	OB-10A	Chloroform	nd	ug/l
03-11-86	770	OB-10A	1,2 - Dichloroethane	nd	ug/l
03-11-86	770	OB-10A	1,1,1-Trichloroethane	nd	ug/l
03-11-86	770	OB-10A	Bromodichloromethane	nd	ug/l
03-11-86	770	OB-10A	Trichloroethylene	4.0	ug/l
03-11-86	770	OB-10A	Chlorobenzene	nd	ug/l
03-11-86	770	OB-10A	Benzene	nd	ug/l
03-11-86	770	OB-10A	Toluene	nd	ug/l
03-11-86	770	OB-10A	Ethylbenzene	nd	ug/l
03-11-86	771	OB-14A	Chloromethane	nd	ug/l
03-11-86	771	OB-14A	1, 1-Dichloroethane	51.0	ug/l
03-11-86	771	OB-14A	trans-1,2-Dichloroethylene	1.0	ug/l
03-11-86	771	OB-14A	Chloroform	nd	ug/l
03-11-86	771	OB-14A	1,2 - Dichloroethane	nd	ug/l
03-11-86	771	OB-14A	1,1,1-Trichloroethane	192.0	ug/l
03-11-86	771	OB-14A	Bromodichloromethane	nd	ug/l
03-11-86	771	OB-14A	Trichloroethylene	249.0	ug/l
03-11-86	771	OB-14A	Chlorobenzene	nd	ug/l
03-11-86	771	OB-14A	Benzene	nd	ug/l
03-11-86	771	OB-14A	Toluene	nd	ug/l
03-11-86	771	OB-14A	Ethylbenzene	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
03-11-86	772	OB-17A	Chloromethane	3.0	ug/1
03-11-86	772	OB-17A	1, 1-Dichloroethane	nd	ug/1
03-11-86	772	OB-17A	trans-1,2-Dichloroethylene	nd	ug/1
03-11-86	772	OB-17A	Chloroform	nd	ug/1
03-11-86	772	OB-17A	1,2 - Dichloroethane	nd	ug/1
03-11-86	772	OB-17A	1,1,1-Trichloroethane	nd	ug/1
03-11-86	772	OB-17A	Bromodichloromethane	nd	ug/1
03-11-86	772	OB-17A	Trichloroethylene	nd	ug/1
03-11-86	772	OB-17A	Chlorobenzene	nd	ug/1
03-11-86	772	OB-17A	Benzene	nd	ug/1
03-11-86	772	OB-17A	Toluene	nd	ug/1
03-11-86	772	OB-17A	Ethylbenzene	nd	ug/1
03-11-86	773	OB-18A	Chloromethane	1.0	ug/1
03-11-86	773	OB-18A	1, 1-Dichloroethane	nd	ug/1
03-11-86	773	OB-18A	trans-1,2-Dichloroethylene	2.0	ug/1
03-11-86	773	OB-18A	Chloroform	nd	ug/1
03-11-86	773	OB-18A	1,2 - Dichloroethane	2.0	ug/1
03-11-86	773	OB-18A	1,1,1-Trichloroethane	1.0	ug/1
03-11-86	773	OB-18A	Bromodichloromethane	7.0	ug/1
03-11-86	773	OB-18A	Trichloroethylene	2.0	ug/1
03-11-86	773	OB-18A	Chlorobenzene	1.0	ug/1
03-11-86	773	OB-18A	Benzene	3.50	ug/1
03-11-86	773	OB-18A	Toluene	nd	ug/1
03-11-86	773	OB-18A	Ethylbenzene	4.50	ug/1
03-11-86	774	OB-19A	Chloromethane	nd	ug/1
03-11-86	774	OB-19A	1, 1-Dichloroethane	nd	ug/1

AR307893

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
03-11-86	774	OB-19A	trans-1,2-Dichloroethylene	nd	ug/l
03-11-86	774	OB-19A	Chloroform	nd	ug/l
03-11-86	774	OB-19A	1,2 - Dichloroethane	nd	ug/l
03-11-86	774	OB-19A	1,1,1-Trichloroethane	15.0	ug/l
03-11-86	774	OB-19A	Bromodichloromethane	nd	ug/l
03-11-86	774	OB-19A	Trichloroethylene	31.0	ug/l
03-11-86	774	OB-19A	Chlorobenzene	nd	ug/l
03-11-86	774	OB-19A	Benzene	nd	ug/l
03-11-86	774	OB-19A	Toluene	nd	ug/l
03-11-86	774	OB-19A	Ethylbenzene	nd	ug/l
03-11-86	775	Recovery RAW	Chloromethane	nd	ug/l
03-11-86	775	Recovery RAW	1, 1-Dichloroethane	129.0	ug/l
03-11-86	775	Recovery RAW	trans-1,2-Dichloroethylene	74.0	ug/l
03-11-86	775	Recovery RAW	Chloroform	28.0	ug/l
03-11-86	775	Recovery RAW	1,2 - Dichloroethane	nd	ug/l
03-11-86	775	Recovery RAW	1,1,1-Trichloroethane	171.0	ug/l
03-11-86	775	Recovery RAW	Bromodichloromethane	nd	ug/l
03-11-86	775	Recovery RAW	Trichloroethylene	217.0	ug/l
03-11-86	775	Recovery RAW	Chlorobenzene	nd	ug/l
03-11-86	775	Recovery RAW	Benzene	nd	ug/l
03-11-86	775	Recovery RAW	Toluene	nd	ug/l
03-11-86	775	Recovery RAW	Ethylbenzene	nd	ug/l
03-11-86	777	OB-24A	1,1 - Dichloroethylene	2.0	ug/l
03-11-86	777	OB-24A	Chloroform	nd	ug/l
03-11-86	777	OB-24A	1,2 - Dichloroethane	nd	ug/l
03-11-86	777	OB-24A	1,1,1-Trichloroethane	75.0	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNI
03-11-86	777	OB-24A	Trichloroethylene	21.0	ug/
03-11-86	777	OB-24A	Benzene	nd	ug/
03-11-86	778	OB-25A	1,1 - Dichloroethylene	1.0	ug/
03-11-86	778	OB-25A	Chloroform	2.5	ug/
03-11-86	778	OB-25A	1,2 - Dichloroethane	nd	ug/
03-11-86	778	OB-25A	1,1,1-Trichloroethane	4.0	ug/
03-11-86	778	OB-25A	Trichloroethylene	152.0	ug/
03-11-86	778	OB-25A	Benzene	nd	ug/
03-11-86	779	OB-28A	1,1 - Dichloroethylene	nd	ug/
03-11-86	779	OB-28A	Chloroform	nd	ug/
03-11-86	779	OB-28A	1,2 - Dichloroethane	nd	ug/
03-11-86	779	OB-28A	1,1,1-Trichloroethane	3.0	ug/
03-11-86	779	OB-28A	Trichloroethylene	138.0	ug/
03-11-86	779	OB-28A	Benzene	nd	ug/
03-11-86	780	Gearh - Curley	1,1 - Dichloroethylene	nd	ug/
03-11-86	780	Gearh - Curley	Chloroform	nd	ug/
03-11-86	780	Gearh - Curley	1,2 - Dichloroethane	25.0	ug/1
03-11-86	780	Gearh - Curley	1,1,1-Trichloroethane	nd	ug/1
03-11-86	780	Gearh - Curley	Trichloroethylene	nd	ug/1
03-11-86	780	Gearh - Curley	Benzene	110.0	ug/1
04-08-86	1092	Gearhart-new RA	Benzene	10.0	ug/1
04-08-86	1092	Gearhart-new RA	Toluene	nd	ug/1
04-08-86	1092	Gearhart-new RA	Ethylbenzene	nd	ug/1
04-08-86	1092	Gearhart-new RA	P-xylene	nd	ug/1
04-08-86	1092	Gearhart-new RA	M-xylene	nd	ug/1
04-08-86	1092	Gearhart-new RA	O-xylene	6	ug/1

AR307895

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
04-08-86	1092	Gearhart-new RA	Chloromethane	nd	ug/l
04-08-86	1092	Gearhart-new RA	Vinyl Chloride	nd	ug/l
04-08-86	1092	Gearhart-new RA	1,1 - Dichloroethylene	nd	ug/l
04-08-86	1092	Gearhart-new RA	1, 1-Dichloroethane	nd	ug/l
04-08-86	1092	Gearhart-new RA	1,2 - Dichloroethane	55.0	ug/l
04-08-86	1092	Gearhart-new RA	1,1,1-Trichloroethane	nd	ug/l
04-08-86	1092	Gearhart-new RA	Carbon Tetrachloride	nd	ug/l
04-08-86	1092	Gearhart-new RA	Tetrachloroethane	nd	ug/l
04-08-86	1093	Gearhart-new TR	Chloromethane	nd	ug/l
04-08-86	1093	Gearhart-new TR	Vinyl Chloride	nd	ug/l
04-08-86	1093	Gearhart-new TR	Benzene	3.1	ug/l
04-08-86	1093	Gearhart-new TR	Toluene	3.0	ug/l
04-08-86	1093	Gearhart-new TR	Ethylbenzene	2.2	ug/l
04-08-86	1093	Gearhart-new TR	P-xylene	2.3	ug/l
04-08-86	1093	Gearhart-new TR	M-xylene	2.9	ug/l
04-08-86	1093	Gearhart-new TR	O-xylene	2.7	ug/l
04-08-86	1093	Gearhart-new TR	1,1 - Dichloroethylene	nd	ug/l
04-08-86	1093	Gearhart-new TR	1, 1-Dichloroethane	nd	ug/l
04-08-86	1093	Gearhart-new TR	1,2 - Dichloroethane	nd	ug/l
04-08-86	1093	Gearhart-new TR	1,1,1-Trichloroethane	nd	ug/l
04-08-86	1093	Gearhart-new TR	Carbon Tetrachloride	nd	ug/l
04-08-86	1093	Gearhart-new TR	Tetrachloroethane	nd	ug/l
04-08-86	1094	Recovery RAW	1,1,1-Trichloroethane	712.0	ug/l
04-08-86	1094	Recovery RAW	O-xylene	nd	ug/l
04-08-86	1094	Recovery RAW	Toluene	8.0	ug/l
04-08-86	1094	Recovery RAW	Chloromethane	1.0	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
04-08-86	1094	Recovery RAW	Vinyl Chloride	1.0	ug
04-08-86	1094	Recovery RAW	1,1 - Dichloroethylene	23.50	ug
04-08-86	1094	Recovery RAW	1, 1-Dichloroethane	4.0	ug
04-08-86	1094	Recovery RAW	1,2 - Dichloroethane	nd	ug
04-08-86	1094	Recovery RAW	Benzene	nd	ug
04-08-86	1094	Recovery RAW	Ethylbenzene	nd	ug
04-08-86	1094	Recovery RAW	P-xylene	nd	ug
04-08-86	1094	Recovery RAW	M-xylene	nd	ug
04-08-86	1094	Recovery RAW	Carbon Tetrachloride	712.0	ug
04-08-86	1094	Recovery RAW	Tetrachloroethane	16.0	ug
04-08-86	1095	Recovery TR	Benzene	nd	ug
04-08-86	1095	Recovery TR	Toluene	nd	ug
04-08-86	1095	Recovery TR	Ethylbenzene	nd	ug
04-08-86	1095	Recovery TR	P-xylene	nd	ug
04-08-86	1095	Recovery TR	M-xylene	nd	ug
04-08-86	1095	Recovery TR	O-xylene	nd	ug
04-08-86	1095	Recovery TR	Chloromethane	nd	ug/
04-08-86	1095	Recovery TR	Vinyl Chloride	nd	ug/
04-08-86	1095	Recovery TR	1,1 - Dichloroethylene	nd	ug/
04-08-86	1095	Recovery TR	1, 1-Dichloroethane	nd	ug/
04-08-86	1095	Recovery TR	1,2 - Dichloroethane	nd	ug/
04-08-86	1095	Recovery TR	1,1,1-Trichloroethane	nd	ug/
04-08-86	1095	Recovery TR	Carbon Tetrachloride	nd	ug/
04-08-86	1095	Recovery TR	Tetrachloroethane	nd	ug/
04-11-86	1189	Gearhart-new RA	Benzene	11.0	ug/
04-11-86	1189	Gearhart-new RA	O-xylene	[illegible]	ug/

AR307897

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
04-11-86	1189	Gearhart-new RA	1,2 - Dichloroethane	29.0	ug/1
04-11-86	1189	Gearhart-new RA	Tetrachloroethylene	8.0	ug/1
04-11-86	1189	Gearhart-new RA	Toluene	3.50	ug/1
04-11-86	1190	Gearhart-new TR	Benzene	nd	ug/1
04-11-86	1190	Gearhart-new TR	O-xylene	nd	ug/1
04-11-86	1190	Gearhart-new TR	1,2 - Dichloroethane	nd	ug/1
04-11-86	1190	Gearhart-new TR	Tetrachloroethylene	nd	ug/1
04-11-86	1190	Gearhart-new TR	Toluene	nd	ug/1
04-28-86	1364	Recovery RAW	1,1 - Dichloroethylene	66.0	ug/1
04-28-86	1364	Recovery RAW	Chloroform	58.0	ug/1
04-28-86	1364	Recovery RAW	Trichloroethylene	104.0	ug/1
04-28-86	1364	Recovery RAW	O-xylene	nd	ug/1
04-28-86	1365	Recovery TR	1,1 - Dichloroethylene	nd	ug/1
04-28-86	1365	Recovery TR	Chloroform	nd	ug/1
04-28-86	1365	Recovery TR	Trichloroethylene	nd	ug/1
04-28-86	1365	Recovery TR	O-xylene	nd	ug/1
05-13-86	1592	OB-14A	1,1 - Dichloroethylene	nd	ug/1
05-13-86	1592	OB-14A	1, 1-Dichloroethane	nd	ug/1
05-13-86	1592	OB-14A	trans-1,2-Dichloroethylene	nd	ug/1
05-13-86	1592	OB-14A	Chloroform	nd	ug/1
05-13-86	1592	OB-14A	1,2 - Dichloroethane	nd	ug/1
05-13-86	1592	OB-14A	1,2-Dichloropropane	nd	ug/1
05-13-86	1592	OB-14A	1,1,1-Trichloroethane	24.0	ug/1
05-13-86	1592	OB-14A	Trichloroethylene	61.0	ug/1
05-13-86	1592	OB-14A	Benzene	nd	ug/1
05-13-86	1592	OB-14A	P-xylene	[illegible]	ug/1

AR307898

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
05-13-86	1592	OB-14A	M-xylene	nd ug/
05-13-86	1592	OB-14A	O-xylene	nd ug/
05-13-86	1593	OB-11A	1,1 - Dichloroethylene	nd ug/
05-13-86	1593	OB-11A	1, 1-Dichloroethane	nd ug/
05-13-86	1593	OB-11A	trans-1,2-Dichloroethylene	nd ug/
05-13-86	1593	OB-11A	Chloroform	nd ug/
05-13-86	1593	OB-11A	1,2 - Dichloroethane	nd ug/
05-13-86	1593	OB-11A	1,2-Dichloropropane	nd ug/
05-13-86	1593	OB-11A	1,1,1-Trichloroethane	4.1 ug/
05-13-86	1593	OB-11A	Trichloroethylene	33.0 ug/
05-13-86	1593	OB-11A	Benzene	nd ug/
05-13-86	1593	OB-11A	P-xylene	nd ug/
05-13-86	1593	OB-11A	M-xylene	nd ug/
05-13-86	1593	OB-11A	O-xylene	nd ug/
05-13-86	1594	OB-12A	1,1 - Dichloroethylene	nd ug/
05-13-86	1594	OB-12A	1, 1-Dichloroethane	nd ug/
05-13-86	1594	OB-12A	trans-1,2-Dichloroethylene	nd ug/
05-13-86	1594	OB-12A	Chloroform	nd ug/
05-13-86	1594	OB-12A	1,2 - Dichloroethane	nd ug/
05-13-86	1594	OB-12A	1,2-Dichloropropane	nd ug/
05-13-86	1594	OB-12A	1,1,1-Trichloroethane	nd ug/
05-13-86	1594	OB-12A	Trichloroethylene	6.1 ug/
05-13-86	1594	OB-12A	Benzene	nd ug/
05-13-86	1594	OB-12A	P-xylene	nd ug/
05-13-86	1594	OB-12A	M-xylene	nd ug/
05-13-86	1594	OB-12A	O-xylene	nd ug/

AR307899

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
05-13-86	1595	OB-10A	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1595	OB-10A	1, 1-Dichloroethane	nd	ug/l
05-13-86	1595	OB-10A	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1595	OB-10A	Chloroform	nd	ug/l
05-13-86	1595	OB-10A	1,2 - Dichloroethane	nd	ug/l
05-13-86	1595	OB-10A	1,2-Dichloropropane	nd	ug/l
05-13-86	1595	OB-10A	1,1,1-Trichloroethane	nd	ug/l
05-13-86	1595	OB-10A	Trichloroethylene	4.2	ug/l
05-13-86	1595	OB-10A	Benzene	nd	ug/l
05-13-86	1595	OB-10A	P-xylene	nd	ug/l
05-13-86	1595	OB-10A	M-xylene	nd	ug/l
05-13-86	1595	OB-10A	O-xylene	nd	ug/l
05-13-86	1596	OB-17A	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1596	OB-17A	1, 1-Dichloroethane	nd	ug/l
05-13-86	1596	OB-17A	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1596	OB-17A	Chloroform	nd	ug/l
05-13-86	1596	OB-17A	1,2 - Dichloroethane	nd	ug/l
05-13-86	1596	OB-17A	1,2-Dichloropropane	nd	ug/l
05-13-86	1596	OB-17A	1,1,1-Trichloroethane	nd	ug/l
05-13-86	1596	OB-17A	Trichloroethylene	nd	ug/l
05-13-86	1596	OB-17A	Benzene	nd	ug/l
05-13-86	1596	OB-17A	P-xylene	nd	ug/l
05-13-86	1596	OB-17A	M-xylene	nd	ug/l
05-13-86	1596	OB-17A	O-xylene	nd	ug/l
05-13-86	1597	OB-18A	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1597	OB-18A	1, 1-Dichloroethane	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNI
05-13-86	1597	OB-18A	trans-1,2-Dichloroethylene	nd	ug/
05-13-86	1597	OB-18A	Chloroform	nd	ug/
05-13-86	1597	OB-18A	1,2 - Dichloroethane	nd	ug/
05-13-86	1597	OB-18A	1,2-Dichloropropane	nd	ug/
05-13-86	1597	OB-18A	1,1,1-Trichloroethane	nd	ug/
05-13-86	1597	OB-18A	Trichloroethylene	nd	ug/
05-13-86	1597	OB-18A	Benzene	nd	ug/
05-13-86	1597	OB-18A	P-xylene	nd	ug/
05-13-86	1597	OB-18A	M-xylene	nd	ug/
05-13-86	1597	OB-18A	O-xylene	nd	ug/
05-13-86	1598	OB-19A	1,1 - Dichloroethylene	4.9	ug/
05-13-86	1598	OB-19A	1, 1-Dichloroethane	nd	ug/
05-13-86	1598	OB-19A	trans-1,2-Dichloroethylene	nd	[illegible]
05-13-86	1598	OB-19A	Chloroform	nd	ug/
05-13-86	1598	OB-19A	1,2 - Dichloroethane	nd	ug/
05-13-86	1598	OB-19A	1,2-Dichloropropane	nd	ug/
05-13-86	1598	OB-19A	1,1,1-Trichloroethane	44.0	ug/l
05-13-86	1598	OB-19A	Trichloroethylene	nd	ug/l
05-13-86	1598	OB-19A	Benzene	nd	ug/l
05-13-86	1598	OB-19A	P-xylene	nd	ug/l
05-13-86	1598	OB-19A	M-xylene	nd	ug/l
05-13-86	1598	OB-19A	O-xylene	nd	ug/l
05-13-86	1599	OB-24A	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1599	OB-24A	1, 1-Dichloroethane	nd	ug/l
05-13-86	1599	OB-24A	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1599	OB-24A	Chloroform	nd	ug/l

AR307901

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
05-13-86	1599	OB-24A	1,2 - Dichloroethane	nd	ug/l
05-13-86	1599	OB-24A	1,2-Dichloropropane	nd	ug/l
05-13-86	1599	OB-24A	1,1,1-Trichloroethane	5.3	ug/l
05-13-86	1599	OB-24A	Trichloroethylene	26.0	ug/l
05-13-86	1599	OB-24A	Benzene	nd	ug/l
05-13-86	1599	OB-24A	P-xylene	nd	ug/l
05-13-86	1599	OB-24A	M-xylene	nd	ug/l
05-13-86	1599	OB-24A	O-xylene	nd	ug/l
05-13-86	1600	OB-28A	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1600	OB-28A	1, 1-Dichloroethane	nd	ug/l
05-13-86	1600	OB-28A	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1600	OB-28A	Chloroform	nd	ug/l
05-13-86	1600	OB-28A	1,2 - Dichloroethane	nd	ug/l
05-13-86	1600	OB-28A	1,2-Dichloropropane	1.1	ug/l
05-13-86	1600	OB-28A	1,1,1-Trichloroethane	3.1	ug/l
05-13-86	1600	OB-28A	Trichloroethylene	236.0	ug/l
05-13-86	1600	OB-28A	Benzene	nd	ug/l
05-13-86	1600	OB-28A	P-xylene	nd	ug/l
05-13-86	1600	OB-28A	M-xylene	nd	ug/l
05-13-86	1600	OB-28A	O-xylene	nd	ug/l
05-13-86	1602	Gearhart-new RA	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1602	Gearhart-new RA	1, 1-Dichloroethane	nd	ug/l
05-13-86	1602	Gearhart-new RA	trans-1,2-Dichloroethylene	2.9	ug/l
05-13-86	1602	Gearhart-new RA	Chloroform	nd	ug/l
05-13-86	1602	Gearhart-new RA	1,2 - Dichloroethane	34.0	ug/l
05-13-86	1602	Gearhart-new RA	1,2-Dichloropropane	1.5	ug/l

AR307902

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
05-13-86	1602	Gearhart-new RA	1,1,1-Trichloroethane	20.0	ug/l
05-13-86	1602	Gearhart-new RA	Trichloroethylene	208.0	ug/l
05-13-86	1602	Gearhart-new RA	Benzene	297.0	ug/l
05-13-86	1602	Gearhart-new RA	P-xylene	nd	ug/l
05-13-86	1602	Gearhart-new RA	M-xylene	nd	ug/l
05-13-86	1602	Gearhart-new RA	O-xylene	nd	ug/l
05-13-86	1603	Recovery RAW	1,1 - Dichloroethylene	58.0	ug/l
05-13-86	1603	Recovery RAW	1, 1-Dichloroethane	5.4	ug/l
05-13-86	1603	Recovery RAW	trans-1,2-Dichloroethylene	98.0	ug/l
05-13-86	1603	Gearhart-new RA	Chloroform	9.6	ug/l
05-13-86	1603	Recovery RAW	1,2 - Dichloroethane	349.0	ug/l
05-13-86	1603	Recovery RAW	1,2-Dichloropropane	nd	ug/l
05-13-86	1603	Recovery RAW	1,1,1-Trichloroethane	nd	ug/l
05-13-86	1603	Gearhart-new RA	Benzene	31.0	ug/l
05-13-86	1603	Recovery RAW	P-xylene	nd	ug/l
05-13-86	1603	Recovery RAW	M-xylene	nd	ug/l
05-13-86	1603	Recovery RAW	O-xylene	nd	ug/l
05-13-86	1604	Recovery TR	1,1 - Dichloroethylene	nd	ug/l
05-13-86	1604	Recovery TR	1, 1-Dichloroethane	nd	ug/l
05-13-86	1604	Recovery TR	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1604	Gearhart-new TR	Chloroform	nd	ug/l
05-13-86	1604	Recovery TR	1,2 - Dichloroethane	nd	ug/l
05-13-86	1604	Recovery TR	1,2-Dichloropropane	nd	ug/l
05-13-86	1604	Recovery TR	1,1,1-Trichloroethane	nd	ug/l
05-13-86	1604	Recovery TR	Trichloroethylene	nd	ug/l
05-13-86	1604	Gearhart-new TR	Benzene	nd	ug/l

AR307903

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
05-13-86	1604	Recovery TR	P-xylene	nd	ug/l
05-13-86	1604	Recovery TR	M-xylene	nd	ug/l
05-13-86	1604	Recovery TR	O-xylene	nd	ug/l
05-13-86	1646	OB-5B	Chloroform	nd	ug/l
05-13-86	1646	OB-5B	1,2 - Dichloroethane	nd	ug/l
05-13-86	1646	OB-5B	1,1,1-Trichloroethane	nd	ug/l
05-13-86	1646	OB-5B	1,2-Dichloropropane	nd	ug/l
05-13-86	1646	OB-5B	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1646	OB-5B	Trichloroethylene	2.7	ug/l
05-13-86	1646	OB-5B	Benzene	nd	ug/l
05-13-86	1646	OB-5B	Toluene	nd	ug/l
05-13-86	1646	OB-5B	P-xylene	nd	ug/l
05-13-86	1646	OB-5B	M-xylene	nd	ug/l
05-13-86	1646	OB-5B	O-xylene	nd	ug/l
05-13-86	1647	OB-5A	Chloroform	25.0	ug/l
05-13-86	1647	OB-5A	1,2 - Dichloroethane	nd	ug/l
05-13-86	1647	OB-5A	1,1,1-Trichloroethane	199.0	ug/l
05-13-86	1647	OB-5A	1,2-Dichloropropane	nd	ug/l
05-13-86	1647	OB-5A	trans-1,2-Dichloroethylene	nd	ug/l
05-13-86	1647	OB-5A	Trichloroethylene	1708.0	ug/l
05-13-86	1647	OB-5A	Benzene	nd	ug/l
05-13-86	1647	OB-5A	Toluene	nd	ug/l
05-13-86	1647	OB-5A	P-xylene	nd	ug/l
05-13-86	1647	OB-5A	M-xylene	nd	ug/l
05-13-86	1647	OB-5A	O-xylene	nd	ug/l
05-13-86	1648	OB-3A	Chloroform	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UN
05-13-86	1648	OB-3A	1,2 - Dichloroethane	nd	ug
05-13-86	1648	OB-3A	1,1,1-Trichloroethane	nd	ug
05-13-86	1648	OB-3A	1,2-Dichloropropane	nd	ug
05-13-86	1648	OB-3A	trans-1,2-Dichloroethylene	nd	ug
05-13-86	1648	OB-3A	Trichloroethylene	8.0	ug
05-13-86	1648	OB-3A	Benzene	nd	ug
05-13-86	1648	OB-3A	Toluene	nd	ug
05-13-86	1648	OB-3A	P-xylene	nd	ug
05-13-86	1648	OB-3A	M-xylene	nd	ug
05-13-86	1648	OB-3A	O-xylene	nd	ug
05-13-86	1649	OB-26A	Chloroform	nd	ug
05-13-86	1649	OB-26A	1,2 - Dichloroethane	nd	ug
05-13-86	1649	OB-26A	1,1,1-Trichloroethane	[illegible]	[illegible]
05-13-86	1649	OB-26A	1,2-Dichloropropane	nd	ug.
05-13-86	1649	OB-26A	trans-1,2-Dichloroethylene	nd	ug.
05-13-86	1649	OB-26A	Trichloroethylene	4.1	ug.
05-13-86	1649	OB-26A	Benzene	82.0	ug/
05-13-86	1649	OB-26A	Toluene	8.7	ug/
05-13-86	1649	OB-26A	P-xylene	nd	ug/
05-13-86	1649	OB-26A	M-xylene	nd	ug/
05-13-86	1649	OB-26A	O-xylene	nd	ug/
05-13-86	1650	Gearhart-new RA	Chloroform	nd	ug/
05-13-86	1650	Gearhart-new RA	1,2 - Dichloroethane	39.0	ug/
05-13-86	1650	Gearhart-new RA	1,1,1-Trichloroethane	nd	ug/
05-13-86	1650	Gearhart-new RA	1,2-Dichloropropane	nd	ug/
05-13-86	1650	Gearhart-new RA	trans-1,2-Dichloroethyl[illegible]	nd	ug/

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
05-13-86	1650	Gearhart-new RA	Trichloroethylene	nd	ug/1
05-13-86	1650	Gearhart-new RA	Benzene	201.0	ug/1
05-13-86	1650	Gearhart-new RA	Toluene	nd	ug/1
05-13-86	1650	Gearhart-new RA	P-xylene	nd	ug/1
05-13-86	1650	Gearhart-new RA	M-xylene	<2.0	ug/1
05-13-86	1650	Gearhart-new RA	O-xylene	nd	ug/1
06-18-86	2050	OB-45B 5 mins.	Trichloroethylene	1.2	ug/1
06-18-86	2051	OB-45B 35 mins.	Trichloroethylene	nd	ug/1
07-14-86	2305	Recovery RAW	1,1 - Dichloroethylene	24.0	ug/1
07-14-86	2305	Recovery RAW	1, 1-Dichloroethane	3.4	ug/1
07-14-86	2305	Recovery RAW	trans-1,2-Dichloroethylene	62.0	ug/1
07-14-86	2305	Recovery RAW	Chloroform	7.8	ug/1
07-14-86	2305	Recovery RAW	1,1,1-Trichloroethane	553.0	ug/1
07-14-86	2305	Recovery RAW	Trichloroethylene	1524.0	ug/1
07-14-86	2305	Recovery RAW	Tetrachloroethylene	4.9	ug/1
07-14-86	2305	Recovery RAW	Benzene	37.0	ug/1
07-14-86	2305	Recovery RAW	1,2 - Dichloroethane	nd	ug/1
07-14-86	2305	Recovery RAW	1,2-Dichloropropane	nd	ug/1
07-14-86	2305	Recovery RAW	Chlorobenzene	nd	ug/1
07-14-86	2305	Recovery RAW	Vinyl Chloride	nd	ug/1
07-14-86	2306	Recovery TR	1,1 - Dichloroethylene	nd	ug/1
07-14-86	2306	Recovery TR	1, 1-Dichloroethane	nd	ug/1
07-14-86	2306	Recovery TR	trans-1,2-Dichloroethylene	nd	ug/1
07-14-86	2306	Recovery TR	Chloroform	nd	ug/1
07-14-86	2306	Recovery TR	1,1,1-Trichloroethane	nd	ug/1
07-14-86	2306	Recovery TR	Trichloroethylene	nd	ug/1

AR307906

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENT.. U:
07-14-86	2306	Recovery TR	Tetrachloroethylene	nd u
07-14-86	2306	Recovery TR	Benzene	nd u
07-14-86	2306	Recovery TR	1,2 - Dichloroethane	nd u
07-14-86	2306	Recovery TR	1,2-Dichloropropane	nd u
07-14-86	2306	Recovery TR	Chlorobenzene	nd u
07-14-86	2306	Recovery TR	Vinyl Chloride	nd u
07-14-86	2307	Gearhart-new RA	1,1 - Dichloroethylene	nd u
07-14-86	2307	Gearhart-new RA	1, 1-Dichloroethane	nd u
07-14-86	2307	Gearhart-new RA	trans-1,2-Dichloroethylene	nd u
07-14-86	2307	Gearhart-new RA	Chloroform	nd u
07-14-86	2307	Gearhart-new RA	1,1,1-Trichloroethane	nd u
07-14-86	2307	Gearhart-new RA	Trichloroethylene	nd u
07-14-86	2307	Gearhart-new RA	Tetrachloroethylene	u
07-14-86	2307	Gearhart-new RA	Benzene	146.0 u
07-14-86	2307	Gearhart-new RA	1,2 - Dichloroethane	33.0 u
07-14-86	2307	Gearhart-new RA	1,2-Dichloropropane	1.8 u
07-14-86	2307	Gearhart-new RA	Chlorobenzene	nd u
07-14-86	2307	Gearhart-new RA	Vinyl Chloride	nd u
07-14-86	2308	Gearhart-new TR	1,1 - Dichloroethylene	nd u
07-14-86	2308	Gearhart-new TR	1, 1-Dichloroethane	nd u
07-14-86	2308	Gearhart-new TR	trans-1,2-Dichloroethylene	nd u
07-14-86	2308	Gearhart-new TR	Chloroform	nd u
07-14-86	2308	Gearhart-new TR	1,1,1-Trichloroethane	nd u
07-14-86	2308	Gearhart-new TR	Trichloroethylene	nd u
07-14-86	2308	Gearhart-new TR	Tetrachloroethylene	nd u
07-14-86	2308	Gearhart-new TR	Benzene	nd u

AR307907

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
07-14-86	2308	Gearhart-new TR	1,2 - Dichloroethane	nd	ug/l
07-14-86	2308	Gearhart-new TR	1,2-Dichloropropane	nd	ug/l
07-14-86	2308	Gearhart-new TR	Chlorobenzene	nd	ug/l
07-14-86	2308	Gearhart-new TR	Vinyl Chloride	nd	ug/l
07-28-86	2572	OB-42A	1,1 - Dichloroethylene	nd	ug/l
07-28-86	2572	OB-42A	1, 1-Dichloroethane	nd	ug/l
07-28-86	2572	OB-42A	trans-1,2-Dichloroethylene	nd	ug/l
07-28-86	2572	OB-42A	Chloroform	2.9	ug/l
07-28-86	2572	OB-42A	1,2 - Dichloroethane	nd	ug/l
07-28-86	2572	OB-42A	1,1,1-Trichloroethane	nd	ug/l
07-28-86	2572	OB-42A	Trichloroethylene	nd	ug/l
07-28-86	2572	OB-42A	Benzene	nd	ug/l
07-28-86	2572	OB-42A	Toluene	nd	ug/l
07-28-86	2573	OB-39A	1,1 - Dichloroethylene	2.7	ug/l
07-28-86	2573	OB-39A	1, 1-Dichloroethane	2.0	ug/l
07-28-86	2573	OB-39A	trans-1,2-Dichloroethylene	1.9	ug/l
07-28-86	2573	OB-39A	Chloroform	1.6	ug/l
07-28-86	2573	OB-39A	1,2 - Dichloroethane	1.9	ug/l
07-28-86	2573	OB-39A	1,1,1-Trichloroethane	8.0	ug/l
07-28-86	2573	OB-39A	Trichloroethylene	460.0	ug/l
07-28-86	2573	OB-39A	Benzene	30.0	ug/l
07-28-86	2573	OB-39A	Toluene	nd	ug/l
07-28-86	2574	OB-26A	1,1 - Dichloroethylene	nd	ug/l
07-28-86	2574	OB-26A	1, 1-Dichloroethane	nd	ug/l
07-28-86	2574	OB-26A	trans-1,2-Dichloroethylene	nd	ug/l
07-28-86	2574	OB-26A	Chloroform	nd	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
07-28-86	2574	OB-26A	1,2 - Dichloroethane	nd ug
07-28-86	2574	OB-26A	1,1,1-Trichloroethane	nd ug
07-28-86	2574	OB-26A	Trichloroethylene	nd ug
07-28-86	2574	OB-26A	Benzene	133.0 ug
07-28-86	2574	OB-26A	Toluene	11.0 ug
07-28-86	2575	OB-25A	1,1 - Dichloroethylene	nd ug
07-28-86	2575	OB-25A	1, 1-Dichloroethane	nd ug
07-28-86	2575	OB-25A	trans-1,2-Dichloroethylene	nd ug
07-28-86	2575	OB-25A	Chloroform	nd ug
07-28-86	2575	OB-25A	1,2 - Dichloroethane	nd ug
07-28-86	2575	OB-25A	1,1,1-Trichloroethane	nd ug
07-28-86	2575	OB-25A	Trichloroethylene	1.6 ug
07-28-86	2575	OB-25A	Benzene	[illegible] ug
07-28-86	2575	OB-25A	Toluene	6.5 ug
07-28-86	2576	OB-27A	1,1 - Dichloroethylene	nd ug
07-28-86	2576	OB-27A	1, 1-Dichloroethane	nd ug
07-28-86	2576	OB-27A	trans-1,2-Dichloroethylene	nd ug
07-28-86	2576	OB-27A	Chloroform	nd ug
07-28-86	2576	OB-27A	1,2 - Dichloroethane	nd ug
07-28-86	2576	OB-27A	1,1,1-Trichloroethane	2.4 ug
07-28-86	2576	OB-27A	Trichloroethylene	100.0 ug
07-28-86	2576	OB-27A	Benzene	nd ug
07-28-86	2576	OB-27A	Toluene	nd ug
07-28-86	2577	OB-28A	1,1 - Dichloroethylene	nd ug
07-28-86	2577	OB-28A	1, 1-Dichloroethane	nd ug
07-28-86	2577	OB-28A	trans-1,2-Dichloroethylene	1.0 ug

AR307909

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
07-28-86	2577	OB-28A	Chloroform	nd	ug/l
07-28-86	2577	OB-28A	1,2 - Dichloroethane	1.4	ug/l
07-28-86	2577	OB-28A	1,1,1-Trichloroethane	nd	ug/l
07-28-86	2577	OB-28A	Trichloroethylene	204.0	ug/l
07-28-86	2577	OB-28A	Benzene	nd	ug/l
07-28-86	2577	OB-28A	Toluene	nd	ug/l
07-28-86	2578	OB-41A	1,1 - Dichloroethylene	nd	ug/l
07-28-86	2578	OB-41A	1, 1-Dichloroethane	nd	ug/l
07-28-86	2578	OB-41A	trans-1,2-Dichloroethylene	nd	ug/l
07-28-86	2578	OB-41A	Chloroform	nd	ug/l
07-28-86	2578	OB-41A	1,2 - Dichloroethane	nd	ug/l
07-28-86	2578	OB-41A	1,1,1-Trichloroethane	nd	ug/l
07-28-86	2578	OB-41A	Trichloroethylene	55.0	ug/l
07-28-86	2578	OB-41A	Benzene	nd	ug/l
07-28-86	2578	OB-41A	Toluene	nd	ug/l
07-28-86	2579	OB-40A	1,1 - Dichloroethylene	nd	ug/l
07-28-86	2579	OB-40A	1, 1-Dichloroethane	nd	ug/l
07-28-86	2579	OB-40A	trans-1,2-Dichloroethylene	nd	ug/l
07-28-86	2579	OB-40A	Chloroform	nd	ug/l
07-28-86	2579	OB-40A	1,2 - Dichloroethane	nd	ug/l
07-28-86	2579	OB-40A	1,1,1-Trichloroethane	nd	ug/l
07-28-86	2579	OB-40A	Trichloroethylene	nd	ug/l
07-28-86	2579	OB-40A	Benzene	nd	ug/l
07-28-86	2579	OB-40A	Toluene	nd	ug/l
07-28-86	2580	OB-24A	1,1 - Dichloroethylene	nd	ug/l
07-28-86	2580	OB-24A	1, 1-Dichloroethane	nd	ug/l

AR307910

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNI
07-28-86	2580	OB-24A	trans-1,2-Dichlcroethylene	nd	ug/
07-28-86	2580	OB-24A	Chloroform	nd	ug/
07-28-86	2580	OB-24A	1,2 - Dichloroethane	nd	ug/
07-28-86	2580	OB-24A	1,1,1-Trichloroethane	1.2	ug/
07-28-86	2580	OB-24A	Trichloroethylene	6.5	ug/
07-28-86	2580	OB-24A	Benzene	nd	ug/
07-28-86	2580	OB-24A	Toluene	nd	ug/
07-29-86	2617	OB-11A	1,1 - Dichloroethylene	nd	ug/
07-29-86	2617	OB-11A	1, 1-Dichloroethane	nd	ug/
07-29-86	2617	OB-11A	trans-1,2-Dichloroethylene	nd	ug/
07-29-86	2617	OB-11A	Chloroform	nd	ug/
07-29-86	2617	OB-11A	1,1,1-Trichloroethane	nd	ug/
07-29-86	2617	OB-11A	Trichloroethylene	nd	ug/
07-29-86	2617	OB-11A	Ethylbenzene	nd	ug/
07-29-86	2618	OB-16A	1,1 - Dichloroethylene	nd	ug/
07-29-86	2618	OB-16A	1, 1-Dichloroethane	nd	ug/
07-29-86	2618	OB-16A	trans-1,2-Dichloroethylene	nd	ug/
07-29-86	2618	OB-16A	Chloroform	nd	ug/
07-29-86	2618	OB-16A	1,1,1-Trichloroethane	nd	ug/
07-29-86	2618	OB-16A	Trichloroethylene	nd	ug/
07-29-86	2618	OB-16A	Ethylbenzene	nd	ug/
07-29-86	2619	OB-19A	1,1 - Dichloroethylene	nd	ug/
07-29-86	2619	OB-19A	1, 1-Dichloroethane	nd	ug/
07-29-86	2619	OB-19A	trans-1,2-Dichloroethylene	nd	ug/
07-29-86	2619	OB-19A	Chloroform	nd	ug/
07-29-86	2619	OB-19A	1,1,1-Trichloroethane	nd	ug/

AR307911

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNITS
07-29-86	2619	OB-19A	Trichloroethylene	nd	ug/l
07-29-86	2619	OB-19A	Ethylbenzene	nd	ug/l
07-29-86	2620	OB-37A	1,1 - Dichloroethylene	nd	ug/l
07-29-86	2620	OB-37A	1, 1-Dichloroethane	nd	ug/l
07-29-86	2620	OB-37A	trans-1,2-Dichloroethylene	16.0	ug/l
07-29-86	2620	OB-37A	Chloroform	nd	ug/l
07-29-86	2620	OB-37A	1,1,1-Trichloroethane	3.1	ug/l
07-29-86	2620	OB-37A	Trichloroethylene	3.0	ug/l
07-29-86	2620	OB-37A	Ethylbenzene	nd	ug/l
07-29-86	2621	OB-38A	1,1 - Dichloroethylene	nd	ug/l
07-29-86	2621	OB-38A	1, 1-Dichloroethane	14.0	ug/l
07-29-86	2621	OB-38A	trans-1,2-Dichloroethylene	9.5	ug/l
07-29-86	2621	OB-38A	Chloroform	399.0	ug/l
07-29-86	2621	OB-38A	1,1,1-Trichloroethane	117.0	ug/l
07-29-86	2621	OB-38A	Trichloroethylene	904.0	ug/l
07-29-86	2621	OB-38A	Ethylbenzene	nd	ug/l
07-29-86	2622	Recovery RAW	1,1 - Dichloroethylene	8.7	ug/l
07-29-86	2622	Recovery RAW	1, 1-Dichloroethane	11.0	ug/l
07-29-86	2622	Recovery RAW	trans-1,2-Dichloroethylene	519.0	ug/l
07-29-86	2622	Recovery RAW	Chloroform	nd	ug/l
07-29-86	2622	Recovery RAW	1,1,1-Trichloroethane	111.0	ug/l
07-29-86	2622	Recovery RAW	Trichloroethylene	96.0	ug/l
07-29-86	2622	Recovery RAW	Ethylbenzene	nd	ug/l
07-29-86	2623	OB-10A	1,1 - Dichloroethylene	nd	ug/l
07-29-86	2623	OB-10A	1, 1-Dichloroethane	nd	ug/l
07-29-86	2623	OB-10A	trans-1,2-Dichloroethylene	nd	ug/l

AR307912

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR
07-29-86	2623	OB-10A	Chloroform	nd ug/l
07-29-86	2623	OB-10A	1,1,1-Trichloroethane	1.5 ug/l
07-29-86	2623	OB-10A	Trichloroethylene	nd ug/l
07-29-86	2623	OB-10A	Ethylbenzene	nd ug/l
07-29-86	2624	OB-15A	1,1 - Dichloroethylene	nd ug/l
07-29-86	2624	OB-15A	1, 1-Dichloroethane	nd ug/l
07-29-86	2624	OB-15A	trans-1,2-Dichloroethylene	nd ug/l
07-29-86	2624	OB-15A	Chloroform	nd ug/l
07-29-86	2624	OB-15A	1,1,1-Trichloroethane	nd ug/l
07-29-86	2624	OB-15A	Trichloroethylene	11.0 ug/l
07-29-86	2624	OB-15A	Ethylbenzene	35.0 ug/l
09-25-86	3548	Recovery RAW	1,1 - Dichloroethylene	5.7 ug/l
09-25-86	3548	Recovery RAW	1, 1-Dichloroethane	nd ug/l
09-25-86	3548	Recovery RAW	trans-1,2-Dichloroethylene	5.6 ug/l
09-25-86	3548	Recovery RAW	Chloroform	8.9 ug/l
09-25-86	3548	Recovery RAW	1,1,1-Trichloroethane	43.0 ug/l
09-25-86	3548	Recovery RAW	Trichloroethylene	165.0 ug/l
09-25-86	3549	Recovery TR	1,1 - Dichloroethylene	nd ug/l
09-25-86	3549	Recovery TR	1, 1-Dichloroethane	nd ug/l
09-25-86	3549	Recovery TR	trans-1,2-Dichloroethylene	nd ug/l
09-25-86	3549	Recovery TR	Chloroform	nd ug/l
09-25-86	3549	Recovery TR	1,1,1-Trichloroethane	nd ug/l
09-25-86	3549	Recovery TR	Trichloroethylene	nd ug/l
11-18-86	4169	OB-38A	trans-1,2-Dichloroethylene	1.5 ug/l
11-18-86	4169	OB-38A	Chloroform	1.1 ug/l
11-18-86	4169	OB-38A	1,2 - Dichloroethane	nd ug/l

AR307913

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
11-18-86	4169	OB-38A	1,1,1-Trichloroethane	3.5	ug/l
11-18-86	4169	OB-38A	Trichloroethylene	6.6	ug/l
11-18-86	4169	OB-38A	Methylene Chloride	nd	ug/l
11-18-86	4169	OB-38A	trans-1,3-Dichloropropene	nd	ug/l
11-18-86	4169	OB-38A	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4169	OB-38A	1, 1-Dichloroethane	nd	ug/l
11-18-86	4170	Recovery RAW	trans-1,2-Dichloroethylene	19.0	ug/l
11-18-86	4170	Recovery RAW	Chloroform	nd	ug/l
11-18-86	4170	Recovery RAW	1,2 - Dichloroethane	nd	ug/l
11-18-86	4170	Recovery RAW	1,1,1-Trichloroethane	254.0	ug/l
11-18-86	4170	Recovery RAW	Trichloroethylene	84.0	ug/l
11-18-86	4170	Recovery RAW	Methylene Chloride	47.0	ug/l
11-18-86	4170	Recovery RAW	trans-1,3-Dichloropropene	nd	ug/l
11-18-86	4170	Recovery RAW	1,1 - Dichloroethylene	2.3	ug/l
11-18-86	4170	Recovery RAW	1, 1-Dichloroethane	2.3	ug/l
11-18-86	4171	Recovery TR	trans-1,2-Dichloroethylene	nd	ug/l
11-18-86	4171	Recovery TR	Chloroform	nd	ug/l
11-18-86	4171	Recovery TR	1,2 - Dichloroethane	nd	ug/l
11-18-86	4171	Recovery TR	1,1,1-Trichloroethane	3.0	ug/l
11-18-86	4171	Recovery TR	Trichloroethylene	5.2	ug/l
11-18-86	4171	Recovery TR	Methylene Chloride	nd	ug/l
11-18-86	4171	Recovery TR	trans-1,3-Dichloropropene	nd	ug/l
11-18-86	4171	Recovery TR	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4171	Recovery TR	1, 1-Dichloroethane	nd	ug/l
11-18-86	4172	OB-10A	trans-1,2-Dichloroethylene	nd	ug/l
11-18-86	4172	OB-10A	Chloroform	nd	ug/l

AR307914

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENT.
11-18-86	4172	OB-10A	1,2 - Dichloroethane	nd ug
11-18-86	4172	OB-10A	1,1,1-Trichloroethane	nd ug
11-18-86	4172	OB-10A	Trichloroethylene	nd ug
11-18-86	4172	OB-10A	Methylene Chloride	1.8 ug
11-18-86	4172	OB-10A	trans-1,3-Dichloropropene	nd ug
11-18-86	4172	OB-10A	1,1 - Dichloroethylene	nd ug
11-18-86	4172	OB-10A	1, 1-Dichloroethane	nd ug
11-18-86	4173	OB-15A	trans-1,2-Dichloroethylene	1.7 ug
11-18-86	4173	OB-15A	Chloroform	1.4 ug
11-18-86	4173	OB-15A	1,2 - Dichloroethane	nd ug
11-18-86	4173	OB-15A	1,1,1-Trichloroethane	5.6 ug
11-18-86	4173	OB-15A	Trichloroethylene	630.0 ug
11-18-86	4173	OB-15A	Methylene Chloride	11[illegible]
11-18-86	4173	OB-15A	trans-1,3-Dichloropropene	nd ug
11-18-86	4173	OB-15A	1,1 - Dichloroethylene	nd ug
11-18-86	4173	OB-15A	1, 1-Dichloroethane	nd ug
11-18-86	4174	OB-16A	trans-1,2-Dichloroethylene	nd ug
11-18-86	4174	OB-16A	Chloroform	nd ug
11-18-86	4174	OB-16A	1,2 - Dichloroethane	nd ug
11-18-86	4174	OB-16A	1,1,1-Trichloroethane	nd ug
11-18-86	4174	OB-16A	Trichloroethylene	1.7 ug
11-18-86	4174	OB-16A	Methylene Chloride	nd ug
11-18-86	4174	OB-16A	trans-1,3-Dichloropropene	nd ug
11-18-86	4174	OB-16A	1,1 - Dichloroethylene	nd ug
11-18-86	4174	OB-16A	1, 1-Dichloroethane	nd ug
11-18-86	4175	OB-24A	1,1 - Dichloroethylene	nd ug

AR307915

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNI
11-18-86	4175	OB-24A	1, 1-Dichloroethane	nd	ug/
11-18-86	4175	OB-24A	trans-1,2-Dichloroethylene	nd	ug/
11-18-86	4175	OB-24A	Chloroform	nd	ug/
11-18-86	4175	OB-24A	1,2 - Dichloroethane	nd	ug/
11-18-86	4175	OB-24A	Trichloroethylene	3.2	ug/
11-18-86	4175	OB-24A	Benzene	nd	ug/
11-18-86	4175	OB-24A	Toluene	nd	ug/
11-18-86	4175	OB-24A	Chlorobenzene	nd	ug/
11-18-86	4175	OB-24A	Ethylbenzene	nd	ug/
11-18-86	4175	OB-24A	1,1,1-Trichloroethane	nd	ug/
11-18-86	4176	OB-25A	1,1 - Dichloroethylene	nd	ug/
11-18-86	4176	OB-25A	1, 1-Dichloroethane	nd	ug/
11-18-86	4176	OB-25A	trans-1,2-Dichloroethylene	nd	ug/
11-18-86	4176	OB-25A	Chloroform	nd	ug/
11-18-86	4176	OB-25A	1,2 - Dichloroethane	nd	ug/l
11-18-86	4176	OB-25A	Trichloroethylene	nd	ug/l
11-18-86	4176	OB-25A	Benzene	nd	ug/l
11-18-86	4176	OB-25A	Toluene	nd	ug/l
11-18-86	4176	OB-25A	Chlorobenzene	nd	ug/l
11-18-86	4176	OB-25A	Ethylbenzene	nd	ug/l
11-18-86	4176	OB-25A	1,1,1-Trichloroethane	nd	ug/l
11-18-86	4177	OB-39A	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4177	OB-39A	1, 1-Dichloroethane	3.1	ug/l
11-18-86	4177	OB-39A	trans-1,2-Dichloroethylene	2.5	ug/l
11-18-86	4177	OB-39A	Chloroform	1.1	ug/l
11-18-86	4177	OB-39A	1,2 - Dichloroethane	1.3	ug/l

AR307916

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
11-18-86	4177	OB-39A	Trichloroethylene	233.0 ug
11-18-86	4177	OB-39A	Benzene	13.0 ug
11-18-86	4177	OB-39A	Toluene	nd ug
11-18-86	4177	OB-39A	Chlorobenzene	nd ug
11-18-86	4177	OB-39A	Ethylbenzene	nd ug
11-18-86	4177	OB-39A	1,1,1-Trichloroethane	4.4 ug
11-18-86	4179	OB-28A	1,1 - Dichloroethylene	nd ug
11-18-86	4179	OB-28A	1, 1-Dichloroethane	1.4 ug
11-18-86	4179	OB-28A	trans-1,2-Dichloroethylene	1.9 ug
11-18-86	4179	OB-28A	Chloroform	nd ug
11-18-86	4179	OB-28A	1,2 - Dichloroethane	7.4 ug
11-18-86	4179	OB-28A	Trichloroethylene	123.0 ug
11-18-86	4179	OB-28A	1,1,1-Trichloroethane	[illegible] ug
11-18-86	4179	OB-28A	Benzene	nd ug
11-18-86	4179	OB-28A	Toluene	nd ug
11-18-86	4179	OB-28A	Ethylbenzene	nd ug
11-18-86	4179	OB-28A	Chlorobenzene	nd ug
11-18-86	4180	OB-27A	1,1 - Dichloroethylene	nd ug
11-18-86	4180	OB-27A	1, 1-Dichloroethane	nd ug
11-18-86	4180	OB-27A	trans-1,2-Dichloroethylene	nd ug
11-18-86	4180	OB-27A	Chloroform	nd ug
11-18-86	4180	OB-27A	1,2 - Dichloroethane	nd ug
11-18-86	4180	OB-27A	Trichloroethylene	74.0 ug
11-18-86	4180	OB-27A	1,1,1-Trichloroethane	1.4 ug
11-18-86	4180	OB-27A	Benzene	nd ug
11-18-86	4180	OB-27A	Toluene	nd ug

AR307917

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
11-18-86	4180	OB-27A	Ethylbenzene	nd	ug/l
11-18-86	4180	OB-27A	Chlorobenzene	nd	ug/l
11-18-86	4181	OB-26A	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4181	OB-26A	1, 1-Dichloroethane	nd	ug/l
11-18-86	4181	OB-26A	trans-1,2-Dichloroethylene	nd	ug/l
11-18-86	4181	OB-26A	Chloroform	nd	ug/l
11-18-86	4181	OB-26A	1,2 - Dichloroethane	nd	ug/l
11-18-86	4181	OB-26A	Trichloroethylene	nd	ug/l
11-18-86	4181	OB-26A	1,1,1-Trichloroethane	nd	ug/l
11-18-86	4181	OB-26A	Benzene	287.0	ug/l
11-18-86	4181	OB-26A	Toluene	13.0	ug/l
11-18-86	4181	OB-26A	Ethylbenzene	5.6	ug/l
11-18-86	4181	OB-26A	Chlorobenzene	nd	ug/l
11-18-86	4193	OB-5A - bailed	1,1 - Dichloroethylene	16.0	ug/l
11-18-86	4193	OB-5A - bailed	1, 1-Dichloroethane	2.8	ug/l
11-18-86	4193	OB-5A - bailed	trans-1,2-Dichloroethylene	15.0	ug/l
11-18-86	4193	OB-5A - bailed	Chloroform	34.0	ug/l
11-18-86	4193	OB-5A - bailed	1,1,1-Trichloroethane	296.0	ug/l
11-18-86	4193	OB-5A - bailed	1,2-Dichloropropane	nd	ug/l
11-18-86	4193	OB-5A - bailed	Chlorobenzene	nd	ug/l
11-18-86	4193	OB-5A - bailed	Trichloroethylene	1400.0	ug/l
11-18-86	4194	OB-5A - pump	1,1 - Dichloroethylene	22.0	ug/l
11-18-86	4194	OB-5A - pump	1, 1-Dichloroethane	2.6	ug/l
11-18-86	4194	OB-5A - pump	trans-1,2-Dichloroethylene	15.0	ug/l
11-18-86	4194	OB-5A - pump	Chloroform	32.0	ug/l
11-18-86	4194	OB-5A - pump	1,1,1-Trichloroethane	224.0	ug/l

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR
11-18-86	4194	OB-5A - pump	1,2-Dichloropropane	nd ug/l
11-18-86	4194	OB-5A - pump	Chlorobenzene	nd ug/1
11-18-86	4194	OB-5A - pump	Trichloroethylene	1152.0 ug/l
11-18-86	4195	OB-5B - pump	1,1 - Dichloroethylene	nd ug/l
11-18-86	4195	OB-5B - pump	1, 1-Dichloroethane	nd ug/l
11-18-86	4195	OB-5B - pump	trans-1,2-Dichloroethylene	nd ug/l
11-18-86	4195	OB-5B - pump	Chloroform	nd ug/1
11-18-86	4195	OB-5B - pump	1,1,1-Trichloroethane	nd ug/1
11-18-86	4195	OB-5B - pump	1,2-Dichloropropane	nd ug/1
11-18-86	4195	OB-5B - pump	Chlorobenzene	nd ug/1
11-18-86	4195	OB-5B - pump	Trichloroethylene	3.3 ug/1
11-18-86	4196	OB-2A - bailed	1,1 - Dichloroethylene	nd ug/1
11-18-86	4196	OB-2A - bailed	1, 1-Dichloroethane	nd
11-18-86	4196	OB-2A - bailed	trans-1,2-Dichloroethylene	nd ug/1
11-18-86	4196	OB-2A - bailed	Chloroform	nd ug/1
11-18-86	4196	OB-2A - bailed	1,1,1-Trichloroethane	2.0 ug/1
11-18-86	4196	OB-2A - bailed	1,2-Dichloropropane	nd ug/1
11-18-86	4196	OB-2A - bailed	Chlorobenzene	nd ug/1
11-18-86	4196	OB-2A - bailed	Trichloroethylene	7.9 ug/1
11-18-86	4197	OB-2A - pumped	1,1 - Dichloroethylene	1.0 ug/1
11-18-86	4197	OB-2A - pumped	1, 1-Dichloroethane	nd ug/1
11-18-86	4197	OB-2A - pumped	trans-1,2-Dichloroethylene	nd ug/1
11-18-86	4197	OB-2A - pumped	Chloroform	1.0 ug/1
11-18-86	4197	OB-2A - pumped	1,1,1-Trichloroethane	3.8 ug/1
11-18-86	4197	OB-2A - pumped	1,2-Dichloropropane	30.0 ug/1
11-18-86	4197	OB-2A - pumped	Chlorobenzene	nd ug/1

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UNIT
11-18-86	4197	OB-2A - pumped	Trichloroethylene	17.0	ug/l
11-18-86	4198	OB-9B - pumped	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4198	OB-9B - pumped	1, 1-Dichloroethane	nd	ug/l
11-18-86	4198	OB-9B - pumped	trans-1,2-Dichloroethylene	nd	ug/l
11-18-86	4198	OB-9B - pumped	Chloroform	nd	ug/l
11-18-86	4198	OB-9B - pumped	1,1,1-Trichloroethane	5.5	ug/l
11-18-86	4198	OB-9B - pumped	1,2-Dichloropropane	nd	ug/l
11-18-86	4198	OB-9B - pumped	Chlorobenzene	nd	ug/l
11-18-86	4198	OB-9B - pumped	Trichloroethylene	39.0	ug/l
11-18-86	4199	OB-9B - bailed	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4199	OB-9B - bailed	1, 1-Dichloroethane	nd	ug/l
11-18-86	4199	OB-9B - bailed	trans-1,2-Dichloroethylene	nd	ug/l
11-18-86	4199	OB-9B - bailed	Chloroform	1.0	ug/l
11-18-86	4199	OB-9B - bailed	1,1,1-Trichloroethane	2.9	ug/l
11-18-86	4199	OB-9B - bailed	1,2-Dichloropropane	32.0	ug/l
11-18-86	4199	OB-9B - bailed	Chlorobenzene	nd	ug/l
11-18-86	4199	OB-9B - bailed	Trichloroethylene	nd	ug/l
11-18-86	4203	OB-41A	1,1 - Dichloroethylene	nd	ug/l
11-18-86	4203	OB-41A	1, 1-Dichloroethane	nd	ug/l
11-18-86	4203	OB-41A	trans-1,2-Dichloroethylene	nd	ug/l
11-18-86	4203	OB-41A	Chloroform	nd	ug/l
11-18-86	4203	OB-41A	1,1,1-Trichloroethane	nd	ug/l
11-18-86	4203	OB-41A	1,2-Dichloropropane	nd	ug/l
11-18-86	4203	OB-41A	Chlorobenzene	nd	ug/l
11-18-86	4203	OB-41A	Trichloroethylene	7.3	ug/l
11-18-86	4203	OB-41A	Benzene	nd	ug/l

AR307920

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTRATION
11-18-86	4203	OB-41A	Toluene	nd u
11-18-86	4203	OB-41A	Ethylbenzene	nd u
11-18-86	4203	OB-41A	1,2 - Dichloroethane	nd u
11-18-86	4204	OB-42A	1,1 - Dichloroethylene	nd u
11-18-86	4204	OB-42A	1, 1-Dichloroethane	nd u
11-18-86	4204	OB-42A	trans-1,2-Dichloroethylene	nd u
11-18-86	4204	OB-42A	Chloroform	nd u
11-18-86	4204	OB-42A	1,1,1-Trichloroethane	nd u
11-18-86	4204	OB-42A	1,2-Dichloropropane	nd u
11-18-86	4204	OB-42A	Chlorobenzene	nd u
11-18-86	4204	OB-42A	Trichloroethylene	1.0 u
11-18-86	4204	OB-42A	Benzene	nd u
11-18-86	4204	OB-42A	Toluene	[illegible]
11-18-86	4204	OB-42A	Ethylbenzene	nd u
11 18-86	4204	OB-42A	1,2 - Dichloroethane	nd u
11-18-86	4205	Durham	1,1 - Dichloroethylene	nd ug
11-18-86	4205	Durham	1, 1-Dichloroethane	nd ug
11-18-86	4205	Durham	trans-1,2-Dichloroethylene	nd ug
11-18-86	4205	Durham	Chloroform	nd ug
11-18-86	4205	Durham	1,1,1-Trichloroethane	nd ug
11-18-86	4205	Durham	1,2-Dichloropropane	nd ug
11-18-86	4205	Durham	Chlorobenzene	nd ug
11-18-86	4205	Durham	Trichloroethylene	nd ug
11-18-86	4205	Durham	Benzene	nd ug
11-18-86	4205	Durham	Toluene	nd ug
11-18-86	4205	Durham	Ethylbenzene	nd ug

AR30792

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR
11-18-86	4205	Durham	1,2 - Dichloroethane	nd
11-18-86	4206	Johnson	1,1 - Dichloroethylene	nd
11-18-86	4206	Johnson	1, 1-Dichloroethane	nd
11-18-86	4206	Johnson	trans-1,2-Dichloroethylene	nd
11-18-86	4206	Johnson	Chloroform	nd
11-18-86	4206	Johnson	1,1,1-Trichloroethane	nd
11-18-86	4206	Johnson	1,2-Dichloropropane	nd
11-18-86	4206	Johnson	Chlorobenzene	nd
11-18-86	4206	Johnson	Trichloroethylene	nd
11-18-86	4206	Johnson	Benzene	nd
11-18-86	4206	Johnson	Toluene	nd
11-18-86	4206	Johnson	Ethylbenzene	nd
11-18-86	4206	Johnson	1,2 - Dichloroethane	nd
11-18-86	4207	Gearh - Curley	1,1 - Dichloroethylene	nd
11-18-86	4207	Gearh - Curley	1, 1-Dichloroethane	nd
11-18-86	4207	Gearh - Curley	trans-1,2-Dichloroethylene	nd
11-18-86	4207	Gearh - Curley	Chloroform	nd
11-18-86	4207	Gearh - Curley	1,1,1-Trichloroethane	nd
11-18-86	4207	Gearh - Curley	1,2-Dichloropropane	nd
11-18-86	4207	Gearh - Curley	Chlorobenzene	nd
11-18-86	4207	Gearh - Curley	Trichloroethylene	nd
11-18-86	4207	Gearh - Curley	Benzene	nd
11-18-86	4207	Gearh - Curley	Toluene	nd
11-18-86	4207	Gearh - Curley	Ethylbenzene	nd
11-18-86	4207	Gearh - Curley	1,2 - Dichloroethane	1.
11-18-86	4208	Gearhart-new RA	1,1 - Dichloroethylene	nd

AR307922

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CHEM SOLV WATER QUALITY DATA

DATE	LAB #	SAMPLE ID	PARAMETER	CONCENTR	UI
11-18-86	4208	Gearhart-new RA	1, 1-Dichloroethane	nd	ug
11-18-86	4208	Gearhart-new RA	trans-1,2-Dichloroethylene	nd	ug
11-18-86	4208	Gearhart-new RA	Chloroform	nd	ug
11-18-86	4208	Gearhart-new RA	1,1,1-Trichloroethane	nd	ug
11-18-86	4208	Gearhart-new RA	1,2-Dichloropropane	1.0	ug
11-18-86	4208	Gearhart-new RA	Chlorobenzene	nd	ug
11-18-86	4208	Gearhart-new RA	Trichloroethylene	nd	ug
11-18-86	4208	Gearhart-new RA	Benzene	nd	ug
11-18-86	4208	Gearhart-new RA	Toluene	nd	ug
11-18-86	4208	Gearhart-new RA	Ethylbenzene	nd	ug
11-18-86	4208	Gearhart-new RA	1,2 - Dichloroethane	30.0	ug
11-18-86	4209	Gearhart-new TR	1,1 - Dichloroethylene	nd	ug
11-18-86	4209	Gearhart-new TR	1, 1-Dichloroethane		ug
11-18-86	4209	Gearhart-new TR	trans-1,2-Dichloroethylene	nd	ug
11-18-86	4209	Gearhart-new TR	Chloroform	nd	ug
11-18-86	4209	Gearhart-new TR	1,1,1-Trichloroethane	nd	ug
11-18-86	4209	Gearhart-new TR	1,2-Dichloropropane	nd	ug
11-18-86	4209	Gearhart-new TR	Chlorobenzene	nd	ug
11-18-86	4209	Gearhart-new TR	Trichloroethylene	nd	ug
11-18-86	4209	Gearhart-new TR	Benzene	nd	ug
11-18-86	4209	Gearhart-new TR	Toluene	nd	ug
11-18-86	4209	Gearhart-new TR	Ethylbenzene	nd	ug
11-18-86	4209	Gearhart-new TR	1,2 - Dichloroethane	nd	ug

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX D

AR307924

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX D

DNREC MONITORING WELL LOGS
AND RESIDENTIAL WELL LOGS

AR307925

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

OB-1A

OB 1

HANDEX CORP., P.O. Box 261, 773 Annapolis Road, Gambrills, MD. 21054 (301) 923-2990

BORING LOG

Well No. 1 Application No. _____ Permit No. 58634
Date Drilled 9-27-84 County _____ Use monitor
Location 176 A, N. Dupont Hwy., Dover, Delaware
Owner Chem. Solv. State Del. Address _____
Drilling Method Auger Sampling Method from cuttings
Hole Diameter 11" Total Depth 20'
Casing:
Type PVC Diameter 4" Length 7'
Screen:
Type PVC Slot .020 Diameter 4" Length 15'
Gravel Pack Size #1 Casing Seal BENTONITE
Static Water Level _____ Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN — 2 ft.	IDENTIFICATION OF SOILS/REMARKS
				0-1 Top soil 1-5 dark brown medium to fine sand, some silt, chemical odor
5				5-17 Brown medium to fine sand, little silt
10			well screen	DESTROYED
15				
				17-20 Orange-Brown silty clay, trace fine sand

AR307926

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

2A

CB-2

Handex

HANDEX CORP., P.O. Box 261, 773 Annapolis Road, Gambrills, MD. 21054 (301) 923-2990

...NG LOG

...ell No. 2 Application No. _____ Permit No. 58639

...e Drilled 9-27-84 County _____ Use monitor

...cation 176 A. N. Dupont Hwy., Dover, Delaware

...wner Chem. Solv-State Del. Address _____

...lling Method Auger Sampling Method from cuttings

...e Diameter 11" Total Depth 17'

Casing:

Type PVC Diameter 4" Length 9'

...reen:

Type PVC Slot .020 Diameter 4" Length 10'

Gravel Pack Size #1 Casing Seal BENTONITE

...tic Water Level _____ Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	2 ft.	IDENTIFICATION OF SOILS/REMARKS
				0-6"	Top soil
				6"-4'	light Brown fine sand, trace silt
				4-17	Brown medium to fine sand, little silt
				17-	Orange Brown Silty Clay
10			well screen		
15					
20					

AR307927

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Handex

3A

HANDEX CORP., P.O. Box 261, 773 Annapolis Road, Gambrills, MD. 21054 (301) 923-2990

OB-3

BORING LOG

Well No. 3 Application No. _____ Permit No. 58636

Date Drilled 9-27-84 County _____ Use monitor

Location 166 A., N. Dupont Hwy., Dover, Delaware

Owner Chem. Solv.-State Del. Address _____

Drilling Method Auger Sampling Method from cuttings

Hole Diameter 11" Total Depth 16'

Casing:

Type PVC Diameter 4" Length 8'

Screen:

Type PVC Slot .020 Diameter 4" Length 10'

Gravel Pack Size #1 Casing Seal BENTONITE

Static Water Level _____ Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	2 ft.	IDENTIFICATION OF SOILS/REMARKS
				0-6"	Top soil
				6"-3'	dark Brown fine sand, some silt
				3-9	Brown medium to fine sand, some silt
			well screen	9-13	Brown medium to fine sand, little silt
10					
				13-16	Brown coarse to fine sand, trace(+) silt
20					

AR307928

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4A

OB-

Handex

HANDEX CORP., P.O. Box 261, 773 Annapolis Road, Gambrills, MD. 21054 (301) 923-2990

BORING LOG

Well No. 4 Application No. _____ Permit No. 58637

Date Drilled 9-27-84 County _____ Use monitor

Location 176 A., N. Dupont Hwy., Dover, Delaware

Owner Chem. Solv.-State Del. Address _____

Drilling Method Auger Sampling Method from cuttings

Hole Diameter 11' Total Depth 17'

Casing:

Type PVC Diameter 4" Length 9'

Screen:

Type PVC Slot .020 Diameter 4" Length 10'

Gravel Pack Size #1 Casing Seal BENTONITE

Static Water Level _____ Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0-6" Top soil
				6"-4' Brown fine sand, some silt
				4-10 Brown medium to fine sand, some silt
10			well screen	10-17 Brown coarse to fine sand, little si
20				

AR307929

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Handex

HANDEX CORP., P.O. Box 261, 773 Annapolis Road, Gambrills, MD. 21054 (301) 923-2990

5A

OB-5A

DRILLING LOG

Well No. 5 Application No. _____ Permit No. 58638

Date Drilled 9-27-84 County _____ Use monitor

Location 176 A., N. Dupont Hwy., Dover, Delaware

Owner Chem. Solv.-State Del. Address _____

Drilling Method Auger Sampling Method from cuttings

Hole Diameter 11" Total Depth 17'

Casing: Type PVC Diameter 4" Length 9'

Screen: Type PVC Slot .020 Diameter 4" Length 10'

Gravel Pack Size #1 Casing Seal BENTONITE

Static Water Level _____ Geologic Formation _____

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0-6" Gravel
				6"-3' Orange-brown fine sand, some silt
				3-7 Yellow-brown medium to fine sand, some silt
				7-10 Brown medium to fine sand, some silt
10			well screen	
				16-17 Brown coarse to fine sand, little silt
20				
				1.65 stick-up

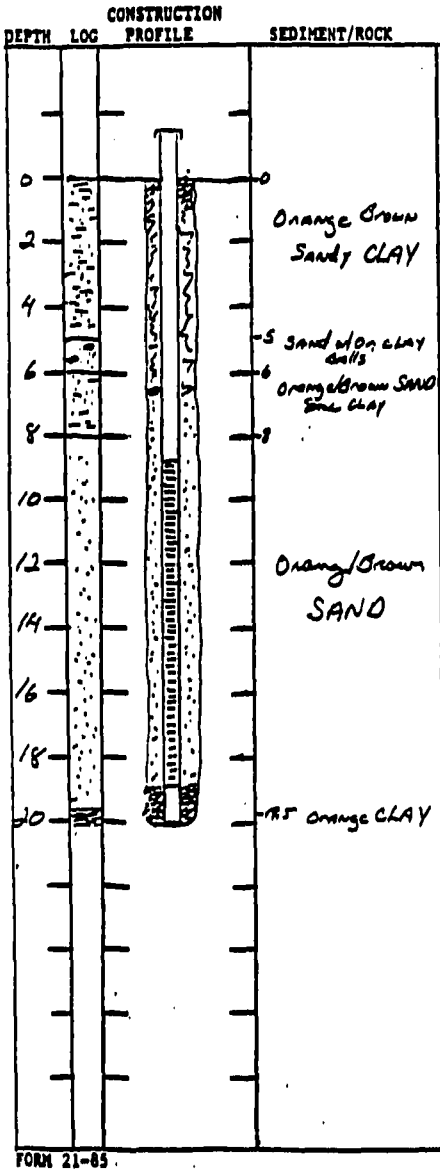
AR307930

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MONITOR WELL CONSTRUCTION SUMMARY

PROJECT Chem-Solv WELL NO. OB-5AR

DEPTH	LOG	CONSTRUCTION PROFILE	SEDIMENT/ROCK



DESCRIPTION OF REFERENCE PTS:

M.P. ELEVATION: 45.46

DATE(S) DRILLED: 8-20-85

DEPTH DRILLED: 20 ft

DEPTH OF WELL: 20 ft

DRILLER: Andy Miller

COMPANY: Earth Data Inc

STICKUP: 1.65

CASING

MATERIAL	PVC	PVC	Steel
DIAMETER	4"	4"	4"
TOP	1	19	-2
BOTTOM	9	20	-1

WELL SCREEN

MATERIAL	PVC		
DIAMETER	4"		
SLOT SIZE	20		
TOP	9		
BOTTOM	19		

SAND OR GRAVEL SIZE: Morie #1

GROUTING DETAILS: Bent Pellets from 20 to 19 ft, 1 to 7 ft Back fill, Ctr 1 Bent

PROTECTIVE CASING: NO

LOCKING CAP? YES NO

INITIAL YIELD:

DEVELOPMENT DETAILS: Surge + Pump with K-Packer (Calgon).

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

FORM 21-85

EARTH DATA INCORPORATED

AR307931

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MONITOR WELL CONSTRUCTION SUMMARY

PROJECT: Chem-Solv

WELL NO. OB-5B

CONSTRUCTION PROFILE

DEPTH	LOG	SEDIMENT/ROCK
0		0 Brown SAND
4		5 Brown SAND, clay balls
8		6
12		Brown Med. grain SAND
16		Cement (Coarse)
20		18 orange/Br CLAY; 20 Br CLAY, white streaks
24		23 white SAND; 23.5 orange CLAY; 25 Orange CLAY/white SAND
28		
32		Grey/Brown SAND, Fine to Med.
36		Some chippy clay Areas
40		
44		
48		50
52		

DESCRIPTION OF REFERENCE PTS: GS for formation Log

M.P. ELEVATION: 45.67

DATE(S) DRILLED: 8-12 and 8-16-85

DEPTH DRILLED: 50 feet

DEPTH OF WELL: 50 feet

DRILLER: Andrew Miller

COMPANY: Earth Data Inc.

STICKUP: 1.99 ft

CASING			
MATERIAL		Steel	
DIAMETER	1¼"	4"	
TOP	0	+2	
BOTTOM	30	24	

WELL SCREEN			
MATERIAL	PVC		
DIAMETER	1¼"		
SLOT SIZE	20		
TOP	30		
BOTTOM	50		

SAND OR GRAVEL SIZE: Nevie #1

GROUTING DETAILS: #1 Sand to 19 ft, 2 ft Bent Pellets, fill w/ Sand Bent mix

PROTECTIVE CASING: Yes 24', 4"

LOCKING CAP? YES NO

INITIAL YIELD:

DEVELOPMENT DETAILS: Surged and pumped with Air

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

FORM 21-85

AR307932

EARTH DATA INCORPORATED

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

TELEPHONE (302) 736-4761

6

BORING LOG

Well No. OA-6B Application No. _____ Permit No. _____
Date Drilled 11/28/85 County SENT Use monitor
Location Chem Solv CHESWOLD DE.
Owner DNREC Address Dover DE
Drilling Method Mud Rotary Sampling Method Cuttings / solid spoon
Hole Diameter _____ Total Depth 56
Casing:
Type PVC Diameter 4" Length 30'
Screen:
Type PVC Slot .002 Diameter 4" Length 10'
Gravel Pack Size #2 Marie Casing Seal Bentonite
Static Water Level 12' Geologic Formation Columbia Formation

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" (W) SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0-1 Topsoil
10				1-10 Medium to coarse orange Sand
				Were there split/spoons between 10-35?
30			30	
				10-35 medium to coarse orange/brown Sand
				35-36 orange clayey silt
			40	
				36-43 medium to coarse orange/brown Sand Trace orange clayey silt
50				43-47 fine to medium orange sand little silt
				47-52 fine orange/brown sand some silt
				52 Trace black/Grey clay Miocene
				53-56 Coarse Grey Sand w/Shells

AR307933

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7A

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

TELEPHONE (302) 736-4761

BORING LOG

Well No. [illegible] Application No. _____ Permit No. _____
Date Drilled [illegible] County [illegible] Use monitor
Location [illegible]
Owner [illegible] Address [illegible]
Drilling Method [illegible] Sampling Method [illegible]
Hole Diameter _____ Total Depth 15'
Casing:
Type PVC Diameter 4" Length 6"
Screen:
Type PVC Slot .002 Diameter 4" Length 10"
Gravel Pack Size [illegible] Casing Seal Bentonite
Static Water Level 7" Geologic Formation Columbia

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0-1 Top Soil
				1-15 Course to medium orange sand some silt
				15-20 orange/red clayey silt
10				
20				
30				

AR307934

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7B

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903
TELEPHONE: (302) 736-4761

BORING LOG

Well No. [illegible] Application No. _____ Permit No. _____
Date Drilled [illegible] County [illegible] Use monitor
Location [illegible]
Owner [illegible] Address [illegible]
Drilling Method [illegible] Sampling Method [illegible]
Hole Diameter _____ Total Depth 60
Casing: Type PVC Outer Casing Diam 18" Depth 20' Diameter 4" Length _____
Screen: Type PVC Slot .002 Diameter 4" Length _____
Gravel Pack Size [illegible] Casing Seal [illegible]
Static Water Level [illegible] Geologic Formation [illegible]

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	Outer Casing	IDENTIFICATION OF SOILS/REMARKS
					0-1 Topsoil
10					
					1-15 Coarse to medium Orange Sand some Silt
					15-23 Orange clayey silt [illegible]
20					
					23-44 = medium to fine orange sand
					44-? wood chips miocene!
30					45-60 Miocene Grey sand coarse/shells
40					
50					

AR307935

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

8A

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

TELEPHONE (302) 736-4761

BORING LOG

Well No. OB-[illegible] Application No. _____ Permit No. _____
Date Drilled [illegible] County KENT Use monitor
Location [illegible] Sherwood Dr
Owner DNREC Address Dover De
Drilling Method [illegible] Sampling Method [illegible]
Hole Diameter _____ Total Depth 20'
Casing:
Type PVC Diameter 4" Length 6'
Screen:
Type PVC Slot .002 Diameter 4" Length 10'
Gravel Pack Size [illegible] Casing Seal [illegible]
Static Water Level [illegible] Geologic Formation [illegible]

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0-1 Topsoil
				1-10 medium to coarse orange sand
				10-18 medium orange/brown sand some silt
				18-30 Orange/Red clayey silt

AR307936

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

8B

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

TELEPHONE (302) 736-4761

BORING LOG

Well No. [illegible] Application No. _____ Permit No. _____
Date Drilled [illegible] County [illegible] Use monitor
Location [illegible]
Owner [illegible] Address [illegible]
Drilling Method [illegible] Sampling Method [illegible]
Hole Diameter _____ Total Depth 57'
Casing:
Type PVC Outer Casing 10" [illegible] Diameter 4" Length 40'
Screen:
Type PVC Slot .002 Diameter 4" Length 10'
Gravel Pack Size [illegible] Casing Seal [illegible]
Static Water Level 0' Geologic Formation [illegible]

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	Outer Casing IDENTIFICATION OF SOILS/REMARKS
				0-1 Topsoil
10				1-10 medium to course orange sand
				10-18 medium orange/brown sand some silt
				18-20 [illegible]
20				20-30 medium orange/brown sand some silt Traces orange/Red clayey silt
30				30-45 fine to medium orange/Red sands
50				45-57 Miocene Coarse Gray sand w/ shells No trace of confining clay
60				

AR307937

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

9A

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

TELEPHONE (302) 736-4761

BORING LOG

Well No. [illegible] Application No. _____ Permit No. _____
Date Drilled [illegible] County [illegible] Use monitor
Location [illegible] Chemical Co
Owner [illegible] Address [illegible]
Drilling Method [illegible] Sampling Method [illegible]
Hole Diameter _____ Total Depth 30'
Casing: Type PVC Diameter 4" Length _____
Screen: Type PVC Slot .002 Diameter 4" Length _____
Gravel Pack Size [illegible] Casing Seal [illegible]
Static Water Level [illegible] Geologic Formation [illegible]

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
				0-1 Topsoil
10				1-10 medium to course orange Sand
20				10-26 medium orange/brown sand some silt
				26 orange clayey silt
30				

AR307938

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

9B

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF ENVIRONMENTAL CONTROL
WATER RESOURCES SECTION

BORING LOG

Well No. [illegible] Application No. _____ Permit No. _____
Date Drilled _____ County [illegible] Use monitor
Location [illegible]
Owner [illegible] Address Dover Del
Drilling Method [illegible] Sampling Method [illegible]
Hole Diameter _____ Total Depth 100'
Casing:
Type PVC Diameter 4" Length 40'
Screen:
Type PVC Slot [illegible] Diameter 4" Length 10'
Gravel Pack Size [illegible] Casing Seal [illegible]
Static Water Level [illegible] Geologic Formation [illegible]

DEPTH BELOW SURFACE	SAMPLE NUMBER	BLOWS PER 6" ON SAMPLER	WELL DESIGN	IDENTIFICATION OF SOILS/REMARKS
0				0-1 Topsoil
10				1-10 medium to coarse orange Sand
20				10-26 medium orange/brown sand some silt 26- Orange clayey silt
30				26-35 medium orange sand Traces orange clayey silt
40			19	42-75 Fine orange/brown sands some silt Trace wood chips
50			70	
60				no clay ?
70				
				75-100 miocene Coarse greysand w/shells

AR307939.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

...:
...SUPPLY BRANCH
...SION OF ENVIRONMENTAL CONTROL
...BOX 1401
...OVER, DELAWARE 19903

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED 21 DAYS AFTER CONSTRUCTION DATE

WELL COMPLETION REPORT

PLEASE PRINT

PERMIT NO 62257 LOCAL ID OR-10A

OWNER DNREC

CONSTRUCTION DATE [illegible]-25

PURPOSE ☐ TEST ☒ PERMANENT

USE ☐ DOMESTIC ☐ AGRICULTURAL
☐ COMMERCIAL ☐ INDUSTRIAL
☐ IRRIGATION ☐ PUBLIC
☒ MONITOR ☐ DEWATERING
☐ HEAT PUMP RECHARGE ☐ HEAT PUMP SUPPLY
☐ OTHER (Specify)

IS THIS A REPLACEMENT WELL? YES ☐ NO ☒

ABANDONMENT DATE FOR OLD WELL

ABANDONMENT METHOD

DRILLING METHOD

☐ AUGERED ☐ BORED ☐ CABLE TOOL
☒ DRIVEN ☐ JETTED ☐ AIR ROTARY
☐ MUD ROTARY ☐ REVERSE ☐ WASHED
☐ OTHER (Specify)

TOTAL DEPTH DRILLED 17.5

CASING SEQUENCE

	INNER	OUTER
CASING TOP	[illegible]	[illegible]
CASING BOTTOM	[illegible]	[illegible]
CASING DIAMETER	[illegible]	[illegible]
CASING MATERIAL	[illegible]	[illegible]

SCREEN SEQUENCE

	INNER	OUTER
SCREEN TOP	[illegible]	
SCREEN BOTTOM	17.5	
SCREEN DIAMETER	[illegible]	
SCREEN MATERIAL	[illegible]	

WRITTEN APPROVAL FOR SCREENING/GRAVEL PACKING MORE THAN ONE AQUIFER MUST BE OBTAINED FROM DNREC

GROUT TYPE CEMENT ☐ BENTONITE CLAY ☐
OTHER N/A
FROM ____ TO ____ FEET
NON-GROUT BACKFILL OF WELL ANNULUS
TYPE ____ FROM ____ TO N/A FEET
GRAVEL PACK TYPE N/A
FROM ____ TO ____ FEET
STATIC WATER LEVEL: DATE
____ FT (Below, above) GROUND SURFACE
PUMPING WATER LEVEL ____ FT BELOW GRADE
AFTER ____ HOURS AT ____ GPM

WELL HEAD COMPLETION:

TYPE PITLESS ADAPTOR ☐
OTHER ☒ [illegible]
[illegible] INCHES ABOVE GRADE [illegible]

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE N/A
RATED CAPACITY (GPM)
PUMP INTAKE SETTING ____ FT. BELOW GRADE

THE COMPLETED WELL IS?

	YES	NO
A. AT LEAST 5' FROM ANY OVERHANG	☒	☐
B. AT LEAST 50' FROM ANY SEPTIC TANK	☐	☐
C. AT LEAST 10' FROM TOWN SEWER LINE	☒	☐
D. AT LEAST 100' FROM THE NEAREST EDGE OF ANY TILE FIELD	☐	☐

THE NEAREST NEIGHBORS (CIRCLE ONE)

SEPTIC TILE FIELD CESSPOOL OR PRIVY
IS ____ FROM COMPLETED WELL.
IS COMPLETED WELL LOCATED AS SHOWN ON APPLICATION FORM? ☒ ☐
IF NO, DESCRIBE LOCATION CHANGE OR OTHER COMMENTS.

Typical completion report for 1/2" drive point wells.

DRILLERS LOG DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
N/A		

SUPPLEMENTAL DRILLERS LOG ATTACHED YES ☐ NO ☒
PAGE 1 OF ___ PAGES
COMPANY NAME [illegible]
SIGNATURE OF DRILLER IN CHARGE DATE

AR207910

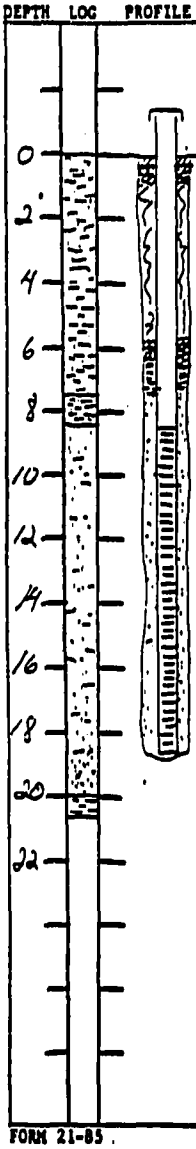
DOCUMENT NO 45-65-78-01-03

WHITE - DNREC CANARY - CONTRACTOR PINK OWNER

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MONITOR WELL CONSTRUCTION SUMMARY

PROJECT Chem-Solv WELL NO. OB-20AR



DEPTH	LOG	CONSTRUCTION PROFILE	SEDIMENT/ROCK
0			0 Or. Brown Sandy CLAY
2			1.5 Light Or. Br. Sandy CLAY
4			3 Light Or. Sandy CLAY 4
6			Ck Orange/Br. Sandy CLAY
8			7.5 Orange/Br. Sandy CLAY 8.5
10			Orange Brown slightly clayey Med SAND, flecks of black mineral present
12			
14			
16			
18			18.5 Orange/Br. coarse SAND
20			20 Orange/Tan CLAY 20.5
22			

DESCRIPTION OF REFERENCE PTS:

M.P. ELEVATION:

DATE(S) DRILLED: 9-15-85

DEPTH DRILLED: 18.5 ft

DEPTH OF WELL: 18.5 ft

DRILLER: Andy Miller

COMPANY: Earth Data Inc.

STICKUP: ? 15 inches

CASING

MATERIAL	Steel		
DIAMETER	1¼"		
TOP	0		
BOTTOM	8.5		

WELL SCREEN

MATERIAL	PVC		
DIAMETER	1¼"		
SLOT SIZE	30		
TOP	8.5		
BOTTOM	18.5		

SAND OR GRAVEL SIZE: Morie #2

GROUTING DETAILS: 7.5 to 6.5 Bent and Sand mix, 6.5 to 5.5 Bent pell, 5.5 to 1 fill 0 to 1 cement

PROTECTIVE CASING: No

LOCKING CAP? YES (NO)

INITIAL YIELD:

DEVELOPMENT DETAILS:

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

FORM 21-85

EARTH DATA INCORPORATED

AR307941

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MONITOR WELL CONSTRUCTION SUMMARY

PROJECT Chem Solv

WELL NO. 013 31 AR

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:
2			
0			CEMENT
2		1 1/4 GALV PIPE	
4			
6			
8			
10		1 1/4 SS Johnson well point	
12			
14			
16			
18			
20			

Drive Point

DESCRIPTION OF MEASURING PTS: Top of well

M.P. ELEVATION:

DATE(S) DRILLED: OCT-4-85

DEPTH DRILLED: 20.4 ft

DEPTH OF WELL: 20.4 ft

DRILLER: Andy Miller

STICKUP: 25 in

CASING

MATERIAL	Galv		
DIAMETER	1 1/4		
TOP	25 in ABOVE ground		
BOTTOM	9.5 ft		

WELL SCREEN

MATERIAL	S.S.		
DIAMETER	1 1/2		
SLOT SIZE	20 Johnson well point		
TOP	9.5		
BOTTOM	20.4		

SAND OR GRAVEL SIZE: NA

GROUTING DETAILS: 1/2 ft cement at ground level

PROTECTIVE CASING: NO

LOCKING CAP? YES NO

INITIAL YIELD:

DEVELOPMENT DETAILS: Jetted twice Back flush/pump.

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

AR307942

FORM 18-85

EARTH DATA INCORPORATED

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MONITOR WELL CONSTRUCTION SUMMARY

PROJECT Chem Solv

WELL NO. OB 32 AR

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:
0		2 in galv pipe	cement
2			Back-fill
4			
6			
8			Bent pell
10		2 in PVC wraped screens	# 2 SAND
12			
14			Natural SAND
16			
18			
20			

DESCRIPTION OF MEASURING PTS:

M.P. ELEVATION:

DATE(S) DRILLED: Oct-4-85

DEPTH DRILLED: 20.2

DEPTH OF WELL: 20.2

DRILLER: Andy Miller

STICKUP: 19 in

CASING

MATERIAL	Galv		
DIAMETER	2 in		
TOP	2 ft above ground		
BOTTOM	9 1/2 ft		

WELL SCREEN

MATERIAL	PVC	wire wrap	
DIAMETER	2 in		
SLOT SIZE	20		
TOP	9.5		
BOTTOM	20.2		

SAND OR GRAVEL SIZE: #2 + natural

GROUTING DETAILS: 1 1/2 Bent Pell + 1/2 ft cement top

PROTECTIVE CASING: NO

LOCKING CAP? YES (NO)

INITIAL YIELD:

DEVELOPMENT DETAILS: Jetted well twice, the surged back fill pump

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

FORM 18-85

EARTH DATA INCORPORATED

AR307943

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MONITOR WELL CONSTRUCTION SUMMARY

PROJECT Chem-Solv

WELL NO. OB SWAC

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:
0		2in gaw pipe	
			CEMENT
2			Back fill with cuttings
4		2in pvc pipe	
6			
8			BENT PELLETS
			#2 SAND
10		PVC wire wrap screens #20	
12			NATERAL SAND
14			
16			
18			
20			

DESCRIPTION OF MEASURING PTS: top of locking cap

M.P. ELEVATION:

DATE(S) DRILLED: Oct 22, 95

DEPTH DRILLED: 20 ft

DEPTH OF WELL: 20 ft

DRILLER: Andy Miller

STICKUP: 24 in

CASING

MATERIAL	GAIV	PVC	
DIAMETER	2in	2in	
TOP	24 above	2ft	
BOTTOM	24 below	10ft	

WELL SCREEN wire wrap

MATERIAL	PVC	-	
DIAMETER	2in		
SLOT SIZE	20		
TOP	10		
BOTTOM	20		

SAND OR GRAVEL SIZE: Natural

GROUTING DETAILS: Bent Pellets Natural Cuttings and Cement added

PROTECTIVE CASING: NO

LOCKING CAP? (YES) NO

INITIAL YIELD:

DEVELOPMENT DETAILS: Back filled and pumped, packer and pump

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

AR307944

FORM 18-85

EARTH DATA INCORPORATED

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PROJECT Chem-Solv

WELL NO. OR-35AR

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:
0		3" Steel	CEMENT
2		2" PVC Pipe	Backfill with Cuttings
4			
6			
8			Bent. Pellets
10		PVC Wire Wrap Screen #20 slot	#2 SAND
12			Natural Sand
14			
16			
18			
20			
22			

DESCRIPTION OF MEASURING PTS: Top of Locking Cap

M.P. ELEVATION:

DATE(S) DRILLED: 10/16/85

DEPTH DRILLED: 20'

DEPTH OF WELL: 20'

DRILLER: Andy Miller

STICKUP: 24"

CASING

MATERIAL	Steel	PVC	
DIAMETER	2"	2"	
TOP	+2	2'	
BOTTOM	-2	9'	

WELL SCREEN

MATERIAL	PVC		
DIAMETER	2"		
SLOT SIZE	20		
TOP	9		
BOTTOM	20		

SAND OR GRAVEL SIZE: #2, Natural

GROUTING DETAILS: Bent Pellets, Natur cuttings, cement at top.

PROTECTIVE CASING: No

LOCKING CAP? (YES) NO

INITIAL YIELD:

DEVELOPMENT DETAILS: Back-fill and pump, packer and pump

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

FORM 18-85

EARTH DATA INCORPORATED

AR3[illegible]/945

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PROJECT Irem-Solr

WELL NO. #36AR

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:
2			
0		2in galv pipe	CEMENT
2			
4		Drc 2in pipe	Fill
6			Bent Fill
8			
10			
12		wire wrap pvc screens 2in #20	NAT. SAND
14			
16			
18			

DESCRIPTION OF MEASURING PTS:

Top of well

M.P. ELEVATION:

DATE(S) DRILLED: Oct 16 95

DEPTH DRILLED: 22 ft

DEPTH OF WELL: 18

DRILLER: Andy Miller

STICKUP: 1 1/2 ft

CASING

MATERIAL	pvc	galv	
DIAMETER	2in	2in	
TOP	1 1/2	+ 1 1/2	
BOTTOM	7	- 1 1/2	

WELL SCREEN

MATERIAL	pvc		
DIAMETER	2in		
SLOT SIZE	20		
TOP	7		
BOTTOM	18		

SAND OR GRAVEL SIZE: Natural

GROUTING DETAILS: Natural sand to 6 ft 1 ft Bent pell, fill to 1 1/2 cement to ground, ok

PROTECTIVE CASING:

LOCKING CAP? YES no

INITIAL YIELD: —

DEVELOPMENT DETAILS: pump + surge

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

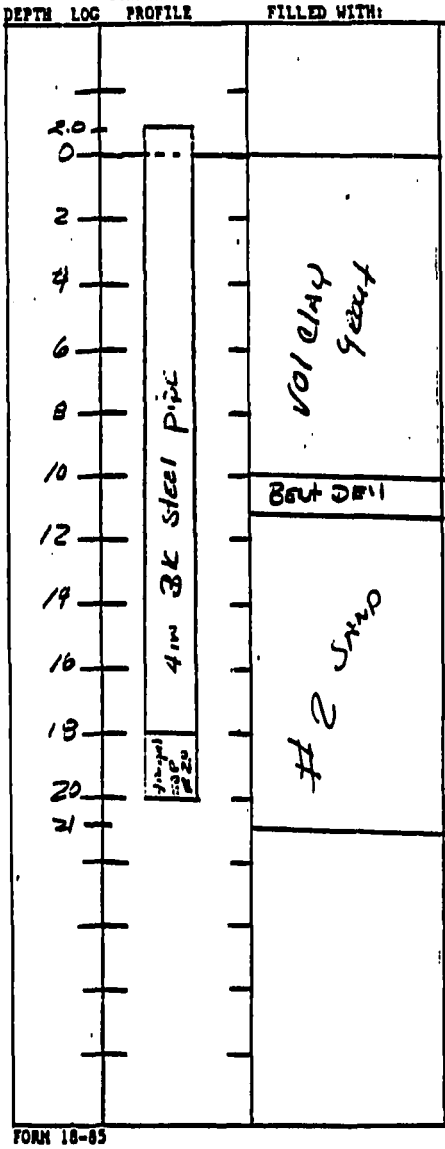
FORM 18-85

EARTH DATA INCORPORATED

AR307946

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PROJECT Chem-Solv #222 WELL NO. W3 AR



DESCRIPTION OF MEASURING PTS: top of well

M.P. ELEVATION:

Method of Drilling: MW 20400

DATE(S) DRILLED: 6-9-86

DEPTH DRILLED: 21.0 ft

DEPTH OF WELL: 20 ft

DRILLER: A. Miller

STICKUP: 2.0

CASING

MATERIAL	3K St.		
DIAMETER	4 in		
TOP +	2.0		
BOTTOM −	18.0		

WELL SCREEN

MATERIAL	GALV		
DIAMETER	4 in		
SLOT SIZE	20		
TOP	18.0		
BOTTOM	20.0		

SAND OR GRAVEL SIZE: #2

GROUTING DETAILS: Bent 11-10
Vol clay grout 10-00

PROTECTIVE CASING: NO

LOCKING CAP? YES NO

INITIAL YIELD: 5 gpm

DEVELOPMENT DETAILS: Ditch pump

PUMPING TEST DETAILS: Ditch pump

STATIC WATER LEVEL: 11.67 DATE:

FORM 18-85

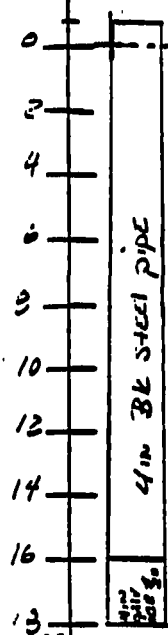
AR307947

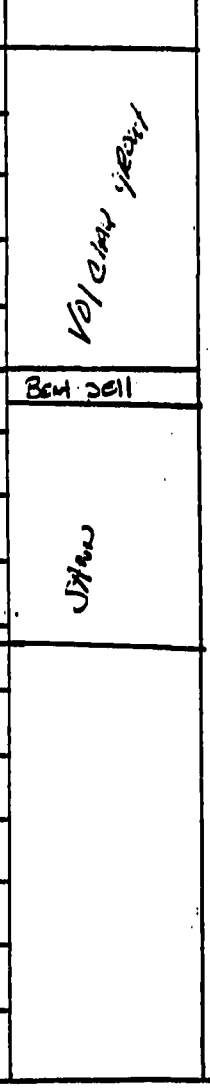
EARTH DATA INCORPORATED

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PROJECT Them Solv #222 WELL NO. 44 AR

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:
0			
2			
4			
6			
8			
10			
12			
14			
16			
18			
18.5			





DESCRIPTION OF MEASURING PTS: Top of well

M.P. ELEVATION:

Method of Drilling: Mud Roto

DATE(S) DRILLED: 6-10-86

DEPTH DRILLED: 18.5

DEPTH OF WELL: 18.0

DRILLER: A. Miller

STICKUP: 2.0

CASING

MATERIAL	BK St		
DIAMETER	4in		
TOP	2.0		
BOTTOM	16.0		

WELL SCREEN

MATERIAL	Galv		
DIAMETER	4in		
SLOT SIZE	#20		
TOP	16.0		
BOTTOM	18.0		

SAND OR GRAVEL SIZE: #2

GROUTING DETAILS: Bent pell 11-10 10-0 volclay grout

PROTECTIVE CASING: no

LOCKING CAP? YES NO

INITIAL YIELD: BK suck

DEVELOPMENT DETAILS: ditch pump, penetrator + surge

PUMPING TEST DETAILS:

STATIC WATER LEVEL: DATE:

FORM 18-85

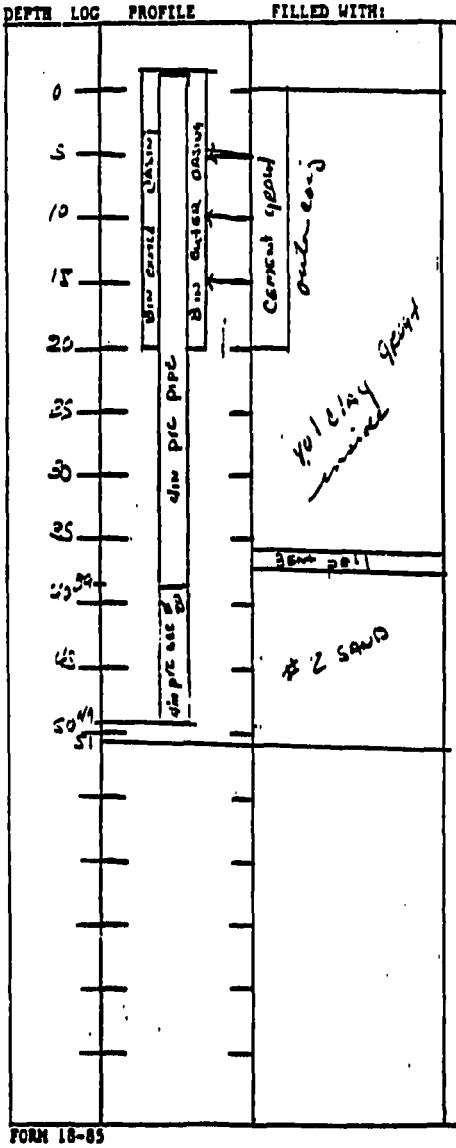
EARTH DATA INCORPORATED

AR307948

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PROJECT Chem-Solv #222 WELL NO. 45B

DEPTH	LOG	CONSTRUCTION PROFILE	ANNULAR SPACE FILLED WITH:



DESCRIPTION OF MEASURING PTS:

M.P. ELEVATION:

Method of Drilling:

DATE(S) DRILLED: 6-17-36 6-16-36

DEPTH DRILLED: 51

DEPTH OF WELL: 49

DRILLER: A. Miller

STICKUP: 2.0

CASING		outer	
MATERIAL	pvc	Bk stl	
DIAMETER	4in	8in	
TOP	1.5	2.0	
BOTTOM	39.0	20	

WELL SCREEN			
MATERIAL	pvc		
DIAMETER	4in		
SLOT SIZE	#20		
TOP	39.0		
BOTTOM	49.0		

SAND OR GRAVEL SIZE: #2

GROUTING DETAILS: 8in 20-0 cement 4in Bent pell 37-36 Volclay 36-0

PROTECTIVE CASING: 8in

LOCKING CAP? YES (NO)

INITIAL YIELD: 12 gpm

DEVELOPMENT DETAILS:

PUMPING TEST DETAILS: ditch pump

STATIC WATER LEVEL: 10.9 DATE: 6-17

FORM 18-85

EARTH DATA INCORPORATED

AR307949

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SENT BY:Div Of Air/Waste Mgmt; 7- 3-98 8:53AM ; 13023234561→ CCITT G3;# 4

MAIL TO:
WATER SUPPLY BRANCH
DIVISION OF ENVIRONMENTAL CONTROL
P.O. BOX 1401
DOVER, DELAWARE 19903

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

APPLICATION FOR A PERMIT TO DRILL A WELL

PERMIT REQUIRED BEFORE DRILLING IS TO BE STARTED. IF APPROVED, THIS APPLICATION CONSTITUTES A WELL PERMIT.

A COMPLETION REPORT MUST BE FILED WITH THE WATER SUPPLY BRANCH WITHIN TWENTY ONE (21) DAYS AFTER COMPLETION OF THE WELL. FAILURE TO DO SO MAY RESULT IN LICENSE SUSPENSION.

PLEASE PRINT OR TYPE

GENERAL INFORMATION

Owner: Ron Gearhart
Address: RD 5 Box 440 D
City: Dover State: Del. Zip: 19901
Telephone Number: ( ) 736-6326
Well Contractor: John Fabe Lic. No. 201
Pump Installer: Lic. No.
Date of Application: Sept 11 1995
Estimated Construction Date: Sept 11-95

Purpose: ☐ Test ☒ Permanent

Use: ☒ Domestic ☐ Agricultural ☐ Commercial ☐ Industrial ☐ Irrigation ☐ Public ☐ Monitor ☐ Dewatering ☐ Heat Pump Recharge ☐ Heat Pump Supply ☐ Other (Specify)

Is public water service available? ☐ Yes ☒ No
Is this a replacement well? ☒ Yes ☐ No
Replacement reason: no water
Abandonment date for old well: Sept 11-95
Type of abandonment: Grout
Septic system permit no.:

DRILLING METHOD:

☐ Augured ☐ Bored ☐ Cable Tool
☐ Driven ☒ Jetted ☐ Air Rotary
☐ Mud Rotary ☐ Reverse ☐ Washed
☐ Other (Specify)

PROPOSED WELL CONSTRUCTION

Approximate total depth: 50' Gravel

	Inner casing	Outer casing
Casing top (above grade)	3'4	
Casing bottom (below grade)	45'	
Casing diameter	2"	
Casing material	PVC	

Tentative screen setting: 45' (Top) to 50'
Tentative screen length: 5' Material PVC
Type of Gravel: Gravel From 45' (Top) to 5'
Gravel pack ☐ Yes ☐ No
Gravel pack interval from 2' to 50'
Desired capacity: GPM.
Maximum daily use: 300 GPD.

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

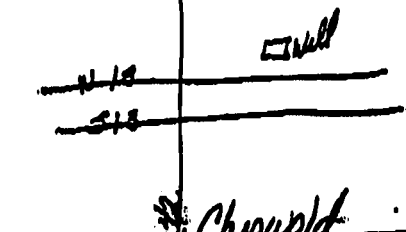
John H. Fabe
Applicant ☐ Representative ☐

LOCATION MAP - ROAD MAP

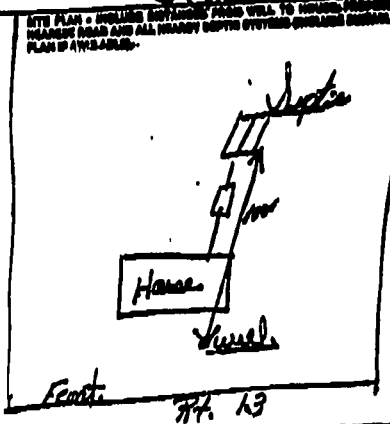
Project County: Kent
Subdivision:
Lot no.:
Name of nearest town: Cheswold
Distance to nearest town: ½ mile

DIRECTION OF WELL FROM TOWN (CIRCLE ONE)

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO ROADS AND GIVE DISTANCE FROM WELL SITE TO NEAREST ROAD JUNCTION.



SITE PLAN - INCLUDE DISTANCES FROM WELL TO HOUSE, PROPERTY LINES, NEAREST ROAD AND ALL NEARBY SEPTIC SYSTEMS. INCLUDE SEPTIC PLAN IF AVAILABLE.



PERMIT NO. 62685

FOR OFFICIAL USE ONLY

Modified Grid: Formation:
Drainage Basin: Local ID:
Aquifer: Tax ID:

FOR OFFICIAL USE ONLY - DO NOT WRITE BELOW THIS LINE

Application Fee Received: RECEIVED
Date: Amount: SEP 12 1995
Received By:
Receipt No.: WATER SUPPLY

PURSUANT TO PROVISIONS OF 7 DELAWARE CODE, CHAPTER 60, PERMISSION IS HEREBY GRANTED TO CONSTRUCT AND USE A WELL AS DESCRIBED ABOVE AND SUBJECT TO THOSE CONDITIONS ATTACHED, ALL APPLICABLE REGULATIONS GOVERNING WELL CONSTRUCTION AND WATER RESOURCES MUST BE FOLLOWED.

Signed: [signature]
Permit Expires: 9/12/98 Report Filed: Permit No. 62685

AR307950

WHITE - WATER SUPPLY • CANARY - WORK • PINK - OWNER • GOLDENROD - WELL CONTRACTOR

DOC. 7 (Revised 1/95)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SENT BY:Div Of Air/Waste Mgmt; 7- 3-98 8:53AM ; 13023234561→ CCITT G3;# 5

MAIL TO:
WATER SUPPLY BRANCH
DIVISION OF ENVIRONMENTAL CONTROL
P.O. BOX 1401
DOVER, DELAWARE 19903

PLEASE PRINT

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED 21 DAYS AFTER CONSTRUCTION DATE

WELL COMPLETION REPORT

PERMIT NO. 62685 LOCAL ID _____

OWNER Gearhart, Ron

CONSTRUCTION DATE 9-11-85

PURPOSE: ☐ TEST ☒ PERMANENT

USE: ☒ DOMESTIC ☐ AGRICULTURAL
☐ COMMERCIAL ☐ INDUSTRIAL
☐ IRRIGATION ☐ PUBLIC
☐ MONITOR ☐ DEWATERING
☐ HEAT PUMP RECHARGE ☐ HEAT PUMP SUPPLY
☐ OTHER (Specify) _____

IS THIS A REPLACEMENT WELL? YES ☒ NO ☐
ABANDONMENT DATE FOR OLD WELL 9-11-85
ABANDONMENT METHOD cemented

DRILLING METHOD

☐ AUGERED ☐ BORED ☐ CABLE TOOL
☐ DRIVEN ☒ JETTED ☐ AIR ROTARY
☐ MUD ROTARY ☐ REVERSE ☐ WASHED
☐ OTHER (Specify) _____
TOTAL DEPTH DRILLED 50' ft

CASING SEQUENCE

CASING TOP	8"	
CASING BOTTOM	45'	
CASING DIAMETER	2"	
CASING MATERIAL	P.V.C.	

SCREEN SEQUENCE

SCREEN TOP	45'	
SCREEN BOTTOM	50'	
SCREEN DIAMETER	2"	
SCREEN MATERIAL	P.V.C.	

WRITTEN APPROVAL FOR SCREENING/GRAVEL PACKING MORE THAN ONE AQUIFER MUST BE OBTAINED FROM DNREC.

GROUT TYPE: CEMENT ☒ BENTONITE CLAY ☐
OTHER: _____
FROM 4' TO 8' FEET
NON-GROUT BACKFILL OF WELL ANNULUS
TYPE stone FROM 45' TO 50' FEET
GRAVEL PACK: TYPE sand
FROM 8" TO 50' FEET
STATIC WATER LEVEL: DATE _____
6 FT. (Below, above) GROUND SURFACE
PUMPING WATER LEVEL: _____ FT. BELOW GRADE
AFTER _____ HOURS AT _____ GPM.

WELL HEAD COMPLETION:
TYPE: PITLESS ADAPTOR ☐
OTHER ☒ pit adaptor
8" INCHES ABOVE GRADE.

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE ✓
RATED CAPACITY (GPM) 20
PUMP INTAKE SETTING 2 FT. BELOW GRADE

THE COMPLETED WELL IS?

	YES	NO
A. AT LEAST 5' FROM ANY OVERHANG	☒	☐
B. AT LEAST 50' FROM ANY SEPTIC TANK	☒	☐
C. AT LEAST 10' FROM TOWN SEWER LINE	☒	☐
D. AT LEAST 100' FROM THE NEAREST EDGE OF ANY TILE FIELD	☒	☐

THE NEAREST NEIGHBORS (CIRCLE ONE)
SEPTIC TILE FIELD CESSPOOL OR PRIVY
IS 100 FROM COMPLETED WELL.
IS COMPLETED WELL LOCATED AS SHOWN ON APPLICATION FORM? ☒ ☐
IF NO, DESCRIBE LOCATION CHANGE OR OTHER COMMENTS:

RECEIVED
JAN 7 1998
WATER SUPPLY

DRILLERS LOG DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
gravel (top soil)		
gravel sand		
clay		
sand		

SUPPLEMENTAL DRILLERS LOG ATTACHED YES ☐ NO ☐
PAGE 1 OF ___ PAGES
COMPANY NAME Johnson Well Service
SIGNATURE OF DRILLER IN CHARGE: David Hastings DATE 9/30/97

DOCUMENT NO. 40-00-00-01-00

WHITE - DNREC CANARY - CONTRACTOR PINK - OWNER

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

00-6012-02
00-6012-03

MAIL TO: PROJECT FILE

WATER SUPPLY BRANCH: Bowker
DIVISION OF WATER RESOURCES
P.O. BOX 1401
DOVER, DELAWARE 19903

PLEASE PRINT OR TYPE

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

APPLICATION FOR A PERMIT TO DRILL A WELL

APPLICATION MUST BE SUBMITTED AND PERMIT RECEIVED BEFORE DRILLING IS STARTED. IF APPROVED, THIS APPLICATION CONSTITUTES A WELL PERMIT.

A COMPLETION REPORT MUST BE FILED WITH THE WATER SUPPLY BRANCH WITHIN TWENTY ONE (21) DAYS AFTER COMPLETION OF THIS WELL. FAILURE TO DO SO MAY RESULT IN LICENSE SUSPENSION.

GENERAL INFORMATION

Owner: State of Delaware - Ron Gearhart
Address: RD #5, Box 144D
City: Dover State: DE Zip: 19901
Telephone Number: (302) 736-6326 (work)
Well Contractor: P. Sharp Lic. No. 104
Pump Installer: P. Sharp Lic. No. 104
Date of Application: 4/30/87
Estimated Construction Date: 4/30/87
Purpose: ☐ Test ☒ Permanent

Use: ☒ Domestic ☐ Agricultural ☐ Commercial ☐ Industrial ☐ Irrigation ☐ Public ☐ Monitor ☐ Dewatering ☐ Heat Pump Recharge ☐ Heat Pump Supply ☐ Other _____ (Specify)

Is public water service available? ☐ Yes ☒ No
Is this a replacement well? ☒ Yes ☐ No
Replacement reason: Contaminated w/ hydrocarbons
Abandonment date for old well: retained as monitor well
Type of abandonment: None
Septic system permit no.: Existing

DRILLING METHOD

☐ Augered ☐ Bored ☐ Cable Tool
☐ Driven ☐ Jetted ☐ Air Rotary
☒ Mud Rotary ☐ Reverse ☐ Washed
☐ Other (Specify) _____

PROPOSED WELL CONSTRUCTION

Approximate total depth: 150'

	Inner casing	Outer casing
Casing top (above grade)	1'	3' below
Casing bottom (below grade)	140'	60'
Casing diameter	4"	8"
Casing material	PVC	Steel

Tentative screen setting: 140' (Top) to 150'
Tentative screen length: 10' Material: PVC
Type of Grout: bentonite From: 0 (Top) to 140'
Gravel pack ☒ Yes ☐ No 0 60
Gravel pack interval from: 140' to 150'
Desired capacity: 20 GPM.
Maximum daily use: 400 GPD.

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

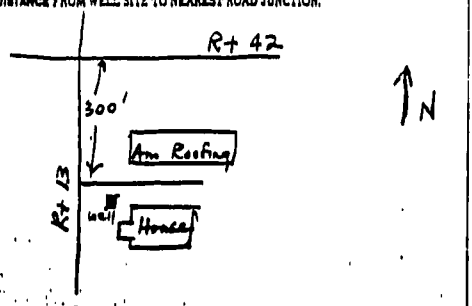
Applicant ☐ Representative ☒

LOCATION MAP - ROAD MAP

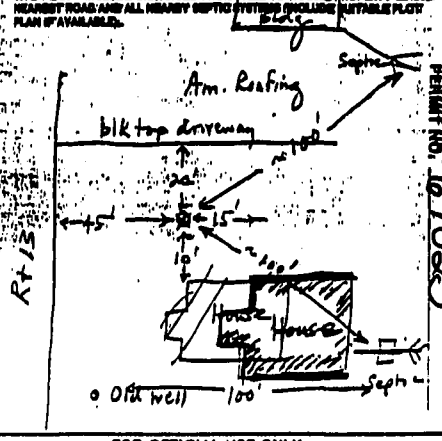
Project County: Kent
Subdivision: —
Lot no.: —
Name of nearest town: Cheswold
Distance to nearest town: 100' (across Rt 13)

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO ROADS AND GIVE DISTANCE FROM WELL SITE TO NEAREST ROAD JUNCTION.



SITE PLAN - INCLUDE DISTANCES FROM WELL TO HOUSE, PROPERTY LINES, NEAREST ROAD AND ALL NEARBY SEPTIC SYSTEMS (INCLUDE SUITABLE PLOT PLAN IF AVAILABLE).



PERMIT NO. 69033

FOR OFFICIAL USE ONLY

Modified Grid _____ Formation _____
Drainage Basin _____
Aquifer _____

FOR OFFICIAL USE ONLY - DO NOT WRITE BELOW THIS LINE

Application Fee Received: RECEIVED
Date _____ Amount _____
Received By: APR 30 1987
Receipt No.: WATER SUPPLY

PURSUANT TO PROVISIONS OF 7 DELAWARE CODE, CHAPTER 60, PERMISSION IS HEREBY GRANTED TO CONSTRUCT AND USE A WELL AS DESCRIBED ABOVE AND SUBJECT TO THOSE CONDITIONS ATTACHED. ALL CURRENT REGULATIONS GOVERNING WELL CONSTRUCTION AND WATER RESOURCE USE MUST BE FOLLOWED.

Signed: [signature]

Permit Expires: 4/1/87 Report Filed: 6-7-88 Permit No. 69033

DOC. # 40-08/88/08/01

WHITE - WATER SUPPLY • CANARY - WORK • PINK - OWNER • GOLDENROD - WELL CONTRACTOR

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MAIL TO:
WATER SUPPLY BRANCH
DIVISION OF WATER RESOURCES
P.O. BOX 1401
DOVER, DELAWARE 19903

PLEASE PRINT

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT

WELL COMPLETION REPORT MUST BE RETURNED 21 DAYS AFTER CONSTRUCTION DATE

PERMIT NO. 69033 LOCAL ID

OWNER State of DE, Ron Gearhart

CONSTRUCTION DATE 5/14/87

PURPOSE: ☐ TEST ☑ PERMANENT

USE: ☑ DOMESTIC ☐ AGRICULTURAL
☐ COMMERCIAL ☐ INDUSTRIAL
☐ IRRIGATION ☐ PUBLIC
☐ MONITOR ☐ DEWATERING
☐ HEAT PUMP RECHARGE ☐ HEAT PUMP SUPPLY
☐ OTHER (Specify)

IS THIS A REPLACEMENT WELL? YES ☑ NO ☐

ABANDONMENT DATE FOR OLD WELL

ABANDONMENT METHOD 5/15/87

DRILLING METHOD

☐ AUGERED ☐ BORED ☐ CABLE TOOL
☐ DRIVEN ☐ JETTED ☐ AIR ROTARY
☑ MUD ROTARY ☐ REVERSE ☐ WASHED
☐ OTHER (Specify)

TOTAL DEPTH DRILLED 127'

CASING SEQUENCE

	INNER	OUTER
CASING TOP	1' above Gr	-4'
CASING BOTTOM	117'	60'
CASING DIAMETER	4"	
CASING MATERIAL	PVC	

SCREEN SEQUENCE

	INNER	OUTER
SCREEN TOP	117'	
SCREEN BOTTOM	127'	
SCREEN DIAMETER	4"	
SCREEN MATERIAL	PVC	

WRITTEN APPROVAL FOR SCREENING/GRAVEL PACKING MORE THAN ONE AQUIFER MUST BE OBTAINED FROM DNREC.

GROUT TYPE: CEMENT ☑ BENTONITE CLAY ☑
~~OTHER~~ Annular of outer Casing Cement
FROM 0 TO 117 FEET Bentonite

NON-GROUT BACKFILL OF WELL ANNULUS
TYPE _____ FROM _____ TO _____ FEET

GRAVEL PACK: TYPE #2 well sand
FROM 117 TO 127 FEET

STATIC WATER LEVEL: DATE
17 FT. (Below) above) GROUND SURFACE

PUMPING WATER LEVEL: 70 FT. BELOW GRADE
AFTER 2 HOURS AT 50 GPM.

WELL HEAD COMPLETION:
TYPE: PITLESS ADAPTOR ☑
OTHER ☐
12 INCHES ABOVE GRADE.

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE Goulds
RATED CAPACITY (GPM) 20
PUMP INTAKE SETTING 80 FT. BELOW GRADE

THE COMPLETED WELL IS?

	YES	NO
A. AT LEAST 5' FROM ANY OVERHANG	☑	☐
B. AT LEAST 50' FROM ANY SEPTIC TANK	☑	☐
C. AT LEAST 10' FROM TOWN SEWER LINE	☑	☐
D. AT LEAST 100' FROM THE NEAREST EDGE OF ANY TILE FIELD	☑	☐

THE NEAREST NEIGHBORS (CIRCLE ONE)

SEPTIC (TILE FIELD) CESSPOOL OR PRIVY
IS 170 FROM COMPLETED WELL
IS COMPLETED WELL LOCATED AS SHOWN ON APPLICATION FORM? ☑ ☐
IF NO, DESCRIBE LOCATION CHANGE OR OTHER COMMENTS.

RECEIVED
MAY 20 1987
WATER SUPPLY

DRILLERS LOG DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
See attached		

SUPPLEMENTAL DRILLERS LOG ATTACHED YES ☑ NO ☐
PAGE 1 OF ___ PAGES
COMPANY NAME Phillip Sharp & Son Inc
SIGNATURE OF DRILLER IN CHARGE: Phil Sharp DATE 5/15/87

AR30795

DOCUMENT NO. 46-66-78-61-63

WHITE - DNREC CANARY - CONTRACTOR PINK - OWNER

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

MAIL TO:
WATER SUPPLY BRANCH
DIVISION OF ENVIRONMENTAL CONTROL
P.O. BOX 1401
DOVER, DELAWARE 19901

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED 21 DAYS AFTER CONSTRUCTION DATE

SUPPLEMENTAL DRILLER'S LOG

PLEASE PRINT

PERMIT NO. 690 33 LOCAL ID PAGE 1 OF 1 PAGES

OWNER STATE OF DEL. RON GEARHART

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Top Soil	0'	2'
Red yellow sand	2'	10'
Coarse yellow sand, Layer of iron ore	10'	16'
Brown Clay	16'	20'
fine yellow sand	20'	38'
Coarse tan sand	38'	50'
fine Gray sand & Shell	50'	52'
Gray silt & shell	52'	59'
fine Gray sand & layer of silt & shell	59'	62'
fine Brown sand & Gray Clay & shell	62'	80'
Gray Clay & shell	80'	90'
Dark Brown Clay	90'	105'
Red Gray Clay sand	105'	110'
fine Gray sand with shell	110'	120'
Red - Coarse Gray sand	120'	127'
(130' Dark Brown Clay)		

OTHER COMMENTS:

RECEIVED
MAY 20 1987
WATER SUPPLY.

Phil Staff 5/15/87

AR307954

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX E

AR307955

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX E

STRATIGRAPHIC BORING AND SOIL BORING LOGS

AR307956

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG			WELL NO: MWI-1-43
			SHEET 1 OF: 2
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
WELL LOCATION: Upgradient, outside Switzer Corner			DATE(S) DRILLED: 3/9, 12/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 10 3/4" and 5 3/4" OD Mud Rotary
BORING DIAMETER: 6"φ (24-43) 10¾"φ (0-24)	SAMPLING METHOD: 2" OD Split Spoon		SAMPLE INTERVAL: 28-42'
LOGGED BY: M. Bonaker			TOTAL DEPTH: 43'
SCREEN SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded, 0.010" screen			SCREENED INTERVAL: 33-43'
CASING SIZE AND MATERIAL: 6" ID black Steel, threaded; 2" ID Schedule 40 PVC, threaded			CASED INTERVAL: 6"φ (0-24'); 2"φ (0-33')
GRAVEL PACK SIZE: No. 1 Sand			PACKED INTERVAL: 31-43'
GROUT TYPE: 5% bentonite / Portland cement			GROUTED INTERVAL: 0-23'
GROUTING METHOD: Tremie			BENTONITE SEAL: (Granular) 23-31'
DEVELOPMENT METHOD: Compressed air	TIME: 1 hour		ESTIMATED YIELD: 5 gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:	

REMARKS: Water used as drilling fluid; hammer driven by hydraulic system on rig. Granular bentonite used for seal. 10" borehole drilled to 23.5', 6" casing pushed to 24'. Well installed 3/12/90; well developed 3/14/90.

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-28'				See log for boring CSB-1
23-28.5'	28-30'	17,40,42,37	20	Silt and Sand: Fine sand; clay slightly dense; orange; wet. OVA = NIR (CS, OS).
28.5-43'				Sand: Fine, well sorted; trace to little clay; trace gray interbeds; orange; wet.
	32-32'	28,46,54,63	17	Sand: Fine, well sorted; trace medium to coarse sand; trace clay; mottled gray and primarily orange; damp. OVA = NIR (CS, OS).
	35-37'	33,28,35,46	14	Sand: Fine to medium, fining downward; trace coarse sand and clay; trace fine (1/32") gray interbeds;

AB307957

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

WELL NO. MWI-1-43

SHEET 2 OF: 2

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (in)	CLASSIFICATION
				orange; damp. OVA = NIR (CS, OS)
	40-42'	11, 27, 22, 23	21	Sand: Fine; little to trace medium Sand and Clay; Sandy Clay lens from 41.9 to 42'; Orange with thin gray interbeds; wet
43'				End of Boring

AR307958

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG			WELL NO: MWI-2-40
			SHEET 1 OF: 1
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
WELL LOCATION: American Roofing property			DATE(S) DRILLED 12/6-8/89
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD 6 1/4" ID HSA
BORING DIAMETER: 10"	SAMPLING METHOD: 2" OD Split Spoon		SAMPLE INTERVAL: Continuous
LOGGED BY: M. Bonaker			TOTAL DEPTH: 40'
SCREEN SIZE AND MATERIAL: 0.010" slotted 2" ID Schedule 40 PVC, threaded			SCREENED INTERVAL: 30-40'
CASING SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded			CASED INTERVAL: 0-30'
GRAVEL PACK SIZE: No. 1 Sand			PACKED INTERVAL: 28-40'
GROUT TYPE: 5% bentonite/cement			GROUTED INTERVAL: 0-24
GROUTING METHOD: Tremie			BENTONITE SEAL: Pellets 24-28
DEVELOPMENT METHOD: Diaphragm pump	TIME: 1 hour		ESTIMATED YIELD: 10gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:	

REMARKS: Boring CSB-2 drilled using 3 1/4" ID hollow stem augers, the borehole was then redrilled using 6 1/4" ID augers and the well was installed 12/8/89.

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-40'				See log for boring CSB-2
40'				End of borehole

AR307959

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG		WELL NO: MWS-3-17
		SHEET 1 OF: 2
PROJECT: Chem-Solv, Inc. Site		PROJECT NO: 00.6012.02
WELL LOCATION: American Roofing property		DATE(S) DRILLED 12/11, 12/89
DRILLING CONTRACTOR: Delmarva Drilling Co, Inc.		DRILLING METHOD 6 1/4" ID HSA
BORING DIAMETER: 10"	SAMPLING METHOD: 2" OD Split Spoon	SAMPLE INTERVAL: Continuous
LOGGED BY: M. Bonaker		TOTAL DEPTH: 20'
SCREEN SIZE AND MATERIAL: 0.020" slotted, 2" ID Schedule 40 PVC, threaded		SCREENED INTERVAL: 4-17'
CASING SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded		CASED INTERVAL: 0-4'
GRAVEL PACK SIZE: No. 1 Sand		PACKED INTERVAL: 3.25-17'
GROUT TYPE: 5% bentonite/Portland cement		GROUTED INTERVAL: 0-2'
GROUTING METHOD: Gravity		BENTONITE SEAL: (Pellets) 0-3.25'
DEVELOPMENT METHOD: Diaphragm pump	TIME: 1 hour	ESTIMATED YIELD: 1 gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:

REMARKS: Borehole initially drilled using 3 1/4" ID hollow stem auger. and then redrilled using 6 1/4" ID auger. well installed 12/12/90.

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-0.6'	0-2'	5, 13, 12, 8	18	Sand and Silt: Fine sand; trace plant material; medium to dark brown; dry, HNu = 0.1 (OS)
0.6-17.6'				Sand: Fine to very fine, well sorted; some to little silt; trace clay and medium sand; dense; medium orange brown, dry
	2-4'	16, 18, 30, 42	24	Sand: Very fine to medium, well sorted; little silt; slightly dense; orange; dry. HNu = NIR (OS)
	4-6	25, 36, 47, 37	23	Sand: Fine to coarse, coarsening downward, moderately [illegible] little to trace silt, decreasing with depth; trace subrounded medium gravel from 5.5 to 5.6'; tan

AR307968

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

WELL NO. MWS-3-17 SHEET 2 OF: 2

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
				planar fabric defined by black Sand at 5.4 to 5.6'; orange; dry
	6-8'	14,20,19,15	24	Sand: Fine to coarse, poorly sorted; trace to little silt and subrounded fine to coarse gravel; fine gray sand from 7.2 to 7.4'; orange; dry. HNu = NIR (OS)
	8-10'	16,18,17,16	18	Sand Fine to coarse, poorly sorted, coarsening downward; trace to little silt; trace fine to coarse subrounded gravel from 9.5 to 10'; orange; dry. HNu = NIR (OS).
	10-12'	23,19,8,10	24	Sand: Fine to coarse, poorly sorted; trace silt and subrounded fine gravel; planar fabric from 11.1 to 11.2' defined by dark orange brown sand; fine to very fine mottled orange to orange brown and black sand from 11.9 to 12'; orange; damp. HNu = NIR (OS).
	12-14'	15,22,24,27	24	Sand: Fine to medium, moderately poorly sorted, little coarse sand; trace silt and subrounded fine gravel, distinct planar fabric defined by black sand from 13.7 to 14'; orange to orange brown and black, damp HNu = NIR (OS)
	14-16'	11,19,32,52	24	Sand: Same as above; planar fabric from 15.6 to 16'. HNu = NIR (OS)
	16-18	19,34,23,24	24	Sand: Fine to coarse, poorly sorted; trace silt and subrounded fine to medium gravel at 17.6'; orange brown, damp. HNu = NIR (OS)
17.6-18.8'				Silt: Moderately dense, little to trace fine sand and silt; planar fabric; orange with thin gray layers, slightly damp.
	18-20		18	Silt: Same as above.
18.8-19.8'				Sand: Fine to medium, coarsening downward, moderately well sorted; little silt; orange; wet.
19.8-20'				Silt: Dense; trace fine to coarse sand and fine gravel; mottled gray and orange.
20'				End of Borehole

AR307961

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG			WELL NO: MWI-4-40
			SHEET 1 OF: 1
PROJECT: Chem. Solv, Inc. Site			PROJECT NO: 00-6012
WELL LOCATION: Durham property, Site yard			DATE(S) DRILLED 3/12/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD 5 3/4" OD Mud Rotary
BORING DIAMETER: 6"	SAMPLING METHOD: None		SAMPLE INTERVAL: None
LOGGED BY: M. Bonaber			TOTAL DEPTH: 40'
SCREEN SIZE AND MATERIAL: 0.010" Slotted, 2" ID Schedule 40 PVC, threaded			SCREENED INTERVAL: 30-40'
CASING SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded			CASED INTERVAL: 0-30'
GRAVEL PACK SIZE: No. 1 Sand			PACKED INTERVAL: 28-40'
GROUT TYPE: 5% bentonite/Portland Cement			GROUTED INTERVAL: 0-25.5'
GROUTING METHOD: Tremie			BENTONITE SEAL: Granular 25.5-28'
DEVELOPMENT METHOD: Compressed air	TIME: 45 minutes		ESTIMATED YIELD: 10 gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:	

REMARKS: Well installed 3/12/90; well developed 3/14/90 and 3/15/90.

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-40'				See log for Boring CSB-3
40'				End of Boring

AR307962

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG			WELL NO: MWS-5-18
			SHEET 1 OF: 1
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
WELL LOCATION: Durham Property, Site yard			DATE(S) DRILLED 3/5/90
DRILLING CONTRACTOR: Delmarva Drilling Co, Inc.			DRILLING METHOD 6 1/4" ID HSA
BORING DIAMETER: 10"	SAMPLING METHOD: None		SAMPLE INTERVAL: None
LOGGED BY: M. Borraker			TOTAL DEPTH: 18'
SCREEN SIZE AND MATERIAL: 0.010" Slotted, 2" ID Schedule 40 PVC, threaded			SCREENED INTERVAL: 5-18'
CASING SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded			CASED INTERVAL: 0-5'
GRAVEL PACK SIZE: No. 1 Sand			PACKED INTERVAL: 4-18'
GROUT TYPE: 5% bentonite / Portland Cement			GROUTED INTERVAL: 0-3'
GROUTING METHOD: Gravity			BENTONITE SEAL: Pellets 3-4'
DEVELOPMENT METHOD: Compressed air	TIME: 1 hour		ESTIMATED YIELD: 0.5 gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:	
REMARKS: Well installed 3/5/90; well developed 3/14/90.			

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-18'				See log for Boring CSB-3.
18'				End of Boring.

AR307963

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG			WELL NO: MWS-6-25
			SHEET 1 OF: [illegible]
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
WELL LOCATION: North of corner			DATE(S) DRILLED: 3/5,6/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7"	SAMPLING METHOD: 2" OD Split Spoon		SAMPLE INTERVAL: Continuous
LOGGED BY: M. Bonaker			TOTAL DEPTH: 25'
SCREEN SIZE AND MATERIAL: c. 10" Slotted, 2" ID Schedule 40 PVC, threaded			SCREENED INTERVAL: 15-25'
CASING SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded			CASED INTERVAL: 0-15'
GRAVEL PACK SIZE: No. 1 Sand			PACKED INTERVAL: 14-25'
GROUT TYPE: 5% bentonite/Portland cement			GROUTED INTERVAL: 0-13'
GROUTING METHOD: Tremie			BENTONITE SEAL: Pellets 13-14'
DEVELOPMENT METHOD: Compressed air	TIME: 1 hour		ESTIMATED YIELD: 3/4 gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:	

REMARKS: Well installed 3/6/90; well developed 3/14/90. CS = closed split spoon; OS = open split spoon.

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-0.6'	0-2	2,2,3,2	19	Silt: Slightly dense, some fine to medium sand, trace coarse sand; medium to dark brown; little plant material; dry. HNU = 1.0 (CS); 1.6 (OS).
0.6-3.1				Sand: Fine to coarse, poorly sorted, sub rounded; trace rounded fine to coarse gravel and silt, fining downward; orange; slightly damp.
	2-4	2,2,2,2	14	Sand: Same as above; orange brown. HNU = 0.2 (CS); 1.6 (OS).
3.1-5.7				Silt: Dense; little fine to coarse sand; trace rounded fine gravel; trace black sand at 3.1'; medium brown; dry
	4-6	4,5,5,7	22	Silt: Trace to little fine to coarse sand; trace rounded coarse gravel at 5'; black sand and fragments at 4.6'; orange brown; dry. HNU = 0.8 (CS); 1.6 (OS).

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

WELL NO. MWS-6-25 SHEET 2 OF: 2

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (in)	CLASSIFICATION
5.7-13.2				Sand: Fine to coarse; Some fine rounded gravel; trace silt; poorly sorted; orange; dry.
	6-8	3,5,5,4	16	Sand: Fine to coarse, rounded, poorly sorted; trace to little fine to medium rounded gravel; trace silt; orange with rust banding from 7.8 to 8'; slightly wet. HNu=0.4(CS); 1.4(OS).
	8-10	2,4,6,8	12	Sand: Fine to coarse, poorly sorted; trace gravel and silt; orange; slightly wet. HNu=2.0(CS); NIR (OS).
	10-12		14	Sand and Gravel. Medium to coarse sand, subrounded; fine to coarse subangular gravel; trace silt; orange brown with black banding from 11.5 to 12'; wet. HNu=NIR(OS)
	12-14	3,2,2,4	16	Sand and Gravel: Same as above. HNu=0.2(CS); NIR(OS).
13.2-14				Clay and Silt: Moderately dense; trace fine to coarse sand; trace thin gray interbeds from 13.5 to 14'; dry
14-25	14-16	2,2,5,4	19	Sand: Fine, well sorted; trace to little silt and clay; trace medium sand; orange to orange brown with thin gray interbeds from 15 to 15.1'; damp HNu=0.2(CS); NIR(OS).
	16-18	1,2,4,4	22	Sand: Same as above; trace thin (1/16") orange and gray clay lenses from 16.6 to 17.4'; orange; wet HNu=NIR(CS); 15.0 at bottom(OS).
	18-20	3,3,2,3	17	Sand: Same as above; trace coarse sand and fine gravel from 19.6 to 20'; mottled gray to orange from 19.6 to 19.8'; wet. HNu=NIR(OS).
	20-22	3,1,1,4	22	Sand: Same as above; trace thin gray clay lenses throughout. HNu=NIR(CS).
	22-24	3,2,2,3	20	Sand: Same as above; orange brown with orange and gray interbeds, wet
25'				End of Borehole

AR307965

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM WELL DRILLING LOG			WELL NO: MWS-7-25
			SHEET 1 OF:
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
WELL LOCATION: Route 13 median, north of Route 42			DATE(S) DRILLED 3/13/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD 6 1/4" ID HSA
BORING DIAMETER: 11"	SAMPLING METHOD: None		SAMPLE INTERVAL: None
LOGGED BY: M. Bonaker			TOTAL DEPTH: 25'
SCREEN SIZE AND MATERIAL: 0.010" slotted, 2" ID Schedule 40 PVC, threaded			SCREENED INTERVAL: 15-25'
CASING SIZE AND MATERIAL: 2" ID Schedule 40 PVC, threaded			CASED INTERVAL: 0-15'
GRAVEL PACK SIZE: No. 1 Sand			PACKED INTERVAL: 12.5-25'
GROUT TYPE: 5% bentonite/Portland Cement			GROUTED INTERVAL: 0-10'
GROUTING METHOD: Tremie			BENTONITE SEAL: Granular 10-12.5'
DEVELOPMENT METHOD: Compressed air	TIME: 1 hour		ESTIMATED YIELD: 2 gpm
STATIC WATER DEPTH:	DATE:	REFERENCE:	
REMARKS: well installed 3/13/90, well developed 3/14/90.			

LITHOLOGIC INTERVAL	SAMPLE INTERVAL	SPOON BLOWS	RECOVERY (IN.)	CLASSIFICATION OF MATERIALS
0-10'				See log for Boring MWS-7A.
10-25'				See log for Boring MWS-7B
25'				End of Boring

AR307966

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX F

AR307967

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX F

REMEDIAL INVESTIGATION MONITORING WELL LOGS

AR307968

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG			SHEET 1 OF 2
			BORING NO: CSB-1
PROJECT: Chem-Solv, Inc.			PROJECT NO: 00-6012-02
BORING LOCATION: upgradient stratigraphic boring			DATE(S) DRILLED: 12/4,5/89
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: CME 41D HSA
BORING DIAMETER: 10"	SAMPLING METHOD: 2" OD Split spoon, 3" OD Shelby tube		TOTAL DEPTH: 28'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout			
LOGGED BY: M. Bonaker		DEPTH TO STATIC WATER: 8.8 FT. BELOW GRADE	

REMARKS: Shelby tube sample CSB-1(22-24') obtained for grain size and permeability tests. Split spoons scanned w/HNu and OVA. CS = closed spoon, OS = open spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.1				Sand and Silt: Some organic material; light brown; dry.
0.1-11.7				Sand: Fine to coarse; poorly sorted; trace rounded coarse gravel; orange; dry.
	10-12	12,19,11,8	18	Sand: Fine to very fine; well sorted; little to some silt; trace medium to coarse sand; orange brown; damp. OVA = 0.4 (CS)
11.7-12				Sand: Fine to coarse, poorly sorted; trace to little silt and fine sub-rounded gravel; orange brown; damp. OVA = 0.2 (CS)
12-12.9	12-14	2,5,10,12	24	Sand: Fine to medium, poorly sorted; little silt and coarse sand; orange brown; wet.
12.9-21.6				Sand: Fine to coarse, very poorly sorted; trace silt and fine subangular gravel; fining downward; orange brown; wet. OVA = 0.2 (CS)
	14-16	10,15,13,19	24	Sand: Same as above; damp. OVA = NIR (CS)

AR307969

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-1 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in)	CLASSIFICATION
	16-18	15,16,14,16	12	Sand: Fine to coarse, subangular to subrounded, very poorly sorted; some to little fine to medium subrounded gravel; gravel content increasing with depth; trace to little silt; orange brown; wet. OVA = 0.1 (CS)
	18-20	6,5,6,16	24	Sand: Fine to coarse, coarsening downward, poorly sorted; trace fine subangular gravel 19.6 to 20' defining a planar fabric; trace silt; orange brown; damp. HNu = 1.4 (CS)
	20-22	8,11,11,13	24	Sand: Fine to coarse, moderately poorly sorted, subrounded, fining downward; black fine sand 20 to 20.5; orange brown; damp. HNu = 0.4 (CS)
21.6-27.6				Silt and Clay: Clay content decreases with depth; trace to little fine sand; slightly dense; orange brown; damp.
	22-24	Shelby Tube	22.5	Silt: Some clay; trace fine sand and silt; brown with orange mottling and interbeds; damp. HNu = N/R (base of tube)
	24-26	2,4,7-18	6	Silt: Same as above; slightly less dense. HNu = N/R (CS)
	26-28	7,20,22,25	18	Silt: Same as above, sand content increasing with depth; blue/gray with orange interbeds from 27.3 to 27.6'
27.6-28				Sand: Fine to medium, moderately well sorted; little to some silt and clay; orange; damp.
28				End of Boring

AR307970

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG	SHEET 1 OF 3
	BORING NO: CSB-2
PROJECT: Chem-Solv, Inc. Site	PROJECT NO: 00-6012-02
BORING LOCATION: Am. Roofing and Siding Co.	DATE(S) DRILLED: 12/6,7/89
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.	DRILLING METHOD: 3¼" ID HSA
BORING DIAMETER: 6" / SAMPLING METHOD: 2" OD split spoon, 3" OD Shelby tube	TOTAL DEPTH: 40'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout	
LOGGED BY: M. Bonaker	DEPTH TO STATIC WATER: 10 FT. BELOW GRADE

REMARKS: Shelby tube sample at 22-24' had 2-3" of silt/clay; not submitted for analyses. Split spoons scanned w/HNu. CS=closed spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.4	0-2	11,9,9,9	21	Silt: Some fine to coarse sand, rounded, poorly sorted; little plant material; brown; dry.
0.4-4.8				Sand: Fine to medium, rounded, moderately well sorted; little to some silt; trace plant material to 1'; medium orange brown; dry. HNu = NIR (cs)
	2-4	17,15,11,18	24	Sand and Silt: Fine to medium sand, rounded, mod. well sorted; trace sub-rounded coarse sand; med. orange brown; dry. HNu = NIR (cs)
	4-6	4,9,8,9	20	Sand and Silt: Same as above, slightly damp. HNu = NIR (cs)
4.8-17				Sand: Fine to coarse, poorly sorted, subrounded; trace to little fine rounded gravel; trace silt; sand and gravel coarsening downward; med. orange brown; slightly damp.
	6-8	10,8,5,7	20	Sand: Same as above, interbedded gray lenses from 7.5 to 8'; wet at 7.5'.

AR307971

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-2 SHEET 2 OF 3

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	8-10	5,8,11,13	22	Sand: Fine to coarse, poorly sorted, subangular to subrounded; trace to little silt; trace subrounded fine gravel; med. orange brown to tan brown; slightly damp. HNu = NIR (CS)
	10-12	9,13,12,15	24	Sand: Same as above; medium tan brown; damp. HNu = NIR (CS)
	12-14	7,7,5,5	24	Sand: Same as above; trace med. subangular black gravel from 13 to 14' defining planar fabric. HNu = NIR (CS)
	14-16	9,12,7,7	24	Sand: Fine to medium, moderately poorly sorted, subrounded; little to some silt; trace coarse sand and fine gravel; med. tan brown with black sand from 15.3 to 16'; damp. HNu = NIR (CS)
	16-18	8,8,7,11	24	Sand: Same as above, slight planar fabric from 16.8 to 17'.
17-18.8				Sand and Gravel: Fine to coarse subrounded sand and fine subangular gravel; trace to little silt and rounded coarse gravel; tan brown; wet. HNu = NIR (CS)
	18-20	4,8,2,2	24	Sand and Gravel: Same as above.
18.8-20				Sand: Fine to medium; little silt; tan brown; wet. HNu = NIR (CS)
20-21.4	20-22	4,4,3,8	24	Sand and Gravel: Fine to coarse subangular sand and gravel, very poorly sorted, fining downward; trace to little silt; medium tan brown; damp. HNu = 0.3 (CS)
21.4-24.6				Sand: Very fine to medium; trace coarse sand; moderately well sorted; little silt; orange brown; wet. Clay and silt lens from 21.8 to 22'.
	22-24	Shelby Tube	24	Sand: Fine to coarse, trace fine gravel, poorly sorted; little silt; orange brown; damp. HNu = NIR (CS)
	24-26	4,8,15,17	20	Sand: Fine to very fine, well sorted; little to some silt, increasing with depth;

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-2 SHEET 3 OF 3

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
				thin gray interbeds from 24.6 to 24.7; damp. HNu = 0.1 (CS)
24.6-25.5				Silt: Little to some sand and clay; trace fine subangular gravel; orange brown; damp
25.5-26.8				Sand: Fine, well sorted; little to some silt; trace medium to coarse sand; orange brown; wet.
	26-28	8,14,20,33	24	Sand: Same as above. HNu = NIR (CS)
26.8-27.6				Silt: Some clay; little fine sand; thin gray and orange interbeds, slightly damp.
27.6-40				Sand: Fine, well sorted; little silt; trace medium to coarse sand; orange with gray interbeds; wet.
	28-30	19,15,20,26	24	Sand: Same as above; silt lens from 28.4 to 28.8'; gray tan from 29.7 to 30; damp. HNu = NIR (CS)
	30-32	12,10,22,24	24	Sand: Same as above; silt lens from 30.3 to 30.7; orange brown; damp. HNu = NIR (CS)
	32-34	15,15,16,29	24	Sand: Fine to very fine, well sorted; little silt; trace medium to coarse sand; orange w/thin gray silt lens at 33.9'; damp.
	34-36	8,13,17,19	24	Sand: Same as above; silt interbeds from 35.1 to 36.'
	36-38	9,16,16,25	24	Sand: Fine to coarse, coarsening downward; trace to little silt and fine to coarse subrounded quartz gravel; orange to gray orange; slightly damp.
	38-40	9,15,27,30	24	Sand: Fine to coarse, coarsening downward; trace to little fine to coarse rounded gravel; trace silt; orange to gray orange; slightly damp.
40				End of Boring

AR307973

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG			SHEET 1 OF 2
			BORING NO: CSB-3
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
BORING LOCATION: Durham property			DATE(S) DRILLED: 2/28-3/1/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7"	SAMPLING METHOD: 3" OD Shelby tube 2" OD Split spoon		TOTAL DEPTH: 40'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout			
LOGGED BY: M. Bonaker		DEPTH TO STATIC WATER: 6 FT. BELOW GRADE	

REMARKS: Shelby tube sample obtained from 14 to 14.9'; sample not submitted for analyses due to thinness of silt. Split spoons scanned w/ HNu. CS= closed spoon; OS= open spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.1	0-2	3,4,4,4	16	Silt: Trace to little fine to medium sand and plant material; dark brown; dry HNu = 2.8 (CS), 0.8 (OS)
0.4-7.4				Sand: Fine to medium; some silt; trace rounded fine to coarse gravel; medium orange brown; dry
	2-4	4,3,3,3	19	Sand: Same as above; silt and sand from 3 to 3.4' HNu = 0.4 (CS), 0.6 (OS)
	4-6	3,5,5,7	22	Sand: Fine to coarse; little to trace silt; trace fine rounded gravel; medium orange; dry HNu = 0.4 (CS), 2.8 (OS)
	6-8	2,4,2,4	18	Sand: Same as above slightly damp. HNu = NIR (CS), 1.0 (OS)
7.4-8				Sand: Fine, moderately well sorted, some medium sand, trace silt and fine gravel; gray and orange; damp
8-	8-10	3,5,5,7	22	Sand: Medium to coarse; trace fine subangular gravel; orange w/ thin black interbedded from 9.2 to 10'; wet. HNu = 0.8 (CS)
	10-12			Sand and Gravel: Coarse sand and fine to coarse subangular gravel; little to trace silt; poorly sorted; orange, wet. HNu = 1.7 (CS), NIR (OS)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-3 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	12-14	3,4,3,5	24	Sand and Gravel: Same as above HNu = NIR (CS)
13.7-14.3				Silt: Some clay; dense; trace fine sand; red to orange; dry.
	14-14.9	Shelby Tube	10	Silt: Dense; brown. HNu = 0.2 (bottom of tube)
14.3-17				Sand and Gravel: Medium to coarse sand and fine gravel; trace silt; orange; damp.
	15-17	4,9,6,4	12	Sand and Gravel: Same as above; fine sand from 16.8 to 17'. HNu = NIR (CS)
17-18.2	17-19	2,5,9,11	24	Silt: Interbedded w/ thin gray clay lenses and fine sand; moderately dense; orange; damp. HNu = NIR (CS, OS)
18.2-32.7				Sand: Fine to very fine, well sorted; little silt; orange; wet.
	19-21	3,7,2,2	18	Sand: Same as above. HNu = NIR (CS, OS)
	21-23	3,1,2,3	20	Sand: Same as above. HNu = NIR (CS, OS)
	23-25	2,1,2,2	12	Sand: Same as above. HNu = NIR (OS)
	25-27	3,3,3,6	24	Sand: Same as above.
	27-29	6,6,13,16	24	Sand: Same as above; gravel at 28.6'. HNu = NIR (CS)
	29-31	3,2,1,7	24	Sand: Same as above; trace fine to coarse gravel from 29.5 to 31'. HNu = 0.2 (CS), 1.4 (OS)
	31-33	3,1,2,7	24	Sand: Same as above; trace gravel from 32.2 to 32.7'. HNu = 0.4 (CS), 1.2 (OS)
32.7-34.3				Sand: Fine to coarse; trace silt and fine gravel; tan to rust; wet
	33-35	3,4,4,5	24	Sand: Fine to medium; trace silt; tan; wet. HNu = 0.2 (CS), 1.0 (OS)
34.5-35				Sand: Very fine; trace silt and rounded gravel; dark gray; damp.
40				End of Borehole

AR307975

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG				SHEET 1 OF 2
				BORING NO: CSB-4
PROJECT: Chem-Solv, Inc. Site				PROJECT NO: 00-6012-02
BORING LOCATION: Lambertson property				DATE(S) DRILLED: 3/7/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.				DRILLING METHOD: 4¼" ID HSA
BORING DIAMETER: 7"	SAMPLING METHOD: 2" OD Split Spoon / 3" OD Split Spoon			TOTAL DEPTH: 26'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout				
LOGGED BY: M. Bonaker			DEPTH TO STATIC WATER: ? FT. BELOW GRADE	

REMARKS: Shelby tube sample obtained at 20 to 22' for grain size and permeability test. Split spoons scanned w/HNu. CS: closed spoon, OS: open spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.2				Asphalt.
0.2-0.6				Concrete.
0.6-1.5				Silt: Moderately dense; trace fine sand; dark brown; dry.
1.5-5				Sand and Silt: Fine sand; orange; dry.
5-10				Silt: Slightly dense; trace fine sand; dark brown; damp at 8'.
10-18.9	10-12	3,2,4,5	16	Sand: Fine to coarse, predominantly medium, moderately well sorted; trace silt and fine rounded gravel; medium brown; damp. HNu = 2.0 (CS), 1.4 (OS)
	12-14	2,3,4,6	18	Sand: Fine; trace coarse sand; black interbeds from 13.1 to 14'; orange; wet. HNu = 0.4 (CS), NIR (OS)
	14-16	2,3,5,6	23	Sand: Same as above; thin black interbeds from 14.4 to 16'; wet. HNu = NIR (CS, OS)
	16-18	2,4,7,8	22	Sand: Same as above; orange to rust. HNu = NIR (CS)
16.7-18.9				Sand and Gravel: Fine to coarse sand, rounded sand and gravel, poorly sorted, trace black interbeds; orange to rust wet.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-4 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	18-20	2,2,3,4	20	Sand and Gravel: Same as above HNu = NIR (CS, OS)
18.9-19.5				Sand and Silt: Fine sand; slightly dense; trace coarse sand; orange; damp.
19.5-23.2				Silt: Dense; trace fine to medium sand; thin gray interbeds; orange; slightly damp.
	20-22	Shelby Tube	24	Silt: Same as above. HNu = NIR (bottom of tube)
	22-24	2,2,3,3	24	Silt: Same as above; mottled gray and orange. HNu = NIR (CS), 0.6 (OS)
23.2-26				Sand: Fine, well sorted; little silt; trace medium sand; orange; slightly damp.
	24-26	2,3,3,4	24	Sand: Same as above; silt lens from 24.3 to 24.7'; orange; slightly damp.
26				End of Boring

AR307977

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG				SHEET 1 OF 2
				BORING NO: CSB-5
PROJECT: Chem-Solv, Inc. Site				PROJECT NO: 00-6012-02
BORING LOCATION: Rte. 13 median, South of Rte. 42				DATE(S) DRILLED: 3/8/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.				DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7"	SAMPLING METHOD: 2" OD Split spoon			TOTAL DEPTH: 34'
BACKFILL MATERIAL AND METHOD: Tremie/5% bentonite and cement grout				
LOGGED BY: M. Bonaker			DEPTH TO STATIC WATER: 8 FT. BELOW GRADE	
REMARKS: Split spoon scanned w/HNu. CS = Closed spoon, OS = open spoon.				

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.2				Silt: little to fine to medium sand; trace gravel and plant material; brown; dry.
0.2-13.1				Sand: Fine to medium; some to little silt; trace fine gravel; orange brown; dry.
	10-12	3,3,2,2	15	Sand: Fine to coarse, subrounded, moderately poorly sorted; little to trace silt and fine gravel; orange with mottled white and rust from 11.5 to 11.8'; slightly damp. HNu = 0.6 (CS), NIR (OS)
	12-14	3,3,2,2	14	Sand: Fine to coarse; some fine to coarse gravel; trace silt; brown; wet. HNu = NIR (CS, OS)
13.1-14				Sand and Silt: Slightly dense; fine to very fine sand; trace coarse sand; clay lens from 13.5 to 13.8; orange; slightly damp.
14-14.9	14-16	2,2,2,2	24	Silt: Moderately dense; trace fine sand; orange with thin gray interb at 14.4 to 14.6'; slightly damp HNu = NIR (CS, OS)

AR307

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-5 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
14.9 - 16.8				Sand and Silt: Fine sand; trace coarse sand; orange to blue gray with gray interbeds from 15 to 15.1'; damp
	16-18	3,2,2,3	20	Sand and Silt: Same as above. HNu = 0.2(CS), 0.4(OS)
16.8-34				Sand: Fine to medium; trace coarse sand, silt, and clay; orange and blue gray; wet.
	18-20	2,2,1,0	40	Sand: Same as above; wet to damp. HNu = NIR (CS, OS)
	20-22	2,1,1,2	13	Sand: Fine, well sorted; trace coarse sand and silt; orange and orange to mottled blue; wet. HNu = NIR (CS, OS)
	22-24	3,0,1,1	20	Sand: Same as above. HNu = NIR (CS, OS)
	24-26	2,1,1,3	14	Sand: Same as above. HNu = NIR (CS, OS)
	26-28	1,0,1,0	14	Sand: Same as above. HNu = NIR (CS), 0.1 (OS)
	28-30	1,1,1,1	20	Sand: Fine to medium, moderately well sorted; little clay; trace coarse round gravel; orange w/ thin gray interbeds; damp HNu = NIR (CS, OS)
	30-32	1,0,1,0	13	Sand: Fine, well sorted, trace silt and clay; orange to blue gray; wet
	32-34	3,1,1,3	23	Sand: Fine to medium, moderately well sorted; trace coarse sand; gray and mottled orange; wet
34				End of Boring

AR307979

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG			SHEET 1 OF 2
			BORING NO: CSB-6
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-601202
BORING LOCATION: SE border of former excavation			DATE(S) DRILLED: 12/14, 15/89
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 3 1/4" ID HSA
BORING DIAMETER: 6"	SAMPLING METHOD: 2" OD and 3" OD Split Spoon		TOTAL DEPTH: 20'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout			
LOGGED BY: M. Bonaker		DEPTH TO STATIC WATER: 7.3 FT. BELOW GRADE	

REMARKS: Samples from 0.5-2', 6-7.3', and 19.6-19.9' submitted for chemical analyses. Split spoons scanned w/ HNu and OVA. CS = closed spoon, OS = open spoon. * = 3-inch split spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.6	0-2 *	28, 20, 26, 28	20	Silt: little to some fine sand; trace coarse sand and plant material; med brown; dry. HNu = 0.3 (CS), NIR (OS)
0.6-19.9				Sand: Fine to medium, moderately well sorted; some silt; trace shell fragments; med. orange; dry.
	2-4 *	28, 38, 30, 35	22	Sand: Same as above. HNu = NIR (CS, OS)
	4-6 *	16, 21, 23, 19	24	Sand: Fine to medium, little silt; orange; dry. Fine to coarse with trace subrounded gravel from 4.7 to 6'. HNu = NIR (CS)
	6-8 *	18, 28, 14, 16	20	Sand: Fine to coarse, poorly sorted; trace silt and coarse gravel; orange brown w/ black lineations from 7.5 to 8'; wet at 7.3'. HNu = 1.0 (CS), 3.2 (OS) OVA = NIR (CS), 1.1 (OS)
	8-10	4, 13, 16, 19	24	Sand: Same as above; damp.
	10-12	10, 10, 16, 17	24	Sand: Same as above. OVA = NIR (CS, OS)
	12-14	12, 13, 18, 26	24	Sand: Same as above; some silt and fine sand from 12.3 to 12.6'; med. orange brown; damp. OVA = NIR (CS), 0.2 (OS)

AR307980

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-6 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in)	CLASSIFICATION
	14-16	5,10,21,32	24	Sand: Same as above; orange brown to rust brown; slightly damp. OVA = NIR (CS); 0.2 (OS)
	16-18	12,14,24,28	24	Sand: Same as above; orange brown. OVA = NIR (CS), 0.4 (OS)
	18-20	3,5,20,10	24	Sand: Same as above.
19.9-20				Silt: Very dense; trace fine sand; orange w/ gray interbeds; very slightly damp.
20				End of Boring

AR307981

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG			SHEET 1 OF 2
			BORING NO: CSB.7
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
BORING LOCATION: South of former excavation			DATE(S) DRILLED: 12/13,14/89
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 3 1/4" ID HSA
BORING DIAMETER: 6	SAMPLING METHOD: 2" OD and 3" OD Split Spoon		TOTAL DEPTH: 22'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout			
LOGGED BY: M. Bonaker		DEPTH TO STATIC WATER: 10 FT. BELOW GRADE	

REMARKS: Samples from 4-6', 8-10', and submitted for chemical analyses. Split spoons scanned w/ OVA and HNu. CS = Closed spoon, OS = open spoon. * = 3-inch split spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.3	0-2 *	28,32,35,53	24	Silt: Some fine to coarse sand and plant material; brown; dry. OVA = 0.4 (OS)
0.3-3				Silt: Trace to some clay, very dense; trace to little fine to coarse sand; med. orange brown; dry.
	2-4 *	21,28,41,33	24	Silt and Sand: Fine to medium sand; trace coarse sand; orange brown; dry OVA = 4.0 (OS)
3-20.8				Sand: Fine to coarse, moderately well sorted; trace subrounded fine gravel and silt; orange brown; dry
	4-6 *	26,31,41,46	24	Sand: Same as above. OVA = 8.0 (OS)
	6-8 *	15,9,15,19	24	Sand: Fine to medium, moderately poorly sorted, coarsening downward; trace to some silt; trace fine subrounded gravel; orange to rust; dry OVA = 1.0 (OS)
	8-10 *	10,12,21,29	22	Sand: Fine to coarse, poorly sorted; some to trace silt; orange to rust with black layers from 9.5 to 10'; dry OVA = 8.0 (OS)

AR307982

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-7 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	10-12	16,20,28,36	24	Sand: Same as above; little to trace silt; damp. OVA = 0.2 (OS)
	12-14	5,8,15,24	24	Sand: Same as above; trace silt; orange to orange brown; damp. HNU = 0.4 (OS)
	14-16	5,7,9,12	24	Sand: Same as above. HNU = 3.0 (OS)
	16-18	7,10,12,15	24	Sand: Same as above; fine to medium sand and trace fine gravel from 16.6 to 18'. HNU = 0.4 (OS)
	18-20	22,19,22,26	24	Sand: Fine to medium, moderately well sorted; trace coarse sand and silt; orange brown; slightly damp HNU = 0.6 (OS), 0.2 (CS)
	20-22	8,9,5,6	24	Sand: Fine to coarse, poorly sorted; trace fine gravel and silt; orange brown to rust brown; wet. HNU = 0.2 (CS)
20.8-22				Silt: Trace fine to coarse sand; orange with thin gray interbeds; slightly damp.
22				End of Boring

AR307983

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG	SHEET 1 OF 2
	BORING NO: CSB-8
PROJECT: Chem-Solv, Inc. Site	PROJECT NO: 00-6012-02
BORING LOCATION: western edge of concrete pad	DATE(S) DRILLED: 2/22, 23/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.	DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7" / SAMPLING METHOD: 2" OD and 3" OD split spoon	TOTAL DEPTH: 16'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout	
LOGGED BY: M. Bonakker, P. Chronowski	DEPTH TO STATIC WATER: 5 FT. BELOW GRADE

REMARKS: Samples from 0.5-2' and 2-4' submitted for chemical analyses, Split spoons scanned w/ HNu and OVA, CS = Closed spoon, OS = Open spoon. * = 3-inch split spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-0.9	0-2*	11,8,7,9	20	Silt and Sand: Fine to coarse sand; med. brown; dry. HNu = NIR (OS, CS)
0.9-6				Silt, sand, and gravel: Fine to coarse sand and rounded gravel; med. brown; dry. Silt and some sand from 1.5 to 2'.
	2-4*	11,11,4,4	18	Silt and Sand: Fine to coarse subrounded sand; trace subrounded to rounded gravel; med brown; dry. HNu = NIR (CS, OS)
	4-6*	5,4,5,7	18	Sand and Silt: Fine sand; trace med. to coarse sand; med. orange brown; slightly damp. HNu = NIR (CS, OS)
6-16	6-8*	3,3,5,7	16	Sand: Fine to coarse, subrounded, poorly sorted; little silt; trace clay; med. brown; damp. HNu = NIR (CS, OS)
	8-10	3,4,6,8	21	Sand: medium to coarse, subrounded; little fine sand; trace silt and fine to coarse subangular gravel

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-8 SHEET 2 OF 2

LITHOLOGIC INTERVAL (Ft.)	SAMPLE INTERVAL (Ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	10-12	1,1,3,5		Sand: Same as above OVA = 2.0 (CS), NIR (OS)
	12-14	4,4,5,6	20	Sand: Same as above, very damp. OVA = NIR (CS), 0.6 (OS)
	14-16	3,1,2,2	23	Sand: Same as above; thin silty clay lens from 15.2 to 15.5:
				End of Boring Borehole abandoned due to running Sand

AR307985

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG			SHEET 1 OF 1 BORING NO: CSB-8A
PROJECT: Chem-Solu, Inc. Site			PROJECT NO: 00-6012-02
BORING LOCATION: Western edge of concrete pad			DATE(S) DRILLED: 2/26/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7"	SAMPLING METHOD: 2" OD Split Spoon		TOTAL DEPTH: 22'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout			
LOGGED BY: M. Bonaker, P. Chronowski		DEPTH TO STATIC WATER: 5 FT. BELOW GRADE	

REMARKS: Sample from 18-20' obtained for chemical analyses. Split spoons scanned w/ HNU. CS = closed spoon, OS = open spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in)	CLASSIFICATION
0-20	0-16			See Log for CSB-8
	16-18	5,4,3,7	24	Sand: medium; trace fine to coarse angular gravel; damp. HNU = NIR (CS, OS)
	18-20	5,4,3,7	24	Sand: Medium to coarse; trace silt; orange-brown; damp. HNU = 0.4 (CS), 3.4 (OS)
20-22	20-22	3,4,3,4	24	Silt: Interbedded w/ fine gray clay lens; orange; damp.
22				End of Boring

AR307986

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG			SHEET 1 OF 2
			BORING NO: CSB-9
PROJECT: Chem-Solv, Inc. Site			PROJECT NO: 00-6012-02
BORING LOCATION: Western edge of concrete pad			DATE(S) DRILLED: 2/27/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.			DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7	SAMPLING METHOD: 2" OD and 3" OD Split Spoon		TOTAL DEPTH: 26'
BACKFILL MATERIAL AND METHOD: Tremie / 5% bentonite and cement grout			
LOGGED BY: M. Bonakar, P. Chronowski		DEPTH TO STATIC WATER: 5.5 FT. BELOW GRADE	

REMARKS: Samples from 2-4', 4-5.5' and 19.5-20' submitted for chemical analyses. Split spoons scanned w/HNu. CS = closed spoon, OS = open spoon. * = 3-inch split spoon.

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-1	0-2 A	6,6,6,7	20	Sand: Fine to coarse, rounded, poorly sorted; little silt; trace gravel; plastic at 1'; med. orange brown; dry. HNu = 0.2 (CS), NIR (OS)
1-4.8				Sand and Silt: Fine to medium sand; trace fine gravel and plant material; dark brown; dry.
	2-4*	2,5,6,7	21	Sand: Fine to coarse; little silt; orange brown; dry. Sand and silt from 2.9 to 4'. HNu = 0.2 (OS), 0.5 (CS)
	4-6*	5,7,5,5	22	Sand and Silt: Fine to medium sand, trace coarse sand and fine gravel; medium dark brown; dry. HNu = NIR (CS), 0.2 (OS)
4.8-26				Sand: Fine; little to some silt; trace medium to coarse sand and fine gravel, orange; damp at 5.5'
	6-8*	7,9,6,8	20	Sand and Silt: Fine to coarse sand; orange brown to orange; damp. HNu = 0.4 (CS), 0.8 (OS)
	8-10	2,1,4,5	19	Sand: Medium to coarse, subangular; orange brown; damp. HNu = 0.2 (CS), 1.2 (OS)

AR307987

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-9 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	10-12	3,6,6,10	19	Sand: Same as above; very damp. HNu = 0.5 (CS), 1.0 (OS)
	14-16	3,4,0,5	20	Sand: Same as above; predominant subrounded coarse sand from 14.4 to 14.6'; very damp, HNu=0.2 (CS), 0.4 (OS)
	16-18	5,10,13,9	20	Sand: Same as above. HNu = 0.5 (CS)
	18-20	3,3,8,12	24	Sand: Fine; little medium sand and medium gravel; black and orange; very damp. HNu = 3.0 (CS); 19 (OS)
	20-22	4,9,13,55	20	Cave in material: gravel and sand; orange to light tan; damp, HNu = 1.0 (CS), NIR (OS)
	22-24	3,4,3,15	22	Sand: Fine to medium, trace subangular gravel and silt; orange; damp
	24-26		23	Cave in Material: Medium to coarse sand, trace silt and gravel; very damp.
26				End of Boring

AR307988

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM TEST BORING LOG	SHEET 1 OF 2
	BORING NO: CSB-10
PROJECT: Chem-Solv, Inc. Site	PROJECT NO: 00-6012-02
BORING LOCATION: Eastern edge of concrete pad	DATE(S) DRILLED: 2/27/90
DRILLING CONTRACTOR: Delmarva Drilling Co., Inc.	DRILLING METHOD: 4 1/4" ID HSA
BORING DIAMETER: 7 / SAMPLING METHOD: 2" OD and 3" OD Split Spoon	TOTAL DEPTH: 20'
BACKFILL MATERIAL AND METHOD: Tremie/ 5% bentonite and cement grout	
LOGGED BY: M. Bonakes and P. Chronowski	DEPTH TO STATIC WATER: 38 FT. BELOW GRADE

REMARKS: Samples obtained from 0.5-2', 2-4', and 18-18.5' for chemical analyses. Samples scanned w/HNu. CS = closed spoon; OS = open spoon. * = 3-inch split spoon

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
0-1.1	0-2 *	2,2,2,3	17	Silt: Some fine to coarse sand and plant material; trace fine to coarse rounded gravel; dark brown; slightly damp. HNu = 1.2 (CS), NIR (OS)
1.1-8				Sand: Fine to coarse; little silt; trace coarse rounded gravel; orange brown; slightly damp
	2-4 *	2,2,2,3	24	Sand and Silt: Fine to medium sand; silt decreasing to little w/depth; little gravel; orange brown; slightly damp. HNu = 2 (CS), NIR (OS)
	4-6 *	2,2,2,2	20	Sand and Silt: Same as above; damp to wet. HNu = 0.4 (CS), NIR (OS)
	6-8	1,2,4,5	16	Sand and Silt: Fine sand, same as above; damp. HNu = NIR (CS, OS)
8-18.6	8-10	7,9,9,9	12	Sand: Medium, subangular to subrounded; trace silt and fine to coarse gravel; little fine dark sand; orange; damp. HNu = NIR (CS, OS)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BORING NO. CSB-10 SHEET 2 OF 2

LITHOLOGIC INTERVAL (ft.)	SAMPLE INTERVAL (ft.)	SPOON BLOWS	RECOVERY (in.)	CLASSIFICATION
	10-12	12,10,11,8	17	Sand: Same as above. HNu = 1.0 (CS), NIR (CS)
	12-14	2,2,9,8	21	Sand: Same as above. HNu = NIR (CS), 2.6 (OS)
	14-16	3,3,3,7	21	Sand: Same as above; very damp. HNu = 0.8 (CS), NIR (OS)
	16-18	3,4,5,7	24	Sand: Fine to medium; little coarse sand, silt and fine gravel; medium orange brown; damp. HNu = 0.4 (CS), NIR (OS)
	18-20	2,3,3,4	24	Sand: Same as above HNu = NIR (CS, OS)
18.6-20				Silt: Trace fine to medium sand; interbedded gray and orange; slightly damp
20				End of Boring

AR30

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX G

AR307991

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX G

DNREC SOIL ANALYTICAL RESULTS

AR307992

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/9/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 9/10/85 ANALYST [illegible] AK 9/10/85 COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem-Solv Cheswold, DE

APPROVED Harry W. Otto

SAMPLE LOG NU.	SAMPLE DESCRIPTION
2899	L1P1S1
2900	L1P1S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER _____

COMMENTS

L = Lot #

P = Pass #

S = Sample #

AR307993

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

PARAMETER	UNITS	2[illegible]	2[illegible]	
ICE	ug/kg	1.3	3.7	Halogens (MDL = 1ug/kg)

AR30799

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/10/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 9/12/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem-Solv

Cheswold, DE

APPROVED [illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
2912	L1P2S1

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

In cooler 9/11/85 CMW

No halogen or aromatics organic volatile compound AR307995

MDL halogens 1 ug/kg

MDL aromatics 2 ug/kg

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/11/85 SAMPLED BY webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 9/11/85 ANALYST M. Pungo COST CENTER WS APPROVED [signature]

Apr 4/2/85

PROJECT LOCATION Chem-Solv

Cheswold, DE

Harry W. [signature]

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
2949	L1 P2S2
2950	L1 P3S1
2951	L1 P3S2
2952	L1 P4S1

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

Samples in cooler 9/11/85 [illegible]

[illegible] organic volatile Compounds [illegible] AR307996

MDL halogens = [illegible]

MDL aromatic = [illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

		LOG NO.											
RAMETER	UNITS	[illegible]	[illegible]	[illegible]	[illegible]								
TCE	ug/kg	<10	<10	<10	[illegible]								

AR307997

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/11/85 SAMPLED BY [illegible] SAMPLE TYPE Soil RESULTS TO [illegible]

COMPLETION DATE 9/11/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chemsolv

Cheswold, DE

APPROVED [illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
2973	L1P452
2974	L1P551
2975	L1P552

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER _____

COMMENTS

Vol halogen. or aromatic organic volatile compounds detected

MDL halogens = 1.0 ug/kg

MDL Aromatics = 2.0 ug/kg

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 4/18/85 SAMPLED BY Webber/Johnson SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 9/16/85 ANALYST M. Pungeer COST CENTER WS APPROVED [signature]

dp 9/19/85

PROJECT LOCATION Chem-Solv

Cheswold, DE APPROVED

SAMPLE LUG NO.	SAMPLE DESCRIPTION
3033	L1P6S1
3034	L1P8S2
3035	L1P7S1
3036	L1P7S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

In Cooler

(MDL halogens = 1ug/kg) (MDL aromatics = 2ug/kg)

No aromatics organic volatile compounds detected

No halogen organic volatile compounds detected

AR307999

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/16/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webb

COMPLETION DATE 9/18/85 ANALYST A. Burgess COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem-Solv Apr 9/23/85

Chesnold DE

Harry W. Ettle

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3037	L2P1S1
3038	L2P1S2
3039	L2P2S1
3040	L2P2S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

(MOL halogens = 1 ug/kg) (MOL aromatics = 2 ug/kg)

No aromatic organic volatile compounds detected

AR308000

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOG NO.			
		3e37	3e38	3e39	3e40
trans-1,2 dichloroethylene	ug/kg	27	1.5	<1.0	<1.0
1,1,1 trichloroethane		23	<1.0	<1.0	<1.0
TCE		27	7.6	4.4	3.5

AR308001

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/17/85 SAMPLED BY Webber SAMPLE TYPE Soil boring RESULTS TO Webb

COMPLETION DATE 9/18/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem-Solv

Cleswold DE

Harry W. [illegible]

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3041	L2P3S1
3042	L2P3S2
3043	L2P4S1
3044	L2P4S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

(MDL halogens = 1 ug/kg) (MDL aromatics = 2 ug/kg)

No aromatic organic volatile compounds detected.

AR30[illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

		LOG NO.			
PARAMETER	UNITS	3C41	3D42	3C43	3D44
TCE	ug/kg	3.4	2.6	1.0	4.4

AR308003

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/18/85 SAMPLED BY Webber SAMPLE TYPE Soil boring RESULTS TO Webber

COMPLETION DATE 9/19/85 ANALYST M. Pawelka COST CENTER WS APPROVED CFA

PROJECT LOCATION Chem-Solv

Cheswold DE

Harry W. [illegible]

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3053	L2P5S1
3054	L2P5S2
3055	L3P1S1
3056	L3P1S2
3057	L3P2S1
3058	L3P2S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

In your cooler Sandy

No aromatics organic volatile compounds detected

MDL halogens = 1 ug/kg

MLD aromatics = 2 ug/kg

AR3080

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOG NO.					
		3057	3054	3055	3056	3057	3058
	µg/kg						
1,1-dichloroethane		<1.0	<1.0	4.7	2.8	2.4	<1.0
chloroethane		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TCE		1.6	1.1	14.6	8.5	9.1	4.1

AR388005

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/19/85 SAMPLED BY Webber SAMPLE TYPE Soil boring RESULTS TO Webber

COMPLETION DATE 9/[illegible]/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem Solv

Cheswold DE

Harry W. [illegible]

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3077	L3P3S1
3078	L3P3S2
3079	L3P4S1
3080	L3P4S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

In color

AR308006

[illegible]

([illegible] halogens [illegible])

([illegible])

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

PARAMETER	UNITS	[illegible]	[illegible]	[illegible]	[illegible]								
TC[illegible]	mg/kg	<1.0	1.7	2.1	<1.0								
[illegible]													

AR308007

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/20/85 SAMPLED BY Webber SAMPLE TYPE Soil Boring RESULTS TO Webber

COMPLETION DATE 9/20/85 ANALYST M Puryear COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem-Solv

Cheswold DE

Harry W. [illegible]

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3081	L3P5S1
3082	L3P5S2
3083	L3P6S1
3084	L3P6S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

In refrigerator

No aromatics organic detected; no halog. VOAs detected AR308008

MDL halogens = 1 ug/kg

MDL aromatics = 2 ug/kg

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOD NO.			
		3001	3002	3003	3004
TCE	ug/kg	1.7	<1.0	<1.0	<1.0

AR308009

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/25/85 SAMPLED BY [illegible] SAMPLE TYPE [illegible] RESULTS TO [illegible]

COMPLETION DATE 10/1/85 ANALYST D. Louie 10/1/85 COST CENTER WS APPROVED

PROJECT LOCATION [illegible]

[illegible] APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3159	LMP1S1
3160	LMP1S2
3161	LMP2S1
3162	LMP2S2
3163	LMP3S1
3164	LMP3S2
3165	LMP4S1
3166	LMP4S2

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/_/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER

COMMENTS

In Sandy [illegible]

No Aromatic Volatile Compounds Found. (MDL Aromatics = 2 ug/l

MDL Halogens 1.0 ug/kg)

AR30801

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOB NO. 3/59	3/60	3/61	3/62	3/63	3/64	3/65	3/66
1,1,2 DICHLOROETHYLENE	µg/kg	5.9	26.0	13.4	9.5	8.4	4.5	1.8	3.0
CHLOROFORM	µg/kg	3.9	<1.0	12.2	11.2	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHYLENE	µg/kg	7.1	6.7	6.3	6.6	5.0	2.8	1.6	2.6
DICHLOROMETHANE	µg/kg	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2 DICHLOROETHYLENE	µg/kg	<1.0	<1.0	<1.0	4.2	<1.0	<1.0	<1.0	<1.0

AR308011

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED [illegible] SAMPLED BY [illegible] SAMPLE TYPE [illegible] RESULTS TO [illegible]

COMPLETION DATE 10/01/85 ANALYST [illegible] COST CENTER [illegible] APPROVED [illegible]

PROJECT LOCATION [illegible]

[illegible] APPROVED [illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3190	LHF5S1
3191	LHF5S2
3192	LHF6S1
3193	LHF6S2
3194	LHF7S1
3195	LHF7S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [ ] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER _____

COMMENTS

On Second Shift in Frig

AR308012

No Aromatic Organic Volatile Compounds Found (MDL Aromatics = 2.0ug/kg MDL Halogens = 1.0ug/kg)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOG NO. 3190	3191	3192	3193	3194	3195
CIS 1,2 DICHLOROETHYLENE	µg/kg	2.9	4.0	2.4	2.1	1.3	1.7
TRICHLOROETHYLENE	µg/kg	2.1	2.9	2.9	2.1	1.5	1.8

AR308013

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/30/85 SAMPLED BY [illegible] SAMPLE TYPE _____ RESULTS TO [illegible]

COMPLETION DATE 10/3/85 ANALYST D Lewis COST CENTER [illegible] APPROVED [illegible]

PROJECT LOCATION [illegible]

[illegible] APPROVED Harry W. [illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3197	L4P8S1
3198	L4P8S2
3199	L4P9S1
3200	L4P9S2
3201	L4P10S1
3202	L4P10S2

ANALSIS REQUEST Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/_/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER _____

COMMENTS

[illegible]

No Aromatic Organic Volatile Compounds Found (MDL Aromatics [illegible] MDL Halogens 1.0 ug/kg).

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOG NO. 3197	3198	3199	3200	320[illegible]	320[illegible]
TICHLOROETHYLENE	ug/kg	<1.0	1.1	<1.0	<1.0	<1.0	<1.0

AR308015

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/1/85 SAMPLED BY [illegible] SAMPLE TYPE [illegible] RESULTS TO [illegible]

COMPLETION DATE 10/9/85 ANALYST [illegible] COST CENTER [illegible] APPROVED [illegible]

PROJECT LOCATION [illegible]

[illegible] APPROVED [illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3220	LSP1S1
3221	LSP1S2
3222	LSP2S1
3223	LSP2S2

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/_/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER _____

COMMENTS

AR308016

No Aromatic Organic Volatile Compounds Found (MDL Aromatics = 2.0 ug/kg MDL Halogens = 1.0 ug/kg)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

PARAMETER	UNITS	3220	3221	3222	3223
TRANS-1,2-DICHLOROETHYLENE	µg/kg	<1.0	1.1	<1.0	3.4
TRICHLOROETHYLENE	µg/kg	<1.0	1.6	1.2	5.0

AR308017

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 9/2/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 10/10/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem-Solv Harry W. [illegible]

Cheswold, DE APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3284	L5P3S1
3285	L5P3S2
3286	L5P4S1
3287	L5P4S2
3288	L5P5S1
3289	L5P5S2
3290	L5P6S1

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

There is redundance/contamination by halogenated (MOC = mg/kg) aromatic (MOC = mg/kg) volatile organic compounds

AR308018

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/7/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 10/16/85 ANALYST D Lavie Apr 10/16/85 COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem Solv

Cheswold, DE APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3338	L5P1S2
3339	L6P1S1
3340	L6P1S2
3341	L6P1S3
3342	L6P2S1

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

[illegible]

No Volatile Organic Aromatics Found (MDL Aromatics = 2.0 ug/kg.

Halogens = 1.0 ug/kg.) AR308019

Data Reverse Side

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

METER	UNITS	3338	3339	3340	3341	3342						
							LOG NO.					
2 DICHLOROETHYLENE	µg/kg	<1.0	6.8	6.2	1.3	1.0						
DICHLOROMETHANE		<1.0	2.2	1.0	1.0	<1.0						
CHLOROETHYLENE		<1.0	1.4	6.2	1.3	<1.0						

AR300020

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED [illegible]/3/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 10/16/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

Apr 10/16/85

PROJECT LOCATION Clem Site

Clewell DE

APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3364	L6P252
3365	L6P253
3366	L6P351
3367	L6P352
3368	L6P353

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/_/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER

COMMENTS

No Volatile Organic Aromatics Found (MDL Aromatics = 2.0ug/kg Halogens = 1.0ug/kg).

Data back pg.

AR308021

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

ER	UNITS	3364	3365	3366	3367	3368
ANCHLOROETHYLENE	µg/kg	<1.0	3.4	1.0	<1.0	1.8
ICHLOROMETHANE		<1.0	2.4	<1.0	<1.0	1.0
RICHLOROETHYLENE		<1.0	1.8	<1.0	<1.0	1.3

AR308022

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 1/9/85 SAMPLED BY Walther SAMPLE TYPE Soil RESULTS TO Walther

COMPLETION DATE 10/16/85 ANALYST D Louie COST CENTER WS APPROVED [illegible]

[illegible] 10/16/85

PROJECT LOCATION Chem Solv

Cheswold DE APPROVED

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3386	L7P1S1
3387	L7P1S2
3388	L7P1S3
3389	L7P2S1
3390	L7P2S2
3391	L7P2S3

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/✓/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER

COMMENTS

Top Shelf [illegible]

MDL Aromatics = 2.0ug/kg Halogens = 1.0ug/kg

Data [illegible]

AR308023

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SERIES	UNITS	3396	3397	3398	3399	3390	3391
		LOG NO.					
TRICHLOROETHYLENE	ug/kg	47.6	2.4	11.1	6.0	8.5	5.7
TRICHLOROMETHANE		7.9	<1.0	1.3	<1.0	<1.0	1.1
TETRACHLOROETHYLENE		18.1	4.1	6.6	3.1	2.6	3.6
BENZENE		5.9	<2.0	<2.0	<2.0	<2.0	<2.0

AR308024

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/10/85 SAMPLED BY Webb SAMPLE TYPE Soil RESULTS

COMPLETION DATE 10/16/85 ANALYST D. Lewis COST CENTER WS APPROVED

PROJECT LOCATION Chem Solv

Cheswold, DE

APPROVED OCT 17 1985

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3410	L7P351
3411	L7P352
3412	L7P353
3413	L8P151
3414	L8P152
3415	L8P153

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [X] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

No Volatile Organic Aromatics Found (MDL Aromatics = 2.0 ug/kg Halogens = 1.0 ug/kg).

AR300025

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

PARAMETER	UNITS	LOG NO. 3410	3411	3412	3413	3414	3415
TRANS-1,2-DICHLOROETHYLENE	µg/kg	3.1	6.2	2.8	14.7	2.0	1.9
BROMODICHLOROMETHANE		1.6	2.0	1.5	8.1	2.0	2.7
TRICHLOROETHYLENE		1.4	3.5	1.4	8.8	1.5	1.1

AR308026

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/11/85 SAMPLED BY Johnson/Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 10/17/85 ANALYST D. Louie Apr 10/17/85 COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem Sdn

Cheswold DE

Harry W. [illegible]

APPROVED OCT 18 1985

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3437	L8P2S1
3438	L8P2S2
3439	L8P2S3
3440	L8P3S1
3441	L8P3S2
3442	L8P3S3
3443	L9P1S1
3444	L9P1S2
3445	L7P1S3

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/✓/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER_____

COMMENTS

Top shelf, on right

No Volatile Organic Aromatics Detected (MDL Aromatics = 2.0ug/kg. Halogens = 1.0ug/kg).

AR308027

Data Book 89

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

		L2P2S1	S2	S3	P3S1	S2	S3	L9P1S1	S2	S3
		LOG NO.								
...TER	UNITS	3437	3438	3439	3440	3441	3442	3443	3444	3445
TRICHLOROETHYLENE	mg/Kg	3.9	6.2	6.8	3.3	5.7	3.0	2.3	9.1	3.5
BROMODICHLOROMETHANE		3.3	3.5	4.3	1.6	2.2	1.9	<1.0	<1.0	<1.0
TRICHLOROETHYLENE		3.3	4.1	4.8	3.7	5.1	2.9	4.6	4.6	2.4

AR3[illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/15/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 10/17/85 ANALYST D. Lowie COST CENTER WS APPROVED CJA

PROJECT LOCATION Chem Solv

Cheswold DE

Harry W. Otto

APPROVED OCT 1 8 1985

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3463	L9P2S1
3464	L9P2S2
3465	L9P2S3

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

DTX [ ] OTHER

COMMENTS

No Volatile Organic Aromatics Detected (MDL Aromatics = 2.0 ug/kg

Halogens = 1.0 ug/kg).

AR308029

Data Sheet

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

		LOG NO.		
PARAMETER	UNITS	3463	3464	3465
TRANS-1,2-DICHLOROETHYLENE	ug/kg	3.1	2.6	1.2
BROMODICHLOROMETHANE		2.2	1.8	<1.0
TRICHLOROETHYLENE		4.1	2.9	1.3

AR300030

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/17/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webber

COMPLETION DATE 10/22/85 ANALYST D. Lowie COST CENTER WS APPROVED [illegible]

Ap 10/22/85

PROJECT LOCATION Chem Solv

Cheswold DE

APPROVED [illegible] OCT 22 1985

OCT 28 1985

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3475	L9P351
3476	L9P352
3477	L9P353

ANALSIS REQUEST Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/✓/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER

COMMENTS

No Volatile Organic Aromatics Detected (MDL Aromatics = 2.0 ug/kg, Halogens = 1.0 ug/kg).

AR308031

Data Person side

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

PARAMETER	UNITS	3475	3476	3477
TRANS-1,2 DICHLOROETHYLENE	µg/kg	2.8	1.6	1.0
BROMODICHLOROMETHANE		1.6	1.3	1.2
TRICHLOROETHYLENE		3.1	3.4	1.1

AR308052

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/24/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webb

COMPLETION DATE 10/29/85 ANALYST D Lowe COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem Solv

Cheswold DE

Harry W. [illegible]

APPROVED OCT 31

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3613	L10P1S1
3614	L10P1S2
3615	L10P1S3
3616	L10P2S1

ANALSIS REQUEST Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/

PCB/_/ VOA/✓/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER

COMMENTS

No Volatile Organic Aromatics Detected (MDL Aromatics = 2.0ug/

Halogens = 1.0ug/kg).

AR308033

[illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

PARAMETER	UNITS	3613	3614	3615	3616
[illegible]	[illegible]	1.4	<1.0	<1.0	2.7

AR30[illegible]3

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/25/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webb

COMPLETION DATE 10/29/85 ANALYST D Lewis COST CENTER EWS APPROVED [illegible]

AP 10/30/85

PROJECT LOCATION Chem Sol

Cheswold DE

Harry W Letts

APPROVED OCT 31 1985

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3634	L10 P2S2
3635	L10 P2S3
3636	L10 P3S1
3637	L10 P3S2
3638	L10 P3S3

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide/_/

PCB/_/ VOA/✓/ Acid Extractables/_/ Base/Neutral Extractables/_/

BTX /_/ OTHER

COMMENTS

No Volatile Organic Aromatics Detected (MDL Aromatics = 2.0 ug

Halogens = 1.0 ug/kg).

AR308035

[illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

PARAMETER	UNITS	3634	3635	3636	3637	3638
1,1-DICHLOROETHYLENE	ug/kg	<1.0	<1.0	<1.0	1.0	<1.0

AR300036

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/28/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webb

COMPLETION DATE 10/30/85 ANALYST [illegible] COST CENTER WS APPROVED [illegible]

Ap 10/31/85

PROJECT LOCATION Chem Solv

Cheswold, DE

Harry W. [illegible]

APPROVED NOV 0[illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3662	L11P1S1
3663	L11P1S2

ANALSIS REQUEST

Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

No Aromatic Volatile Organic Compounds Detected.

(MDL Aromatics = 2.0 ug/kg, HAlogens = 1.0 ug/kg)

AR308037

[illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

LOG NO.

METER	UNITS	3662	3663
[illegible]DROETHYLENE	µg/kg	2.0	2.1
[illegible]ANS 12 DICHLOROETHYLENE		<1.0	3.9

AR308038

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

11/12/8

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 10/30/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO Webb

COMPLETION DATE 11/4/85 ANALYST D Lowe COST CENTER WS APPROVED [illegible]

PROJECT LOCATION Chem Solv Harry W. [illegible]

Chesnut, DE APPROVED [illegible]

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3713	L11 P153
3714	L11 P251
3715	L11 P252
3716	L11 P253

ANALSIS REQUEST Chlorinated Pesticide [ ] Insecticide [ ] Herbicide [ ] Fungicide [ ]

PCB [ ] VOA [✓] Acid Extractables [ ] Base/Neutral Extractables [ ]

BTX [ ] OTHER

COMMENTS

No Halogenated or Aromatic Volatile Organic Compounds Detect

(MDL Halogens = 1.0 ug/kg, Aromatics = 2.0 ug/kg)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

ORGANIC ANALYTICAL REQUEST

DATE SAMPLED 11/1/85 SAMPLED BY Webber SAMPLE TYPE Soil RESULTS TO We

COMPLETION DATE 11/4/85 ANALYST D. Louis COST CENTER WS APPROVED [illegible]

Apr 11/5/85

PROJECT LOCATION Chem Sale

Cheswell DE

Harry W. [illegible]

APPROVED NOV

SAMPLE LOG NO.	SAMPLE DESCRIPTION
3733	L11P3S1
3734	L11P3S2
3735	L11P3S3

ANALSIS REQUEST

Chlorinated Pesticide/_/ Insecticide/_/ Herbicide/_/ Fungicide

PCB/_/ VOA/_/ Acid Extractables/_/ Base/Neutral Extractables/_

BTX /_/ OTHER

COMMENTS

No Halogenated or Aromatic Volatile Organic Compounds Dete

(MDL Halogens = 10 ug/kg, Aromatics = 2[illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

APPENDIX H

AR308041

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX H

SOIL ANALYTICAL RESULTS AND QUALITY ASSURANCE REVIEW
DECEMBER 1989 AND FEBRUARY 1990

AR308042

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA Assigned Number Index

Organic Analyses

IEA Assigned "EPA" Number	BCM Engineers Sample ID
BCM01	FIELD BLANK (12/13/89)
BCM02	TRIP BLANK (12/13/89)
BCM03	TRIP BLANK (12/14/89)
BCM04	FIELD BLANK (12/14/89)
BCM05	CSB-7 (4-6)
BCM06	CSB-7 (8-10)
BCM07	CSB-6 (0.5-2)
BCM08	CSB-6 (6-7.3)
BCM09	TRIP BLANK (12/15/89)
BCM10	FIELD BLANK (12/15/89)
BCM11	CSB-6 (19.6-19.9)
BCM12	CSB-7 (20.5-20.8)
BCM13	FIELD BLANK (12/16/89)
BCM14	TRIP BLANK (12/18/89)
BCM16	CSB-12 (0.5-2)
BCM17	CSB-12 (2-4)
BCM18	TRIP BLANK (12/19/89)
BCM19	FIELD BLANK (12/19/89)
BCM20	CSB-11 (0.5-2)
BCM21	CSB-11D (0.5-2)
BCM22	CSB-11 (6-8)
BCM23	TRIP BLANK (12/20/89)
BCM24	FIELD BLANK (12/20/89)
BCM25	CSB-11 (20.4-20.7)
BCM26	CSB-12 (21.7-22)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-1
SDG BCM01
CASE NARRATIVE & VOLATILES

1 OF 1

AR308044

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM01

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C10

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 25.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	250.	U
74-83-9	Bromomethane	250.	U
75-01-4	Vinyl Chloride	250.	U
75-00-3	Chloroethane	250.	U
75-09-2	Methylene Chloride	120.	U
67-64-1	Acetone	2600.	
75-15-0	Carbon Disulfide	120.	U
75-35-4	1,1-Dichloroethene	120.	U
75-34-3	1,1-Dichloroethane	120.	U
540-59-0	1,2-Dichloroethene (total)	120.	U
67-66-3	Chloroform	120.	U
107-06-2	1,2-Dichloroethane	120.	U
78-93-3	2-Butanone	250.	U
71-55-6	1,1,1-Trichloroethane	120.	U
56-23-5	Carbon Tetrachloride	120.	U
108-05-4	Vinyl Acetate	250.	U
75-27-4	Bromodichloromethane	120.	U
78-87-5	1,2-Dichloropropane	120.	U
10061-01-5	cis-1,3-Dichloropropene	120.	U
79-01-6	Trichloroethene	120.	U
124-48-1	Dibromochloromethane	120.	U
79-00-5	1,1,2-Trichloroethane	120.	U
71-43-2	Benzene	120.	U
10061-02-6	trans-1,3-Dichloropropene	120.	U
75-25-2	Bromoform	120.	U
108-10-1	4-Methyl-2-Pentanone	250.	U
591-78-6	2-Hexanone	250.	U
127-18-4	Tetrachloroethene	120.	U
79-34-5	1,1,2,2-Tetrachloroethane	120.	U
108-88-3	Toluene	120.	U
108-90-7	Chlorobenzene	120.	U
100-41-4	Ethylbenzene	120.	U
100-42-5	Styrene	120.	U
1330-20-7	Xylene (total)	120.	U

AR308045

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM01

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C10

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 25.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308046

FORM I VOA-TIC 1/87 Rev.

1 030

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM02

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C05

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308047

FORM I VOA 1 036 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM02

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C05

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308040

FORM I VOA-TIC 1/87 F

1 037

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM03

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C06

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308049

FORM I VOA 1 042 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM03

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C06

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308050

FORM I VOA-TIC 1/87 Re

1 043

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM04

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C07

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	15.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308051

FORM I VOA 1 049 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM04

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C07

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	6.30	7.	J
2.	96-14-0	Pentane, 3-methyl-	7.15	8.	J
3.	110-54-3	Hexane (DOT)	8.02	30.	J
4.	- -	UNKNOWN	9.40	7.	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308052

FORM I VOA-TIC 1/87 R

1 050

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 2.500 (g/mL) G Lab File ID: 1220207

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 11. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	23.	U
74-83-9	BROMOMETHANE	23.	U
75-01-4	VINYL CHLORIDE	23.	U
75-00-3	CHLOROETHANE	23.	U
75-09-2	METHYLENE CHLORIDE	11.	U
67-64-1	ACETONE	400.	B
75-15-0	CARBON DISULFIDE	11.	U
75-35-4	1,1-DICHLOROETHENE	11.	U
75-34-3	1,1-DICHLOROETHANE	11.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	11.	U
67-66-3	CHLOROFORM	15.	
107-06-2	1,2-DICHLOROETHANE	11.	U
78-93-3	2-BUTANONE	23.	U
71-55-6	1,1,1-TRICHLOROETHANE	11.	U
56-23-5	CARBON TETRACHLORIDE	11.	U
108-05-4	VINYL ACETATE	23.	U
75-27-4	BROMODICHLOROMETHANE	11.	U
78-87-5	1,2-DICHLOROPROPANE	11.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	11.	U
79-01-6	TRICHLOROETHENE	11.	U
124-48-1	DIBROMOCHLOROMETHANE	11.	U
79-00-5	1,1,2-TRICHLOROETHANE	11.	U
71-43-2	BENZENE	11.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	11.	U
75-25-2	BROMOFORM	11.	U
108-10-1	4-METHYL-2-PENTANONE	23.	U
591-78-6	2-HEXANONE	23.	U
127-18-4	TETRACHLOROETHENE	11.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	11.	U
108-88-3	TOLUENE	11.	U
108-90-7	CHLOROBENZENE	11.	U
100-41-4	ETHYLBENZENE	11.	U
100-42-5	STYRENE	11.	U
1330-20-7	XYLENE (TOTAL)	11.	U

ARB08053

FORM I VOA 1/87 Rev.

1 061

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 2.500 (g/mL) G Lab File ID: 1220207

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 11. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 2.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308054

FORM I VOA-TIC 1/87 Re

1 062

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220208

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 15. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	7.	B
67-64-1	ACETONE	89.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	8.	
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308055

FORM I VOA 1 072 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220208

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 15. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308056

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM07

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220205

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 11. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	12.	B
67-64-1	ACETONE	12.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308057

FORM I VOA 1 085 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM07

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220205

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 11. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308058

FORM I VOA-TIC 1/87 R

1 083

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220210

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 14. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	6.	BJ
67-64-1	ACETONE	73.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	5.	J
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308059

FORM I VOA 1 097 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220210

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 14. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300060

FORM I VOA-TIC 1/87 R

1 098

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM09

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C08

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308061

FORM I VOA 1 111 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM09

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C08

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM10

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C09

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308063

FORM I VOA 1 117 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM10

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C09

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-54-3	Hexane (DOT)	8.12	20.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308064

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM11

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220213

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 0. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	3.	BJ
67-64-1	ACETONE	13.	B
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	4.	J
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AB308065

FORM I VOA 1 125 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM11

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220213

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 0. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308066

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM12

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220217

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 0. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	3.	BJ
67-64-1	ACETONE	56.	B
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	4.	J
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR368067

FORM I VOA 1 139 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM12

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220217

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 0. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308068

FORM I VOA-TIC 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1220C04

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec. 100. Date Analyzed: 12/20/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	4.	BJ
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308069

FORM I VOA 1 153 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1220C04

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec. 100. Date Analyzed: 12/20/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-54-3	Hexane (DOT)	8.13	20.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308070

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM14

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1220C05

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec. 100. Date Analyzed: 12/20/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	7.	B
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR300807

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM14

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1220C05

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec. 100. Date Analyzed: 12/20/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308072

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM15

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G08

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308073

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM15

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G08

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR300074

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229107

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	11.	U
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308075

FORM I VOA 1 175 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229107

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1066-40-6	SILANOL, TRIMETHYL-	12.63	10.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308076

FORM I VOA-TIC 1/87 R

1 176

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229108

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 10. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	11.	U
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308077

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229108

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 10. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308070

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM18

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G09

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308079

FORM I VOA 1 191 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM18

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G09

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.			4R308060	

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G10

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR303808

FORM I VOA 1 197 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G10

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	107-83-5	Pentane, 2-methyl-	6.58	10.	J
2.	96-14-0	Pentane, 3-methyl-	7.27	20.	J
3.	110-54-3	Hexane (DOT)	8.13	60.	J
4.	- -	UNKNOWN HYDROCARBON	9.52	20.	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300002

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: G8-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229109

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	12.	U
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308083

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229109

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308084

FORM I VOA-TIC 1/87 Re

1 209

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229110

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 15. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	12.	U
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	J
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308085

FORM I VOA 1 215 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229110

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 15. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308086

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM22

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229111

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	11.	U
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308087

FORM I VOA 1 224 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM22

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229111

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308088

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM23

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM21

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G11

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308089

FORM I VOA 1 231 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM23

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G11

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308090

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM24

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM21

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G12

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308091

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM24

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G12

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-54-3	Hexane (DOT)	8.12	9.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

4R308092

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM26

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229A06

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 0. Date Analyzed: 12/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308093

FORM I VOA 1 252 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM26

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229A06

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 0. Date Analyzed: 12/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308

FORM I VOA-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM25

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229A03

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 0. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308695

FORM I VOA 1 215 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM25

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229A03

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 0. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-1
SDG BCM01
SEMIVOLATILES

1 OF 1

AR308097

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM01

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 1068-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220402

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR3D809

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SCM01

Name: IEA Contract: 68-W8-0045

Lab: IEA Case No.: 868-1 SAS No.: SDG No.: SCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220402

Level: (low/med) LOW Date Received: 12/15/89

Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	8.	J
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

AR308099

FORM I SV-2 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM01

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220402

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN HYDROCARBON	9.45	10.	J
2.	- -	UNKNOWN	5.73	10.	J
3.	- -	SUBSTITUTED PHENOL	19.37	10.	J
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308100

FORM I SV-TIC 2 027 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SCM04

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 968-1 SAS No.: SDG No.: SCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220403

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR308101

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM04

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample Wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220403

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-1	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

AR308102

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

2 039

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM04

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220403

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	SUBSTITUTED PHENOL	19.37	10.	J
2. - -	UNKNOWN	36.92	8.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308103

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123406

Level: (low/med) LOW Date Received: 12/~~18~~ 15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123406

Level: (low/med) LOW Date Received: 12/~~18~~15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

AR308105

FORM I SV-2 2 051 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123406

Level: (low/med) LOW Date Received: 12/~~18~~ 15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308106

FORM I SV-TIC 1/87 Rev

2 052

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM05 AC

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D10

Level: (low/med) LOW Date Received: 12/~~18~~15/89 12/15/90

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

FORM I SV-1 2 060 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D10

Level: (low/med) LOW Date Received: 12/~~16~~15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

AR300168

FORM I SV-2 1/87 Rev

2 061

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM05 RE

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D10

Level: (low/med) LOW Date Received: 12/~~18~~15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	500.	BJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308109

FORM I SV-TIC 2 062 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123409

Level: (low/med) LOW Date Received: 12/~~18~~ 15/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390.	U
111-44-4	bis(2-Chloroethyl)ether	390.	U
95-57-8	2-Chlorophenol	390.	U
541-73-1	1,3-Dichlorobenzene	390.	U
106-46-7	1,4-Dichlorobenzene	390.	U
100-51-6	Benzyl alcohol	390.	U
95-50-1	1,2-Dichlorobenzene	390.	U
95-48-7	2-Methylphenol	390.	U
108-60-1	bis(2-Chloroisopropyl)ether	390.	U
106-44-5	4-Methylphenol	390.	U
621-64-7	N-Nitroso-di-n-propylamine	390.	U
67-72-1	Hexachloroethane	390.	U
98-95-3	Nitrobenzene	390.	U
78-59-1	Isophorone	390.	U
88-75-5	2-Nitrophenol	390.	U
105-67-9	2,4-Dimethylphenol	390.	U
65-85-0	Benzoic acid	2000.	U
111-91-1	bis(2-Chloroethoxy)methane	390.	U
120-83-2	2,4-Dichlorophenol	390.	U
120-82-1	1,2,4-Trichlorobenzene	390.	U
91-20-3	Naphthalene	390.	U
106-47-8	4-Chloroaniline	390.	U
87-68-3	Hexachlorobutadiene	390.	U
59-50-7	4-Chloro-3-methylphenol	390.	U
91-57-6	2-Methylnaphthalene	390.	U
77-47-4	Hexachlorocyclopentadiene	390.	U
88-06-2	2,4,6-Trichlorophenol	390.	U
95-95-4	2,4,5-Trichlorophenol	2000.	U
91-58-7	2-Chloronaphthalene	390.	U
88-74-4	2-Nitroaniline	2000.	U
131-11-3	Dimethylphthalate	390.	U
208-96-8	Acenaphthylene	390.	U
606-20-2	2,6-Dinitrotoluene	390.	U

R308110

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123409

Level: (low/med) LOW Date Received: 12/~~16~~15/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000.	U
83-32-9	Acenaphthene	390.	U
51-28-5	2,4-Dinitrophenol	2000.	U
100-02-7	4-Nitrophenol	2000.	U
132-64-9	Dibenzofuran	390.	U
121-14-2	2,4-Dinitrotoluene	390.	U
84-66-2	Diethylphthalate	390.	U
7005-72-3	4-Chlorophenyl-phenylether	390.	U
86-73-7	Fluorene	390.	U
100-01-6	4-Nitroaniline	2000.	U
534-52-1	4,6-Dinitro-2-methylphenol	2000.	U
86-30-6	N-Nitrosodiphenylamine (1)	390.	U
101-55-3	4-Bromophenyl-phenylether	390.	U
118-74-1	Hexachlorobenzene	390.	U
87-86-5	Pentachlorophenol	2000.	U
85-01-8	Phenanthrene	390.	U
120-12-7	Anthracene	390.	U
84-74-2	Di-n-butylphthalate	390.	U
206-44-0	Fluoranthene	390.	U
129-00-0	Pyrene	390.	U
85-68-7	Butylbenzylphthalate	390.	U
91-94-1	3,3'-Dichlorobenzidine	780.	U
56-55-3	Benzo(a)anthracene	390.	U
218-01-9	Chrysene	390.	U
117-81-7	bis(2-Ethylhexyl)phthalate	390.	U
117-84-0	Di-n-octylphthalate	390.	U
205-99-2	Benzo(b)fluoranthene	390.	U
207-08-9	Benzo(k)fluoranthene	390.	U
50-32-8	Benzo(a)pyrene	390.	U
193-39-5	Indeno(1,2,3-cd)pyrene	390.	U
53-70-3	Dibenz(a,h)anthracene	390.	U
191-24-2	Benzo(g,h,i)perylene	390.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 2 071 1/87 Rev.

AR308111

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123409

Level: (low/med) LOW Date Received: 12/~~16~~ 15/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR300112

2 072

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM07

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123411

Level: (low/med) LOW Date Received: 12/~~16~~15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

AR303113

FORM I SV-1 2 080 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM07

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123411

Level: (low/med) LOW Date Received: 12/~~16~~15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	750.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM07

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123411

Level: (low/med) LOW Date Received: 12/~~18~~15/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	700.	BJ
2. - -	UNKNOWN KETONE	11.25	300.	J
3. - -	UNKNOWN	11.67	400.	J
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.			AR308115	
30.				

FORM I SV-TIC

2 082

1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123412

Level: (low/med) LOW Date Received: 12/~~18~~ 15/89

% Moisture: not dec. 14. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
100-51-6	Benzyl alcohol	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	bis(2-Chloroisopropyl)ether	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U

AH308116

FORM I SV-1 1/87

2 092

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123412

Level: (low/med) LOW Date Received: 12/~~28~~15/89

% Moisture: not dec. 14. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	760.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	380.	U
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

(1) - Cannot be separated from diphenylamine

AR300117

FORM I SV-2 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123412

Level: (low/med) LOW Date Received: 12/~~26~~ 15/89

% Moisture: not dec. 14. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.33	200.	BJ
2.	- -	UNKNOWN	11.67	200.	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300811

FORM I SV-TIC 1/87 Re

2 094

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D07

Level: (low/med) LOW Date Received: 12/~~18~~ 19/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR308019

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D07

Level: (low/med) LOW Date Received: 12/~~16~~ 17/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	U
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

AR308120

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D07

Level: (low/med) LOW Date Received: 12/~~18~~ 19/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.15	20.	J
2. - -	UNKNOWN	10.27	200.	J
3. - -	TRICHLOROPROPENE ISOMER	10.42	10.	J
4. - -	UNKNOWN	11.47	9.	J
5. - -	UNKNOWN CHLOROCARBON	13.38	10.	J
6. 100-97-0	Methenamine	15.65	100.	J
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308121

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 0123D02

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
100-51-6	Benzyl alcohol	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	bis(2-Chloroisopropyl)ether	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
65-85-0	Benzoic acid	290.	J
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U

AR308922

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 0123D02

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	760.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	220.	J
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

2 119

R308123

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 0123D02

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 9

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.02	500.	J
2.	- -	UNKNOWN	10.33	900.	BJ
3.	- -	UNKNOWN KETONE	11.25	600.	J
4.	- -	UNKNOWN KETONE	11.67	600.	
5.	- -	UNKNOWN	12.40	600.	
6.	- -	UNKNOWN	12.50	500.	J
7.	- -	UNKNOWN	24.93	400.	J
8.	123-79-5	Hexanedioic acid, dioctyl es	29.25	4000.	BJ
9.	- -	UNKNOWN AROMATIC	36.27	200.	J
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300124

FORM I SV-TIC 2 120 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123D03

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

R308125

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123D03

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

AR300126

FORM I SV-2

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123D03

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.33	600.	BJ
2.	- -	UNKNOWN	11.67	200.	J
3.	104-76-7	1-Hexanol, 2-ethyl-	12.02	300.	J
4.	- -	SUBSTITUTED PHENOL	19.83	200.	BJ
5.	123-79-5	Hexanedioic acid, dioctyl es	29.25	8000.	BJ
6.	- -	UNKNOWN	30.65	300.	J
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308127

FORM I SV-TIC 2 140 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D11

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360.	U
111-44-4	bis(2-Chloroethyl)ether	360.	U
95-57-8	2-Chlorophenol	360.	U
541-73-1	1,3-Dichlorobenzene	360.	U
106-46-7	1,4-Dichlorobenzene	360.	U
100-51-6	Benzyl alcohol	360.	U
95-50-1	1,2-Dichlorobenzene	360.	U
95-48-7	2-Methylphenol	360.	U
108-60-1	bis(2-Chloroisopropyl)ether	360.	U
106-44-5	4-Methylphenol	360.	U
621-64-7	N-Nitroso-di-n-propylamine	360.	U
67-72-1	Hexachloroethane	360.	U
98-95-3	Nitrobenzene	360.	U
78-59-1	Isophorone	360.	U
88-75-5	2-Nitrophenol	360.	U
105-67-9	2,4-Dimethylphenol	360.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	360.	U
120-83-2	2,4-Dichlorophenol	360.	U
120-82-1	1,2,4-Trichlorobenzene	360.	U
91-20-3	Naphthalene	360.	U
106-47-8	4-Chloroaniline	360.	U
87-68-3	Hexachlorobutadiene	360.	U
59-50-7	4-Chloro-3-methylphenol	360.	U
91-57-6	2-Methylnaphthalene	360.	U
77-47-4	Hexachlorocyclopentadiene	360.	U
88-06-2	2,4,6-Trichlorophenol	360.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	360.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	360.	U
208-96-8	Acenaphthylene	360.	U
606-20-2	2,6-Dinitrotoluene	360.	U

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM17 RE

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D11

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	360.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	360.	U
121-14-2	2,4-Dinitrotoluene	360.	U
84-66-2	Diethylphthalate	360.	U
7005-72-3	4-Chlorophenyl-phenylether	360.	U
86-73-7	Fluorene	360.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	360.	U
101-55-3	4-Bromophenyl-phenylether	360.	U
118-74-1	Hexachlorobenzene	360.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	360.	U
120-12-7	Anthracene	360.	U
84-74-2	Di-n-butylphthalate	360.	U
206-44-0	Fluoranthene	360.	U
129-00-0	Pyrene	360.	U
85-68-7	Butylbenzylphthalate	360.	U
91-94-1	3,3'-Dichlorobenzidine	720.	U
56-55-3	Benzo(a)anthracene	360.	U
218-01-9	Chrysene	360.	U
117-81-7	bis(2-Ethylhexyl)phthalate	360.	U
117-84-0	Di-n-octylphthalate	360.	U
205-99-2	Benzo(b)fluoranthene	360.	U
207-08-9	Benzo(k)fluoranthene	360.	U
50-32-8	Benzo(a)pyrene	360.	U
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U
53-70-3	Dibenz(a,h)anthracene	360.	U
191-24-2	Benzo(g,h,i)perylene	360.	U

(1) - Cannot be separated from diphenylamine

A008129

FORM I SV-2 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM17 RE

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D11

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.33	700.	BJ
2.	- -	UNKNOWN	11.67	200.	J
3.	104-76-7	1-Hexanol, 2-ethyl-	12.02	300.	J
4.	- -	UNKNOWN	23.70	100.	
5.	123-79-5	Hexanedioic acid, dioctyl es	29.25	6000.	B
6.	- -	UNKNOWN	33.73	200.	J
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308130

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D08

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR308191

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D08

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	U
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

AR308632

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D08

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89 1/15/90

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.25	90.	&J
2. - -	UNKNOWN	13.38	20.	&J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308133

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123D04

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 14. dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390.	U
111-44-4	bis(2-Chloroethyl)ether	390.	U
95-57-8	2-Chlorophenol	390.	U
541-73-1	1,3-Dichlorobenzene	390.	U
106-46-7	1,4-Dichlorobenzene	390.	U
100-51-6	Benzyl alcohol	390.	U
95-50-1	1,2-Dichlorobenzene	390.	U
95-48-7	2-Methylphenol	390.	U
108-60-1	bis(2-Chloroisopropyl)ether	390.	U
106-44-5	4-Methylphenol	390.	U
621-64-7	N-Nitroso-di-n-propylamine	390.	U
67-72-1	Hexachloroethane	390.	U
98-95-3	Nitrobenzene	390.	U
78-59-1	Isophorone	390.	U
88-75-5	2-Nitrophenol	390.	U
105-67-9	2,4-Dimethylphenol	390.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	390.	U
120-83-2	2,4-Dichlorophenol	390.	U
120-82-1	1,2,4-Trichlorobenzene	390.	U
91-20-3	Naphthalene	390.	U
106-47-8	4-Chloroaniline	390.	U
87-68-3	Hexachlorobutadiene	390.	U
59-50-7	4-Chloro-3-methylphenol	390.	U
91-57-6	2-Methylnaphthalene	390.	U
77-47-4	Hexachlorocyclopentadiene	390.	U
88-06-2	2,4,6-Trichlorophenol	390.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	390.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	390.	U
208-96-8	Acenaphthylene	390.	U
606-20-2	2,6-Dinitrotoluene	390.	U

AR308 34

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123D04

Level: (low/med) LOW Date Received: 12/~~18~~20/89

% Moisture: not dec. 14. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	390.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	390.	U
121-14-2	2,4-Dinitrotoluene	390.	U
84-66-2	Diethylphthalate	390.	U
7005-72-3	4-Chlorophenyl-phenylether	390.	U
86-73-7	Fluorene	390.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	390.	U
101-55-3	4-Bromophenyl-phenylether	390.	U
118-74-1	Hexachlorobenzene	390.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	390.	U
120-12-7	Anthracene	390.	U
84-74-2	Di-n-butylphthalate	390.	U
206-44-0	Fluoranthene	390.	U
129-00-0	Pyrene	390.	U
85-68-7	Butylbenzylphthalate	390.	U
91-94-1	3,3'-Dichlorobenzidine	770.	U
56-55-3	Benzo(a)anthracene	390.	U
218-01-9	Chrysene	390.	U
117-81-7	bis(2-Ethylhexyl)phthalate	390.	U
117-84-0	Di-n-octylphthalate	390.	U
205-99-2	Benzo(b)fluoranthene	390.	U
207-08-9	Benzo(k)fluoranthene	390.	U
50-32-8	Benzo(a)pyrene	390.	U
193-39-5	Indeno(1,2,3-cd)pyrene	390.	U
53-70-3	Dibenz(a,h)anthracene	390.	U
191-24-2	Benzo(g,h,i)perylene	390.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123D04

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 14. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 15

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	8.93	300.	J
2.	- -	UNKNOWN KETONE	9.98	4000.	J
3.	- -	UNKNOWN	10.33	3000.	BJ
4.	- -	UNKNOWN	10.55	200.	
5.	- -	UNKNOWN	11.05	500.	
6.	- -	UNKNOWN	11.18	200.	J
7.	- -	UNKNOWN KETONE	11.25	2000.	J
8.	- -	UNKNOWN	11.57	200.	J
9.	- -	UNKNOWN	11.68	1000.	J
10.	- -	UNKNOWN	12.18	400.	J
11.	- -	UNKNOWN	12.40	1000.	J
12.	- -	UNKNOWN	12.50	700.	J
13.	- -	SUBSTITUTED PHENOL	19.83	200.	BJ
14.	- -	DDE ISOMER	27.65	200.	J
15.	123-79-5	Hexanedioic acid, dioctyl es	29.27	20000.	BJ
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308136

FORM I SV-TIC 2 181 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.8 (g/mL) G Lab File ID: 0123D05

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
100-51-6	Benzyl alcohol	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	bis(2-Chloroisopropyl)ether	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U

AR338137

FORM I SV-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.8 (g/mL) G Lab File ID: 0123D05

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	760.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	380.	U
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

AR308138

(1) - Cannot be separated from diphenylamine

FORM I SV-2 2 204 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.8 (g/mL) G Lab File ID: 0123D05

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN KETONE	9.98	300.	J
2. - -	UNKNOWN	10.33	1000.	BJ
3. - -	UNKNOWN KETONE	11.25	900.	J
4. - -	UNKNOWN	11.67	500.	J
5. - -	UNKNOWN	12.40	300.	J
6. - -	UNKNOWN	12.48	300.	J
7. - -	SUBSTITUTED PHENOL	19.83	200.	BJ
8. - -	UNKNOWN	20.90	300.	BJ
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR300139

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM22

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123D06

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

AR308140

FORM I SV-1 2 220 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM22

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123D06

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

AR300141

FORM I SV-2

2 221

1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM22

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123D06

Level: (low/med) LOW Date Received: 12/~~18~~20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2. - -	SUBSTITUTED PHENOL	19.83	200.	BJ
3. - -	UNKNOWN	20.90	200.	BJ
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.			AR308142	

FORM I SV-TIC 2 222 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-1
SDG BCM01
PESTICIDES

1 OF 1

AR308143

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM04

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 500. (g/mL)ML Lab File ID: DB5A5532

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/18/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR308144

3 021

FORM I PEST 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM05

Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5536

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 11. dec. 0. Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR300145

3 026

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31. (g/mL) G Lab File ID: DB5A5534

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 15. dec. 0. Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308146

3 031

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM07

Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5539

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 11. dec. 0. Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308147

3 036

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31. (g/mL) G Lab File ID: DB5A5540

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 14. dec. 0. Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308148

3 041

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: DB5A5542

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR308149

3 046

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5545

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	150.	
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	51.	
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308150

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5546

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 10. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	14.	J
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308151

3 059

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: DB5A5543

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR308152

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM20

Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5548

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	240.	
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	86.	
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308153

3 069

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29. (g/mL) G Lab File ID: DB5A5549

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 15. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	20.	U
72-55-9	4,4'-DDE	310.	
72-20-8	Endrin	20.	U
33213-65-9	Endosulfan II	20.	U
72-54-8	4,4'-DDD	20.	U
1031-07-8	Endosulfan sulfate	20.	U
50-29-3	4,4'-DDT	99.	
72-43-5	Methoxychlor	100.	U
53494-70-5	Endrin ketone	20.	U
5103-71-9	alpha-Chlordane	100.	U
5103-74-2	gamma-Chlordane	100.	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Aroclor-1016	100.	U
11104-28-2	Aroclor-1221	100.	U
11141-16-5	Aroclor-1232	100.	U
53469-21-9	Aroclor-1242	100.	U
12672-29-6	Aroclor-1248	100.	U
11097-69-1	Aroclor-1254	200.	U
11096-82-5	Aroclor-1260	200.	U

AR308150

3 078

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM22

Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29. (g/mL) G Lab File ID: DB5A5550

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

AR308155
3 087

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

iea

IEA Assigned "EPA" Number	BCM Engineers Sample ID
BCM28	CSB-8 (0.5-2)
BCM29	CSB-8D (0.5-2)
BCM30	CSB-8 (2-4)
BCM31	TRIP BLANK (2/22/90)
BCM32	FIELD BLANK (2/22/90)
BCM33	CSB-8A (18-20)
BCM34	TRIP BLANK (2/26/90)
BCM35	FIELD BLANK (2/26/90)
BCM36	CSB-9 (2-4)
BCM37	CSB-9 (4-5.5)
BCM38	CSB-10 (2-4)
BCM39	CSB-10 (0.5-2)
BCM40	FIELD BLANK (2/27/90)
BCM41	TRIP BLANK (2/27/90)
BCM42	CSB-10 (18-18.5)
BCM43	CSB-9 (19.5-20)

AR308156

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-3
SDG BCM28
CASE NARRATIVE & VOLATILES

1 OF 1

AR308157

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B07

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 9. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	9.	B
67-64-1	ACETONE	10.	BJ
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	5.	J
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308158

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B07

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 9. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR300159

FORM I VOA-TIC 1/87 Rev.

1 021

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B08

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	9.	B
67-64-1	ACETONE	12.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308160

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B08

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B09

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	8.	B
67-64-1	ACETONE	12.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AB308162

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B09

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308163

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM31

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B04

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308164

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM31

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B04

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308165

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B05

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308166

FORM I VOA 1 065 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B05

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308167

FORM I VOA-TIC 1/87 Rev.

1 066

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM33

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B10

Level: (low/med) LOW Date Received: 2/27/90

% Moisture: not dec. 11. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	10.	B
67-64-1	ACETONE	12.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308168

FORM I VOA 1 073 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM33

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B10

Level: (low/med) LOW Date Received: 2/27/90

% Moisture: not dec. 11. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308169

FORM I VOA-TIC 1/87 Rev.

1 074

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM34

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B06

Level: (low/med) LOW Date Received: 2/27/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308170

FORM I VOA 1/87 Rev

1 085

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM34

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B06

Level: (low/med) LOW Date Received: 2/27/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR300171

FORM I VOA-TIC 1/87 Rev.

1 086

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM35

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B14

Level: (low/med) LOW Date Received: 2/27/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308172

FORM I VOA 1 092 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM35

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B14

Level: (low/med) LOW Date Received: 2/27/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308173

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309205

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	4.	J
67-64-1	ACETONE	16.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308174

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309205

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308175

FORM I VOA-TIC 1/87 Rev.

1 100

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309206

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	18.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AH308176

FORM I VOA 1/87 Rev

1 111

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309206

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308177

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309207

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	12.	BJ
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308178

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309207

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308179

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309208

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	6.	U
67-64-1	ACETONE	11.	BJ
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308180

FORM I VOA 1/87 Rev

1 131

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309208

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308181

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B08

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308182

FORM I VOA 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B08

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM41

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B09

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM41

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0304B09

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. Date Analyzed: 3/ 4/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308185

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM42

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0313212

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. Date Analyzed: 3/13/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12.	U
74-83-9	BROMOMETHANE	12.	U
75-01-4	VINYL CHLORIDE	12.	U
75-00-3	CHLOROETHANE	12.	U
75-09-2	METHYLENE CHLORIDE	15.	B
67-64-1	ACETONE	19.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	12.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	12.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	12.	U
591-78-6	2-HEXANONE	12.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308186

FORM I VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM42

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0313212

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. Date Analyzed: 3/13/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308187

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM43

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0313213

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 10. Date Analyzed: 3/13/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11.	U
74-83-9	BROMOMETHANE	11.	U
75-01-4	VINYL CHLORIDE	11.	U
75-00-3	CHLOROETHANE	11.	U
75-09-2	METHYLENE CHLORIDE	6.	B
67-64-1	ACETONE	15.	B
75-15-0	CARBON DISULFIDE	6.	U
75-35-4	1,1-DICHLOROETHENE	6.	U
75-34-3	1,1-DICHLOROETHANE	6.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	6.	U
67-66-3	CHLOROFORM	6.	U
107-06-2	1,2-DICHLOROETHANE	6.	U
78-93-3	2-BUTANONE	11.	U
71-55-6	1,1,1-TRICHLOROETHANE	6.	U
56-23-5	CARBON TETRACHLORIDE	6.	U
108-05-4	VINYL ACETATE	11.	U
75-27-4	BROMODICHLOROMETHANE	6.	U
78-87-5	1,2-DICHLOROPROPANE	6.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	6.	U
79-01-6	TRICHLOROETHENE	6.	U
124-48-1	DIBROMOCHLOROMETHANE	6.	U
79-00-5	1,1,2-TRICHLOROETHANE	6.	U
71-43-2	BENZENE	6.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	6.	U
75-25-2	BROMOFORM	6.	U
108-10-1	4-METHYL-2-PENTANONE	11.	U
591-78-6	2-HEXANONE	11.	U
127-18-4	TETRACHLOROETHENE	6.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	6.	U
108-88-3	TOLUENE	6.	U
108-90-7	CHLOROBENZENE	6.	U
100-41-4	ETHYLBENZENE	6.	U
100-42-5	STYRENE	6.	U
1330-20-7	XYLENE (TOTAL)	6.	U

AR308188

FORM I VOA 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM43

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0313213

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 10. Date Analyzed: 3/13/90

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308189

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR308190

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-3
SDG BCM28
SEMIVOLATILES

1 OF 1

AR308191

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302410

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 9. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

AR308192

FORM I SV-1 1/87 Rev

2 020

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302410

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 9. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

2 021

AR303193

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302410

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 9. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN KETONE	9.95	1000.	J
2. - -	UNKNOWN KETONE	10.28	900.	BJ
3. - -	UNKNOWN	11.20	400.	J
4. - -	UNKNOWN	12.45	200.	
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308194

FORM I SV-TIC 2 022 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.5 (g/mL) G Lab File ID: 0302411

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
100-51-6	Benzyl alcohol	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	bis(2-Chloroisopropyl)ether	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	380.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U

AR308195

FORM I SV-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.5 (g/mL) G Lab File ID: 0302411

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	750.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	380.	U
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

AR308196

(1) - Cannot be separated from diphenylamine

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.5 (g/mL) G Lab File ID: 0302411

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.85	300.	J
2. - -	UNKNOWN KETONE	10.28	3000.	BJ
3. - -	UNKNOWN	10.42	200.	BJ
4. - -	UNKNOWN KETONE	10.50	500.	J
5. - -	UNKNOWN KETONE	11.20	200.	J
6. - -	UNKNOWN	11.45	200.	J
7. - -	UNKNOWN	11.53	300.	J
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308197

FORM I SV-TIC 1/87 Rev.

2 035

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302402

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

AR308198

FORM I SV-1 1/87

2 049

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302402

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	78.	J
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

AR308099

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302402

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.23	200.	J
2. - -	UNKNOWN	9.48	200.	J
3. - -	UNKNOWN	9.92	1000.	J
4. - -	UNKNOWN KETONE	10.27	900.	DJ
5. - -	UNKNOWN	11.18	400.	
6. - -	UNKNOWN	12.42	200.	
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308200

FORM I SV-TIC 1/87

2 051

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0227D03

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. dec.____ Date Extracted: 2/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 2/28/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR308201

FORM I SV-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0227D03

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. dec.____ Date Extracted: 2/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 2/28/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	U
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

AR308202

FORM I SV-2 1/87 Rev.

2 066

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0227D03

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. dec.____ Date Extracted: 2/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 2/28/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	Substituted Phenol	19.75	10.	BJ
2. - -	UNKNOWN	32.60	8.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308203

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.0 (g/mL) G Lab File ID: 0302403

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
100-51-6	Benzyl alcohol	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	bis(2-Chloroisopropyl)ether	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	380.	U
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U

AR900820

2 076

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.0 (g/mL) G Lab File ID: 0302403

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	750.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	110.	J
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

(1) - Cannot be separated from diphenylamine

AR008205

FORM I SV-2 1/87 Rev.

2 077

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.0 (g/mL) G Lab File ID: 0302403

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	9.85	200.	J
2.	- -	UNKNOWN KETONE	9.93	1000.	J
3.	- -	UNKNOWN KETONE	10.30	3000.	BJ
4.	- -	UNKNOWN KETONE	10.50	200.	
5.	- -	UNKNOWN KETONE	11.18	800.	
6.	- -	UNKNOWN ACID	11.62	200.	J
7.	- -	UNKNOWN	12.17	400.	J
8.	- -	UNKNOWN	34.27	400.	J
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308206

FORM I SV-TIC 1/87 R

2 078

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 0302404

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

AR308207

FORM I SV-1 1/87 Rev.

2 093A

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 0302404

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	740.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	bis(2-Ethylhexyl)phthalate	510.	
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

A73D8208

FORM I SV-2 1/87 Rev

2 094

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 0302404

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.48	200.	J
2. - -	UNKNOWN	9.95	200.	J
3. - -	UNKNOWN KETONE	10.30	4000.	BJ
4. - -	UNKNOWN KETONE	10.50	200.	J
5. - -	UNKNOWN KETONE	11.20	400.	J
6. - -	UNKNOWN	11.62	200.	J
7. - -	UNKNOWN	12.17	400.	J
8. - -	UNKNOWN	41.60	500.	J
9. - -	UNKNOWN	41.70	300.	J
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.			AR308209	
30.				

FORM I SV-TIC 2 095 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 0302405

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. dec._____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U
95-57-8	2-Chlorophenol	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U
100-51-6	Benzyl alcohol	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U
95-48-7	2-Methylphenol	380.	U
108-60-1	bis(2-Chloroisopropyl)ether	380.	U
106-44-5	4-Methylphenol	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U
67-72-1	Hexachloroethane	380.	U
98-95-3	Nitrobenzene	380.	U
78-59-1	Isophorone	1600.	
88-75-5	2-Nitrophenol	380.	U
105-67-9	2,4-Dimethylphenol	380.	U
65-85-0	Benzoic acid	1900.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U
120-83-2	2,4-Dichlorophenol	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U
91-20-3	Naphthalene	380.	U
106-47-8	4-Chloroaniline	380.	U
87-68-3	Hexachlorobutadiene	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U
91-57-6	2-Methylnaphthalene	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U
95-95-4	2,4,5-Trichlorophenol	1900.	U
91-58-7	2-Chloronaphthalene	380.	U
88-74-4	2-Nitroaniline	1900.	U
131-11-3	Dimethylphthalate	380.	U
208-96-8	Acenaphthylene	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U

AR308210

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 0302405

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900.	U
83-32-9	Acenaphthene	380.	U
51-28-5	2,4-Dinitrophenol	1900.	U
100-02-7	4-Nitrophenol	1900.	U
132-64-9	Dibenzofuran	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U
84-66-2	Diethylphthalate	380.	U
7005-72-3	4-Chlorophenyl-phenylether	380.	U
86-73-7	Fluorene	380.	U
100-01-6	4-Nitroaniline	1900.	U
534-52-1	4,6-Dinitro-2-methylphenol	1900.	U
86-30-6	N-Nitrosodiphenylamine (1)	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U
118-74-1	Hexachlorobenzene	380.	U
87-86-5	Pentachlorophenol	1900.	U
85-01-8	Phenanthrene	380.	U
120-12-7	Anthracene	380.	U
84-74-2	Di-n-butylphthalate	380.	U
206-44-0	Fluoranthene	380.	U
129-00-0	Pyrene	380.	U
85-68-7	Butylbenzylphthalate	380.	U
91-94-1	3,3'-Dichlorobenzidine	750.	U
56-55-3	Benzo(a)anthracene	380.	U
218-01-9	Chrysene	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate	160.	J
117-84-0	Di-n-octylphthalate	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U
50-32-8	Benzo(a)pyrene	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U

(1) - Cannot be separated from diphenylamine

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 0302405

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

Number TICs found: 15

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	9.10	200.	J
2.	- -	UNKNOWN	9.85	200.	J
3.	- -	UNKNOWN	9.95	700.	J
4.	- -	UNKNOWN KETONE	10.30	5000.	
5.	- -	UNKNOWN KETONE	10.50	300.	
6.	- -	UNKNOWN	11.12	200.	J
7.	- -	UNKNOWN KETONE	11.20	700.	J
8.	- -	UNKNOWN	12.17	600.	J
9.	- -	UNKNOWN	30.02	1000.	J
10.	- -	UNKNOWN	31.00	200.	J
11.	- -	UNKNOWN	31.12	600.	J
12.	- -	UNKNOWN	31.20	400.	J
13.	- -	UNKNOWN	31.27	300.	J
14.	- -	UNKNOWN	34.38	400.	J
15.	- -	UNKNOWN	37.92	300.	J
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I SV-TIC

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0319408

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390.	U
111-44-4	bis(2-Chloroethyl)ether	390.	U
95-57-8	2-Chlorophenol	390.	U
541-73-1	1,3-Dichlorobenzene	390.	U
106-46-7	1,4-Dichlorobenzene	390.	U
100-51-6	Benzyl alcohol	390.	U
95-50-1	1,2-Dichlorobenzene	390.	U
95-48-7	2-Methylphenol	390.	U
108-60-1	bis(2-Chloroisopropyl)ether	390.	U
106-44-5	4-Methylphenol	390.	U
621-64-7	N-Nitroso-di-n-propylamine	390.	U
67-72-1	Hexachloroethane	390.	U
98-95-3	Nitrobenzene	390.	U
78-59-1	Isophorone	3100.	
88-75-5	2-Nitrophenol	390.	U
105-67-9	2,4-Dimethylphenol	390.	U
65-85-0	Benzoic acid	2000.	U
111-91-1	bis(2-Chloroethoxy)methane	390.	U
120-83-2	2,4-Dichlorophenol	390.	U
120-82-1	1,2,4-Trichlorobenzene	390.	U
91-20-3	Naphthalene	390.	U
106-47-8	4-Chloroaniline	390.	U
87-68-3	Hexachlorobutadiene	390.	U
59-50-7	4-Chloro-3-methylphenol	390.	U
91-57-6	2-Methylnaphthalene	390.	U
77-47-4	Hexachlorocyclopentadiene	390.	U
88-06-2	2,4,6-Trichlorophenol	390.	U
95-95-4	2,4,5-Trichlorophenol	2000.	U
91-58-7	2-Chloronaphthalene	390.	U
88-74-4	2-Nitroaniline	2000.	U
131-11-3	Dimethylphthalate	390.	U
208-96-8	Acenaphthylene	390.	U
606-20-2	2,6-Dinitrotoluene	390.	U

AR300213

FORM I SV-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0319408

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000.	U
83-32-9	Acenaphthene	390.	U
51-28-5	2,4-Dinitrophenol	2000.	U
100-02-7	4-Nitrophenol	2000.	U
132-64-9	Dibenzofuran	390.	U
121-14-2	2,4-Dinitrotoluene	390.	U
84-66-2	Diethylphthalate	390.	U
7005-72-3	4-Chlorophenyl-phenylether	390.	U
86-73-7	Fluorene	390.	U
100-01-6	4-Nitroaniline	2000.	U
534-52-1	4,6-Dinitro-2-methylphenol	2000.	U
86-30-6	N-Nitrosodiphenylamine (1)	390.	U
101-55-3	4-Bromophenyl-phenylether	390.	U
118-74-1	Hexachlorobenzene	390.	U
87-86-5	Pentachlorophenol	2000.	U
85-01-8	Phenanthrene	390.	U
120-12-7	Anthracene	390.	U
84-74-2	Di-n-butylphthalate	390.	U
206-44-0	Fluoranthene	390.	U
129-00-0	Pyrene	390.	U
85-68-7	Butylbenzylphthalate	390.	U
91-94-1	3,3'-Dichlorobenzidine	780.	U
56-55-3	Benzo(a)anthracene	390.	U
218-01-9	Chrysene	390.	U
117-81-7	bis(2-Ethylhexyl)phthalate	390.	U
117-84-0	Di-n-octylphthalate	390.	U
205-99-2	Benzo(b)fluoranthene	390.	U
207-08-9	Benzo(k)fluoranthene	390.	U
50-32-8	Benzo(a)pyrene	390.	U
193-39-5	Indeno(1,2,3-cd)pyrene	390.	U
53-70-3	Dibenz(a,h)anthracene	390.	U
191-24-2	Benzo(g,h,i)perylene	390.	U

(1) - Cannot be separated from diphenylamine

AR308214

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0319408

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.87	1000.	J
2. - -	UNKNOWN KETONE	10.23	4000.	BJ
3. - -	UNKNOWN KETONE	10.42	200.	J
4. - -	UNKNOWN KETONE	11.12	600.	J
5. - -	UNKNOWN KETONE	12.27	200.	J
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308215

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0319412

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. dec.____ Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR300826

FORM I SV-1 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0319412

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. dec.____ Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	50.	U
534-52-1	4,6-Dinitro-2-methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	U
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	U
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

AR308217

FORM I SV-2 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0319412

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 100. dec.____ Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308218

FORM I SV-TIC 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-3
SDG BCM28
PESTICIDES

1 OF 1

AR308219

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5991

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 4/ 3/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.7	U
319-85-7	beta-BHC	4.7	U
319-86-8	delta-BHC	4.7	U
58-89-9	gamma-BHC	4.7	U
76-44-8	Heptachlor	4.7	U
309-00-2	Aldrin	4.7	U
1024-57-3	Heptachlor epoxide	4.7	U
959-98-8	Endosulfan I	4.7	U
60-57-1	Dieldrin	9.3	U
72-55-9	4,4'-DDE	44.	
72-20-8	Endrin	9.3	U
33213-65-9	Endosulfan II	9.3	U
72-54-8	4,4'-DDD	9.3	U
1031-07-8	Endosulfan sulfate	9.3	U
50-29-3	4,4'-DDT	25.	
72-43-5	Methoxychlor	47.	U
53494-70-5	Endrin ketone	9.3	U
5103-71-9	alpha-Chlordane	47.	U
5103-74-2	gamma-Chlordane	47.	U
8001-35-2	Toxaphene	93.	U
12674-11-2	Aroclor-1016	47.	U
11104-28-2	Aroclor-1221	47.	U
11141-16-5	Aroclor-1232	47.	U
53469-21-9	Aroclor-1242	47.	U
12672-29-6	Aroclor-1248	47.	U
11097-69-1	Aroclor-1254	93.	U
11096-82-5	Aroclor-1260	93.	U

AR308220

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31. (g/mL) G Lab File ID: DB5A5957

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/15/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.5	U
319-85-7	beta-BHC	4.5	U
319-86-8	delta-BHC	4.5	U
58-89-9	gamma-BHC	4.5	U
76-44-8	Heptachlor	4.5	U
309-00-2	Aldrin	4.5	U
1024-57-3	Heptachlor epoxide	4.5	U
959-98-8	Endosulfan I	4.5	U
60-57-1	Dieldrin	9.1	U
72-55-9	4,4'-DDE	56.	
72-20-8	Endrin	9.1	U
33213-65-9	Endosulfan II	9.1	U
72-54-8	4,4'-DDD	9.1	U
1031-07-8	Endosulfan sulfate	9.1	U
50-29-3	4,4'-DDT	31.	
72-43-5	Methoxychlor	45.	U
53494-70-5	Endrin ketone	9.1	U
5103-71-9	alpha-Chlordane	45.	U
5103-74-2	gamma-Chlordane	45.	U
8001-35-2	Toxaphene	91.	U
12674-11-2	Aroclor-1016	45.	U
11104-28-2	Aroclor-1221	45.	U
11141-16-5	Aroclor-1232	45.	U
53469-21-9	Aroclor-1242	45.	U
12672-29-6	Aroclor-1248	45.	U
11097-69-1	Aroclor-1254	91.	U
11096-82-5	Aroclor-1260	91.	U

FORM I PEST

AR308227 Rev.

3 020

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31. (g/mL) G Lab File ID: DB5A5959

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/16/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.6	U
319-85-7	beta-BHC	4.6	U
319-86-8	delta-BHC	4.6	U
58-89-9	gamma-BHC	4.6	U
76-44-8	Heptachlor	4.6	U
309-00-2	Aldrin	4.6	U
1024-57-3	Heptachlor epoxide	4.6	U
959-98-8	Endosulfan I	4.6	U
60-57-1	Dieldrin	9.1	U
72-55-9	4,4'-DDE	37.	
72-20-8	Endrin	9.1	U
33213-65-9	Endosulfan II	9.1	U
72-54-8	4,4'-DDD	9.1	U
1031-07-8	Endosulfan sulfate	9.1	U
50-29-3	4,4'-DDT	17.	
72-43-5	Methoxychlor	46.	U
53494-70-5	Endrin ketone	9.1	U
5103-71-9	alpha-Chlordane	46.	U
5103-74-2	gamma-Chlordane	46.	U
8001-35-2	Toxaphene	91.	U
12674-11-2	Aroclor-1016	46.	U
11104-28-2	Aroclor-1221	46.	U
11141-16-5	Aroclor-1232	46.	U
53469-21-9	Aroclor-1242	46.	U
12672-29-6	Aroclor-1248	46.	U
11097-69-1	Aroclor-1254	91.	U
11096-82-5	Aroclor-1260	91.	U

AR308222

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: DB5A5954

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec.100. dec. 0. Date Extracted: 2/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 3/15/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR308223

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29. (g/mL) G Lab File ID: DB5A5960

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/16/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	110.	
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	61.	
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100.	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100.	U
11096-82-5	Aroclor-1260	100.	U

AR308225

FORM I PEST 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5961

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/16/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.8	U
319-85-7	beta-BHC	4.8	U
319-86-8	delta-BHC	4.8	U
58-89-9	gamma-BHC	4.8	U
76-44-8	Heptachlor	4.8	U
309-00-2	Aldrin	4.8	U
1024-57-3	Heptachlor epoxide	4.8	U
959-98-8	Endosulfan I	4.8	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	8.6	J
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	3.9	J
72-43-5	Methoxychlor	48.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	48.	U
5103-74-2	gamma-Chlordane	48.	U
8001-35-2	Toxaphene	97.	U
12674-11-2	Aroclor-1016	48.	U
11104-28-2	Aroclor-1221	48.	U
11141-16-5	Aroclor-1232	48.	U
53469-21-9	Aroclor-1242	48.	U
12672-29-6	Aroclor-1248	48.	U
11097-69-1	Aroclor-1254	97.	U
11096-82-5	Aroclor-1260	97.	U

AR308225

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5969

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 3/ 8/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/16/90

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	46.	
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	8.4	J
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100.	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100.	U
11096-82-5	Aroclor-1260	100.	U

AR308226

FORM I PEST 1/87 F

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29. (g/mL) G Lab File ID: DB5A5962

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/16/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	100.	
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	31.	
72-43-5	Methoxychlor	51.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	51.	U
5103-74-2	gamma-Chlordane	51.	U
8001-35-2	Toxaphene	100.	U
12674-11-2	Aroclor-1016	51.	U
11104-28-2	Aroclor-1221	51.	U
11141-16-5	Aroclor-1232	51.	U
53469-21-9	Aroclor-1242	51.	U
12672-29-6	Aroclor-1248	51.	U
11097-69-1	Aroclor-1254	100.	U
11096-82-5	Aroclor-1260	100.	U

AR308227

FORM I PEST 1/87 Rev.

3 082

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: DB5A5967

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec.100. dec. 0. Date Extracted: 3/ 2/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 3/16/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	.050	U
319-85-7	beta-BHC	.050	U
319-86-8	delta-BHC	.050	U
58-89-9	gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.10	U
72-55-9	4,4'-DDE	.10	U
72-20-8	Endrin	.10	U
33213-65-9	Endosulfan II	.10	U
72-54-8	4,4'-DDD	.10	U
1031-07-8	Endosulfan sulfate	.10	U
50-29-3	4,4'-DDT	.10	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin ketone	.10	U
5103-71-9	alpha-Chlordane	.50	U
5103-74-2	gamma-Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AR308228

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-3
SDG BCM028
METALS DATA

1 OF 1

AR308229

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA ASSIGNED NUMBER INDEX
INORGANICS

IEA Assigned "EPA" Number	BCM Engineers Sample ID
BCM028	CSB-8 (0.5-2)
BCM029	CSB-8D (0.5-2)
BCM030	CSB-8 (2-4)
BCM031	TRIP BLANK (2/22/90)
BCM032	FIELD BLANK (2/22/90)
BCM036	CSB-9 (2-4)
BCM037	CSB-9 (4-5.5)
BCM038	CSB-10 (2-4)
BCM039	CSB-10 (0.5-2)
BCM040	FIELD BLANK (2/27/90)
BCM041	TRIP BLANK (2/27/90)

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BCM028

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-1

Matrix (soil/water): SOIL

Client ID: CSB-8 (0.5-2)

Level (low/med): LOW

Date Received: 02/23/90

% Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10700			P
7440-36-0	Antimony	7.6	U		P
7440-38-2	Arsenic	3.5			F
7440-39-3	Barium	42.0			P
7440-41-7	Beryllium	0.13	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	509	B		P
7440-47-3	Chromium	8.2			P
7440-48-4	Cobalt	3.7	B		P
7440-50-8	Copper	5.7			P
7439-89-6	Iron	8430			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	578	B		P
7439-96-5	Manganese	126			P
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel	4.4	B		P
7440-09-7	Potassium	433	B		P
7782-49-2	Selenium	0.26	U		F
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	69.1	B		P
7440-28-0	Thallium	0.22	U		F
7440-62-2	Vanadium	14.7			P
7440-66-6	Zinc	24.0		E*	P
	Cyanide	0.51	U		C

lor Before: BROWN

Clarity Before:

Texture: MED

or After: YELLOW

Clarity After:

Ar

AR000231

mments:

1 002

CSB-8 (0.5-2)

FORM I - IN

7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BCM029

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-2

Matrix (soil/water): SOIL

Client ID: CSB-8D (0.5-2)

Level (low/med): LOW

Date Received: 02/23/90

% Solids: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14500			P
7440-36-0	Antimony	6.9	U		P
7440-38-2	Arsenic	2.7			F
7440-39-3	Barium	50.5			P
7440-41-7	Beryllium	0.67	B		P
7440-43-9	Cadmium	1.7			P
7440-70-2	Calcium	595	B		P
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt	5.4	B		P
7440-50-8	Copper	6.5			P
7439-89-6	Iron	11900			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	852	B		P
7439-96-5	Manganese	129			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	4.9	B		P
7440-09-7	Potassium	456	B		P
7782-49-2	Selenium	0.25	U		F
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	82.2	B		P
7440-28-0	Thallium	0.21	U		F
7440-62-2	Vanadium	18.6			P
7440-66-6	Zinc	32.1		E*	P
	Cyanide	0.45	U		C

Color Before: BROWN

Clarity Before:

Texture: MED

Color After: YELLOW

Clarity After:

Artifacts:

Comments:

AR308232

1 00

CSB-8D (0.5-2)

FORM I - IN

7/8

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM030

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-3

Matrix (soil/water): SOIL

Client ID: CSB-8 (2-4)

Level (low/med): LOW

Date Received: 02/23/90

% Solids: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13000			P
7440-36-0	Antimony	7.2	U		P
7440-38-2	Arsenic	4.0			F
7440-39-3	Barium	59.8			P
7440-41-7	Beryllium	0.63	B		P
7440-43-9	Cadmium	1.7			P
7440-70-2	Calcium	593	B		P
7440-47-3	Chromium	12.1			P
7440-48-4	Cobalt	5.8	B		P
7440-50-8	Copper	5.2			P
7439-89-6	Iron	12700			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	803	B		P
7439-96-5	Manganese	138			P
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel	4.5	B		P
7440-09-7	Potassium	507	B		P
7782-49-2	Selenium	0.26	B		F
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	102	B		P
7440-28-0	Thallium	0.22	U		F
7440-62-2	Vanadium	19.7			P
7440-66-6	Zinc	25.5		E*	P
	Cyanide	0.53	U		C

lor Before: BROWN

Clarity Before:

Texture: COARSE

lor After: YELLOW

Clarity After:

Artifacts:

mments:

AR308233

1 004

CSB-8 (2-4)

FORM I - IN

7/89

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE

BCM031

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-4

Matrix (soil/water): WATER

Client ID: TRIP BLANK

Level (low/med): LOW

Date Received: 02/23/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.2	U		P
7440-36-0	Antimony	40.1	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	1.9	B		P
7440-41-7	Beryllium	0.70	U		P
7440-43-9	Cadmium	3.2	U		P
7440-70-2	Calcium	80.4	B		P
7440-47-3	Chromium	4.1	U		P
7440-48-4	Cobalt	10.7	U		P
7440-50-8	Copper	3.9	U		P
7439-89-6	Iron	9.2	B		P
7439-92-1	Lead				NR
7439-95-4	Magnesium	4.4	U		P
7439-96-5	Manganese	4.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	24.8	B		P
7440-09-7	Potassium	674	U		P
7782-49-2	Selenium	1.2	U		F
7440-22-4	Silver	5.9	U		P
7440-23-5	Sodium	351	B		P
7440-28-0	Thallium	1.0	U		F
7440-62-2	Vanadium	8.1	U		P
7440-66-6	Zinc	4.0	U		P
	Cyanide	10.0	U		C

AR308234

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

1 005

TRIP BLANK

FORM I - IN

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM032

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-5

Matrix (soil/water): WATER

Client ID: FIELD BLANK

Level (low/med): LOW

Date Received: 02/23/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.2	U		P
7440-36-0	Antimony	40.1	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	3.7	B		P
7440-41-7	Beryllium	0.70	U		P
7440-43-9	Cadmium	3.2	U		P
7440-70-2	Calcium	157	B		P
7440-47-3	Chromium	4.1	U		P
7440-48-4	Cobalt	10.7	U		P
7440-50-8	Copper	3.9	U		P
7439-89-6	Iron	15.8	B		P
7439-92-1	Lead				NR
7439-95-4	Magnesium	4.4	U		P
7439-96-5	Manganese	4.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	18.0	U		P
7440-09-7	Potassium	680	B		P
7782-49-2	Selenium	1.2	U		F
7440-22-4	Silver	5.9	U		P
7440-23-5	Sodium	492	B		P
7440-28-0	Thallium	1.0	U		F
7440-62-2	Vanadium	8.1	U		P
7440-66-6	Zinc	4.4	B		P
	Cyanide	10.0	U		F

lor Before: COLORLESS Clarity Before: CLEAR Texture:

lor After: COLORLESS Clarity After: CLEAR Artifacts:

mments:

AR308235

1 006

FIELD BLANK

FORM I - IN 7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE

BCM036

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-9

Matrix (soil/water): SOIL

Client ID: CSB-9 (2-4)

Level (low/med): LOW

Date Received: 02/28/90

% Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10800			P
7440-36-0	Antimony	9.4	U		P
7440-38-2	Arsenic	10.7			F
7440-39-3	Barium	100			P
7440-41-7	Beryllium	0.89	B		P
7440-43-9	Cadmium	1.5			P
7440-70-2	Calcium	1880			P
7440-47-3	Chromium	11.2			P
7440-48-4	Cobalt	6.1	B		P
7440-50-8	Copper	14.0			P
7439-89-6	Iron	11600			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	707	B		P
7439-96-5	Manganese	255			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	5.9	B		P
7440-09-7	Potassium	469	B		P
7782-49-2	Selenium	0.21	U		F
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	127	B		P
7440-28-0	Thallium	0.18	U		F
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	73.9		E*	P
	Cyanide	0.58	U		C

Color Before: BROWN

Clarity Before:

Texture: MED

Color After: YELLOW

Clarity After:

Artifacts:

Comments:

AR308

1 0

CSB-9 (2-4)

FORM I - IN

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM037

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-10

Matrix (soil/water): SOIL

Client ID: CSB-9 (4-5.5)

Level (low/med): LOW

Date Received: 02/28/90

% Solids: 87.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15400			P
7440-36-0	Antimony	9.2	U		P
7440-38-2	Arsenic	2.1			F
7440-39-3	Barium	44.5	B		P
7440-41-7	Beryllium	0.59	B		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	461	B		P
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	3.9	B		P
7439-89-6	Iron	10000			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	408	B		P
7439-96-5	Manganese	101			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	4.9	B		P
7440-09-7	Potassium	570	B		P
7782-49-2	Selenium	0.19	U		F
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	107	B		P
7440-28-0	Thallium	0.16	U		F
7440-62-2	Vanadium	16.2			P
7440-66-6	Zinc	16.0		E*	P
	Cyanide	0.52	U		C

olor Before: BROWN

Clarity Before:

Texture: COARSE

olor After: YELLOW

Clarity After:

AR300237

omments:

1 008

CSB-9 (4-5.5)

FORM I - IN

7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE

BCM038

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab-Sample ID: 868-3-11

Matrix (soil/water): SOIL

Client ID: CSB-10 (2-4)

Level (low/med): LOW

Date Received: 02/28/90

% Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8510			P
7440-36-0	Antimony	7.8	U		P
7440-38-2	Arsenic	5.6			F
7440-39-3	Barium	53.9			P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	0.62	U		P
7440-70-2	Calcium	784	B		P
7440-47-3	Chromium	11.9			P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	8.2			P
7439-89-6	Iron	8720			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	591	B		P
7439-96-5	Manganese	143			P
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel	4.4	B		P
7440-09-7	Potassium	345	B		P
7782-49-2	Selenium	0.23	U		F
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	79.9	B		P
7440-28-0	Thallium	0.21	U		F
7440-62-2	Vanadium	13.1			P
7440-66-6	Zinc	96.6		E*	P
	Cyanide	0.53	U		C

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: YELLOW

Clarity After:

Artifacts:

Comments:

AR508238

1 00

CSB-10 (2-4)

FORM I - IN

7/

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM039

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-12

Matrix (soil/water): SOIL

Client ID: CSB-10 (0.5-2)

Level (low/med): LOW

Date Received: 02/28/90

% Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8590			P
7440-36-0	Antimony	7.7	U		P
7440-38-2	Arsenic	5.3			F
7440-39-3	Barium	72.9			P
7440-41-7	Beryllium	0.65	B		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	656	B		P
7440-47-3	Chromium	10.6			P
7440-48-4	Cobalt	4.4	B		P
7440-50-8	Copper	11.2			P
7439-89-6	Iron	8390			P
7439-92-1	Lead				NR
7439-95-4	Magnesium	623	B		P
7439-96-5	Manganese	131			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	6.2	B		P
7440-09-7	Potassium	392	B		P
7782-49-2	Selenium	0.26	U		F
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	141	B		P
7440-28-0	Thallium	0.22	U		F
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	91.0		E*	P
	Cyanide	0.56	U		C

Color Before: BROWN

Clarity Before:

Texture: COARSE

Color After: YELLOW

Clarity After:

Artifacts:

Comments:

AR308239

1 010

CSB-10 (0.5-2)

FORM I - IN

7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE

BCM040

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-13

Matrix (soil/water): WATER

Client ID: FIELD BLANK

Level (low/med): LOW

Date Received: 02/28/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.2	U		P
7440-36-0	Antimony	40.1	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	2.2	B		P
7440-41-7	Beryllium	0.87	B		P
7440-43-9	Cadmium	3.2	U		P
7440-70-2	Calcium	221	B		P
7440-47-3	Chromium	4.1	U		P
7440-48-4	Cobalt	10.7	U		P
7440-50-8	Copper	3.9	U		P
7439-89-6	Iron	47.7	B		P
7439-92-1	Lead				NR
7439-95-4	Magnesium	4.4	U		P
7439-96-5	Manganese	4.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	18.0	U		P
7440-09-7	Potassium	710	B		P
7782-49-2	Selenium	1.2	U		F
7440-22-4	Silver	5.9	U		P
7440-23-5	Sodium	520	B		P
7440-28-0	Thallium	10.0	U		F
7440-62-2	Vanadium	8.1	U		P
7440-66-6	Zinc	5.6	B		P
	Cyanide	10.0	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

AR308240

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

FIELD BLANK

FORM I - IN

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM041

Lab Name: IEA, INC.

SDG No.: BCM028

Lab Code: IEA

Lab Sample ID: 868-3-14

Matrix (soil/water): WATER

Client ID: TRIP BLANK

Level (low/med): LOW

Date Received: 02/28/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.2	U		P
7440-36-0	Antimony	40.1	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	1.7	U		P
7440-41-7	Beryllium	0.70	U		P
7440-43-9	Cadmium	3.2	U		P
7440-70-2	Calcium	69.5	B		P
7440-47-3	Chromium	4.1	U		P
7440-48-4	Cobalt	10.7	U		P
7440-50-8	Copper	3.9	U		P
7439-89-6	Iron	5.1	B		P
7439-92-1	Lead				NR
7439-95-4	Magnesium	4.4	U		P
7439-96-5	Manganese	4.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	18.0	U		P
7440-09-7	Potassium	674	U		P
7782-49-2	Selenium	1.2	U		F
7440-22-4	Silver	5.9	U		P
7440-23-5	Sodium	256	B		P
7440-28-0	Thallium	10.0	U		F
7440-62-2	Vanadium	8.1	U		P
7440-66-6	Zinc	6.6	B		P
	Cyanide	10.0	U		C

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

AR308241

1 012

TRIP BLANK

FORM I - IN

7/90

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

IEA, INC.
CASE 868-3
SDG BCM028
METALS DATA LEAD RE-ANALYSIS

1 OF 1

AR3

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Industrial & Environmental Analysts, Inc.
P.O. Box 12848
Research Triangle Park, North Carolina 27709
(919) 677-0080
FAX (919) 677-0427

IEA ASSIGNED NUMBER INDEX
INORGANICS

IEA Assigned "EPA" Number	BCM Engineers Sample ID
BCM028	CSB-8 (0.5-2)
BCM029	CSB-8D (0.5-2)
BCM030	CSB-8 (2-4)
BCM031	TRIP BLANK (2/22/90)
BCM032	FIELD BLANK (2/22/90)
BCM036	CSB-9 (2-4)
BCM037	CSB-9 (4-5.5)
BCM038	CSB-10 (2-4)
BCM039	CSB-10 (0.5-2)
BCM040	FIELD BLANK (2/27/90)
BCM041	TRIP BLANK (2/27/90)

AR308243

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM028

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-1

Matrix (soil/water): SOIL Client ID: CSB-8 (0.5.2)

Level (low/med): LOW Date Received: 02/23/90

% Solids: 89.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	19.6			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BEIGE Clarity After: Artifacts:

Comments:

AR308244

CSB-8 (0.5.2)

FORM I - IN 7/8

1 002

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM029

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-2

Matrix (soil/water): SOIL Client ID: CSB-8D (0.5-2)

Level (low/med): LOW Date Received: 02/23/90

% Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	24.2			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

›lor Before: BROWN Clarity Before: Texture: MEDIUM

›lor After: BEIGE Clarity After: Artifacts:

›mments:

AR308245

CSB-8D (0.5-2)

FORM I - IN 7/88

1 003

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BCM0

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-3

Matrix (soil/water): SOIL Client ID: CSB-8 (2-4)

Level (low/med): LOW Date Received: 02/23/90

% Solids: 88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	23.0			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COAR

Color After: BEIGE Clarity After: Artifacts

Comments:

CSB-8 (2-4)

FORM I - IN

AR808246

1 001

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM031

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-4

Matrix (soil/water): WATER Client ID: TRIP BLANK

Level (low/med): LOW Date Received: 02/23/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

AR308247

TRIP BLANK

FORM I - IN 7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM032

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-5

Matrix (soil/water): WATER Client ID: FIELD BLANK

Level (low/med): LOW Date Received: 02/23/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

AR303249

Comments:

FIELD BLANK

FORM I - IN

7/

1 006

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM036

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-9

Matrix (soil/water): SOIL Client ID: CSB-9 (2-4)

Level (low/med): LOW Date Received: 02/28/90

% Solids: 86.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	34.1			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BEIGE Clarity After: Artifacts:

AR308249

Comments:

CSB-9 (2-4)

FORM I - IN 7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM037

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-10

Matrix (soil/water): SOIL Client ID: CSB-9 (4-5.5)

Level (low/med): LOW Date Received: 02/28/90

% Solids: 88.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	6.9			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: BEIGE Clarity After: Artifacts:

Comments:

AR308250

CSB-9 (4-5.5)

FORM I - IN 7/8

1 009

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM038

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-11

Matrix (soil/water): SOIL Client ID: CSB-10 (2-4)

Level (low/med): LOW Date Received: 02/28/90

% Solids: 84.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	33.8			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: BEIGE Clarity After: Artifacts:

Comments:

AR308251

CSB-10 (2-4)

FORM I - IN 7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

SAMPLE NO.

BCM039

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-12

Matrix (soil/water): SOIL Client ID: CSB-10 (0.5-2)

Level (low/med): LOW Date Received: 02/28/90

% Solids: 85.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	38.1			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARS

Color After: BEIGE Clarity After: Artifacts:

Comments:

AR308252

CSB-10 (0.5-2)

FORM I - IN

1 010

7,

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM040

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-13

Matrix (soil/water): WATER Client ID: FIELD BLANK

Level (low/med): LOW Date Received: 02/28/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

olor Before: COLORLESS Clarity Before: CLEAR Texture:

olor After: COLORLESS Clarity After: CLEAR Artifacts:

mments:

FIELD BLANK

FORM I - IN 7/88

AR308253

1 011

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

SAMPLE NO.

BCM041

1

INORGANIC ANALYSIS DATA SHEET

Lab Name: IEA, INC. Case No.: 868-3

Lab Code: IEA SDG No.: BCM028 Lab Sample ID: 868-3-14

Matrix (soil/water): WATER Client ID: TRIP BLANK

Level (low/med): LOW Date Received: 02/28/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

AR308254

Comments:

TRIP BLANK

FORM I - IN

1 012 7/

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

QUALITY ASSURANCE REVIEW
SOIL SAMPLING EVENT
CHEM-SOLV, INC.
CHESWOLD, DELAWARE

JUNE 1990

PREPARED BY

Martin B. Kudlesky
MARTIN B. KUDLESKY
QUALITY ASSURANCE SCIENTIST

Clare E. Casselberry
CLARE E. CASSELBERRY
SENIOR QUALITY ASSURANCE SCIENTIST

Atwood F. Davis
ATWOOD F. DAVIS, CPC
QUALITY ASSURANCE SECTION MANAGER

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

QUALITY ASSURANCE REVIEW

VOLATILE/SEMIVOLATILES
CHEM-SOLV, INC.
CHESWOLD, DELAWARE

Introduction

This quality assurance review addresses the volatile and semivolatile organic analytical results for the December 1989 and February 1990 soil sampling events at the Chem-Solv site in Cheswold, Delaware. The findings offered in this review are based upon a general review of sample data, analytical holding times, gas chromatography/mass spectrometry (GC/MS) tunes, initial and continuing calibrations, blank analysis results, sample spike results, duplicate analysis results, internal standards performance, Target Compound List (TCL) compound identification, tentatively identified compounds (TIC), and quantitative calculations. All samples in this report were analyzed by a subcontracted laboratory following United States Environmental Protection Agency (USEPA) Contract Laboratory Program Statement of Work (SOW) for Organics Analysis, July, 1988. The quality assurance review was prepared according to USEPA Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis, February 1988.

The support documentation appendix of this report summarizes the specifics of this review. The data summary lists only compounds that were reported to be present. The constituents detected represent a small portion of the total analytical protocol. Analytical problems were minimal and are outlined in the following qualifiers/findings section.

QUALIFIERS/FINDINGS

It is recommended that Chem-Solv volatile and semivolatile results for soil samples be used with the following qualifier statements:

- The presence of chloroform in samples Field Blank 12/18/89 (BCM13) and Trip Blank 12/18/89 (BCM14) is questioned due to the presence of chloroform in the associated method blank.

- The presence of acetone in sample CSB-7 (4-6) is questioned due to field blank contamination.

- The presence of methylene chloride in samples CSB-7 (8-10), CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-6 (19.6-19.9), CSB-7 (20.5-20.8), CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-8A (18-20), CSB-10 (18-18.5), and CSB-9 (19.5-20) is questioned due to method blank contamination.

AR308256

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

- The presence of acetone in samples CSB-7 (8-10), CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-6 (19.6-19.9), CSB-7 (20.5-20.8), CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-8A (18-20), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), CSB-10 (0.5-2), CSB-10 (18-18.5), and CSB-9 (19.5-20) is questioned due to method blank contamination.

- Sample quantitation limits for purgeable aromatics (benzene, toluene, chlorobenzene, ethyl benzene, styrene, and xylene) in samples CSB-12 (0.5-2), CSB-12 (2-4), CSB-11 (0.5-2), CSB-11D (0.5-2), CSB-11 (6-8), CSB-11 (20.4-20.7), CSB-11 (20.4-20.7)(BCM25MS), CSB-11 (20.4-20.7)(BCM25MSD), CSB-12 (21.7-22), CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-8A (18-20), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), CSB-10 (0.5-2), CSB-10 (18-18.5), CSB-9 (19.5-20), CSB-10 (0.5-2)(BCM39MS), and CSB-10 (0.5-2)(BCM39MSD) are estimated (UJ) due to exceeded holding times.

- Positive result for acetone in samples Field Blank 12/13/89 (BCM01) and Field Blank 12/14/89 (BCM04) is estimated (J) due to a percent difference (%D) of greater than 25%.

- Positive result for bis (2-ethylhexyl) phthalate in samples Field Blank 12/13/89 (BCM01) and Field Blank 12/14/89 (BCM04) is estimated (J) due to a percent difference of greater than 25%.

- Positive result for benzoic acid in sample CSB-12 (0.5-2) is estimated (J) due to a percent difference of greater than 25%.

- Sample quantitation limits for Di-n-octylphthalate, Benzo (b) fluoranthene, Benzo (k) fluoranthene, Benzo (a) pyrene, Indeno (1,2,3-cd) pyrene, Dibenz (a,h) anthracene, and Benzo (g,h,i) perylene in samples CSB-7 (4-6), CSB-7 (4-6)RE, CSB-12 (2-4), and CSB-12 (2-4)RE are estimated (UJ) due to low internal standard (Perylene-d12) recoveries.

- Quantitation limits for acetone, 2-butanone, 4-methyl-2-pentanone, and 2-hexanone are estimated (UJ) in samples CSB-7 (4-6), CSB-7 (8-10), CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-6 (19.6-19.9), CSB-7 (20.5-20.8), CSB-7 (4-6)MS, and CSB-7 (4-6)MSD due to a percent difference (%D) of greater than 25 percent between the relative response factors (RRF) for the initial and continuing calibrations.

- Quantitation limits for 2-butanone and 2-hexanone are estimated (UJ) in samples Field Blank 12/13/89 (BCM01), Trip Blank 12/13/89 (BCM02), Trip Blank 12/14/89 (BCM03), Field Blank 12/14/89 (BCM04), Trip Blank 12/15/89 (BCM09), and Field Blank 12/15/89 (BCM10) due to a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

- Quantitation limit for 2-hexanone is estimated (UJ) in samples Field Blank 12/18/89 (BCM13) and Trip Blank 12/18/89 (BCM14) due to a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

- Quantitation limits for acetone, 2-butanone, cis-1,3-dichloropropene, trans-1,3-dichloropropene, bromoform, and 2-hexanone are estimated (UJ) in samples Trip Blank (12/18/89 (BCM15), Trip Blank 12/19/89 (BCM18), Field Blank 12/19/89 (BCM19), Trip Blank 12/20/89 (BCM23), and Field Blank 12/20/89 (BCM24) due to a relative standard deviation (RSD) of greater than 30 percent between initial calibration RRFs and/or a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

- Quantitation limits for 4-chloroaniline, 3-nitroaniline, 4-nitrophenol, 3,3'-dichlorobenzidine, and bis (2-ethylhexyl) phthalate are estimated (UJ) in samples Field Blank 12/13/89 (BCM01) and Field Blank 12/14/89 (BCM04) due to a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

- Quantitation limits for benzoic acid are estimated in samples Field Blank 12/18/89 (BCM13), CSB-12 (0.5-2), CSB-12 (2-4), CSB-11 (0.5-2), CSB-11D (0.5-2) CSB-11 (6-8), Field Blank 12/19/89 (BCM19), CSB-7 (4-6)RE, and CSB-12 (2-4)RE due to a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

- Quantitation limits for bis (2-chloroisopropyl) ether, N-nitroso-di-n-propylamine and benzoic acid are estimated (UJ) in sample Field Blank 2/22/90 (BCM32) due to a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

- Quantitation limits for benzyl alcohol, benzoic acid, dibenz (a,h) anthracene, and benzo (g,h,i) perylene are estimated (UJ) in samples CSB-8 (2-4), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), CSB-8 (0.5-2), and CSB-8D (0.5-2) due to a %D of greater than 25 percent between the RRFs for the initial and continuing calibrations.

The presence of the following Tentatively Identified Compounds (TICs) in the semivolatile fraction are questioned due to method blank contamination.

- The presence of the unknown TIC at a RT/scan of 10.33/581-582 in samples CSB-7 (4-6), CSB-7 (4-6)RE, CSB-7 (8-10), CSB-6 (6-7.3), CSB-12 (0.5-2), CSB-12 (2-4), CSB-12 (2-4)RE, CSB-11D (0.5-2), and CSB-11 (6-8) is questioned due to its presence in SBLK20 and SBLK21.

AR308258

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

- The presence of the unknown TIC at a RT/scan of 10.27-10.25/575-574 in samples Field Blank 12/18/89 (BCM13) and Field Blank 12/19/89 (BCM19) is questioned due to its presence in SBLK23.

- The presence of the unknown chlorocarbon TIC at a RT/scan of 13.38/854 in samples Field Blank 12/18/89 (BCM13) and Field Blank 12/19/89 (BCM19) is questioned due to its presence in SBLK23.

- The presence of the substitued phenol TIC at a RT/scan of 19.83/1431 in samples CSB-12 (2-4), CSB-11 (0.5-2), CSB-11D (0.5-2), and CSB-11 (6-8) is questioned due to its presence in SBLK21.

- The presence of the unknown TIC at a RT/scan of 20.90/1526 in samples CSB-11D (0.5-2) and CSB-11 (6-8) is questioned due to its presence in SBLK21.

- The presence of the substituted phenol TIC at a RT/scan of 19.75/1423 in sample Field Blank 2/22/90 (BCM32) is questioned due to its presence in SBLK40.

- The presence of the unknown ketone TIC at a RT/scan of 10.27-10.30/576-579 in samples CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-9 (2-4), CSB-9 (4-5.5), and CSB-10 (2-4) is questioned due to its presence in SBLK42.

- The presence of the unknown TIC at a RT/scan of 10.42/589 in sample CSB-8D (0.5-2) is questioned due to its presence in SBLK42.

- The presence of the unknown TIC at a RT/scan of 10.23/573 in sample CSB-10 (0.5-2) is questioned due to its presence in SBLK43.

Since holding times have not been established for soil matrices, the holding time requirements established under the Clean Water Act (40 CFR 136) for water matrices have been applied to this data set. Unpreserved, aromatic volatiles must be analyzed within 7 days unless preserved with hydrochloric acid, and non-aromatic volatiles must be analyzed within 14 days of sampling. Upon review, the analytical holding times for aromatic volatiles in the previously qualified soil samples were determined to have been exceeded. It was noted, however, that the majority of qualified samples met the CLP contract holding time with the exception of samples CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-10 (18-18.5), and CSB-9 (19.5-20). All non-aromatic volatile and semivolatile holding time criteria were met.

Blank contamination has been identified in several trip, field, and method blanks and is summarized in the Method Blank Summary [illegible] Appendix A. All samples affected by the contaminated blanks have been addressed in the preceeding qualifiers section.

AR300299

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

It was noted that positive results for acetone in samples CSB-7 (4-6), CSB-7 (8-10), CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-6 (19.6-19.9), and CSB-7 (20.5-20.8) are estimated due to a relative standard deviation (%RSD) of greater than 30%. Since the presence of acetone in these samples has already been questioned due to blank contamination, no further qualification is necessary.

All matrix spike/matrix spike duplicate (MS/MSD) recoveries were within acceptable limits, with the exception of CSB-10 (0.5-2)MS/MSD. Matrix spike recoveries are slightly high for 2,4-dinitrotoluene and pentachlorophenol and are out of criteria. There are no positive results in CSB-10 (0.5-2) and there is no effect on reported results. It should also be noted that analytical holding times were exceeded for volatile aromatics in CSB-11 (20.4-20.7)MS/MSD and CSB-10 (0.5-2)MS/MSD; since there were no hits for volatile aromatics in these samples, the calculated MS/MSD recoveries are not affected.

It was verified with the laboratory that the calculated semivolatile surrogate recoveries written on the quantitation report for samples CSB-7 (4-6), CSB-7 (4-6)MS, CSB-7 (4-6)MSD, CSB-7 (8-10), CSB-6 (0.5-2), CSB-6 (6-7.3), and CSB-7 (4-6)RE are not correct, but the recoveries reported on the surrogate recovery form (Form II SV-2) are correct. The recoveries are within the acceptance limits.

All System Performance Check Compound (SPCC) and Calibration Check Compound (CCC) criteria were met for initial and continuing calibrations. Initial calibration %RSD and/or continuing calibration %D criteria (30% or 25%, respectively) were exceeded for the following compounds.

- Vinyl acetate in samples CSB-7 (4-6), CSB-7 (8-10), CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-6 (19.6-19.9), CSB-7 (20.5-20.8), CSB-7 (4-6)MS, and CSB-7 (4-6)MSD.

- Acetone, bromodichlormethane, and 4-methyl-2-pentanone in samples Field Blank 12/13/89 (BCM01), Trip Blank 12/13/89 (BCM02), Trip Blank 12/14/89 (BCM03), Field Blank 12/14/89 (BCM04), Trip Blank 12/15/89 (BCM09), and Field Blank 12/15/89 (BCM10).

- Chloromethane in samples Field Blank 12/18/89 (BCM13) and Trip Blank 12/18/89 (BCM14).

- 1,1,1-Trichloroethane, vinyl acetate, bromodichloromethane, trichloroethene, dibromochloromethane, and benzene in samples Trip Blank 12/18/89 (BCM15), Trip Blank 12/19/89 (BCM18), Field Blank 12/19/89 (BCM19), Trip Blank 12/20/89 (BCM23), and Field Blank 12/20/89 (BCM24).

- Diethylphthalate and di-n-butylphthalate in samples Field Blank 12/13/89 (BCM01) and Field Blank 12/14/89 (BCM04).

AR308260

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

- bis (2-chloroisopropyl) ether in samples CSB-7 (4-6), CSB-7 (4-6)MS, CSB-7 (4-6)MSD, CSB-7 (8-10), CSB-6 (0.5-2), and CSB-6 (6-7.3).

- Nitrobenzene and 2-nitroaniline in Field Blank 2/22/90 (BCM32).

- 2-methylphenol, 4-methylphenol, and hexachlorobutadiene in samples CSB-8 (2-4), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), CSB-8 (0.5-2), and CSB-8D (0.5-2).

For the aforementioned compounds, the continuing calibration response factors were reviewed and compared to the 50 ng response factor from the associated initial calibration. Based on this review and %Ds greater than 25%, but less than 35%, it was determined that instrument sensitivity was not significantly affected.

Relative percent differences (RPDs) were calculated for duplicate samples where applicable. Field duplicates with detected compounds reproduced well, exhibiting low RPDs. It was noted that sample Trip Blank 12/18/89 (BCM15) is a laboratory duplicate of Trip Blank 12/18/89 (BCM14).

Internal standard area criteria for the initial semivolatile analysis of samples CSB-7 (4-6) and CSB-12 (2-4) were not met due to low area counts for the internal standard perylene-d12. Upon re-analysis, the internal standard failed again, making these analyses valid according to the organic SOW. As a result, sample quantitiation limits for all compounds quantitated from the internal standard perylene-d12 are estimated. All samples affected by the low perylene-d12 areas have been addressed in the preceeding qualifiers section.

A minimum of 10 percent of the total number of samples were randomly chosen for calculation verification. All positive results in these samples were verified. No calculation errors were noted.

The compound present in CSB-12 (2-4) at a RT/scan of 29.25/2273 was tentatively identified as hexanedioic acid by means of a computer-generated library search of reference spectra. It was noted that the compound detected in samples CSB-12 (0.5-2), CSB-12 (2-4)RE, CSB-11 (0.5-2), and SBLK21 at an RT/scan of 29.25-29.27/2272-2274 did not match their respective computer-generated GC/MS TIC spectra. However, samples CSB-12 (0.5-2), CSB-12 (2-4)RE, and CSB-11 (0.5-2) did match the reference spectrum for hexanedioic acid generated for sample CSB-12 (2-4). The laboratory recognized this match and tentatively identified these detected compounds as hexanedioic acid. The spectrum for the compound detected in the associated extraction blank, SBLK21, was not background subtracted as were the other aforementioned samples. Although this compound was also tentatively identified as hexanedioic acid, the spectra match could not be confirmed.

TIC analysis documentation is included in Appendix A. Although the identity of several TICs could not be confirmed, the reviewer generally agrees with the laboratory's identification of these detected compounds.

AR308261

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

SUMMARY

This review has identified exceeded holding times, blank contamination, and low internal standard areas as sources of concern. In general, the results are acceptable as qualified; all GC/MS tune criteria, SPCC/CCC calibration criteria, and surrogate spike recovery criteria were met. For specifics relating to this organics review, please see the attached support documentation in Appendix A.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

QUALIFIER SYMBOLS - VOLATILES AND SEMIVOLATILES

◊ - Questionable qualitative value

J - Denotes an estimated value less than the detection limit or exceeding QC criteria.

UJ - Denotes an estimated detection limit.

AR308263

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem-Solv

Date of Sample December, 1989

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Methylene Chloride	Acetone	Chloroform	Trichloroethene	Isophorone	Benzoic Acid	bis-(2-Ethylhexyl)phthalate							Remarks
BCM01	Field Blank	AQ	UG/L		J 2600					J 9							
BCM02	Trip Blank	AQ	UG/L														VOA only
BCM03	Trip Blank	AQ	UG/L	J 4													VOA only
BCM04	Field Blank	AQ	UG/L		J 15					J 10							
BCM05	CSB-7 (4-6)	SOIL	UG/KG		400	15											
BCM06	CSB-7 (8-10)	SOIL	UG/KG	7	89	8											
BCM07	CSB-6 (0.5-2)	SOIL	UG/KG	12	12												
BCM08	CSB-6 (6-7.3)	SOIL	UG/KG	J 6	73	J 5											
BCM09	Trip Blank	AQ	UG/L														VOA only
BCM10	Field Blank	AQ	UG/L														VOA only
BCM11	CSB-6 (6-7.3)	SOIL	UG/KG	J 3	13	J 4											VOA only
BCM12	CSB-7 (0.5-2)	SOIL	UG/KG	J 3	56	J 4											VOA only
BCM13	Field Blank	AQ	UG/L			J 4											
BCM14	Trip Blank	AQ	UG/L			7											VOA only

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____
EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name: Chem-Solv
Date of Sample: December, 1989

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Methylene Chloride	Acetone	Chloroform	Trichloroethene	Isophorone	Benzoic Acid	bis(2-Ethylhexyl)phthalate							Remarks
BOM15	Trip Blank	AQ	UG/L														VOA only
BOM16	CSB-12 (0.5-2)	SOIL	UG/KG						J 290	J 220							
BOM17	CSB-12 (2-4)	SOIL	UG/KG														
BOM18	Trip Blank	AQ	UG/L														VOA only
BOM19	Field Blank	AQ	UG/L														
BOM20	CSB-11 (0.5-2)	SOIL	UG/KG														
BOM21	CSB-11D (0.5-2)	SOIL	UG/KG				J 6										
BOM22	CSB-11 (6-8)	SOIL	UG/KG														
BOM23	Trip Blank	AQ	UG/L														VOA only
BOM24	Field Blank	AQ	UG/L														VOA only
BOM25	CSB-44 (20.1-20.7)	SOIL	UG/KG														VOA only
BOM26	CSB-99 (21.7-22)	SOIL	UG/KG														VOA only

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem-Solv

Date of Sample February, 1990

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Methylene Chloride	Acetone	Chloroform	Trichloroethene	Isophorone	Benzoic Acid	bis(2-ethyl-hexyl)phthalate							Remarks
BCM128	CSB-8 (0.5-2)	Soil	ug/kg	9 ◇	10 ◇		J 5										
BCM129	CSB-8D (0.5-2)	Soil	ug/kg	9 ◇	12 ◇												
BCM130	CSB-8 (2-4)	Soil	ug/kg	8 ◇	12 ◇					J 78							
BCM131	Trip Blank (2-22-9)	AQ	ug/L														VOA only
BCM132	Field Blank 2-22-9	AQ	ug/L														
BCM133	CSB-6A (18-20)	Soil	ug/kg	10 ◇	12 ◇												VOA only
BCM134	Trip Blank 2-26-90	AQ	ug/L														VOA only
BCM135	Field Blank 2-26-90	AQ	ug/L														VOA only
BCM136	CSB-7D (2-4)	Soil	ug/kg	J 4	16 ◇					J 110							
BCM137	CSB-9 (4-5.5)	Soil	ug/kg		18 ◇					510							
BCM138	CSB-10 (2-4)	Soil	ug/kg		12 ◇			1600		J 160							
BCM139	CSB-10 (0.5-2)	Soil	ug/kg		11 ◇			3100									
BCM140	Blank 2-27-90	AQ	ug/L														

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem-Solv

Date of Sample February 5, 1990

Sample Number	Sample Description and Location	Phase	Units	Methylene Chloride	Acetone	Chloroform	Trichloroethene	Isophorone	Benzoic Acid	bis(2-ethyl-hexyl) phthalate							Remarks
				Compounds Detected													
BCM42	CSB-10 (14-16.5)	Soil	ug/Kg	15 ◊	19 ◊												VOA only
BCM43	CSB-9 (11.5-20)	Soil	ug/Kg	6 ◊	15 ◊												VOA only

AR308297

BCM

QUALITY ASSURANCE REVIEW

PESTICIDE/PCBs
CHEM-SOLV, INC.
CHESWOLD, DELAWARE

Introduction

This quality assurance review addresses the pesticide/PCB analytical results for the December 1989 and February 1990 soil sampling at the Chem-Solv site in Cheswold, Delaware. The findings in this review are based upon a general review of sample data, analytical holding times, instrument performance, initial and continuing calibrations, analytical sequence, blank analysis results, sample spike results, duplicate analysis results, compound identification, and quantitative calculations. All samples in this review were analyzed by a subcontracted laboratory following United States Environmental Protection Agency (USEPA) Contract Laboratory Program Statement of Work (SOW) for Organics, July 1988 and current revisions. The quality assurance review was prepared according the USEPA Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis, February 1988.

The support documentation appendix of this report summarizes the specifics of this review. The data summary lists only compounds that were reported to be present. The constituents detected represent a small portion of the total analytical protocol. Analytical problems were minimal and are outlined in the following qualifiers/findings section.

Qualifiers/Findings

It is recommended that the Chem-Solv pesticides results for soil samples be used with the following qualifier statements.

- Positive results for p,p'-DDE and p,p'-DDT in samples CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), and CSB-10 (2-4) are estimated (J) due to exceeded holding times.

- Sample quantitation limits for pesticides in samples CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), and CSB-10 (2-4) are estimated (UJ) due to exceeded holding times.

- Quantitation limits for heptachlor and endrin in CSB-7 (4-6) are estimated (UJ) due to low matrix spike/matrix spike duplicate recoveries.

The analytical extraction holding times for pesticides in the qualified soil samples were determined to have been exceeded. Since sample holding times have not been established for soil matrices, the holding time requirements (7 days to extraction, 40 days to analysis) established under the Clean Water Act (40 CFR 136) for water matrices have been applied. Holding times were not grossly exceeded, contractural holding times were met, and the effect upon the samples can be considered to be minor.

AR308261

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

p,p'-DDD should be reported in CSB-11 (0.5-2) at 20 ug/kg, and in CSB-11D (0.5-2) at 23 ug/kg. The compound was identified on the primary and the confirmation columns at a concentration greater than the Contract Required Quantitation Limit (CRQL). The laboratory chose not to report p,p'-DDD in these samples based on relative retention time (RRT) comparisions between the quantitation and confirmation columns. The reviewer does not agree with this method; the sample RRT should be compared to the standard RRT from the same column. When the appropriate RRTs are compared, it is apparent that p,p'-DDD should be reported. There are elevated levels of p,p'-DDT and p,p'-DDE in these samples, therefore, p,p'-DDD would be expected as it is a natural breakdown product of p,p'-DDT. Chromatograms for these two samples are included in the support appendix to this report.

Surrogate recoveries were recalculated to verify the reported values. The recoveries could not be reproduced. The laboratory indicated in its June 22, 1990 letter that the software used calculates the pesticide surrogate recoveries using an average response factor of the Evaluation Mix Standards A, B, and C and the Individual Mixes A and B on the quantitation column. All surrogate recoveries were within acceptable limits for the quantitation column analyses.

Field duplicate variability between samples CSB-8 (0.5-2) and CSB-8D (0.5-2), and CSB-11 (0.5-2) and CSB-11D (0.5-2) was minimal.

Quantititive calculations were verified for approximately 50 percent of all detected compounds. Calculation checks were performed on a random basis on compounds that were detected at less than the CRQL, and therefore, were not reported. No calculation errors were noted.

Summary

This review has identified exceeded holding times, incorrectly calculated surrogate recoveries, and a compound incorrectly reported as "not detected" as areas of concern. The exceeded holding times are minor. The p,p'-DDD has been added to the list of detected compounds for CSB-11 (0.5-2) and CSB-11D (0.5-2). The results are acceptable as qualified. All instrument performance criteria, initial and continuing calibration criteria, and analytical sequence criteria were met; all blank analysis results, MS/MSD results, and surrogate recoveries were within acceptable limits. For specifics relating to this review, please see the attached Support Documentation in Appendix B.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

QUALIFIER SYMBOLS - PESTICIDES/PCBs

J - Denotes an estimated value less than the detection limit or exceeding QC criteria.

UJ - Denotes an estimated quantitation limit.

AR308270

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____
EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem-Solv
Date of Sample 12/89

J-estimated; less than detection limit or exceeded QC criteria

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	P,P'-DDE	P,P'-DDT	P,P'-DDD											Remarks
BCM01	Field Blank	AQ	UG/L														
BCM04	Field Blank	AQ	UG/L														
BCM05	CSB-7 (4-6)	SOIL	UG/KG														
BCM06	CSB-7 (8-10)	SOIL	UG/KG														
BCM07	CSB-6 (0.5-2)	SOIL	UG/KG														
BCM08	CSB-6 (6-7.3)	SOIL	UG/KG														
BCM13	Field Blank	AQ	UG/L														
BCM16	CSB-12 (0.5-2)	SOIL	UG/KG	150	51												
BCM17	CSB-12 (2-4)	SOIL	UG/KG	14 J													
BCM19	Field Blank	AQ	UG/L														
BCM20	CSB-11 (0.5-2)	SOIL	UG/KG	240	86	20*											
BCM21	CSB-11D (0.5-2)	SOIL	UG/KG	310	99	23*											
BCM22	CSB-11 (6-8)	SOIL	UG/KG														

* Added by reviewer, not reported by laboratory.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample February, 1990

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	P,P'-DDE	P,P'-DDT	P,P'-DDD											Remarks
BCM28	CSB-8(0.5-2)	Soil	ug/Kg	44 J	25 J	UJ											
BCM29	CSB-8D(0.5-2)	Soil	ug/Kg	56 J	31 J	UJ											
BCM30	CSB-8 (2-4)	Soil	ug/Kg	37 J	17 J	UJ											
BCM31	Trip Blank (2-22-90)	AQ	ug/L														VOA only
BCM32	Field Blank 2-22-90	AQ	ug/L														
BCM33	CSB-8A (18-20)	Soil	ug/Kg														VOA only
BCM34	Trip Blank 2-26-90	AQ	ug/L														VOA only
BCM35	Field Blank 2-26-90	AQ	ug/L														VOA only
BCM36	CSB-9 (2-4)	Soil	ug/Kg	110	61												
BCM37	CSB-9 (4-5.5)	Soil	ug/Kg	J 8.6	J 3.9												
BCM38	CSB-10 (2-4)	Soil	ug/Kg	46	J 8.4	UJ											
BCM39	CSB-10 (0.5-2)	Soil	ug/Kg	100	31												
BCM40	Field Blank 2-27-90	AQ	ug/L														
BCM41	Tr[illegible]nk 2-27-90	AQ	ug/L														[illegible]A only

NOTE: For a review of this data and non-target tentatively identified [illegible]

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name: ChemSolv

Date of Sample: February, 1990

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	P,P'-DDE	P,P'-DDT	P,P'-DDD											Remarks
BCM42	CSB-10(18-18.5)	Soil	ug/Kg														VBA only
BCM43	CSB-9(19.5-20)	Soil	ug/Kg														VOA only

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR308273

BCM

QUALITY ASSURANCE REVIEW

INORGANICS
CHEM-SOLV, INC.
CHESWOLD, DELAWARE

Introduction

This quality assurance review addresses the inorganic analytical results for the December 1989 and February 1990 soil sampling at the Chem-Solv site in Cheswold, Delaware. The findings offered in this review are based upon a general review of analytical data, analytical holding times, blank analysis results, initial and continuing calibrations, spike sample results, duplicate sample results, detection limits, and quantitative calculations. All samples were analyzed by a subcontracted laboratory according to United States Environmental Protection Agency (USEPA) Contract Laboratory Program Statement of Work (SOW) for Inorganics Analysis, July 1988 with current revisions. The quality assurance review was prepared according to USEPA Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses, June 13, 1988 and Region III modifications.

The support appendix of this document summarizes the specifics of this review. Analytical problems were minimal and are outlined in the Qualifiers/Findings section.

Qualifiers/Findings

It is recommended that the Chem-Solv inorganic results for soil samples be used with the following qualifier statements:

- The presence of barium in samples trip blank 2/22/90 (BCM031), field blank 2/22/90 (BCM032), and field blank 2/27/90 (BCM040) is questioned due to calibration blank contamination.

- The presence of beryllium in samples CSB-8D (0.5-2), CSB-8 (2-4), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), CSB-10 (0.5-2) and field blank 02/27/90 (BCM040) is questioned due to calibration blank contamination.

- The presence of calcium in trip blank 2/27/90 (BCM041) is questioned due to preparation blank contamination.

- The presence of iron in samples trip blank 2/22/90 (BCM031), field blank 2/22/90 (BCM032), and trip blank 2/27/90 (BCM041) is questioned due to calibration blank contamination.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

- Iron results in trip blank 12/13/89 (BCM002), trip blank 12/14/89 (BCM003), field blank 12/18/89 (BCM009), trip blank 12/19/89 (BCM012), and field blank 12/19/89 (BCM013) are questioned due to contamination in the preparation blank.

- The presence of sodium in samples CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-7 (4-6), CSB-7 (8-10), CSB-11 (0.5-2), CSB-11D (0.5-2), CSB-11 (6-8), CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), and CSB-10 (0.5-2) is questioned due to trip and/or field blank contamination.

- The presence of nickel in samples CSB-7 (4-6), CSB-7 (8-10), CSB-12 (0.5-2), CSB-8 (0.5-2), CSB-8D (0.5-2), and CSB-8 (2-4) is questioned due to trip and/or field blank contamination.

- The presence of zinc in samples CSB-6 (6-7.3) is questioned due to trip and/or field blank contamination.

- The presence of potassium in all samples is questioned due to contamination in calibration blanks. All blanks were greater than the instrument detection limit (IDL) but less than the Contract Required Detection Limit (CRDL).

- The reported detection limits for antimony for samples CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-7 (4-6), CSB-7 (8-10), CSB-11 (0.5-2), CSB-11D (0.5-2), CSB-11 (6-8), CSB-12 (0.5-2), and CSB-12 (2-4) are biased low due to low matrix spike recoveries.

- Positive results for calcium in samples CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-7 (4-6), CSB-7 (8-10), CSB-11 (0.5-2), CSB-11D (0.5-2), CSB-11 (6-8), CSB-12 (0.5-2), and CSB-12 (2-4) are estimated due to exceeded serial dilution criteria.

- Positive results for zinc in samples CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), and CSB-10 (0.5-2) are estimated due to a percent difference (%D) of greater than 10% between the initial analysis result and the serial dilution result.

- Detection limits for cyanide in samples CSB-6 (0.5-2), CSB-6 (6-7.3), CSB-11 (0.5-2), CSB-11D (0.5-2), CSB-11 (6-8), CSB-12 (0.5-2), CSB-12 (2-4), field blank 12/13/89 (BCM001), trip and field blank 12/14/89 (BCM003 and BCM004), field blank 12/18/89 (BCM009), and trip and field blank 12/19/89 (BCM012 and BCM013), CSB-8 (0.5-2), CSB-8D (0.5-2), CSB-8 (2-4), Trip Blank 2/22/90 (BCM031), Field Blank 2/22/90 (BCM032), CSB-9 (2-4), CSB-9 (4-5.5), CSB-10 (2-4), Field Blank 2/27/90 (BCM040), and Trip Blank 2/27/90 (BCM041) are estimated since an ICV/CCV was not distilled with the samples.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

- Detection limits for cyanide in samples CSB-10 (0.5-2), CSB-10 (0.5-2) duplicate, and CSB-10 (0.5-2) spike are estimated due to the lack of a solid preparation blank.

It was noted on the digestion log that the trip and field blanks from February 22 and 27, 1990, (samples BCM031, BCM032, BCM040, and BCM041) were preserved to a pH of 3 rather than 2 as required. Since the samples were either trip or field blanks, the effect is minor.

Lead data from case 868-3, sample delivery group (SDG) BCM028 was reanalyzed due to improper reporting from the ICP and an incomplete set of quality control data from the original furance run. This review addresses the results of the reanalysis of lead. All results were reported from the furnace on reanalysis.

Raw data was not provided for the mercury and cyanide analyses. Cyanide analyses for samples prepared on 03/01/90, 03/02/90, and 03/05/90 did not include a preparation blank as required by the SOW.

The trip blank for inorganics collected on December 18, 1989, was not analyzed by the laboratory. There is an appropriate field blank analyzed from that sample shipment. Cyanide analysis was not requested on trip blank 12/15/89 (BCM002).

It was noted in several instances that the values reported on the Form I and QC forms could not be reproduced upon recalculation. These differences are insignificant except for potassium in CSB-11 (0.5-2), CSB-11D (0.5-2), and CSB-11 (6-8) and do not affect data usability. Potassium in the aforementioned samples should have been reported as 781 mg/kg, 703 mg/kg, and 451 mg/kg, respectively. These corrected results are reported on the data summary for inorganics in this validation report. Additionally, the spike sample result for thallium in BCM039S was reported as 8.6800; upon recalculation, the value was found to be 9.567. As a result, the percent recovery for thallium in sample BCM039S is 95.7% rather than 86.8% and is still with recovery criteria.

Summary

The sources of concern in this review have been identified as insufficient ICV/CCV and preparation blank digestions for the cyanide analyses, a high %D for zinc and calcium in the serial dilution, low matrix spike recoveries for antimony, and blank contamination. The results are acceptable as qualified. All holding times, calibrations, lab control samples and duplicate results met established criteria. For specifics relating to this review, please see the attached support documentation in Appendix C.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

QUALIFIER SYMBOLS - INORGANICS

B - Value qualified due to the presence of the analyte in the sample at less than five times the amount in an associated blank

J - Estimated value

UJ - Estimated detection limit

UL - Detection limit biased low

[] - Value less than the contract required detection limit (CRDL) and greater than the instrument detection limit (IDL)

AR308277

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem-Solv

Date of Sample December 1989

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Lab Sample Del. Group I.D. Remarks
BCM001	Field Blank	AQ	UG/L							[41.7]				131			868-2-1
BCM002	Trip Blank	AQ	UG/L											B [8.1]			868-2-2
BCM003	Trip Blank	AQ	UG/L											B [12.5]			868-2-3
BCM004	Field Blank	AQ	UG/L							[44.8]				[66.6]			868-2-4
BCM005	CSB-7 (4-6)	SOIL	MG/KG	15700	UL	[1.6]	[29.5]			J [272]	8.8	[4.1]	[3.8]	9590	7.0	[465]	868-2-5
BCM006	CSB-7 (8-10)	SOIL	MG/KG	11300	UL	[0.67]	[33.8]			J [245]	9.0		[2.5]	7460	5.8	[940]	868-2-6
BCM007	CSB-6 (0.5-2)	SOIL	MG/KG	17700	UL	[2.0]	49.0			J [576]	15.8	[3.3]	[4.6]	15600	7.0	1030	868-2-7
BCM008	CSB-6 (6-7.3)	SOIL	MG/KG	15100	UL	[0.61]	[34.0]			J [236]	7.1	[2.2]	[1.8]	8630	5.3	[411]	868-2-8
BCM009	Field Blank	AQ	UG/L				[2.1]			[126]				B [29.1]			868-2-9
BCM010	CSB-12 (0.5-2)	SOIL	MG/KG	10200	UL	6.2	58.8			J 1130	10.9	[2.6]	6.2	9310	35.9	[757]	868-2-10
BCM011	CSB-12 (3-4)	SOIL	MG/KG	8650	UL	[1.5]	[28.5]			J [502]	7.4	[9.0]	[3.3]	9080	9.7	[399]	868-2-11
BCM012	Trip Blank	AQ	UG/L							[137]				B [15.9]			868-2-12
BCM013	Field Blank	AQ	UG/L				[1.7]			[208]				B [22.6]			868-2-13
BCM014	CSB-11 (0.5-2)	SOIL	MG/KG	[illegible]	UL	7.9	109			J [illegible]	12.0	[3.3]	10.4		80.0	[879]	868-2-14

AR308278

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____
EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem-Solv
Date of Sample December, 1989

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Lab Sample ID/ Group ID Remarks
B0M05	CSB-11D(0.5-2)	SOIL	MG/KG	11300	UL	8.2	97.2			[979] J	10.8	4.1	11.4	9270	69.6	[891]	868-2-15
B0M06	CSB-11(6-8)	SOIL	MG/KG	16200	UL	[0.64]	[37.5]			[270] J	8.0	[4.5]	[2.0]	7860	5.3	[347]	868-2-16

AR308279

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

If the page Xlmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem-Solv

Date of Sample December, 1989

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide			Lab Sample Delivery Grp. ID Remarks
BEM001	Field Blank	AQ	UG/L			[18.6]	B [1100]			[193]			[12.3]	UJ			868-2-1
BEM002	Trip Blank	AQ	UG/L										[4.1]				868-2-2
BEM003	Trip Blank	AQ	UG/L				B [1030]			[843]			[10.8]	UJ			868-2-3
BEM004	Field Blank	AQ	UG/L				B [697]			[195]			[17.3]	UJ			868-2-4
BEM005	CSB-7 (4-6)	SOIL	MG/KG	88.9		B [3.3]	B [521]			B [19.0]		17.2	14.7				868-2-5
BEM006	CSB-7 (8-10)	SOIL	MG/KG	69.6		B [7.8]	B [765]			B [29.1]		13.3	14.5				868-2-6
BEM007	CSB-6 (0.5-2)	SOIL	MG/KG	75.7		8.8	B [331]			B [19.6]		25.1	20.8				868-2-7
BEM008	CSB-6 (6-7.3)	SOIL	MG/KG	61.9		[7.9]	B [374]			B [20.0]		16.3	B 13.6	UJ			
BEM009	Field Blank	AQ	UG/L			[21.0]				[644]				UJ			
BEM010	CSB-12 (0.5-2)	SOIL	MG/KG	136		B [7.2]	B [433]			B [27.1]		16.8	44.2	UJ			
BEM011	CSB-12 (2-4)	SOIL	MG/KG	135			B [404]					14.8	14.9	UJ			
BEM012	Trip Blank	AQ	UG/L				B [781]			[473]				UJ			
BEM013	Field Blank	AQ	UG/L							[778]			[7.8]	UJ			
BEM014	CS[illegible] (0.5-3)	SOIL	MG/KG	24.2		[4.8]	B [781]	[0.34]		B [31.7]		16.6	91.9	UJ			

AR308280

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Chem-Solv

Date of Sample December, 1987

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide			Lab Sample Delivery Grp. I.D. Remarks
BMM015	CSB-11D(0.5-2)	SOIL	MG/KG	258		[6.8]	B [703]			B [34.6]		16.4	83.4	UJ			868-2-15
BMM016	CSB-11(6-8)	SOIL	MG/KG	173			B [451]			B [38.1]		13.4	12.5	UJ			868-2-16

AR300828

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample February, 1990

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Remarks
BCM028	CSB-8 (0.5-2)	Soil/Low	mg/kg	10700		3.5	42.0			[509]	8.2	[3.7]	5.7	8430	19.6	[578]	
BCM029	CSB-8D (0.5-2)	↓	↓	14500		2.7	50.5	[0.67] B	1.7	[595]	12.6	[5.4]	6.5	11900	24.2	[852]	
BCM030	CSB-8 (2-4)	↓	↓	13000		4.0	59.8	[0.63] B	1.7	[593]	12.1	[5.8]	5.2	12700	23.0	[803]	
BCM031	Trip Blank 2-22-90	Aq/Low	ug/L				[1.9] B			[80.4]				[9.2] B			
BCM032	Field Blank 2-22-90	"	"				[3.7] B			[157]				[15.5] B			
BCM036	CSB-9 (2-4)	Soil/Low	mg/kg	10800		10.7	100	[0.89] B	1.5	1880	11.2	[6.1]	14.0	11600	34.1	[707]	
BCM037	CSB-9 (4-5.5)	↓	↓	15400		2.1	[44.5]	[0.59] B	1.2	[461]	8.0	[6.0]	[3.4]	10000	6.9	[408]	
BCM038	CSB-10 (2-4)	↓	↓	8510		5.6	53.9	[0.70] B		[784]	11.9	[3.0]	8.2	8720	33.8	[591]	
BCM039	CSB-10 (0.5-2)	↓	↓	8590		5.3	72.9	[0.65] B		[656]	10.6	[4.4]	11.2	8390	38.1	[623]	
BCM040	Field Blank 2-27-90	Aq/Low	ug/L				[2.7] B	[0.87] B		[221]				[47.7]			
BCM041	Trip Blank 2-27-90	"	"							[69.5] B				[5.1] B			

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

AR308282

TDD Number _____

EPA Number _____

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic

Site Name Chem Solv

Date of Sample February, 1990

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cyanide			Remarks
BCM028	CSB-8 (0.5-2)	Soil/Low	Mg/Kg	126		[4.4] B	[433] B			[69.1] B		14.7	24.0 J	UJ			
BCM029	CSB-8D (0.5-2)	↓	↓	129		[4.9] B	[456] B			[82.2] B		18.6	32.1 J	UJ			
BCM030	CSB-8 (2-4)	↓	↓	138		[4.5] B	[507] B	[0.27]		[102] B		19.7	25.5 J	UJ			
BCM031	Trip Blank 2-22-90	AQ/Low	ug/L			[24.8]				[351]				UJ			
BCM032	Field Blank 2-22-90	"	"				[680] B			[492]			[4.4]	UJ			
BCM036	CSB-9 (2-4)	Soil/Low	Mg/Kg	255		[5.9]	[469] B			[127] B		13.5	73.9 J	UJ			
BCM037	CSB-9 (4-5.5)	↓	↓	101		[4.9]	[570] B			[107] B		16.2	16.0 J	UJ			
BCM038	CSB-10 (2-4)	↓	↓	143		[4.4]	[345] B			[79.9] B		13.1	96.6 J	UJ			
BCM039	CSB-10 (0.5-2)	↓	↓	131		[6.2]	[392] B			[141] B		13.5	91.0 J				
BCM040	Field Blank 2-27-90	AQ/Low	ug/L				[710] B			[520]			[5.6]	UJ			
BCM041	Trip Blank 2-27-90	"	"							[256]			[6.6]	UJ			

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

A308283

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX A

84

AR3082

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

Page ___ of ___

BCM ENGINEERS INC.

VOLATILE/SEMIVOLATILE DATA VALIDATION SUMMARY

Project Name Chem Solv

Sampling Dates December 1989 and February 1990

BCM Project No. 02-6012-02

Date Review Completed June 1990

Field ID

Reviewer M. Kudlesky

MATRIX	CONCENTRATION Low	Med	High	MATRIX-RELATED COMMENTS
Soil/Solid	X			
Aqueous				
Other				

VOLATILE/SEMIVOLATILE	OK	FYI	ACTION	COMMENTS
Holding Time			✓	purgeable aromatic holding time exceeded. See text and support documentation
GC/MS Tuning	✓			
Calibration			✓	ical %RSD & Ccal %D acceptance limits exceeded for several compounds. See text and support documentation.
Blanks			✓	VOA method & field blank contamination Semi-VOA method Blank TIC contamination
Surrogate Recovery	✓			
MS/MSD		✓		CSB-10 (0.5-2) MS/MSD 2,4-dinitrotoluene & quinoline surrogate recoveries high
Field Duplicates	✓			
Internal Standards			✓	CSB-7 (4-6) & CSB-12 (2-4) internal standard perylene-d12 areas low.
TCL Compound ID	✓			
TIC	✓			
Quantitation and Detection Limits	✓			

AR308285

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Chem-Solv Volatile

SOP WORK SHEETS FOR VOLATILES

HOLDING TIMES

SAMPLE NO.*	PRESERVED YES	PRESERVED NO	CONC LEVEL/MATRIX	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	TIME ANALYZED	INSTRUMENT I.D.	CONTRACT HOLDING TIME MET YES	CONTRACT HOLDING TIME MET NO	40 CFR 136 HOLDING TIME MET YES	40 CFR 136 HOLDING TIME MET NO	ACTION
BCM01	X		Low/AQ	12-13-89	12-14-89	12-18-89	22:52	EXTR3			X		
BCM02	X			"	"		19:54						
BCM03	X			12-14-89	12-15-89		20:34						
BCM04	X			"	"		21:08						
BCM05		X	Low/Soil	12-13-89	12-15-89	12-20-89	14:46	105002					
BCM06		X		"	"		15:44						
BCM07		X		12-14-89	"		13:48						
BCM08	-	X		"			16:56						
BCM09	X		Low/AQ	12-15-89	12-16-89	12-18-89	21:43	EXTR3					
BCM10	X		"			"	22:18	EXTR3					
BCM11		X	Low/Soil			12-20-89	18:56	105002					
BCM12		X	"	12-14-89			21:49	105002					
BCM13	X		Low/AQ	12-18-89	12-20-89		21:26	EXTR3					
BCM14	X			"	"		22:01				X		
① - BCM15	X			"	"	12-30-89	1:05						①
BCM16		X	Low/Soil	12-18-89	12-20-89	12-29-89	13:25	105001				X	②
BCM17		X	"	"	"	"	14:21	105001				X	②
BCM18	X		Low/AQ	12-14-89	12-20-89	12-30-89	1:39	EXTR3			X		
BCM19	X		"			"	2:14	EXTR3			X		
BCM20		X	Low/Soil			12-27-89	15:31	105001				X	②
BCM21		X					16:24					X	②
BCM22		X					17:19					X	②
BCM23	X		Low/AQ	12-20-89	12-21-89	12-30-89	2:48	EXTR3			X		
BCM24	X		"			"	3:23	EXTR3			X		
BCM25		X	Low/Soil			12-29-89	22:56	105001				X	②
BCM26		X	"	12-14-89		12-30-89	2:07	105001				X	②

AR300829

* INCLUDE MATRIX SPIKES, BLANKS AND RE-RUNS HERE

86

(1) The analysis of BCM14 was duplicated - (BCM15).

(2) Sample holding time was exceeded for purgeable aromatics. Soil sample holding time (7 days) based upon 40 CFR 136 holding time for aro

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Chem-Solv

SOP WORK SHEETS FOR VOLATILES

HOLDING TIMES

SAMPLE NO.*	PRESERVED YES	PRESERVED NO	CONC. LEVEL/MATRIX	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	TIME ANALYZED	INSTRUMENT I.D.	CONTRACT HOLDING TIME MET YES	CONTRACT HOLDING TIME MET NO	40 CFR 136 HOLDING TIME MET YES	40 CFR 136 HOLDING TIME MET NO	ACTION
BCM05MS		X	LOW/Soil	12.13.99	12.15.99	12.20.99	17:38	105002	X		X		
BCM05MSD		↓	↓	"	"	"	20:15	"	↓		X		
BCM25MS				12.20.99	12.21.99	12.29.99	23:54	105001				X	(2)
BCM25MSD		↓	↓	"	"	12.20.99	1:21	"	↓			X	(2)

AR308287

* INCLUDE MATRIX SPIKES, BLANKS AND RE-RUNS HERE

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

Chem-Solv

SOP WORK SHEETS FOR VOLATILES

HOLDING TIMES

SAMPLE NO *	PRESERVED YES	PRESERVED NO	CONC. LEVEL/MATRIX	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	TIME ANALYZED	INSTRUMENT I.D.	CONTRACT HOLDING TIME MET YES	CONTRACT HOLDING TIME MET NO	40 CFR 136 HOLDING TIME MET YES	40 CFR 136 HOLDING TIME MET NO	ACTI
BCM 28		X	Low/Soil	2.22.90	2.23.90	3.6.90	21:06	105002		X		X	(1)
BCM 29		X	↓	↓	↓	↓	21:46			X		X	(1)
BCM 30		X	↓	↓	↓	↓	22:37			X		X	(1)
BCM 31	X		Low/AQ			3.4.90	15:28		X		X		
BCM 32	X		"	↓	↓	"	16:18		X		X		
BCM 33		X	Low/Soil	2.26.90	2.27.90	3.6.90	23:24		X			X	(1)
BCM 34	X		Low/AQ			3.4.90	17:00		X		X		
BCM 35	X		"	↓	↓	"	22:36		X		X		
BCM 36		X	Low/Soil	2.27.90	2.28.90	3.7.90	14:53		X			X	
BCM 37		X	↓	↓	↓	↓	15:28		X			X	(1)
BCM 38		X	↓	↓	↓	↓	16:21		X			X	(1)
BCM 39		X	↓	↓	↓	↓	17:22		X			X	(1)
BCM 40	X		Low/AQ			3.4.90	15:05		X		X		
BCM 41	X		"			"	15:42		X		X		
BCM 42		X	Low/Soil			3.13.90	17:52			X		X	(1)
BCM 43		X	↓	↓	↓	"	18:40			X		X	(1)
BCM 39 MS		X	↓	↓	↓	3.9.90	19:20		X			X	(1)
BCM 39 MSD		X	↓	↓	↓	"	20:14	↓	X			X	(1)

* INCLUDE MATRIX SPIKES, BLANKS AND RE-RUNS

AR308288

(1) Sample holding time was exceeded for purgeable aromatics. Soil sample holding time (7 days) based upon 40 CFR 136 holding time for aqueous samples.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CASE NO. _____
LABORATORY _____

Chem-Solv

SOP WORK SHEETS FOR EXTRACTABLES

HOLDING TIMES

SAMPLE NO. *	CONC. LEVEL/MATRIX	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	TIME ANALYZED	INSTRUMENT I.D.	CONTRACT HOLDING TIME MET		40 CFR 136 HOLDING TIME MET		ACTION
								YES	NO	YES	NO	
BCM01	LOW/AQ	12.13.89	12.14.89	12.16.89	12.20.89	15:54	EXTR 4	X		X		
BCM04	"	12.14.89	12.15.89	"	"	16:47						
BCM05	LOW/Soil	12.13.89		12.20.89	1.23.90	16:03						
BCM05-RE					1.24.90	6:57						
BCM06					1.23.90	18:49						
BCM07		12.14.89				19:44						
BCM08		"				20:40						
BCM13	LOW/AQ	12.18.89	12.20.89	12.21.89	1.24.90	4:17						
BCM16	LOW/Soil				1.23.90	23:44						
BCM17					1.24.90	00:39						
BCM17-RE						8:16						
BCM19	LOW/AQ	12.11.89				5:12						
BCM20	LOW/Soil					1:33						
BCM21						2:28						
BCM22						3:23						
BCM05MS		12.13.89	12.15.89	12.20.89	1.23.90	16:59						
BCM05MSD		"	"	"	"	17:54						

* INCLUDE MATRIX SPIKES, BLANKS AND RE-RUNS HERE

AR308289

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CASE NO. _____
LABORATORY _____ Chem Solv

SOP WORK SHEETS FOR EXTRACTABLES

HOLDING TIMES

SAMPLE NO. *	CONC. LEVEL/MATRIX	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	TIME ANALYZED	INSTRUMENT I.D.	CONTRACT HOLDING TIME MET YES	CONTRACT HOLDING TIME MET NO	40 CFR 136 HOLDING TIME MET YES	40 CFR 136 HOLDING TIME MET NO	ACTION
BCM 28	Low/Soil	2.22.90	2.23.90	3.1.90	3.2.90	18:58	EXTR 4	X		X		
BCM 29	↓	↓	↓	↓	↓	19:53	↓	↓		↓		
BCM 30	↓	↓	↓	↓	↓	11:44	↓	↓		↓		
BCM 32	Low/Aq	↓	↓	2.25.90	2.25.90	1:14	↓	↓		↓		
BCM 36	Low/Soil	2.27.90	2.28.90	3.1.90	3.2.90	12:38	↓	↓		↓		
BCM 37	↓	↓	↓	↓	↓	13:33	↓	↓		↓		
BCM 38	↓	↓	↓	↓	↓	14:27	↓	↓		↓		
BCM 39	↓	↓	↓	↓	3.1.90	16:01	↓	↓		↓		
BCM 40	Low/Aq	↓	↓	3.2.90	↓	19:40	↓	↓		↓		
BCM 39 MS	Low/Soil	↓	↓	3.1.90	↓	16:56	↓	↓		↓		
BCM 39 MSD	"	↓	↓	"	↓	17:50	↓	↓		↓		

* INCLUDE MATRIX SPIKES, BLANKS AND RE-RUNS HERE

AR300829

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: 105002 Calibration Date(s): 12/19/89 12/19/89

Matrix:(soil/water) SOIL Level:(low/med): LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = .300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 1219B07 RRF50 = 1219B02
RRF100= 1219B03 RRF150= 1219B04 RRF200= 1219B05

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	% RSD
CHLOROMETHANE	2.244	2.422	2.485	2.387	2.447	[illegible]	[illegible]
BROMOMETHANE	.990	1.131	1.128	1.142	1.122	[illegible]	5.7
VINYL CHLORIDE *	1.659	1.844	1.808	1.876	1.846	[illegible]	4.8*
CHLOROETHANE	.638	.643	.614	.616	.614	[illegible]	2.3
METHYLENE CHLORIDE	2.157	1.900	1.723	1.695	1.633	[illegible]	11.6
ACETONE	1.281	.460	.485	.603	.845	[illegible]	[illegible]
CARBON DISULFIDE	4.465	4.339	4.246	3.547	3.867	[illegible]	9.2
1,1-DICHLOROETHENE *	1.329	1.327	1.290	1.281	1.266	1.298	2.2*
1,1-DICHLOROETHANE #	3.711	3.672	3.675	3.691	3.590	[illegible]	1.3#
1,2-DICHLOROETHENE (TOTAL)	3.184	3.115	3.121	3.163	3.051	3.127	1.6
CHLOROFORM *	2.910	2.945	2.909	2.927	2.872	2.913	.9*
1,2-DICHLOROETHANE	1.904	1.973	2.011	1.967	1.899	1.951	2.5
2-BUTANONE	.029	.028	.037	.044	.058	.039	31.5
1,1,1-TRICHLOROETHANE	.406	.409	.422	.428	.437	.420	3.0
CARBON TETRACHLORIDE	.339	.355	.369	.377	.397	.368	6.0
VINYL ACETATE	1.781	1.719	1.866	1.639	1.732	1.747	4.8
BROMODICHLOROMETHANE	.544	.536	.570	.581	.593	.565	4.3
1,2-DICHLOROPROPANE *	.573	.565	.564	.562	.569	.567	.8*
CIS-1,3-DICHLOROPROPENE	.654	.643	.689	.687	.688	.672	3.3
TRICHLOROETHENE	.395	.397	.396	.394	.399	.396	.5
DIBROMOCHLOROMETHANE	.436	.462	.493	.496	.508	.479	6.1
1,1,2-TRICHLOROETHANE	.409	.421	.426	.407	.411	.415	1.9
BENZENE	1.199	1.146	1.124	1.105	1.070	1.129	4.2
TRANS-1,3-DICHLOROPROPENE	.339	.351	.385	.397	.398	.374	7.3
BROMOFORM #	.324	.348	.407	.402	.422	.381	11.1#
4-METHYL-2-PENTANONE	.735	.678	.772	.680	.722	.717	5.5
2-HEXANONE	.946	.763	.822	.683	.786	.800	12.0
TETRACHLOROETHENE	.408	.409	.419	.429	.433	.420	2.7
1,1,2,2-TETRACHLOROETHANE #	.890	.826	.894	.872	.881	.873	3.2#
TOLUENE *	.586	.563	.563	.583	.568	.573	1.9*
CHLOROBENZENE #	.960	.942	.928	.927	.909	.933	2.0#
ETHYLBENZENE *	.430	.425	.423	.430	.419	.425	1.1*
STYRENE	.959	.940	.890	.765	.831	.877	9.1
XYLENE (TOTAL)	.551	.545	.523	.487	.500	.521	5.3
TOLUENE-D8	.905	.887	.864	.887	.870	.882	1.8
BROMOFLUOROBENZENE	.912	.874	.844	.836	.826	.858	4.1
1,2-DICHLOROETHANE-D4	1.592	1.609	1.704	1.685	1.529	1.624	4.4

AR300029

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0

Instrument ID: EXTR3 Calibration Date(s): 12/28/89 12/29/89

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

Min $\overline{RRF}$ for SPCC(#) = .300 (0.250 for Bromoform) Max %RSD for CCC(*) = 3

LAB FILE ID: RRF20 = 1228C07 RRF50 = 1228C06
RRF100= 1228C02 RRF150= 1228C03 RRF200= 1228C04

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	R
Chloromethane	2.362	2.829	2.450	2.546	2.321	2.502	
Bromomethane #	2.074	2.417	2.102	2.166	2.046	[illegible]	
Vinyl Chloride *	2.605	3.250	2.777	2.947	2.750	[illegible]	
Chloroethane	1.521	1.711	1.497	1.555	1.432	1.543	
Methylene Chloride	2.578	2.914	2.482	2.557	2.478	[illegible]	
Acetone	.961	.972	.938	.896	.857	[illegible]	
Carbon Disulfide	8.566	10.496	9.125	9.385	8.659	[illegible]	
1,1-Dichloroethene *	2.294	2.908	2.483	2.582	2.387	2.531	
1,1-Dichloroethane #	4.414	5.354	4.591	4.753	[illegible]	[illegible]	
1,2-Dichloroethene (total)	4.171	5.224	4.518	4.745	4.555	4.642	
Chloroform *	3.907	4.757	4.024	4.174	3.878	[illegible]	
1,2-Dichloroethane	2.569	3.091	2.673	2.756	2.569	[illegible]	
2-Butanone	.041	.065	.051	.050	.085	.058	2
1,1,1-Trichloroethane	.512	.827	.580	.552	.914	.677	2
Carbon Tetrachloride	.463	.724	.499	.473	.806	.593	2
Vinyl Acetate	.726	1.264	.894	.876	1.528	1.058	3
Bromodichloromethane	.635	.997	.712	.583	1.131	.812	2
1,2-Dichloropropane *	.474	.425	.536	.512	.823	.554	2
cis-1,3-Dichloropropene	.908	1.675	1.147	1.039	1.371	1.228	2
Trichloroethene	.345	.544	.382	.381	.632	.457	2
Dibromochloromethane	.424	.730	.526	.511	.878	.614	3
1,1,2-Trichloroethane	.379	.618	.437	.420	.720	.515	2
Benzene	1.434	2.332	1.662	1.572	2.585	1.917	2
trans-1,3-Dichloropropene	.333	.657	.481	.485	.872	.565	3
Bromoform #	.238	.423	.324	.320	.559	.373	3
4-Methyl-2-Pentanone	.384	.457	.452	.475	.482	.450	
2-Hexanone	.194	.265	.309	.334	.343	.289	2
Tetrachloroethene	.283	.342	.332	.348	.335	.328	
1,1,2,2-Tetrachloroethane #	.523	.595	.565	.580	.555	.564	
Toluene *	1.054	1.283	1.215	1.275	1.232	1.212	
Chlorobenzene #	.986	1.144	1.053	1.095	1.029	1.061	
Ethylbenzene *	.509	.622	.591	.621	.588	.586	
Styrene	1.050	1.306	1.239	1.279	1.222	1.219	
Xylene (total)	.676	.850	.796	.829	.784	.787	
Toluene-d8	1.123	1.274	1.329	1.400	[illegible]	[illegible]	
Bromofluorobenzene	.567	.635	.646	.626	.598	[illegible]	
1,2-Dichloroethane-d4	2.267	2.275	2.280	2.329	2.178	2.268	

FORM VI VOA 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: 105002 Calibration Date: 12/20/89 Time: 11:29

Lab File ID: 1220201 Init. Calib. Date(s): 12/19/89 12/19/89

Matrix:(soil/water) SOIL Level:(low/med): LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = .300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
CHLOROMETHANE		2.397	2.788	16.3	#
BROMOMETHANE		1.103	1.261	14.4	
VINYL CHLORIDE	*	1.806	2.243	24.2	*
CHLOROETHANE		.625	.630	.7	
METHYLENE CHLORIDE		1.821	1.854	1.8	
ACETONE		.735	1.222	66.4	
CARBON DISULFIDE		4.093	4.860	18.7	
1,1-DICHLOROETHENE	*	1.298	1.368	5.4	*
1,1-DICHLOROETHANE	#	3.668	3.849	4.9	#
1,2-DICHLOROETHENE (TOTAL)		3.427	3.566	4.1	
CHLOROFORM	*	2.913	3.045	4.6	*
1,2-DICHLOROETHANE		1.951	2.171	11.3	
2-BUTANONE		.039	.067	71.0	76.1
1,1,1-TRICHLOROETHANE		.420	.427	1.7	
CARBON TETRACHLORIDE		.368	.364	.8	
VINYL ACETATE		1.747	2.198	25.8	
BROMODICHLOROMETHANE		.565	.593	5.0	
1,2-DICHLOROPROPANE	*	.567	.622	9.8	*
CIS-1,3-DICHLOROPROPENE		.672	.727	8.1	
TRICHLOROETHENE		.396	.399	.6	
DIBROMOCHLOROMETHANE		.479	.489	2.0	
1,1,2-TRICHLOROETHANE		.415	.456	10.0	
BENZENE		1.129	1.234	9.3	
TRANS-1,3-DICHLOROPROPENE		.374	.404	7.9	
BROMOFORM	#	.381	.400	5.0	#
4-METHYL-2-PENTANONE		.717	1.092	52.2	
2-HEXANONE		.800	1.132	41.4	
TETRACHLOROETHENE		.420	.396	5.6	
1,1,2,2-TETRACHLOROETHANE	#	.873	1.082	23.9	#
TOLUENE	*	.573	.608	6.1	*
CHLOROBENZENE	#	.933	.955	2.4	#
ETHYLBENZENE	*	.425	.429	.9	*
STYRENE		.877	.963	9.8	
XYLENE (TOTAL)		.521	.549	5.3	
TOLUENE-D8		.882	.939	6.4	
BROMOFLUOROBENZENE		.858	.919	7.1	
1,2-DICHLOROETHANE-D4		1.624	1.798	10.7	

FORM VII VOA 1/87 Rev.

1 361

00008293

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTR3 Calibration Date: 12/18/89 Time: 16:56

Lab File ID: 1218C01 Init. Calib. Date(s): 12/ 7/89 12/ 7/89

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

Min RRF50 for SPCC(#) = .300 (0.250 for Bromoform) Max %D for CCC(*) = 25.

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	2.832	2.806	.9	#
Bromomethane		2.174	2.128	2.1	
Vinyl Chloride	*	2.977	2.444	17.9	*
Chloroethane		1.617	1.574	2.7	
Methylene Chloride		2.511	2.646	5.4	
Acetone		.658	.465	29.2	
Carbon Disulfide		9.914	9.887	.3	
1,1-Dichloroethene	*	2.381	2.368	.6	*
1,1-Dichloroethane	#	4.608	4.429	3.9	#
1,2-Dichloroethene (total)		4.605	4.264	7.4	
Chloroform	*	3.938	3.837	2.6	*
1,2-Dichloroethane		2.674	2.471	7.6	
2-Butanone		.038	.031	19.4	31.9
1,1,1-Trichloroethane		.583	.625	7.1	
Carbon Tetrachloride		.476	.528	11.0	
Vinyl Acetate		1.018	.834	18.1	
Bromodichloromethane		.670	.484	27.8	
1,2-Dichloropropane	*	.487	.546	12.1	*
cis-1,3-Dichloropropene		1.249	1.166	6.7	
Trichloroethene		.350	.390	11.5	
Dibromochloromethane		.498	.514	3.2	
1,1,2-Trichloroethane		.428	.457	6.6	
Benzene		1.660	1.828	10.1	
trans-1,3-Dichloropropene		1.249	1.166	6.7	
Bromoform	#	.311	.290	6.7	#
4-Methyl-2-Pentanone		.438	.319	27.2	
2-Hexanone		.235	.127	45.9	
Tetrachloroethene		.331	.303	8.7	
1,1,2,2-Tetrachloroethane	#	.534	.471	11.8	#
Toluene	*	1.236	1.135	8.2	*
Chlorobenzene	#	1.041	.983	5.6	#
Ethylbenzene	*	.598	.538	10.0	*
Styrene		1.241	1.152	7.1	
Xylene (total)		.788	.702	10.9	
Toluene-d8		1.376	1.287	6.5	
Bromofluorobenzene		.592	.577	2.4	
1,2-Dichloroethane-d4		2.262	2.158	4.6	

AR308294

FORM VII VOA 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTR3 Calibration Date: 12/20/89 Time: 19:47

Lab File ID: 1220C02 Init. Calib. Date(s): 12/ 7/89 12/ 7/89

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

Min RRF50 for SPCC(#) = .300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	2.832	3.658	29.2	#
Bromomethane		2.174	2.493	14.7	
Vinyl Chloride	*	2.977	3.524	18.4	*
Chloroethane		1.617	1.740	7.6	
Methylene Chloride		2.511	2.689	7.1	
Acetone		.658	.497	24.4	
Carbon Disulfide		9.914	10.159	2.5	
1,1-Dichloroethene	*	2.381	2.441	2.5	*
1,1-Dichloroethane	#	4.608	4.808	4.4	#
1,2-Dichloroethene (total)		4.605	5.094	10.6	
Chloroform	*	3.938	4.875	23.8	*
1,2-Dichloroethane		2.674	2.983	11.5	
2-Butanone		.038	.035	8.4	13.1
1,1,1-Trichloroethane		.583	.690	18.4	
Carbon Tetrachloride		.476	.555	16.6	
Vinyl Acetate		1.018	.999	1.9	
Bromodichloromethane		.670	.827	23.4	
1,2-Dichloropropane	*	.487	.415	14.7	*
cis-1,3-Dichloropropene		1.249	1.225	2.0	
Trichloroethene		.350	.417	19.2	
Dibromochloromethane		.498	.527	5.9	
1,1,2-Trichloroethane		.428	.452	5.5	
Benzene		1.660	1.947	17.3	
trans-1,3-Dichloropropene		1.249	1.225	2.0	
Bromoform	#	.311	.315	1.3	#
4-Methyl-2-Pentanone		.438	.366	16.4	
2-Hexanone		.235	.143	39.3	
Tetrachloroethene		.331	.333	.5	
1,1,2,2-Tetrachloroethane	#	.534	.495	7.3	#
Toluene	*	1.236	1.295	4.7	*
Chlorobenzene	#	1.041	1.026	1.4	#
Ethylbenzene	*	.598	.622	4.0	*
Styrene		1.241	1.225	1.3	
Xylene (total)		.788	.806	2.3	
Toluene-d8		1.376	1.312	4.7	
Bromofluorobenzene		.592	.576	2.8	
1,2-Dichloroethane-d4		2.262	2.264	.1	

AR308295

1 373

FORM VII VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTR3 Calibration Date: 12/29/89 Time: 22:38

Lab File ID: 1229G05 Init. Calib. Date(s): 12/28/89 12/29/89

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

Min RRF50 for SPCC(#) = .300 (0.250 for Bromoform) Max %D for CCC(*) = 25

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	2.502	2.038	18.5	#
Bromomethane		2.161	1.969	8.9	
Vinyl Chloride	*	2.866	2.351	18.0	*
Chloroethane		1.543	1.484	3.8	
Methylene Chloride		2.602	2.474	4.9	
Acetone		.925	.528	43.0	
Carbon Disulfide		9.246	9.775	5.7	
1,1-Dichloroethene	*	2.531	2.286	9.7	*
1,1-Dichloroethane	#	4.727	4.423	6.4	#
1,2-Dichloroethene (total)		4.642	3.995	13.9	
Chloroform	*	4.148	3.838	7.5	*
1,2-Dichloroethane		2.732	2.299	15.8	
2-Butanone		.233 058	.026	55.9	51.1
1,1,1-Trichloroethane		.677	.502	25.9	
Carbon Tetrachloride		.593	.492	17.0	
Vinyl Acetate		1.058	.935	11.6	
Bromodichloromethane		.812	.603	25.7	
1,2-Dichloropropane	#	.554	.516	6.9	*
cis-1,3-Dichloropropene		1.228	.670	45.4	
Trichloroethene		.457	.317	30.6	
Dibromochloromethane		.614	.475	22.5	
1,1,2-Trichloroethane		.515	.418	18.8	
Benzene		1.917	1.436	25.1	
trans-1,3-Dichloropropene		.565	.374	33.8	
Bromoform	#	.373	.261	30.0	#
4-Methyl-2-Pentanone		.450	.382	15.2	
2-Hexanone		.289	.118	59.3	
Tetrachloroethene		.328	.303	7.6	
1,1,2,2-Tetrachloroethane	#	.564	.502	10.9	#
Toluene	*	1.212	1.033	14.7	*
Chlorobenzene	#	1.061	1.003	5.5	#
Ethylbenzene	*	.586	.516	12.0	*
Styrene		1.219	1.282	5.2	
Xylene (total)		.787	.763	3.0	
Toluene-d8		1.295	1.280	1.2	
Bromofluorobenzene		.614	.631	2.8	
1,2-Dichloroethane-d4		2.266	2.203	2.8	

AR300296

FORM VII VOA 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 608-1 SAS No.: SDG No.: ECM01

Instrument ID: EATR4 Calibration Date: 12/20/89 Time: 15:07

Lab File ID: 1220401 Init. Calib. Date(s): 12/14/89 12/14/89

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	3.002	2.858	4.8 *
bis(2-Chloroethyl)ether	2.275	2.069	9.1
2-Chlorophenol	1.944	1.747	10.1
1,3-Dichlorobenzene	1.793	1.556	13.2
1,4-Dichlorobenzene *	1.833	1.546	15.6 *
Benzyl alcohol	1.225	1.217	.7
1,2-Dichlorobenzene	1.639	1.412	13.8
2-Methylphenol	2.021	1.667	17.5
bis(2-Chloroisopropyl)ether	2.198	1.819	17.2
4-Methylphenol	2.005	1.717	14.4
N-Nitroso-di-n-propylamine #	1.522	1.498	1.6 #
Hexachloroethane	.831	.707	14.9
Nitrobenzene	.434	.502	15.6
Isophorone	.871	.932	6.9
2-Nitrophenol *	.221	.221	.0 *
2,4-Dimethylphenol	.376	.434	15.4
Benzoic acid	.195	.186	4.7
bis(2-Chloroethoxy)methane	.555	.552	.5
2,4-Dichlorophenol *	.285	.295	3.7 *
1,2,4-Trichlorobenzene	.316	.320	1.2
Naphthalene	1.116	1.102	1.2
4-Chloroaniline	.528	.264	50.0
Hexachlorobutadiene *	.174	.176	1.6 *
4-Chloro-3-methylphenol *	.330	.396	20.2 *
2-Methylnaphthalene	.705	.782	10.9
Hexachlorocyclopentadiene #	.340	.332	2.3 #
2,4,6-Trichlorophenol *	.416	.435	4.6 *
2,4,5-Trichlorophenol	.454	.466	2.5
2-Chloronaphthalene	1.104	1.183	7.1
2-Nitroaniline	.486	.555	14.0
Dimethylphthalate	1.186	1.290	8.8
Acenaphthylene	1.835	1.852	.9
2,6-Dinitrotoluene	.304	.338	11.2
3-Nitroaniline	.427	.300	29.5
Acenaphthene *	1.005	1.086	8.1 *
2,4-Dinitrophenol #	.157	.130	17.2 #
4-Nitrophenol #	.164	.122	25.6 #

AR308297

FORM VII SV-1 1/87 Rev.

2 286

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0048

Lab Code: IEA Case No.: 608-1 SAS No.: SDG No.: BCM01

Instrument ID: EATR4 Calibration Date: 12/20/89 Time: 15:07

Lab File ID: 122040 Init. Calib. Date(s): 12/14/89 12/14/89

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.488	1.594	7.1
2,4-Dinitrotoluene	.368	.439	19.2
Diethylphthalate	1.045	1.312	25.6
4-Chlorophenyl-phenylether	.700	.749	7.0
Fluorene	1.258	1.282	1.8
4-Nitroaniline	.366	.293	19.9
4,6-Dinitro-2-methylphenol	.176	.143	19.0
N-Nitrosodiphenylamine (1) *	.607	.537	11.6 *
4-Bromophenyl-phenylether	.274	.243	11.5
Hexachlorobenzene	.274	.232	15.3
Pentachlorophenol *	.163	.143	12.2 *
Phenanthrene	1.078	1.110	3.0
Anthracene	1.132	1.129	.3
Di-n-butylphthalate	1.025	1.303	27.2
Fluoranthene *	1.124	1.173	4.3 *
Pyrene	1.369	1.242	9.3
Butylbenzylphthalate	.488	.584	19.8
3,3'-Dichlorobenzidine	.451	.290	35.7
Benzo(a)anthracene	1.257	1.175	6.5
Chrysene	1.119	1.126	.6
bis(2-Ethylhexyl)phthalate	.631	.934	48.1
Di-n-octylphthalate *	1.023	1.269	24.1 *
Benzo(b)fluoranthene	1.216	1.174	3.5
Benzo(k)fluoranthene	1.286	1.107	14.0
Benzo(a)pyrene *	1.182	1.110	6.1 *
Indeno(1,2,3-cd)pyrene	1.102	1.170	6.2
Dibenz(a,h)anthracene	.945	.927	1.9
Benzo(g,h,i)perylene	.945	1.010	6.9
Nitrobenzene-d5	.476	.505	6.0
2-Fluorobiphenyl	1.297	1.242	4.2
Terphenyl-d14	.973	.833	14.4
Phenol-d5	2.074	2.023	1.9
2-Fluorophenol	1.944	1.933	.6
2,4,6-Tribromophenol	.171	.157	8.1

(1) Cannot be separated from Diphenylamine

AR308298

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SEMI-VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: [illegible] Contract: [illegible]

Lab Code: [illegible] Case No.: [illegible] SAS No.: SDG No.: SCM01

Instrument ID: [illegible] Calibration Date: [illegible] Time: [illegible]

Lab File ID: [illegible] Init. Calib. Date(s): 12/14/89 12/14/89

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	3.002	2.541	15.3 *
bis(2-Chloroethyl)ether	2.275	1.876	17.6
2-Chlorophenol	1.944	1.645	15.4
1,3-Dichlorobenzene	1.793	1.622	9.5
1,4-Dichlorobenzene *	1.833	1.719	6.2 *
Benzyl alcohol	1.225	1.200	2.0
1,2-Dichlorobenzene	1.639	1.518	7.4
2-Methylphenol	2.021	1.650	18.4
bis(2-Chloroisopropyl)ether	2.198	1.358	38.2
4-Methylphenol	2.005	1.778	11.3
N-Nitroso-di-n-propylamine #	1.522	1.262	17.0 #
Hexachloroethane	.831	.824	.9
Nitrobenzene	.434	.453	4.5
Isophorone	.871	.858	1.5
2-Nitrophenol *	.222	.215	3.0 *
2,4-Dimethylphenol	.376	.368	2.1
Benzoic acid	.195	.227	16.0
bis(2-Chloroethoxy)methane	.555	.517	6.8
2,4-Dichlorophenol *	.285	.277	2.9 *
1,2,4-Trichlorobenzene	.316	.324	2.5
Naphthalene	1.116	1.021	8.5
4-Chloroaniline	.528	.457	13.4
Hexachlorobutadiene *	.174	.212	21.9 *
4-Chloro-3-methylphenol *	.330	.329	.3 *
2-Methylnaphthalene	.705	.636	9.7
Hexachlorocyclopentadiene #	.340	.404	18.8 #
2,4,6-Trichlorophenol *	.416	.469	12.8 *
2,4,5-Trichlorophenol	.454	.518	14.1
2-Chloronaphthalene	1.104	1.207	9.3
2-Nitroaniline	.486	.521	7.2
Dimethylphthalate	1.186	1.292	8.9
Acenaphthylene	1.835	1.736	5.4
2,6-Dinitrotoluene	.304	.351	15.5
3-Nitroaniline	.427	.435	1.8
Acenaphthene *	1.005	1.019	1.4 *
2,4-Dinitrophenol #	.157	.148	5.5 #
4-Nitrophenol #	.164	.189	15.4 #

AR308299

2 293

FORM VII SV-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

SEMI-VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTF4 Calibration Date: 12/21/89 Time: 10:36

Lab File ID: 1221401 Init. Calib. Date(s): 12/14/89 12/14/89

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.

COMPOUND	$\overline{RRF}$	RRF50	%D
Dibenzofuran	1.488	1.472	1.0
2,4-Dinitrotoluene	.368	.404	9.6
Diethylphthalate	1.045	1.085	3.9
4-Chlorophenyl-phenylether	.700	.693	.9
Fluorene	1.258	1.332	5.9
4-Nitroaniline	.366	.407	11.2
4,6-Dinitro-2-methylphenol	.176	.142	19.4
N-Nitrosodiphenylamine (1) *	.607	.510	16.0 *
4-Bromophenyl-phenylether	.274	.251	8.3
Hexachlorobenzene	.274	.232	15.4
Pentachlorophenol *	.163	.147	9.5 *
Phenanthrene	1.078	1.114	3.3
Anthracene	1.132	1.157	2.2
Di-n-butylphthalate	1.025	1.170	14.2
Fluoranthene *	1.124	1.251	11.2 *
Pyrene	1.369	1.254	8.4
Butylbenzylphthalate	.488	.479	1.8
3,3'-Dichlorobenzidine	.451	.426	5.4
Benzo(a)anthracene	1.257	1.211	3.7
Chrysene	1.119	1.153	3.0
bis(2-Ethylhexyl)phthalate	.631	.672	6.6
Di-n-octylphthalate *	1.023	1.016	.6 *
Benzo(b)fluoranthene	1.216	1.102	9.4
Benzo(k)fluoranthene	1.286	1.219	5.2
Benzo(a)pyrene *	1.182	1.105	6.5 *
Indeno(1,2,3-cd)pyrene	1.102	1.210	9.8
Dibenz(a,h)anthracene	.945	.981	3.8
Benzo(g,h,i)perylene	.945	1.012	7.1
Nitrobenzene-d5	.476	.519	9.0
2-Fluorobiphenyl	1.297	1.389	7.1
Terphenyl-d14	.973	.873	10.3
Phenol-d5	2.674	2.286	14.5
2-Fluorophenol	1.944	1.594	18.0
2,4,6-Tribromophenol	.171	.161	5.6

(1) Cannot be separated from Diphenylamine

AR308300

FORM VII SV-2 1/87 Re

2 29

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTR4 Calibration Date: 1/23/90 Time: 11:30

Lab File ID: 0123401 Init. Calib. Date(s): 1/22/90 1/23/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Phenol	*	2.961	2.433	17.8	*
bis(2-Chloroethyl)ether		2.109	1.822	13.6	
2-Chlorophenol		1.893	1.704	10.0	
1,3-Dichlorobenzene		1.814	1.626	10.4	
1,4-Dichlorobenzene	*	1.831	1.724	5.9	*
Benzyl alcohol		1.025	.818	20.2	
1,2-Dichlorobenzene		1.697	1.521	10.4	
2-Methylphenol		1.568	1.503	4.1	
bis(2-Chloroisopropyl)ether		3.082	2.074	32.7	
4-Methylphenol		1.589	1.637	3.0	
N-Nitroso-di-n-propylamine	#	1.953	1.824	6.6	#
Hexachloroethane		.914	.953	4.3	
Nitrobenzene		.669	.643	4.0	
Isophorone		1.194	1.169	2.1	
2-Nitrophenol	*	.257	.259	1.1	*
2,4-Dimethylphenol		.532	.525	1.2	
Benzoic acid		.249	.243	2.2	
bis(2-Chloroethoxy)methane		.680	.665	2.3	
2,4-Dichlorophenol	*	.348	.335	3.7	*
1,2,4-Trichlorobenzene		.389	.394	1.4	
Naphthalene		1.287	1.339	4.0	
4-Chloroaniline		.596	.627	5.2	
Hexachlorobutadiene	*	.262	.269	2.8	*
4-Chloro-3-methylphenol	*	.510	.516	1.2	*
2-Methylnaphthalene		.815	.860	5.5	
Hexachlorocyclopentadiene	#	.481	.455	5.3	#
2,4,6-Trichlorophenol	*	.481	.469	2.6	*
2,4,5-Trichlorophenol		.434	.390	10.0	
2-Chloronaphthalene		1.298	1.287	.8	
2-Nitroaniline		.833	.804	3.4	
Dimethylphthalate		1.487	1.477	.6	
Acenaphthylene		2.075	2.013	3.0	
2,6-Dinitrotoluene		.388	.372	4.2	
3-Nitroaniline		.493	.483	2.0	
Acenaphthene	*	1.242	1.196	3.7	*
2,4-Dinitrophenol	#	.232	.229	1.6	#
4-Nitrophenol	#	.390	.363	6.9	#

AR308301

2 300

FORM VII S7-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM

Instrument ID: EXTR4 Calibration Date: 1/23/90 Time: 11:30

Lab File ID: 0123401 Init. Calib. Date(s): 1/22/90 1/23/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) =

COMPOUND	$\overline{RRF}$	RRF50	%D
Dibenzofuran	1.879	1.893	.8
2,4-Dinitrotoluene	.514	.549	6.8
Diethylphthalate	1.589	1.671	5.2
4-Chlorophenyl-phenylether	.872	.907	4.0
Fluorene	1.552	1.530	1.4
4-Nitroaniline	.482	.529	9.6
4,6-Dinitro-2-methylphenol	.180	.209	16.2
N-Nitrosodiphenylamine (1) *	.540	.559	3.4 *
4-Bromophenyl-phenylether	.284	.320	12.4
Hexachlorobenzene	.272	.295	8.3
Pentachlorophenol *	.188	.207	9.7 *
Phenanthrene	1.150	1.203	4.6
Anthracene	1.203	1.288	7.0
Di-n-butylphthalate	1.477	1.606	8.7
Fluoranthene *	1.548	1.697	9.6 *
Pyrene	1.271	1.299	2.2
Butylbenzylphthalate	.590	.605	2.6
3,3'-Dichlorobenzidine	.497	.481	3.2
Benzo(a)anthracene	1.319	1.421	7.8
Chrysene	1.251	1.239	.9
bis(2-Ethylhexyl)phthalate	.794	.829	4.4
Di-n-octylphthalate *	1.448	1.343	7.3 *
Benzo(b)fluoranthene	1.378	1.283	6.9
Benzo(k)fluoranthene	1.352	1.375	1.7
Benzo(a)pyrene *	1.211	1.295	6.9 *
Indeno(1,2,3-cd)pyrene	1.339	1.350	.8
Dibenz(a,h)anthracene	1.047	1.116	6.6
Benzo(g,h,i)perylene	1.021	1.095	7.3
Nitrobenzene-d5	.684	.659	3.6
2-Fluorobiphenyl	1.407	1.286	8.6
Terphenyl-d14	.861	.883	2.6
Phenol-d5	2.478	2.207	10.9
2-Fluorophenol	1.861	1.565	15.9
2,4,6-Tribromophenol	.210	.209	.4

(1) Cannot be separated from Diphenylamine

AR308302

2 3(

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTR4 Calibration Date: 1/23/90 Time: 22:52

Lab File ID: 0123D01 Init. Calib. Date(s): 1/22/90 1/23/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Phenol	*	2.961	2.783	6.0	*
bis(2-Chloroethyl)ether		2.109	2.172	3.0	
2-Chlorophenol		1.893	1.820	3.9	
1,3-Dichlorobenzene		1.814	1.798	.9	
1,4-Dichlorobenzene	*	1.831	1.737	5.1	*
Benzyl alcohol		1.025	1.051	2.5	
1,2-Dichlorobenzene		1.697	1.687	.6	
2-Methylphenol		1.568	1.692	7.9	
bis(2-Chloroisopropyl)ether		3.082	2.339	24.1	
4-Methylphenol		1.589	1.644	3.5	
N-Nitroso-di-n-propylamine	#	1.953	2.017	3.3	#
Hexachloroethane		.914	.937	2.5	
Nitrobenzene		.669	.669	.1	
Isophorone		1.194	1.154	3.3	
2-Nitrophenol	*	.257	.257	.1	*
2,4-Dimethylphenol		.532	.503	5.4	
Benzoic acid		.249	.166	33.3	
bis(2-Chloroethoxy)methane		.680	.630	7.5	
2,4-Dichlorophenol	*	.348	.322	7.6	*
1,2,4-Trichlorobenzene		.389	.383	1.5	
Naphthalene		1.287	1.260	2.1	
4-Chloroaniline		.596	.576	3.3	
Hexachlorobutadiene	*	.262	.265	1.1	*
4-Chloro-3-methylphenol	*	.510	.502	1.8	*
2-Methylnaphthalene		.815	.814	.1	
Hexachlorocyclopentadiene	#	.481	.485	.9	#
2,4,6-Trichlorophenol	*	.481	.517	7.6	*
2,4,5-Trichlorophenol		.434	.442	2.0	
2-Chloronaphthalene		1.298	1.263	2.7	
2-Nitroaniline		.833	.898	7.8	
Dimethylphthalate		1.487	1.679	12.9	
Acenaphthylene		2.075	2.172	4.7	
2,6-Dinitrotoluene		.388	.402	3.6	
3-Nitroaniline		.493	.507	2.9	
Acenaphthene	*	1.242	1.218	1.9	*
2,4-Dinitrophenol	#	.232	.195	15.9	#
4-Nitrophenol	#	.390	.304	21.9	#

AR308303

2 307

FORM VII SV-1 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Instrument ID: EXTR4 Calibration Date: 1/23/90 Time: 22:52

Lab File ID: 0123D01 Init. Calib. Date(s): 1/22/90 1/23/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.

COMPOUND	$\overline{RRF}$	RRF50	%D
Dibenzofuran	1.879	2.029	8.0
2,4-Dinitrotoluene	.514	.591	15.0
Diethylphthalate	1.589	1.792	12.8
4-Chlorophenyl-phenylether	.872	.911	4.5
Fluorene	1.552	1.618	4.2
4-Nitroaniline	.482	.507	5.2
4,6-Dinitro-2-methylphenol	.180	.169	6.2
N-Nitrosodiphenylamine (1) *	.540	.563	4.2 *
4-Bromophenyl-phenylether	.284	.301	5.9
Hexachlorobenzene	.272	.307	12.9
Pentachlorophenol *	.188	.203	7.5 *
Phenanthrene	1.150	1.194	3.8
Anthracene	1.203	1.244	3.4
Di-n-butylphthalate	1.477	1.508	2.1
Fluoranthene *	1.548	1.601	3.4 *
Pyrene	1.271	1.246	2.0
Butylbenzylphthalate	.590	.559	5.2
3,3'-Dichlorobenzidine	.497	.398	19.9
Benzo(a)anthracene	1.319	1.325	.4
Chrysene	1.251	1.289	3.0
bis(2-Ethylhexyl)phthalate	.794	.724	8.8
Di-n-octylphthalate *	1.448	1.158	20.0 *
Benzo(b)fluoranthene	1.378	1.409	2.3
Benzo(k)fluoranthene	1.352	1.462	8.1
Benzo(a)pyrene *	1.211	1.377	13.7 *
Indeno(1,2,3-cd)pyrene	1.339	1.270	5.2
Dibenz(a,h)anthracene	1.047	.961	8.1
Benzo(g,h,i)perylene	1.021	1.073	5.1
Nitrobenzene-d5	.684	.665	2.7
2-Fluorobiphenyl	1.407	1.410	.2
Terphenyl-d14	.861	.827	3.9
Phenol-d5	2.478	2.417	2.5
2-Fluorophenol	1.861	1.851	.5
2,4,6-Tribromophenol	.210	.252	20.2

(1) Cannot be separated from Diphenylamine

AR308304

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Instrument ID: EXTR4 Calibration Date: 2/27/90 Time: 23:26

Lab File ID: 0227D01 Init. Calib. Date(s): 2/21/90 2/22/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Phenol	*	2.631	3.062	16.4	*
bis(2-Chloroethyl)ether		1.940	2.220	14.4	
2-Chlorophenol		1.746	1.787	2.3	
1,3-Dichlorobenzene		1.631	1.697	4.1	
1,4-Dichlorobenzene	*	1.700	1.803	6.0	*
Benzyl alcohol		1.089	.878	19.3	
1,2-Dichlorobenzene		1.553	1.609	3.6	
2-Methylphenol		1.775	1.934	9.0	
bis(2-Chloroisopropyl)ether		2.178	3.477	59.6	
4-Methylphenol		1.806	2.012	11.4	
N-Nitroso-di-n-propylamine	#	1.500	2.086	39.1	#
Hexachloroethane		.768	.877	14.3	
Nitrobenzene		.536	.702	31.0	
Isophorone		.985	1.198	21.6	
2-Nitrophenol	*	.226	.247	9.3	*
2,4-Dimethylphenol		.432	.444	2.9	
Benzoic acid		.144	.219	51.9	
bis(2-Chloroethoxy)methane		.581	.631	8.5	
2,4-Dichlorophenol	*	.306	.301	1.5	*
1,2,4-Trichlorobenzene		.348	.336	3.2	
Naphthalene		1.156	1.221	5.6	
4-Chloroaniline		.540	.487	9.8	
Hexachlorobutadiene	*	.223	.225	1.1	*
4-Chloro-3-methylphenol	*	.380	.405	6.4	*
2-Methylnaphthalene		.729	.723	.7	
Hexachlorocyclopentadiene	#	.380	.406	6.7	#
2,4,6-Trichlorophenol	*	.466	.506	8.6	*
2,4,5-Trichlorophenol		.514	.567	10.2	
2-Chloronaphthalene		1.239	1.264	2.0	
2-Nitroaniline		.556	.708	27.2	
Dimethylphthalate		1.311	1.455	11.0	
Acenaphthylene		1.821	2.093	14.9	
2,6-Dinitrotoluene		.328	.358	9.1	
3-Nitroaniline		.425	.449	5.8	
Acenaphthene	*	1.084	1.156	6.7	*
2,4-Dinitrophenol	#	.128	.117	8.5	#
4-Nitrophenol	#	.208	.183	12.1	#

AR308305

FORM VII SV-1 1/87 Rev.

2 215

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Instrument ID: EXTR4 Calibration Date: 2/27/90 Time: 23:26

Lab File ID: 0227D01 Init. Calib. Date(s): 2/21/90 2/22/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 2!

COMPOUND	$\overline{RRF}$	RRF50	%D
Dibenzofuran	1.703	1.744	2.4
2,4-Dinitrotoluene	.429	.441	2.8
Diethylphthalate	1.323	1.314	.7
4-Chlorophenyl-phenylether	.768	.799	4.2
Fluorene	1.406	1.523	8.3
4-Nitroaniline	.432	.393	8.9
4,6-Dinitro-2-methylphenol	.149	.156	4.1
N-Nitrosodiphenylamine (1) *	.569	.554	2.5 *
4-Bromophenyl-phenylether	.256	.251	2.1
Hexachlorobenzene	.248	.258	4.1
Pentachlorophenol *	.142	.161	13.3 *
Phenanthrene	1.204	1.173	2.6
Anthracene	1.205	1.195	.9
Di-n-butylphthalate	1.371	1.396	1.8
Fluoranthene *	1.600	1.513	5.5 *
Pyrene	1.074	.986	8.2
Butylbenzylphthalate	.468	.446	4.9
3,3'-Dichlorobenzidine	.462	.413	10.6
Benzo(a)anthracene	1.255	1.264	.7
Chrysene	1.144	1.132	1.1
bis(2-Ethylhexyl)phthalate	.736	.695	5.6
Di-n-octylphthalate *	1.391	1.092	21.5 *
Benzo(b)fluoranthene	1.246	1.282	2.9
Benzo(k)fluoranthene	1.328	1.344	1.2
Benzo(a)pyrene *	1.238	1.242	.4 *
Indeno(1,2,3-cd)pyrene	1.186	1.252	5.5
Dibenz(a,h)anthracene	.931	.946	1.6
Benzo(g,h,i)perylene	.989	1.046	5.7
Nitrobenzene-d5	.562	.756	34.4
2-Fluorobiphenyl	1.388	1.559	12.3
Terphenyl-d14	.736	.722	2.0
Phenol-d5	2.272	2.760	21.5
2-Fluorophenol	1.793	1.879	4.8
2,4,6-Tribromophenol	.182	.178	2.0

(1) Cannot be separated from Diphenylamine

AR308306

FORM VII SV-2 1/87

2 21

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Instrument ID: EXTR4 Calibration Date: 3/ 2/90 Time: 10:51

Lab File ID: 0302401 Init. Calib. Date(s): 2/21/90 2/22/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Phenol	*	2.631	3.227	22.7	*
bis(2-Chloroethyl)ether		1.940	1.909	1.6	
2-Chlorophenol		1.746	1.859	6.5	
1,3-Dichlorobenzene		1.631	1.606	1.5	
1,4-Dichlorobenzene	*	1.700	1.739	2.3	*
Benzyl alcohol		1.089	.746	31.5	
1,2-Dichlorobenzene		1.553	1.570	1.0	
2-Methylphenol		1.775	2.327	31.0	
bis(2-Chloroisopropyl)ether		2.178	1.663	23.6	
4-Methylphenol		1.806	2.445	35.4	
N-Nitroso-di-n-propylamine	#	1.500	1.569	4.6	#
Hexachloroethane		.768	.726	5.5	
Nitrobenzene		.536	.473	11.7	
Isophorone		.985	.988	.2	
2-Nitrophenol	*	.226	.239	5.8	*
2,4-Dimethylphenol		.432	.383	11.3	
Benzoic acid		.144	.217	50.5	
bis(2-Chloroethoxy)methane		.581	.546	6.1	
2,4-Dichlorophenol	*	.306	.317	3.4	*
1,2,4-Trichlorobenzene		.348	.335	3.5	
Naphthalene		1.156	1.314	13.7	
4-Chloroaniline		.540	.609	12.9	
Hexachlorobutadiene	*	.223	.189	15.1	*
4-Chloro-3-methylphenol	*	.380	.409	7.6	*
2-Methylnaphthalene		.729	.903	24.0	
Hexachlorocyclopentadiene	#	.380	.254	33.3	#
2,4,6-Trichlorophenol	*	.466	.404	13.1	*
2,4,5-Trichlorophenol		.514	.412	20.0	
2-Chloronaphthalene		1.239	1.133	8.6	
2-Nitroaniline		.556	.451	19.0	
Dimethylphthalate		1.311	1.165	11.2	
Acenaphthylene		1.821	1.876	3.0	
2,6-Dinitrotoluene		.328	.282	14.1	
3-Nitroaniline		.425	.429	1.0	
Acenaphthene	*	1.084	.964	11.0	*
2,4-Dinitrophenol	#	.128	.130	1.8	#
4-Nitrophenol	#	.208	.181	13.0	#

AR308307

FORM VII SV-1 1/87 Rev.

2 222

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Instrument ID: EXTR4 Calibration Date: 3/ 2/90 Time: 10:51

Lab File ID: 0302401 Init. Calib. Date(s): 2/21/90 2/22/90

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.

COMPOUND	$\overline{RRF}$	RRF50	%D
Dibenzofuran	1.703	1.708	.3
2,4-Dinitrotoluene	.429	.391	8.9
Diethylphthalate	1.323	1.064	19.6
4-Chlorophenyl-phenylether	.768	.812	5.8
Fluorene	1.406	1.479	5.1
4-Nitroaniline	.432	.434	.5
4,6-Dinitro-2-methylphenol	.149	.155	3.8
N-Nitrosodiphenylamine (1) *	.569	.690	21.4 *
4-Bromophenyl-phenylether	.256	.286	11.7
Hexachlorobenzene	.248	.232	6.2
Pentachlorophenol *	.142	.149	4.4 *
Phenanthrene	1.204	1.346	11.8
Anthracene	1.205	1.378	14.3
Di-n-butylphthalate	1.371	1.185	13.5
Fluoranthene *	1.600	1.534	4.1 *
Pyrene	1.074	1.272	18.5
Butylbenzylphthalate	.468	.444	5.3
3,3'-Dichlorobenzidine	.462	.472	2.2
Benzo(a)anthracene	1.255	1.241	1.1
Chrysene	1.144	1.219	6.6
bis(2-Ethylhexyl)phthalate	.736	.596	19.0
Di-n-octylphthalate *	1.391	1.155	17.0 *
Benzo(b)fluoranthene	1.246	1.453	16.5
Benzo(k)fluoranthene	1.328	1.405	5.8
Benzo(a)pyrene *	1.238	1.480	19.6 *
Indeno(1,2,3-cd)pyrene	1.186	1.435	20.9
Dibenz(a,h)anthracene	.931	1.213	30.3
Benzo(g,h,i)perylene	.989	1.285	29.9
Nitrobenzene-d5	.562	.507	9.8
2-Fluorobiphenyl	1.388	1.339	3.5
Terphenyl-d14	.736	.871	18.3
Phenol-d5	2.272	2.844	25.2
2-Fluorophenol	1.793	1.886	5.1
2,4,6-Tribromophenol	.182	.158	12.9

(1) Cannot be separated from Diphenylamine

AR308308

FORM VII SV-2 1/87 Re

2 223

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID: 1220C03 ✓ (VBK02) Lab Sample ID:

Date Analyzed: 12/20/89 ✓ Time Analyzed: 20:22 ✓

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

Instrument ID: EXTR3 ✓

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	BCM13 ✓		1220C04	21:26
2	BCM14 ✓		1220C05	22:01
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: Chloroform 4.0 ppb
No TIC Hits

AR308309

page 1 of 1

FORM IV VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1220C03

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 100. Date Analyzed: 12/20/89

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

AR308310

FORM I VOA 1 415 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID: 1220202 ✓ (✓ BLK 06) Lab Sample ID:

Date Analyzed: 12/20/89 ✓ Time Analyzed: 12:06 ✓

Matrix: (soil/water) SOIL ✓ Level:(low/med) LOW ✓

Instrument ID: 105002 ✓

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	BCM07 ✓		1220205	13:48
2	BCM05 ✓		1220207	14:46
3	BCM06 ✓		1220208	15:44
4	BCM08 ✓		1220210	16:56
5	BCM05MS ✓		1220211	17:38
6	BCM11 ✓		1220213	18:56
7	BCM05MSD✓		1220215	20:15
8	BCM12 ✓		1220217	21:49
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: Methylene Chloride 4.10 ppb
Acetone 12.0 ppb
No TIC Hits

AR308311

page 1 of 1

1 010

FORM IV VOA 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1220202

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 12/20/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	4.	J
67-64-1	ACETONE	12.	
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AA308312

FORM I VOA 1 422 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Lab File ID: 0308B06 (VBLK10) Lab Sample ID:

Date Analyzed: 3/ 8/90 Time Analyzed: 20:19

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

Instrument ID: 105002

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	BCM28		0308B07	21:00
2	BCM29		0308B08	21:46
3	BCM30		0308B09	22:37
4	BCM33		0308B10	23:24
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: Methylene Chloride 7.
Acetone 5.
No TIC compounds

AR308313

FORM IV VOA 1 006 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK10

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0308B06

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 3/ 8/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	7.	
67-64-1	ACETONE	8.	J
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308314

FORM I VOA 1 322 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Lab File ID: 0309204 — (VBLK 11) Lab Sample ID:

Date Analyzed: 3/ 9/90 — Time Analyzed: 14:00 —

Matrix: (soil/water) SOIL — Level:(low/med) LOW

Instrument ID: 105002 —

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	BCM36		0309205	14:53
2	BCM37		0309206	15:28
3	BCM38		0309207	16:21
4	BCM39		0309208	17:22
5	BCM39MS		0309209	19:20
6	BCM39MSD		0309210	20:14
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: Acetone 32.

No TIC Compounds

FORM IV VOA

AR308315

1 007

1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK11

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309204

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	32.	
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

FORM I VOA 1 3/87 Rev.

AR308315A

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK11

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0309204

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 3/ 9/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	32.	
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308316

FORM I VOA 1 3347 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Lab File ID: 0313211 (V BLK 12) Lab Sample ID:

Date Analyzed: 3/13/90 Time Analyzed: 17:02

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

Instrument ID: 105002

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	BCM42		0313212	17:52
2	BCM43		0313213	18:40
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: Methylene Chloride 5.
Acetone 10.
No TIC compounds

AR308317

FORM IV VOA 1/87 Rev.

1 008

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK12

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 0313211

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 3/13/90

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	
67-64-1	ACETONE	10.	J
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	5.	U
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	5.	U
107-06-2	1,2-DICHLOROETHANE	5.	U
78-93-3	2-BUTANONE	10.	U
71-55-6	1,1,1-TRICHLOROETHANE	5.	U
56-23-5	CARBON TETRACHLORIDE	5.	U
108-05-4	VINYL ACETATE	10.	U
75-27-4	BROMODICHLOROMETHANE	5.	U
78-87-5	1,2-DICHLOROPROPANE	5.	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	5.	U
79-01-6	TRICHLOROETHENE	5.	U
124-48-1	DIBROMOCHLOROMETHANE	5.	U
79-00-5	1,1,2-TRICHLOROETHANE	5.	U
71-43-2	BENZENE	5.	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	5.	U
75-25-2	BROMOFORM	5.	U
108-10-1	4-METHYL-2-PENTANONE	10.	U
591-78-6	2-HEXANONE	10.	U
127-18-4	TETRACHLOROETHENE	5.	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.	U
108-88-3	TOLUENE	5.	U
108-90-7	CHLOROBENZENE	5.	U
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENE (TOTAL)	5.	U

AR308348

FORM I VOA 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM01

b Name: IEA Contract: 68-W8-0045

ab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

atrix: (soil/water) WATER Lab Sample ID:

ample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C10

evel: (low/med) LOW Date Received: 12/15/89

Moisture: not dec. 100. Date Analyzed: 12/18/89

olumn: (pack/cap) CAP Dilution Factor: 25.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	250.	U
74-83-9	Bromomethane	250.	U
75-01-4	Vinyl Chloride	250.	U
75-00-3	Chloroethane	250.	U
75-09-2	Methylene Chloride	120.	U
67-64-1	Acetone	2600.	
75-15-0	Carbon Disulfide	120.	U
75-35-4	1,1-Dichloroethene	120.	U
75-34-3	1,1-Dichloroethane	120.	U
540-59-0	1,2-Dichloroethene (total)	120.	U
67-66-3	Chloroform	120.	U
107-06-2	1,2-Dichloroethane	120.	U
78-93-3	2-Butanone	250.	U
71-55-6	1,1,1-Trichloroethane	120.	U
56-23-5	Carbon Tetrachloride	120.	U
108-05-4	Vinyl Acetate	250.	U
75-27-4	Bromodichloromethane	120.	U
78-87-5	1,2-Dichloropropane	120.	U
10061-01-5	cis-1,3-Dichloropropene	120.	U
79-01-6	Trichloroethene	120.	U
124-48-1	Dibromochloromethane	120.	U
79-00-5	1,1,2-Trichloroethane	120.	U
71-43-2	Benzene	120.	U
10061-02-6	trans-1,3-Dichloropropene	120.	U
75-25-2	Bromoform	120.	U
108-10-1	4-Methyl-2-Pentanone	250.	U
591-78-6	2-Hexanone	250.	U
127-18-4	Tetrachloroethene	120.	U
79-34-5	1,1,2,2-Tetrachloroethane	120.	U
108-88-3	Toluene	120.	U
108-90-7	Chlorobenzene	120.	U
100-41-4	Ethylbenzene	120.	U
100-42-5	Styrene	120.	U
1330-20-7	Xylene (total)	120.	U

AR308319

FORM I VOA 1 029 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID: 0122D08 (SRIK 21) Lab Sample ID:

Date Extracted: 12/21/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 1/23/90 Time Analyzed: 3:04

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

Instrument ID: EXTR4

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BCM16 -		0123D02	1/23/90
2	BCM17 -		0123D03	1/24/90
3	BCM20 -		0123D04	1/24/90
4	BCM21 -		0123D05	1/24/90
5	BCM22 -		0123D06	1/24/90
6	BCM17 - RE		0123D11	1/24/90
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: - No TCL Hits
- 4 TIC Hits:
UNK RT: 10.33, ostrone 200.
Subs. phenol RT: 11.83, ostrone 200
[illegible]

AR308320

2 007

FORM IV SV 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK21

ıb Name: IEA Contract: 68-W8-0045

ɔ Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

ıtrix: (soil/water) SOIL Lab Sample ID:

ımple wt/vol: 30.1 (g/mL) G Lab File ID: 0122D08

ɜvel: (low/med) LOW Date Received: 0/ 0/ 0

Moisture: not dec. 0. dec._____ Date Extracted: 12/21/89

ɛtraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

ɜC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.33	200.	J
2.	- -	SUBSTITUTED PHENOL	19.83	200.	J
3.	- -	UNKNOWN	20.90	300.	J
4.	123-79-5	Hexanedioic acid, dioctyl es	29.25	100.	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300321

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0.

Lab File ID: 0123404 (SBIK 20) Lab Sample ID:

Date Extracted: 12/20/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 1/23/90 Time Analyzed: 14:13

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

Instrument ID: EXTR4

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BCM05 -		0123406	1/23/90
2	BCM05MS -		0123407	1/23/90
3	BCM05MSD -		0123408	1/23/90
4	BCM06 -		0123409	1/23/90
5	BCM07 -		0123411	1/23/90
6	BCM08 -		0123412	1/23/90
7	BCM05 - RE		0123D10	1/24/90
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

AR308322

COMMENTS: - NO TCL Hits

- 1 unknown TIC RT: 10.33, [illegible] 2 [illegible]

page 1 of 1

FORM IV SV 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK20

Name: IEA Contract: 68-W8-0045

de: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

ix: (soil/water) SOIL Lab Sample ID:

le wt/vol: 30.0 (g/mL) G Lab File ID: 0123404

l: (low/med) LOW Date Received: 0/ 0/ 0

isture: not dec. 0. dec._____ Date Extracted: 12/20/89

action: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CONCENTRATION UNITS:

ber TICs found: 1 (ug/L or ug/Kg) UG/KG

AS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
. - -	UNKNOWN	10.33	100.	J
2.				
3.				
4.				
7.				
8.				
9.				
0.				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
0.				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				

AR308323

FORM I SV-TIC 1/87 Rev.

2 390

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID: 0122D07 (SBLK23) Lab Sample ID:

Date Extracted: 12/21/89 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 1/23/90 Time Analyzed: 2:11

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

Instrument ID: EXTR4

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BCM13 -		0123D07	1/24/90
2	BCM19 -		0123D08	1/24/90
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: - No TCL Hits

- 4 unknown TICs

RT	est conc
10.25	50.
11.10	10.
[illegible]	10.

AR308324

2 006

FORM IV SV 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

EPA SAMPLE N

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK23

Name: IEA Contract: 68-W8-0045

Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

rix: (soil/water) WATER Lab Sample ID:

ple wt/vol: 1000.0 (g/mL) ML Lab File ID: 0122D07

el: (low/med) LOW Date Received: 0/ 0/ 0

oisture: not dec. 100. dec._____ Date Extracted: 12/21/89

raction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/23/90

Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

mber TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.25	50.	J
2. - -	UNKNOWN	11.10	10.	J
3. - -	UNKNOWN CHLOROCARBON	13.38	10.	J
4. - -	UNKNOWN	23.60	9.	J
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308325

FORM I SV-TIC 1/87 Rev.

2 364

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Lab File ID: 0227D02 (SBlk LV) Lab Sample ID:

Date Extracted: 2/25/90 Extraction:(SepF/Cont/Sonc) CONT

Date Analyzed: 2/28/90 Time Analyzed: 0:19

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

Instrument ID: EXTR4

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BCM32		0227D03	2/28/90
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: No TCL Compounds
1 TIC : Substituted Phenol 8 ppb (RT : [illegible])

AR308326

page 1 of 1

FORM IV SV 1/87

2 006

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix Spike - EPA Sample No.: BCM39 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
Phenol	7973.	0.	5465.	69	26- 90
2-Chlorophenol	7973.	0.	5661.	71	25-102
1,4-Dichlorobenzene	3987.	0.	2988.	75	28-104
N-Nitroso-di-n-prop.(1)	3987.	0.	3696.	93	41-126
1,2,4-Trichlorobenzene	3987.	0.	3493.	88	38-107
4-Chloro-3-methylphenol	7973.	0.	5906.	74	26-103
Acenaphthene	3987.	0.	3428.	86	31-137
4-Nitrophenol	7973.	0.	7288.	91	11-114
2,4-Dinitrotoluene	3987.	0.	3629.	91 *	28- 89
Pentachlorophenol	7973.	0.	7284.	91	17-109
Pyrene	3987.	0.	3779.	95	35-142

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	7831.	6316.	81	16	35	26- 90
2-Chlorophenol	7831.	6586.	84	17	50	25-102
1,4-Dichlorobenzene	3916.	3470.	89	17	27	28-104
N-Nitroso-di-n-prop.(1)	3916.	4142.	106	13	38	41-126
1,2,4-Trichlorobenzene	3916.	3703.	95	8	23	38-107
4-Chloro-3-methylphenol	7831.	7108.	91	20	33	26-103
Acenaphthene	3916.	3819.	98	13	19	31-137
4-Nitrophenol	7831.	8169.	104	13	50	11-114
2,4-Dinitrotoluene	3916.	4209.	107 *	17	47	28- 89
Pentachlorophenol	7831.	8844.	111 *	21	47	17-109
Pyrene	3916.	4183.	107	12	36	35-142

(1) N-Nitroso-di-n-propylamine

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

* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 3 out of 22 outside limits

AR308327

COMMENTS:

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID (Standard): 0123401 Date Analyzed: 1/23/90

Instrument ID: EXTR4 Time Analyzed: 11:30

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	167870.	23.48	235032.	30.53	238834.	35.85
	UPPER LIMIT	335740.	23.98	470064.	31.03	477668.	36.35
	LOWER LIMIT	83935.	22.98	117516.	30.03	119417.	35.35
	EPA SAMPLE NO.						
1	SBLK20	128530.	23.48	134910.	30.52	147741.	35.85
2	BCM05	161390.	23.48	169458.	30.52	73828.*	35.83
3	BCM05MS	172500.	23.48	258616.	30.52	179966.	35.85
4	BCM05MSD	229180.	23.48	291596.	30.52	238116.	35.82
5	BCM06	197722.	23.48	274640.	30.52	179452.	35
6	BCM07	241004.	23.48	353620.	30.52	257244.	35..
7	BCM08	200960.	23.48	277092.	30.52	226727.	35.83
8	SSTD50	225044.	23.50	303948.	30.53	261140.	35.85
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

Column used to flag internal standard area values with an asterisk

BCM 05 IS6 Area out, Sample

AR308328

FORM VIII SV-2

2 022 1/87 F

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID (Standard): 0123D01 Date Analyzed: 1/23/90

Instrument ID: EXTR4 Time Analyzed: 22:52

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	41280.	11.75	174290.	15.00	100742.	19.62
	UPPER LIMIT	82560.	12.25	348580.	15.50	201484.	20.12
	LOWER LIMIT	20640.	11.25	87145.	14.50	50371.	19.12
	EPA SAMPLE NO.						
1	BCM16	42096.	11.77	150208.	15.00	85786.	19.62
2	BCM17	36028.	11.77	139050.	15.00	77303.	19.62
3	BCM20	34662.	11.75	125180.	14.98	73683.	19.62
4	BCM21	43483.	11.77	164204.	15.00	80185.	19.62
5	BCM22	38846.	11.75	145170.	14.98	80825.	19.62
6	BCM13	39645.	11.75	140184.	14.98	80681.	19.62
7	BCM19	41142.	11.77	153136.	15.00	93616.	19.62
8	BCM05 RE	40019.	11.75	158482.	14.98	96740.	19.62
9	BCM17 RE	40816.	11.77	126074.	14.98	81952.	19.62
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

Column used to flag internal standard area values with an asterisk

AA308329

FORM VIII SV-1 2 023 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Lab File ID (Standard): 0123D01 Date Analyzed: 1/23/90

Instrument ID: EXTR4 Time Analyzed: 22:52

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	225044.	23.50	303948.	30.53	261140.	35.85
	UPPER LIMIT	450088.	24.00	607896.	31.03	522280.	36.35
	LOWER LIMIT	112522.	23.00	151974.	30.03	130570.	35.35
	EPA SAMPLE NO.						
1	BCM16	179604.	23.48	244800.	30.52	196384.	35.83
2	BCM17	155534.	23.48	184512.	30.52	115734.*	35.83
3	BCM20	141798.	23.48	191720.	30.52	164107.	35.83
4	BCM21	180904.	23.48	220410.	30.52	203279.	35.[illegible]
5	BCM22	160354.	23.48	200624.	30.52	187214.	35
6	BCM13	172506.	23.48	208314.	30.52	187504.	35.[illegible]
7	BCM19	174276.	23.48	195938.	30.52	202586.	35.83
8	BCM05 RE	174954.	23.48	180822.	30.52	59861.*	35.83
9	BCM17 RE	176518.	23.47	199326.	30.52	82649.*	35.82
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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

Column used to flag internal standard area values with an asterisk

Internal std Perylene-d12 recovered are low. Sampling limits are estimated.

AH3D8330

FORM VIII SV-2

2 024 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

TIC Footnotes

RS - reasonable identification of compound or compound category
OI - isomer or similar compound
UK - unknown
NW - ~~Does~~ not ~~meet~~ within SOW TIC acceptance criteria

AR308331

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

BCM04 Field 12

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C07

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	6.30	7.	J
2.	96-14-0	Pentane, 3-methyl-	7.15	8.	J
3.	110-54-3	Hexane (DOT)	8.02	30.	J
4.	- -	UNKNOWN	9.40	7.	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308332

FORM I VOA-TIC 1/87 R

1 050

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM10

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Field Blank 12/15

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1218C09

Level: (low/med) LOW Date Received: 12/16/89

% Moisture: not dec. 100. Date Analyzed: 12/18/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-54-3	Hexane (DOT)	8.12	20.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308333

FORM I VOA-TIC 1/87 Rev.

1 118

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM13

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1220C04

Level: (low/med) LOW Date Received: 12/19/89

% Moisture: not dec. 100. Date Analyzed: 12/20/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-54-3	Hexane (DOT)	8.13	20.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR301833

FORM I VOA-TIC 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 1229107

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 11. Date Analyzed: 12/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1066-40-6	SILANOL, TRIMETHYL-	12.63	10.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

RS

AR308335

FORM I VOA-TIC 1/87 Rev.

1 176

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) WATER Lab Sample ID: Field Blank 12/14

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G10

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	107-83-5	Pentane, 2-methyl-	6.58	10.	J OI, NW
2.	96-14-0	Pentane, 3-methyl-	7.27	20.	J OI, NW
3.	110-54-3	Hexane (DOT)	8.13	60.	J OI, NW
4.	- -	UNKNOWN HYDROCARBON	9.52	20.	J UK
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC 1/87 Rev.

AR308336

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM24

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1229G12

Level: (low/med) LOW Date Received: 12/21/89

% Moisture: not dec. 100. Date Analyzed: 12/30/89

Column: (pack/cap) CAP Dilution Factor: 1.00

Field Blank 12/30

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-54-3	Hexane (DOT)	8.12	9.	J IO
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308337

FORM I VOA-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM01

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 668-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 122402

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN HYDROCARBON	9.45	10.	J
2. - -	UNKNOWN	9.73	10.	J
3. - -	SUBSTITUTED PHENOL	19.37	10.	J
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308338

FORM I SV-TIC 2 027 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM04

Field Blank

Name: IEA Contract: 68-W8-0045

Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

trix: (soil/water) WATER Lab Sample ID:

mple wt/vol: 1000.0 (g/mL) ML Lab File ID: 1220403

vel: (low/med) LOW Date Received: 12/15/89

Moisture: not dec. 100. dec. ____ Date Extracted: 12/16/89

traction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/89

C Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CONCENTRATION UNITS:
umber TICs found: 2 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. - -	SUBSTITUTED PHENOL	19.37	10.	J	RS
2. - -	UNKNOWN	36.92	8.	J	UK
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308339

FORM I SV-TIC 1/87 Rev.

2 040

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM05

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123406

Level: (low/med) LOW Date Received: 12/~~18~~ 15/89

% Moisture: not dec. 11. dec._____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308340

FORM I SV-TIC 1/87 R

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM05 RE

ab Name: IEA Contract: 68-W8-0045

Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

atrix: (soil/water) SOIL Lab Sample ID:

ample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D10

evel: (low/med) LOW Date Received: 12/~~18~~ 15/89 BM 2/5/90

Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

xtraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

PC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	500.	BJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

UK

AR308341

FORM I SV-TIC 2 062 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM06

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0123409

Level: (low/med) LOW Date Received: 12/~~16~~ 15/89

% Moisture: not dec. 15. dec._____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308342

2 072

FORM I SV-TIC 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM07

ab Name: IEA Contract: 68-W8-0045

b Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

atrix: (soil/water) SOIL Lab Sample ID:

ample wt/vol: 30.0 (g/mL) G Lab File ID: 0123411

evel: (low/med) LOW Date Received: 12/~~18~~15/89

Moisture: not dec. 11. dec.____ Date Extracted: 12/20/89

xtraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

PC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.00

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	700.	BJ
2. - -	UNKNOWN KETONE	11.25	300.	J
3. - -	UNKNOWN	11.67	400.	J
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308343

FORM I SV-TIC 2 082 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM08

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123412

Level: (low/med) LOW Date Received: 12/~~18~~ 15/89

% Moisture: not dec. 14. dec._____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2. - -	UNKNOWN	11.67	200.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308344

FORM I SV-TIC 1/87 R

2 094

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM13

ab Name: IEA Contract: 68-W8-0045

b Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

atrix: (soil/water) WATER Lab Sample ID:

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D07

evel: (low/med) LOW Date Received: 12/~~18~~ 19/89

Moisture: not dec. 100. dec._____ Date Extracted: 12/21/89

xtraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

PC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. - -	UNKNOWN	10.15	20.	J	UK
2. - -	UNKNOWN	10.27-SBK23	200.	BJ	UK
3. - -	TRICHLOROPROPENE ISOMER	10.42	10.	J	OI
4. - -	UNKNOWN	11.47	9.	J	UK
5. - -	UNKNOWN CHLOROCARBON	13.38-SBK23	10.	BJ	UK
6. 100-97-0	Methenamine	15.65	100.	J	RS
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300345

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM16

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.8 (g/mL) G Lab File ID: 0123D02

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.02	500.	J
2. - -	UNKNOWN	10.33 - 5 blk 2	900.	BJ
3. - -	UNKNOWN KETONE	11.25	600.	J
4. - -	UNKNOWN KETONE	11.67	600.	J
5. - -	UNKNOWN	12.40	600.	
6. - -	UNKNOWN	12.50	500.	
7. - -	UNKNOWN	24.93	400.	J
8. 123-79-5	Hexanedioic acid, dioctyl es	29.25 - 5 blk 2	4000.	BJ
9. - -	UNKNOWN AROMATIC	36.27	200.	J
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308346

* Spectrum does not match the 5 spectral library search TIC spe

FORM I SV-TIC 2 120 1/87 I

but does match BCM17 Scan 2273 TIC search, the third TIC spectrum [illegible]

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM17

b Name: IEA Contract: 68-W8-0045

Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

trix: (soil/water) SOIL Lab Sample ID:

mple wt/vol: 30.1 (g/mL) G Lab File ID: 0123D03

vel: (low/med) LOW Date Received: 12/~~18~~ 20/89

Moisture: not dec. 10. dec.____ Date Extracted: 12/21/89

traction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

C Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

umber TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	UNKNOWN	10.33	600.	BJ	UK
2.	- -	UNKNOWN	11.67	200.	J	UK
3.	104-76-7	1-Hexanol, 2-ethyl-	12.02	300.	J	OI,A
4.	- -	SUBSTITUTED PHENOL	19.83	200.	BJ	RS
5.	123-79-5	Hexanedioic acid, dioctyl es	29.25	8000.	BJ	RS
6.	- -	UNKNOWN	30.65	300.	J	UK
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

AR308347

FORM I SV-TIC 2 140 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM17 RE

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.7 (g/mL) G Lab File ID: 0123D11

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89 2/5/90

% Moisture: not dec. 10. dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33 - SBIK2	700.	BJ
2. - -	UNKNOWN	11.67	200.	J
3. 104-76-7	1-Hexanol, 2-ethyl-	12.02	300.	J
4. - -	UNKNOWN	23.70	100.	J
5. 123-79-5	Hexanedioic acid, dioctyl es	29.25 + SBIK2	6000.	BJ
6. - -	UNKNOWN	33.73	200.	J
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

* Spectrum does not match the 3 generated spectra library search. T[illegible] but does match the third TIC spectrum generated for BCM17 scan 2273.

AR308348

FORM I SV-TIC 2155 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM19

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0123D08

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.25	90.	J
2. - -	UNKNOWN	13.38	20.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308349

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123D04

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 14. dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 15

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	8.93	300.	J
2. - -	UNKNOWN KETONE	9.98	4000.	J
3. - -	UNKNOWN	10.33	SBK21 3000.	BJ
4. - -	UNKNOWN	10.55	200.	J
5. - -	UNKNOWN	11.05	500.	
6. - -	UNKNOWN	11.18	200.	
7. - -	UNKNOWN KETONE	11.25	2000.	J
8. - -	UNKNOWN	11.57	200.	J
9. - -	UNKNOWN	11.68	1000.	J
10. - -	UNKNOWN	12.18	400.	J
11. - -	UNKNOWN	12.40	1000.	J
12. - -	UNKNOWN	12.50	700.	J
13. - -	SUBSTITUTED PHENOL	19.83	SBK21 200.	BJ
14. - -	DDE ISOMER	27.65	200.	J
15. 123-79-5	Hexanedioic acid, dioctyl es	29.27	SBK21 20000.	BJ
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

* Spectrum does not match the 3 generated spectral library search TIC spectra, but does match the third TIC spectrum [illegible]

FORM I SV-TIC 1/87

AR308350

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.8 (g/mL) G Lab File ID: 0123D05

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 15. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. - -	UNKNOWN KETONE	9.98	300.	J	RS
2. - -	UNKNOWN	10.33 - Sbnk 21	1000.	BJ	UK
3. - -	UNKNOWN KETONE	11.25	900.	J	RS
4. - -	UNKNOWN	11.67	500.	J	UK
5. - -	UNKNOWN	12.40	300.	J	UK
6. - -	UNKNOWN	12.48	300.	J	UK
7. - -	SUBSTITUTED PHENOL	19.83 - Sbnk 21	200.	BJ	RS
8. - -	UNKNOWN	20.90 - Sbnk 21	300.	BJ	UK
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.			AR308351		

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM22

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.5 (g/mL) G Lab File ID: 0123D06

Level: (low/med) LOW Date Received: 12/~~18~~ 20/89

% Moisture: not dec. 11. dec.____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/24/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	10.33	200.	BJ
2. - -	SUBSTITUTED PHENOL	19.83	200.	BJ
3. - -	UNKNOWN	20.90	200.	BJ
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308352

FORM I SV-TIC 2 222 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

32LR17

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 8dd-1 SAS No.: SDG No.: BCM01

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 122140S

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 100. dec.____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/21/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	23.05	10.	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ULK

AR300353

FORM I SV-TIC

1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

SBLK23

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM0

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0122D07

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 100. dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.25	50.	J
2.	- -	UNKNOWN	11.10	10.	J
3.	- -	UNKNOWN CHLOROCARBON	13.38	10.	J
4.	- -	UNKNOWN	23.60	9.	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308354

FORM I SV-TIC 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0122D08

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	UNKNOWN	10.33	200.	J	UK
2.	- -	SUBSTITUTED PHENOL	19.83	200.	J	RS
3.	- -	UNKNOWN	20.90	300.	J	UK
4.	123-79-5	Hexanedioic acid, dioctyl es	29.25	100.	J	*
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

AR308355

* Does not match Library Search generated TIC spectra. The compound identified above was identified in BCM17 at the same R.T. Since BCM17 spectrum was [illegible] the SBLK21 spectrum cannot be

FORM I SV-TIC 1/87 Rev.

2 377

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0123404

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 12/20/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/23/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	10.33	100.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308356

FORM I SV-TIC 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM28

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302410

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 9. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN KETONE	9.95	1000.	J
2. - -	UNKNOWN KETONE	10.28	900.	BJ
3. - -	UNKNOWN	11.20	400.	J
4. - -	UNKNOWN	12.45	200.	J
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AH308357

FORM I SV-TIC 2 022 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM29

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.5 (g/mL) G Lab File ID: 0302411

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 10. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.85	300.	J
2. - -	UNKNOWN KETONE	10.28	3000.	BJ
3. - -	UNKNOWN	10.42	200.	BJ
4. - -	UNKNOWN KETONE	10.50	500.	J
5. - -	UNKNOWN KETONE	11.20	200.	
6. - -	UNKNOWN	11.45	200.	J
7. - -	UNKNOWN	11.53	300.	J
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308356

FORM I SV-TIC 1/87

2 035

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM30

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0302402

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 11. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	UNKNOWN	9.23	200.	J	UK
2.	- -	UNKNOWN	9.48	200.	J	UK
3.	- -	UNKNOWN	9.92	1000.	J	UK
4.	- -	UNKNOWN KETONE	10.27	900.	BJ	Q
5.	- -	UNKNOWN	11.18	400.	J	U
6.	- -	UNKNOWN	12.42	200.	J	U
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

AR308359

FORM I SV-TIC 1/87 Rev.

2 051

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM32

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0227D03

Level: (low/med) LOW Date Received: 2/23/90

% Moisture: not dec. 100. dec.____ Date Extracted: 2/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 2/28/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	Substituted Phenol	19.75	10.	BJ
2. - -	UNKNOWN	32.60	8.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC

AR300

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM36

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.0 (g/mL) G Lab File ID: 0302403

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.85	200.	J
2. - -	UNKNOWN KETONE	9.93	1000.	J
3. - -	UNKNOWN KETONE	10.30	3000.	BJ
4. - -	UNKNOWN KETONE	10.50	200.	J
5. - -	UNKNOWN KETONE	11.18	800.	J
6. - -	UNKNOWN ACID	11.62	200.	J
7. - -	UNKNOWN	12.17	400.	J
8. - -	UNKNOWN	34.27	400.	J
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308361

FORM I SV-TIC 1/87 Rev.

2 078

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM37

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 0302404

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 13. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.4 Dilution Factor: 1.00

Number TICs found: 9

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	9.48	200.	J
2.	- -	UNKNOWN	9.95	200.	J
3.	- -	UNKNOWN KETONE	10.30	4000.	BJ
4.	- -	UNKNOWN KETONE	10.50	200.	J
5.	- -	UNKNOWN KETONE	11.20	400.	
6.	- -	UNKNOWN	11.62	200.	
7.	- -	UNKNOWN	12.17	400.	J
8.	- -	UNKNOWN	41.60	500.	J
9.	- -	UNKNOWN	41.70	300.	J
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR300362

FORM I SV-TIC

2 095 1/87 I

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BCM38

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 31.9 (g/mL) G Lab File ID: 0302405

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 18. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

Number TICs found: 15

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.10	200.	J
2. - -	UNKNOWN	9.85	200.	J
3. - -	UNKNOWN	9.95	700.	J
4. - -	UNKNOWN KETONE	10.30	5000.	BJ
5. - -	UNKNOWN KETONE	10.50	300.	J
6. - -	UNKNOWN	11.12	200.	J
7. - -	UNKNOWN KETONE	11.20	700.	J
8. - -	UNKNOWN	12.17	600.	J
9. - -	UNKNOWN	30.02	1000.	J
10. - -	UNKNOWN	31.00	200.	J
11. - -	UNKNOWN	31.12	600.	J
12. - -	UNKNOWN	31.20	400.	J
13. - -	UNKNOWN	31.27	300.	J
14. - -	UNKNOWN	34.38	400.	J
15. - -	UNKNOWN	37.92	300.	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308363

FORM I SV-TIC 1/87 Rev.

2 114

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

BCM39

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29.7 (g/mL) G Lab File ID: 0319408

Level: (low/med) LOW Date Received: 2/28/90

% Moisture: not dec. 16. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.87	1000.	J
2. - -	UNKNOWN KETONE	10.23	4000.	BJ
3. - -	UNKNOWN KETONE	10.42	200.	J
4. - -	UNKNOWN KETONE	11.12	600.	J
5. - -	UNKNOWN KETONE	12.27	200.	
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308364

FORM I SV-TIC 1/87

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0227D02

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 100. dec.____ Date Extracted: 2/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 2/28/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	Substituted Phenol	19.75	8.	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308365

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

EPA SAMPLE NO

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK4

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0302409

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN KETONE	10.28	500.	J
2.	- -	UNKNOWN	10.42	200.	J
3.	- -	UNKNOWN	29.15	200.	J
4.	- -	UNKNOWN	37.93	400.	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AR308356

FORM I SV-TIC 1/87

2 262

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK43

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0319413

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN KETONE	10.20	100.	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

CI

AR308367

FORM I SV-TIC 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX B

AR308368

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS INC.

PESTICIDE/PCB DATA VALIDATION SUMMARY

Project Name ChemSolv

Sampling Dates December, 1989

BCM Project No. 00-6012-02

Date Review Completed May, 1990

Field ID CSB-7, CSB-6, CSB-12, CSB-11

Reviewer C.E. Casselberry

MATRIX	CONCENTRATION Low	Med	High	MATRIX-RELATED COMMENTS
Soil/Solid	✓			
Aqueous				
Other				

PESTICIDE/PCB	OK	FYI	ACTION	COMMENTS
Holding Time	✓			
Instrument Performance	✓			
- DDT Retention Time	✓			
- DDT/Endrin Breakdown	✓			
- DBC Retention Time	✓			
- Retention Time Window	✓			
Calibration	✓			
Blanks	✓			
Surrogate Recovery		✓		average off prim. + quant. column
MS/MSD			✓	Heptachlor + endrin quant. limits estim
Field Duplicates	✓			
Compound Identification			✓	CSB-11 → positive hit for p,p'-DDD
Quantitation and Detection Limits	✓			

AR308369

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS INC.

PESTICIDE/PCB DATA VALIDATION SUMMARY

Project Name ChemSolv

Sampling Dates February, 1990

BCM Project No. 02-6012-02

Date Review Completed June, 19

Field ID CSB-8, CSB-9, CSB-10

Reviewer M. Kudlesky

MATRIX	CONCENTRATION Low	Med	High	MATRIX-RELATED COMMENTS
Soil/Solid	✓			
Aqueous				
Other				

PESTICIDE/PCB	OK	FYI	ACTION	COMMENTS
Holding Time			✓	Positive results & quantitation limits out
Instrument Performance	✓			
- DDT Retention Time	✓			
- DDT/Endrin Breakdown	✓			
- DBC Retention Time	✓			
- Retention Time Window	✓			
Calibration	✓			
Blanks	✓			
Surrogate Recovery	✓			
MS/MSD	✓			
Field Duplicates	✓			
Compound Identification	✓			
Quantitation and Detection Limits	✓			

AR308370

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

CASE NO. _____
LABORATORY IEA

Chem Solv

SOP WORK SHEETS FOR PESTICIDES / PCBs

HOLDING TIMES

SAMPLE NO *	CONC. LEVEL / MATRIX	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	TIME ANALYZED	INSTRUMENT I.D.	CONTRACT HOLDING TIME MET YES	CONTRACT HOLDING TIME MET NO	40 CFR 136 HOLDING TIME MET YES	40 CFR 136 HOLDING TIME MET NO	ACTION
BCM 25	LOW/SOIL	8-22-90	2-23-90	3-2-90	4-3-90	2:57	1.A / 1.B	✓			✓	(5)
BCM 29	↓	↓	↓	↓	3-15-90	23:51	↓	✓			✓	(6)
BCM 30	↓	↓	↓	↓	3-16-90	1:01	↓	✓			✓	(6)
BCM 32	LOW/AQ	↓	↓	2-27-90	3-15-90	22:06	↓	✓		✓		
BCM 36	LOW/SOIL	2-27-90	2-28-90	3-2-90	3-16-90	1:37	↓	✓		✓		
BCM 37	↓	↓	↓	↓	"	↓	↓	✓		✓		
BCM 38	↓	↓	↓	↓	3-8-90	↓	↓	✓			✓	(6)
BCM 39	↓	↓	↓	↓	3-2-90	↓	↓	✓		✓		
BCM 40	LOW/AQ	↓	↓	↓	↓	5:43	↓	✓		✓		
BCM 39 MS	LOW/SOIL	↓	↓	↓	↓	3:32	↓	✓		✓		
BCM 39 MSD	"	↓	↓	↓	↓	4:32	↓	✓		✓		
BCM C1	LOW/AQ	12/13/89	12/15	12/18	1/25/90	00:19	1.A / 1.B	✓		✓		
BCM C4	↓	12/14/89	12/15	12/18	1/25	00:55	↓	✓		✓		
BCM C5	LOW/SOIL	12/13/89	12/15	12/20	1/25	3:15	↓	✓		✓		
BCM C6	↓	↓	12/15	12/20	1/25	3:05	↓	✓		✓		
BCM C7	↓	12/14/89	12/15	12/20	1/25	5:01	↓	✓		✓		
BCM C8	↓	↓	12/15	12/20	1/25	5:36	↓	✓		✓		
BCM 13	LOW/AQ	12/8/89	12/20	12/20	1/25	6:47	↓	✓		✓		
BCM 16	LOW/SOIL	↓	12/20	12/22	1/25	8:32	↓	✓		✓		
BCM 17	LOW/AQ	↓	12/20	12/22	1/25	9:08	↓	✓		✓		
BCM 19	↓	12/14/89	12/20	12/22	1/25	7:22	↓	✓		✓		
BCM 20	LOW/SOIL	↓	12/20	12/22	1/25	10:18	↓	✓		✓		
BCM 21	↓	↓	12/20	12/22	1/25	10:53	↓	✓		✓		
BCM 22	↓	↓	12/20	12/22	1/25	11:29	↓	✓		✓		

(5) Positive results and quantitation limits are estimated

AR308371

* INCLUDE MATRIX SPIKES, BLANKS AND RE-RUNS HERE

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix Spike - EPA Sample No.: BCM05 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
gamma-BHC	29.84	.00	22.05	74.	46-127
Heptachlor	29.84	.00	14.97	50.	35-13[illegible]
Aldrin	29.84	.00	24.44	82.	34-13[illegible]
Dieldrin	74.60	.00	58.32	78.	31-13[illegible]
Endrin	74.60	.00	18.98	25. *	42-13[illegible]
4,4'-DDT	74.60	.00	58.12	78.	23-13[illegible]

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	30.21	19.56	65.	13.	50	46-1[illegible]
Heptachlor	30.21	4.43	15. *	110. *	31	35-1[illegible]
Aldrin	30.21	23.87	79.	4.	43	34-1[illegible]
Dieldrin	75.52	50.72	67.	15.	38	31-1[illegible]
Endrin	75.52	2.24	3. *	158. *	45	42-13[illegible]
4,4'-DDT	75.52	49.68	66.	17.	50	23-1[illegible]

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

* Values outside of QC limits

RPD: 2 out of 6 outside limits
Spike Recovery: 3 out of 12 outside limits

COMMENTS: Quantitation limits estimated based on low recoveries an[illegible] high RPD for endrin and heptaclor in this sample. (u[illegible] CEC (BCM 6/18/90)

AR308372

FORM III PEST-2

1[illegible]R

[illegible]-00

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM20

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: DB5A5548

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	240.	
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	86.	
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180.	U
11096-82-5	Aroclor-1260	180.	U

20 cc (est)

AR308373

3 069

FORM I PEST 1/87 Rev.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 2

5A5548.MOD ONLYDBC.FIL SETCAL.CFG FW = 6 FT = 100 QF = 8% AT = 12.

FILENAME: DB-5 30M FROM /1.A/

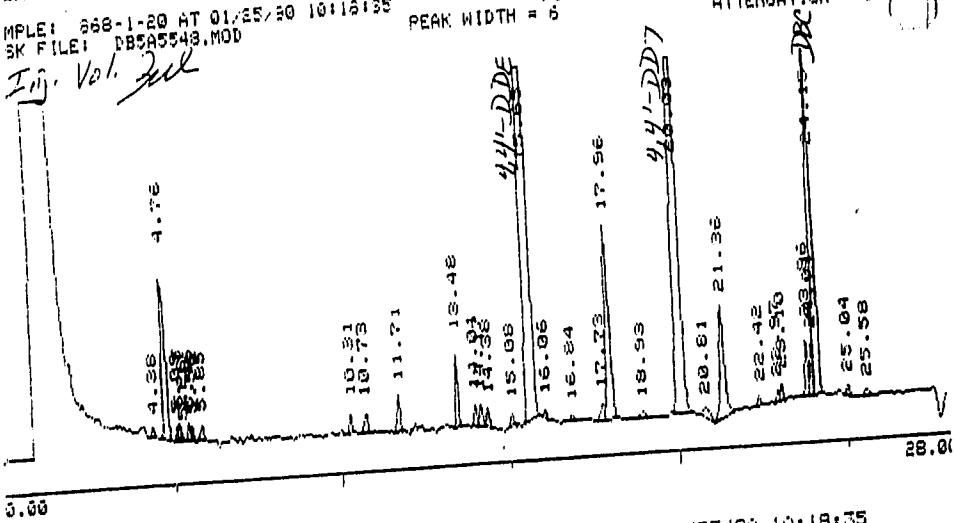
ATTENUATION = 12.

MPLE: 868-1-20 AT 01/25/90 10:18:35

SK FILE: DB5A5548.MOD

PEAK WIDTH = 6

Inj. Vol. 2ul



DISK FILE: DB5A5548.MOD FROM / 1.A/ INJECTED AT: 01/25/90 10:18:35

CH= PS= 1

FILE 1 METHOD 5 RUN 31 INDEX 30

NAME	CONC	RT	AREA	BC	RF
1	0.	4.36	2833	01	
2	0.	4.76	50512	01	
3	0.	5.09	3429	02	
4	0.	5.13	5324	00	
5	0.	5.26	1998	03	
6	0.	5.46	4276	02	
7	0.	5.56	4126	03	
8	0.	5.85	4982	00	
9	0.	10.31	5647	01	
10	0.	10.73	6570	01	
11	0.	11.71	9979	01	
12	0.	13.48	24314	01	
13	0.	14.01	7330	02	
14	0.	14.17	5642	02	
15	0.	14.38	7108	03	
16	0.	15.08	4368	00	
17	0.	15.85	1417544	01	
18	0.	16.06	2623	01	
19	0.	16.84	3711	01	
20	0.	17.73	8038	02	
21	0.	17.96	99054	03	
22	0.	18.93	3304	01	
23	0.	20.09	463896	00	
24	0.	20.81	8078	02	
25	0.	21.36	56127	03	
26	0.	22.42	3411	01	
27	0.	22.77	4124	03	

p-p' DDE

p-p' DDT

p,p'-DDD

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

2 of 2
B5A5548.MOD

	0.	23.1	5304 03
	0.	23.86	20379 02
	0.	24.01	14145 02
	0.	24.15	183364 03
	0.	25.04	4141 03
	0.	25.58	2725 01
			2460828
L	0.		

AR308375 3 071

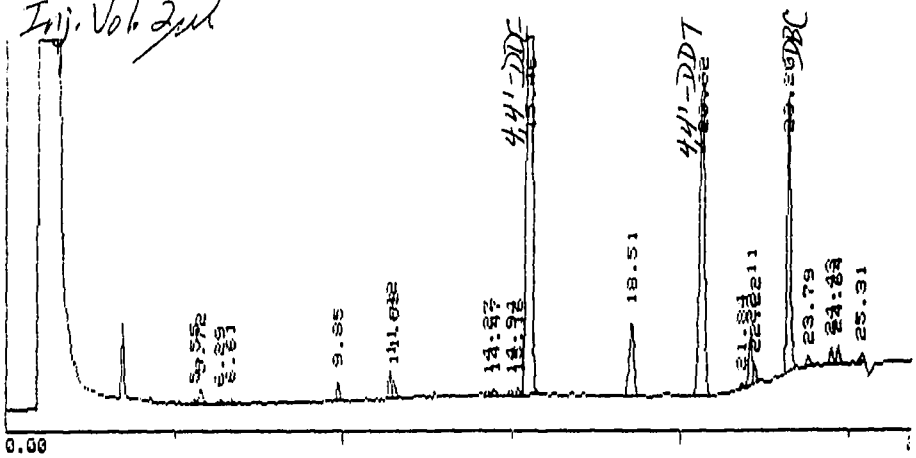
If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 1

608B5854.MOD ONLYDBC.FIL SETCAL.CFG PW = 6 PT = 100 OF = 5% AT = 12.

SAMPLE: 668-1-20 AT 01/25/90 10:18:35 FILENAME: DB-606B 30M FRO
DISK FILE: 608B5854.MOD PEAK WIDTH = 6 ATTENUATION

Inj. Vol. 2µl



DISK FILE: 608B5854.MOD FROM / 1.B/ INJECTED AT: 01/25/90 10:18:35

CH= PS= 1

FILE 1 METHOD 5 RUN 31 INDEX 30

NAME	CONC	RT	AREA	BC	RF
1	0.	3.55	1647	01	
2	0.	5.72	3740	01	
3	0.	6.29	2010	02	
4	0.	6.61	2532	03	
5	0.	9.85	5901	01	
6	0.	11.42	8180	02	
7	0.	11.53	5720	03	
8	0.	14.27	1899	02	
9	0.	14.47	2327	03	
10	0.	14.94	1835	02	
11	0.	15.16	2613	02	
12 p-p' DDE	0.	15.46	748522	03	
13	0.	18.51	40972	01	→ DDD (see-BCM 5/18/90)
14 p-p' DDT	0.	20.62	210835	03	
15	0.	21.84	2077	00	
16	0.	22.11	20130	00	
17	0.	22.22	6375	00	
DBC (surr)	0.	23.2	107162	00	
19	0.	23.79	3566	00	
20	0.	24.43	5063	00	
21	0.	24.64	6051	00	
22	0.	25.31	3611	00	
TOTAL	0.		1194770		

AR308376

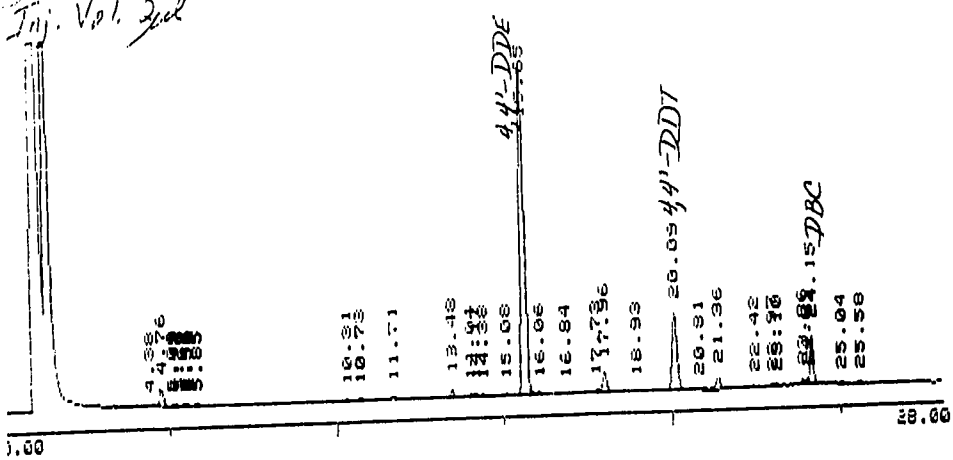
3 012

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 2

PLE: 566-1-60 AT 01/25/90 10:18:35 FILENAME: DB-5 30M FROM /1.A/
FILE: DB5A5548.MOD PEAK WIDTH = 6 ATTENUATION = 115.0

Inj. Vol. 2µl



DISK FILE: DB5A5548.MOD FROM / 1.A/ INJECTED AT: 01/25/90 10:18:35

CH= PS= 1

FILE 1 METHOD 0 RUN 2 INDEX 2

PEAK#		AREA%	RT	AREA BC
1		0.115	4.33	2833 01
2		2.053	4.76	50512 01
3		0.137	5.06	3429 02
4		0.216	5.15	5324 00
5		0.082	5.26	1998 03
6		0.173	5.46	4276 02
7		0.168	5.56	4126 03
8		0.203	5.85	4982 00
9		0.229	10.31	5647 01
10		0.267	10.73	6570 01
11		0.406	11.71	9979 01
12		0.988	13.48	24314 01
13		0.297	14.01	7330 02
14		0.352	14.17	8642 02
15		0.288	14.38	7108 03
16		0.179	15.08	4388 00
17	p-p' DDE	57.41	15.53	1417944 01
18		0.107	16.06	2625 01
19		0.11	16.84	2711 01
20		0.327	17.73	8038 02
21		4.025	17.96	99054 02
22		0.134	18.93	3304 01
23	p-p' DDT	18.852	20.09	463896 00
24		0.328	20.81	8078 02
25		2.687	21.36	66127 03
26		0.139	22.42	3411 01
27		0.167	22.97	4124 02
28		[illegible]	[illegible]	3304 03

AR308077

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

2 of 2

DB5A5548.MOD

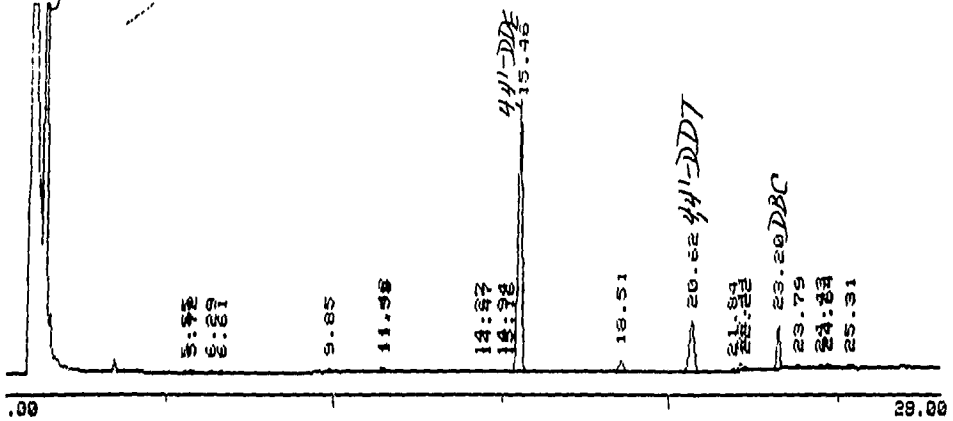
29	0.826	23.88	20379 02
30	0.575	24.01	14145 02
31	7.451	24.15	183364 03
32	0.168	25.04	4141 03
33	0.111	25.58	2725 01
TOTAL	100.		2460828

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 1

LE: 368-1-20 AT 01/25/90 10:18:35 FILENAME: DB-608B 30M FROM /1.B/
FILE: 608B5854.MOD PEAK WIDTH = 6 ATTENUATION = 80.0

Inj. Vol. 2ul



ISK FILE: 608B5854.MOD FROM / 1.B/ INJECTED AT: 01/25/90 10:18:35

CH= PS= 1

ILE 1 METHOD 0 RUN 1 INDEX 1

PEAK#		AREA%	RT	AREA	BC
1		0.136	5.55	1647	01
2		0.48	5.72	5740	01
3		0.169	6.29	2010	02
4		0.211	6.61	2532	03
5		0.494	9.85	5901	01
6		0.685	11.42	8180	02
7		0.479	11.53	5720	03
8		0.159	14.27	1899	02
9		0.194	14.47	2327	03
10		0.154	14.94	1835	02
11		0.219	15.16	2613	02
12	p-p' DDE	62.65	15.46	748522	03
13		3.427	18.51	40972	01
14	p-p' DDT	17.546	20.62	210835	03
15		0.174	21.84	2077	00
16		1.685	22.11	20130	00
17		0.534	22.22	6375	00
18	DBC (surr)	8.969	23.2	107162	00
19		0.299	23.79	3566	00
20		0.423	24.43	5063	00
21		0.507	24.64	6051	00
22		0.302	25.31	3611	00
TOTAL		100.		1194770	

AR308379

3 075

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

FILENAME IND A: DB5A5520.OUT
FILENAME IND B: DB5A5521.OUT

DB5A5548.MOD 1.A 01/25/90 10:18
INITIAL SAMPLE VOL 29.62
FINAL EXT VOL 20000
PERCENT MOISTURE 13.6
DILUTION FACTOR 1

NAME	RT	AREA	CONCENTRATION ug/KG
UNKNOWN	4.38	2833	
UNKNOWN	4.76	50512	
UNKNOWN	5.09	3429	
UNKNOWN	5.15	5324	
UNKNOWN	5.26	1998	
UNKNOWN	5.46	4276	
UNKNOWN	5.56	4126	
UNKNOWN	5.85	4982	
UNKNOWN	10.31	5647	
UNKNOWN	10.73	6570	
UNKNOWN	11.71	9979	
~~HEPTACHLOR EPOXIDE~~	13.48	24314	~~3.502~~ BDL
UNKNOWN	14.01	7330	
~~a-CHLORDANE~~	14.17	8642	~~1.285~~ ⊥
~~g-CHLORDANE~~	14.38	7108	~~1.055~~
UNKNOWN	15.08	4388	
p,p'-DDE	15.65	1417944	228.631 ✓
~~DIELDRIN~~	16.06	2625	~~0.425~~ BDL
~~ENDRIN~~	16.84	2711	~~0.458~~ ⊥ ← DDD - (DDT 2'down)
~~p,p'-DDD~~	17.73	8038	~~1.692~~ RRT off — std RRT to DB[illegible]
~~p,p'-DDT~~	17.96	99054	~~18.613~~ RRT to DF [illegible]
UNKNOWN	18.93	7304	
~~ENDOSULFAN SULFATE~~ p,p'-DDT	20.09	463896	~~147.795~~ 86.15 - p,p'DDT
UNKNOWN	20.81	8078	
UNKNOWN	21.36	66127	
UNKNOWN	22.42	3411	
UNKNOWN	22.97	4124	
~~METHOXYCHLOR~~	23.1	5304	~~0.850~~ BDL
UNKNOWN	23.86	20379	
UNKNOWN	24.01	14145	
DBC (surr)	24.15	153364	54.017 ✓
UNKNOWN	25.04	4141	
UNKNOWN	25.58	2725	

AR308380

3 076

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

FILENAME IND A: 60885826.OUT
FILENAME IND B: 60885827.OUT

60885854.MOD 1.B 01/25/90 10:18:35
INITIAL SAMPLE VOL 29.62
FINAL EXT VOL 20000
PERCENT MOISTURE 13.6
DILUTION FACTOR 1

NAME	RT	AREA	CONCENTRATION ug/KG	
UNKNOWN	5.55	1647		
UNKNOWN	5.72	5740		
UNKNOWN	6.29	2010		
UNKNOWN	6.61	2532		
UNKNOWN	9.85	5901		
~~ALDRIN B~~	11.42	8180	~~5.664~~	BDL
UNKNOWN	11.53	5720		
~~a-CHLORDANE~~	14.27	1899	~~0.787~~	⊥
~~a-CHLORDANE & ENDOSULFAN I~~	14.47	2327	~~2.177~~	
UNKNOWN	14.94	1835		
UNKNOWN	15.16	2613		
p,p'-DDE	15.46	748522	362.594	✓ RRT off
~~p,p'-DDD~~	18.51	40972	~~29.125~~	
~~p,p'-DDT~~ p-p' DDT	20.62	210835	~~124.995~~	124.995
~~ENDOSULFAN SULFATE~~	21.84	2077	~~1.918~~	BDL
UNKNOWN	22.11	20130		
UNKNOWN	22.22	6375		
DBC (surr)	23.2	107162	55.347	✓
UNKNOWN	23.79	7568		
~~METHOXYCHLOR~~	24.43	5063	~~1.479~~	BDL
~~METHOXYCHLOR~~	24.84	6051	~~5.742~~	⊥
UNKNOWN	25.31	7611		

RRT to DBC = 0.798
Std. RRT to DBC = 0.799
acc (BCM 5/15/90)

1/29/90

AR308381

3 077

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BCM21

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-1 SAS No.: SDG No.: BCM01

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 29. (g/mL) G Lab File ID: DB5A5549

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 15. dec. 0. Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 1/25/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	20.	U
72-55-9	4,4'-DDE	310.	
72-20-8	Endrin	20.	U
33213-65-9	Endosulfan II	20.	U
72-54-8	4,4'-DDD	20.	U
1031-07-8	Endosulfan sulfate	20.	U
50-29-3	4,4'-DDT	99.	
72-43-5	Methoxychlor	100.	U
53494-70-5	Endrin ketone	20.	U
5103-71-9	alpha-Chlordane	100.	U
5103-74-2	gamma-Chlordane	100.	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Aroclor-1016	100.	U
11104-28-2	Aroclor-1221	100.	U
11141-16-5	Aroclor-1232	100.	U
53469-21-9	Aroclor-1242	100.	U
12672-29-6	Aroclor-1248	100.	U
11097-69-1	Aroclor-1254	200.	U
11096-82-5	Aroclor-1260	200.	U

AR308382

FORM I PEST 1/87 Re

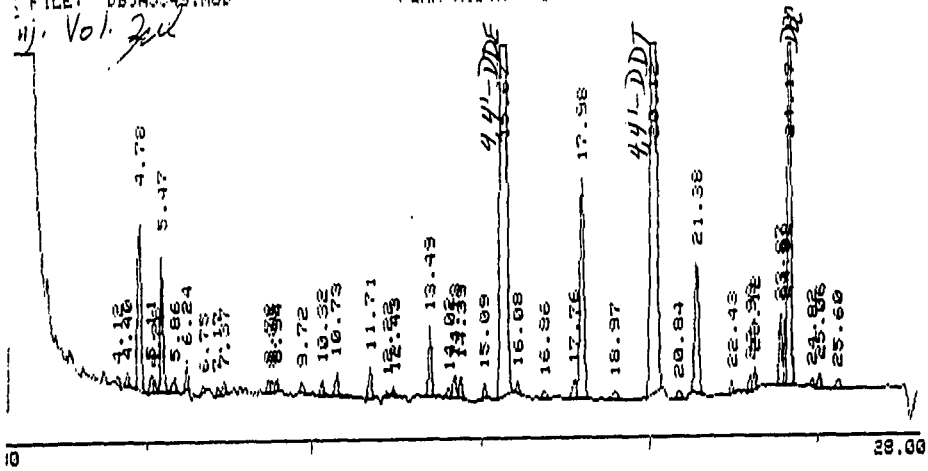
If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 2

5549.MOD ONLYDBC.FIL SETCAL.CFG FW = 6 FT = 100 OF = 8% AT = 12.

E: 968-1-21 AT 01/25/90 10:53:50 FILENAME: DB-5 30M FROM /1.A/
FILE: DB5A5549.MOD PEAK WIDTH = 6 ATTENUATION = 12.0

Vol. 2



FILE: DB5A5549.MOD FROM / 1.A/ INJECTED AT: 01/25/90 10:53:50

CH= PS= 1

LE 1 METHOD 5 RUN 32 INDEX 31

ME		CONC	RT	AREA	BC	RF
		0.	4.12	3263	01	
		0.	4.4	4305	01	
		0.	4.78	52740	01	
4		0.	5.11	8565	02	
5		0.	5.26	3409	02	
6		0.	5.47	44058	03	
7		0.	5.86	5949	01	
8		0.	6.24	7347	00	
9		0.	6.75	1583	03	
0		0.	7.17	3644	02	
1		0.	7.37	5171	02	
2		0.	8.72	3799	02	
3		0.	8.6	3276	02	
4		0.	8.94	3975	03	
5		0.	9.72	3115	00	
6		0.	10.32	5921	02	
7		0.	10.73	8446	03	
8		0.	11.71	3702	01	
9		0.	12.22	1385	02	
		0.	12.43	1917	00	
		0.	13.49	21762	03	
22		0.	14.02	3867	00	
23		0.	14.18	9642	02	
24		0.	14.39	8577	03	
25		0.	15.09	5390	01	
26	p-p' DDE	0.	15.67	1791044	01	
			[illegible]	[illegible]	[illegible]	

AR306989

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

2 of 2

DBSA5549.MOD

28	0.	16.86	3594 01
29	0.	17.76	8829 02
30	0.	17.98	114063 03 → DDD (CE[illegible] 5/15/9[illegible]
31	0.	18.97	4615 01
32 p-p' DDT	0.	20.12	522519 00
33	0.	20.84	4763 02
34	0.	21.38	67349 03
35	0.	22.43	4087 01
36	0.	22.99	5343 02
37	0.	23.12	6790 03
38	0.	23.87	21997 02
39	0.	24.02	20893 02
DBC (surr)	0.	24.17	236915 03
41	0.	24.62	2669 02
42	0.	25.06	5426 03
43	0.	25.6	3565 01
TOTAL	0.		3058096

3 0

AR308384

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

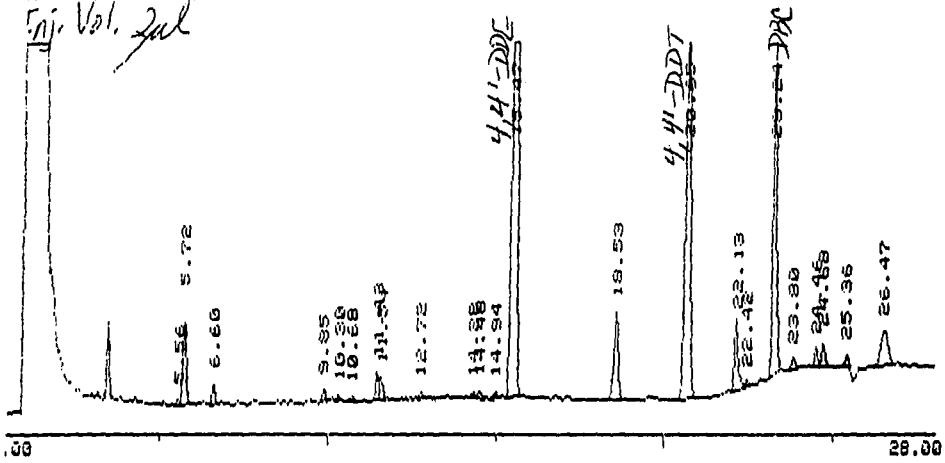
1 of 1

85855.MOD ONLYDBC.FIL SETCAL.CFG FW = 6 FT = 100 OF = 5% AT = 12.

E: 368-1-21 AT 01/25/90 10:53:50 FILENAME: DB-608B 30M FROM /1.B/

FILE: 60885855.MOD PEAK WIDTH = 6 ATTENUATION = 12.0

Inj. Vol. 2ul



SK FILE: 60885855.MOD FROM / 1.B/ INJECTED AT: 01/25/90 10:53:50

CH= PS= 1

ILE 1 METHOD 5 RUN 32 INDEX 31

AME		CONC	RT	AREA	SC	RF
1		0.	5.56	1957	02	
2		0.	5.72	29776	03	
3		0.	6.6	7043	01	
4		0.	9.85	3976	01	
5		0.	10.3	1296	03	
6		0.	10.68	1131	01	
7		0.	11.43	8561	02	
8		0.	11.54	7382	03	
9		0.	12.72	2087	01	
10		0.	14.28	2218	02	
11		0.	14.48	2753	03	
12		0.	14.54	2524	02	
13	p-p' DDE	0.	15.47	346452	00	
14		0.	16.33	47265	01	→ DDD (CEL-Bcm) 5/15/90
15	p-p' DDT	0.	20.83	242443	00	
16		0.	21.13	7315	02	
17		0.	22.42	2086	03	
18C	(surr)	0.	23.24	140214	00	
19		0.	23.8	5067	01	
20		0.	24.46	6543	02	
21		0.	24.68	9656	03	
22		0.	25.36	4633	01	
23		0.	26.47	33700	03	
TOTAL		0.		1542309		

AR308385

3 081

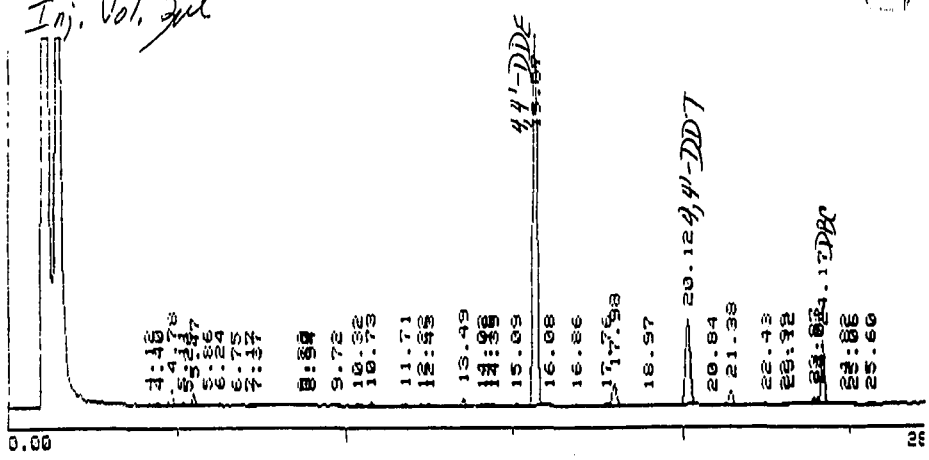
If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 2

SAMPLE: 868-1-21 AT 01/25/90 10:53:50 FILENAME: DB-5 30M FROM /1.A

DISK FILE: DB5A5549.MOD PEAK WIDTH = 6 ATTENUATION [illegible]

Inj. Vol. 2ul



DISK FILE: DB5A5549.MOD FROM / 1.A/ INJECTED AT: 01/25/90 10:53:50

CH= FS= 1

FILE 1 METHOD 0 RUN 3 INDEX 3

PEAK#		AREA%	RT	AREA	BC
1		0.107	4.12	7263	01
2		0.14	4.4	4305	01
3		1.725	4.78	52740	01
4		0.28	5.11	8563	02
5		0.112	5.26	3409	02
6		1.44	5.47	44058	03
7		0.193	5.86	5949	01
8		0.24	6.24	7347	00
9		0.052	6.73	1583	03
10		0.119	7.17	3644	02
11		0.169	7.37	5171	02
12		0.124	8.72	3799	02
13		0.107	8.8	3276	02
14		0.13	8.94	3975	03
15		0.102	9.72	3115	00
16		0.194	10.32	5921	02
17		0.175	10.77	5446	03
18		0.285	11.71	8702	01
19		0.045	12.22	1385	02
20		0.062	12.43	1917	00
21		0.711	13.49	21762	03
22		0.127	14.02	3867	00
23		0.315	14.18	9642	02
24		0.28	14.39	8577	03
25		0.177	15.09	5390	01
26	p-p' DDE	58.367	15.87	1791044	01
27		0.125	16.08	3827	01
28		0.119	16.36	3594	01

AR308386

3 of 3

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

2 of 2

DB5A5549.MOD

9	0.288	17.76	8829 02
0	3.73	17.98	114063 03
	0.151	18.97	4615 01
p-p' DDT	17.087	20.12	522519 00
3	0.155	20.84	4763 02
4	2.203	21.38	67349 03
5	0.133	22.43	4087 01
6	0.175	22.99	5343 02
7	0.222	23.12	6790 03
8	0.719	23.87	21997 02
9	0.684	24.02	20893 02
10	7.747	24.17	236915 03
11	0.087	24.82	2669 02
12	0.177	25.06	5426 03
13	0.117	25.6	3565 01
TAL	100.		3058096

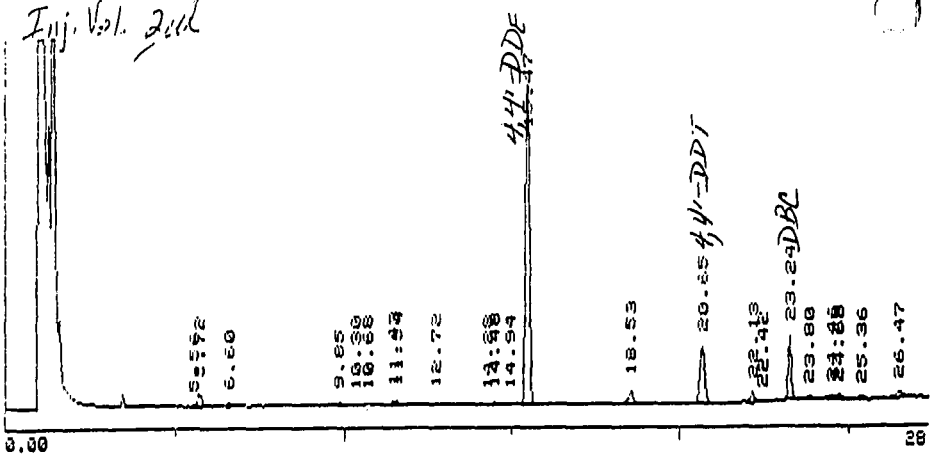
AR308387
3 083

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1 of 1

SAMPLE: 868-1-21 AT 01/25/90 10:53:50 FILENAME: DB-608B 30M FROM /1.B/
DISK FILE: 60885855.MOD PEAK WIDTH = 6 ATTENUATION = 80.0

Inj. Vol. 2ul



DISK FILE: 60885855.MOD FROM / 1.B/ INJECTED AT: 01/25/90 10:53:50

CH= PS= 1

FILE 1 METHOD 0 RUN 2 INDEX 2

PEAK#	AREA%	RT	AREA	SC
1	0.127	5.56	1957	02
2	1.93	5.72	29776	03
3	0.457	6.6	7043	01
4	0.256	9.85	3976	01
5	0.084	10.3	1296	03
6	0.073	10.68	1131	01
7	0.555	11.43	8561	02
8	0.479	11.94	7382	03
9	0.135	12.72	2087	01
10	0.144	14.28	2218	02
11	0.181	14.48	2783	03
12	0.163	14.94	2524	02
13	61.496	15.47	948452	00
14	3.064	16.53	47265	01
15	15.72	20.85	242443	00
16	2.043	22.13	31516	02
17	0.458	22.42	7066	03
18	9.091	23.24	140214	00
19	0.328	23.6	5067	01
20	0.424	24.46	6543	02
21	0.627	24.88	9656	03
22	0.3	25.36	4633	01
23	2.185	26.47	33700	03
TOTAL	100.		1542309	

AR308388

3 of 3

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

FILENAME IND A: DB5A5520.OUT
FILENAME IND B: DB5A5521.OUT

DB5A5549.MOD 1.A 01/25/90 10:53
INITIAL SAMPLE VOL 29.43
FINAL EXT VOL 20000
PERCENT MOISTURE 15.06
DILUTION FACTOR 1

NAME	RT	AREA	CONCENTRATION ug/KG	
UNKNOWN	4.12	3263		
UNKNOWN	4.4	4305		
UNKNOWN	4.78	52740		
UNKNOWN	5.11	8565		
UNKNOWN	5.26	3409		
UNKNOWN	5.47	44058		
UNKNOWN	5.86	5949		
UNKNOWN	6.24	7347		
UNKNOWN	6.75	1583		
UNKNOWN	7.17	3644		
UNKNOWN	7.37	5171		
UNKNOWN	8.72	3799		
~~b-BHC~~	8.8	3276	~~0.819~~	BDL
~~b-BHC~~	8.94	3975	~~0.993~~	
~~b-BHC~~	9.72	3115	~~0.428~~	
UNKNOWN	10.32	5921		
UNKNOWN	10.73	5446		
UNKNOWN	11.71	6702		
~~ALDRIN A~~	12.22	1385	~~0.214~~	
UNKNOWN	12.43	1917		
~~HEPTACHLOR EPOXIDE~~	13.49	21762	~~0.282~~	
UNKNOWN	14.02	3867		
~~a-CHLORDANE~~	14.18	9642	~~1.466~~	
~~g-CHLORDANE~~	14.39	8577	~~1.304~~	
UNKNOWN	15.09	5390		
0.0 -DDE	15.67	1791044	308.581 ✓	
~~DIELDRIN~~	16.08	3827	~~0.632~~	BDL
~~ENDRIN~~	16.86	3594	~~0.613~~	
~~p,p'-DDD~~	17.76	5829	~~1.790~~	
~~p,p'-DDD~~	17.98	114063	~~23.127~~	RRT off
UNKNOWN	18.97	4615		
~~ENDOSULFAN SULFATE~~ 0.0 -DDT	20.12	522519	~~172.627~~	[redacted]
UNKNOWN	20.84	4763		
UNKNOWN	21.38	67349		
~~ENDRIN KETONE~~	22.43	4087	~~0.687~~	BDL
~~METHOXYCHLOR~~	22.99	5343	~~2.328~~	
METHOXYCHLOR	23.12	6790	~~2.759~~	
UNKNOWN	23.87	21997		
UNKNOWN	24.02	20893		
DBC (surr)	24.17	236915	71.451 ✓	
UNKNOWN	24.82	2669		
UNKNOWN	25.06	5426		
UNKNOWN	25.6	3565		

RRT to DBC = 0.744
Std. RRT to DBC = 0.737
CEC (BLM 5/15/90)

p-p' DDT - 172.6

AR308385

1/29/90

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

FILENAME IND A: 60885826.OUT
FILENAME IND B: 60885827.OUT

60885855.MOD 1.B 01/25/90 10:53:50
INITIAL SAMPLE VOL 29.43
FINAL EXT VOL 20000
PERCENT MOISTURE 15.06
DILUTION FACTOR 1

NAME	RT	AREA	CONCENTRATION ug/KG	
UNKNOWN	5.56	1957		
UNKNOWN	5.72	29776		
UNKNOWN	6.6	7043		
UNKNOWN	9.85	3976		
~~HEPTACHLOR~~	10.3	1296	~~0.492~~	BDL
~~d-BHC~~	10.68	1131	~~0.649~~	
~~ALDRIN B~~	11.43	8561	~~3.926~~	
UNKNOWN	11.54	7382		
UNKNOWN	12.72	2087		
~~a-CHLORDANE~~	14.28	2218	~~0.944~~	
~~a-CHLORDANE & ENDOSULFAN I~~	14.48	2783	~~2.668~~	
UNKNOWN	14.94	2524		
p,p'-DDE	15.47	948452	470.357	✓
~~p,p'-DDD~~	18.53	47265	~~54.750~~	
~~p,p'-DDT~~	20.65	242443	~~147.148~~	
UNKNOWN	22.13	31516		
UNKNOWN	22.42	2086		
DBC (surr)	23.24	140214	78.156	✓
UNKNOWN	23.8	5067		
~~METHOXYCHLOR~~	24.46	6543	~~5.913~~	BDL
~~ENDRIN KETONE~~	24.68	9656	~~4.198~~	
UNKNOWN	25.36	4633		
UNKNOWN	26.47	33700		

RRT to DBC = 0.79
Std RRT to DBC = 0.7
cc (Bcm.51

P-p' DDT 147.2

KHH 1/29/90

AR308390
3

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

APPENDIX C

AR308391

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chem-Solv

Sampling Date(s) Dec. 1989

BCM Project No. 03-6012-02

Date Review Completed

Field ID CSB-6, CSB-7, CSB-11, CSB-12

Reviewer CEC

Telephone No.

MATRIX	CONCENTRATION low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	✓			
aqueous	✓			Field and Trip blanks only
other				

ICP	OK	FYI	ACTION	COMMENTS
Holding Time	✓			
Calibration Blanks			✓	Potassium results questioned
Initial Calibration	✓			
Continuing Calibration	✓			
Preparation Blank			✓	Iron in BCM 002, 003, 004, 012, [illegible]
Interference Check Sample	✓			
Lab Control Sample	✓			
Lab Duplicate	✓			
Matrix Spike			✓	Antimony biased low
Serial Dilution			✓	Calcium estimated

AR308392

REVIEWER'S COMMENTS:

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chem-Solv
Sampling Date(s) Dec. 1999
BCM Project No. 00-6002-02
Date Review Completed May, 1990
Field ID CSB-6, CSB-7, CSB-11, CSB-12
Reviewer [illegible]
Telephone No.

CONCENTRATION

MATRIX	low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	✓			
aqueous	✓			Trip and field blanks only
other				

FURNACE	OK	FYI	ACTION	COMMENTS
Holding Time	✓			
Calibration Blanks	✓			
Initial Calibration	✓			
Continuing Calibration	✓			
Preparation Blank	✓			
Lab Control Sample	✓			
Lab Duplicate	✓			
Matrix Spike	✓			
Duplicate Injections	✓			
Analytical Spike	✓			

AR308393

REVIEWER'S COMMENTS:

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chem-Solv
Sampling Date(s) Dec. 1989
BCM Project No. 60-6012-02
Date Review Completed May, 1990
Field ID CSB-6, CSB-7, CSB-11, CSB-12
Reviewer CEC
Telephone No.

MATRIX	CONCENTRATION low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	✓			
aqueous	✓			Trip + field blanks only.
other				

MERCURY & CYANIDE	OK	FYI	ACTION	COMMENTS
Holding Time	✓			
Calibration Blank	✓			
Initial Calibration	✓			
Continuing Calibration	✓			
Preparation Blank		✓		Hg → PBS-1750 not on record; CN → no prep blank on 12/22 + 12
Lab Duplicate	✓			
Matrix Spike	✓			

REVIEWER'S COMMENTS: LCS not distilled w/CN sample 12/22 detection limits estimated.

AR308394

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM014

Lab Name: IEA, INC. Contract:

Lab Code: IEA Case No.: SAS No.: SDG No.: BCM001

Matrix (soil/water): SOIL Lab Sample ID: 868-2-14

Level (low/med): LOW Date Received: 12/20/89

% Solids: 86.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12500		*	P
7440-36-0	Antimony	9.2	U	N	P
7440-38-2	Arsenic	7.9			F
7440-39-3	Barium	109			P
7440-41-7	Beryllium	0.16	U		P
7440-43-9	Cadmium	0.73	U		P
7440-70-2	Calcium	1070	B	E	P
7440-47-3	Chromium	12.0			P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	10.4			P
7439-89-6	Iron	10100			P
7439-92-1	Lead	80.0			P
7439-95-4	Magnesium	879	B		P
7439-96-5	Manganese	242			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	4.8	B		P
7440-09-7	Potassium	3900	B		P
7782-49-2	Selenium	0.34	B		F
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	31.7	B		P
7440-28-0	Thallium	0.22	U		F
7440-62-2	Vanadium	16.6			P
7440-66-6	Zinc	91.9			P
	Cyanide	1.1	U		C

781

CEC-BCM 6/22/90

lor Before: BLACK Clarity Before: Texture: FINE

lor After: LT.YELLOW Clarity After: Artifacts: NO

mments:
CLIENT ID = CSB-11(0.5-2)

AR308395

FORM I - IN 7/88

1 015

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BCM015

Lab Name: IEA, INC. Contract:

Lab Code: IEA Case No.: SAS No.: SDG No.: BCM0(

Matrix (soil/water): SOIL Lab Sample ID: 868-2-15

Level (low/med): LOW Date Received: 12/20/89

% Solids: 84.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11300		*	P
7440-36-0	Antimony	9.3	U	N	P
7440-38-2	Arsenic	8.2			F
7440-39-3	Barium	97.2			P
7440-41-7	Beryllium	0.16	U		P
7440-43-9	Cadmium	0.74	U		P
7440-70-2	Calcium	979	B	E	P
7440-47-3	Chromium	10.8			P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	11.4			P
7439-89-6	Iron	9270			P
7439-92-1	Lead	69.6			P
7439-95-4	Magnesium	891	B		P
7439-96-5	Manganese	258			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	6.8	B		P
7440-09-7	Potassium	3520	B		P
7782-49-2	Selenium	0.26	U		F
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	34.6	B		P
7440-28-0	Thallium	0.22	U		F
7440-62-2	Vanadium	16.4			P
7440-66-6	Zinc	83.4			P
	Cyanide	1.1	U		C

703

Color Before: BLACK Clarity Before: Texture: FIN

Color After: LT.YELLOW Clarity After: Artifacts: NO

Comments:
CLIENT ID = CSB-11D(0.5-2)

AR308396

FORM I - IN

10

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

1

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BCM016

Lab Name: IEA, INC. Contract:

Lab Code: IEA Case No.: SAS No.: SDG No.: BCM001

Matrix (soil/water): SOIL Lab Sample ID: 868-2-16

Level (low/med): LOW Date Received: 12/20/89

% Solids: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16200		*	P
7440-36-0	Antimony	8.1	U	N	P
7440-38-2	Arsenic	0.67	B		F
7440-39-3	Barium	37.5	B		P
7440-41-7	Beryllium	0.14	U		P
7440-43-9	Cadmium	0.65	U		P
7440-70-2	Calcium	270	B	E	P
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt	4.5	B		P
7440-50-8	Copper	2.0	B		P
7439-89-6	Iron	7860			P
7439-92-1	Lead	5.3			F
7439-95-4	Magnesium	347	B		P
7439-96-5	Manganese	173			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.6	U		P
7440-09-7	Potassium	2200	B		P
7782-49-2	Selenium	0.26	U		F
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	38.1	B		P
7440-28-0	Thallium	0.22	U		F
7440-62-2	Vanadium	13.4			P
7440-66-6	Zinc	12.5			P
	Cyanide	1.1	U		C

451 aec 6/22/91 (BCM)

lor Before: BROWN Clarity Before: Texture: MED

lor After: LT.YELLOW Clarity After: Artifacts: NO

AR308397

ments:
LIENT ID = CSB-11(6-8)

FORM I - IN 7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

9

ICP SERIAL DILUTIONS

SAMPLE NO.

BCM005

Lab Name: IEA, INC. Contract:

Lab Code: IEA Case No.: SAS No.: SDG No.: BCM00

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	71638.00		75870.00		5.9		P
Antimony	40.10	U	200.50	U			P
Arsenic							
Barium	134.42	B	136.36	B	1.4		P
Beryllium	0.70	U	4.34	B			P
Cadmium	3.20	U	16.00	U			P
Calcium	1241.60	B	1373.60	B	10.6	E	P
Chromium	40.14		35.22	B	12.3		P
Cobalt	18.76	B	53.50	U	100.0		P
Copper	17.46	B	19.50	U	100.0		P
Iron	43743.00		44854.00		2.5		P
Lead							
Magnesium	2122.10	B	2236.40	B	5.4		P
Manganese	405.84		410.36		1.1		P
Mercury							
Nickel	38.05	B	90.00	U	100.0		P
Potassium	2378.80	B	3370.00	U	100.0		P
Selenium							
Silver	5.90	U	29.50	U			P
Sodium	86.85	B	389.00	U	100.0		P
Thallium							
Vanadium	78.41		92.42	B	17.9		P
Zinc	67.14		79.19	B	17.9		P

Calcium results are estimated. CEC 5/15/90

AR308398

FORM IX - IN 7/88

1

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

ENVIROFORMS/CLP 788

5A
SPIKE SAMPLE RECOVERY

SAMPLE NO.

BCM005S

Lab Name: IEA, INC. Contract:

Lab Code: IEA Case No.: SAS No.: SDG No : BCM001

Matrix (soil/water): SOIL Level (low/med): LOW
% Solids for Sample: 88.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	35.2746		8.7883	U	107.49	32.8	N	P
Arsenic	75-125	8.9986		1.5999	B	8.21	90.1		F
Barium	75-125	421.8209		29.4593	B	429.97	91.3		P
Beryllium	75-125	8.6265		0.1534	U	10.75	80.2		P
Cadmium	75-125	9.1405		0.7013	U	10.75	85.0		P
Calcium									NR
Chromium	75-125	48.4037		8.7973		43.00	92.1		P
Cobalt	75-125	102.3068		4.1103	B	107.49	91.4		P
Copper	75-125	53.5548		3.6267	B	53.75	92.5		P
Iron									NR
Lead	75-125	11.3477		6.9583		4.10	106.6		F
Magnesium									NR
Manganese	75-125	190.2311		88.9434		107.49	94.2		P
Mercury	75-125	0.0891		0.0167	U	0.09	99.0		CV
Nickel	75-125	101.9091		8.3381	B	107.49	87.1		P
Potassium									NR
Selenium	75-125	1.3800		0.2630	U	1.80	76.7		F
Silver	75-125	9.8091		1.2930	U	10.75	91.2		P
Sodium									NR
Thallium	75-125	9.6963		0.2192	U	10.26	94.5		F
Vanadium	75-125	113.6451		17.1836		107.49	89.7		P
Zinc	75-125	110.6675		14.7154		107.49	89.3		P
Cyanide	75-125	10.2991		1.0958	U	10.76	95.7		C

Reported detection limits for antimony for soil samples are biased low. CEC 5/15/90

Comments:

AR308399

1 03

FORM V (PART 1) - IN 7/88

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chemisolv
Sampling Date(s) February, 1990
BCM Project No. 00-6012-03
Date Review Completed June, 1990
Field ID CSB-8, CSB-9, and CSB-10
Reviewer M. Kudlesky
Telephone No. (215) 825-3800

CONCENTRATION

MATRIX	low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	X			
aqueous				
other				

ICP	OK	FYI	ACTION	COMMENTS
Holding Time		✓		BCM031, BCM032, BCM040, and BCM041 preserved to pH 3
Calibration Blanks			✓	Ba, Be, Fe, K
Initial Calibration	✓			
Continuing Calibration	✓			
Preparation Blank			✓	Ca
Interference Check Sample	✓			
Lab Control Sample	✓			
Lab Duplicate	✓			
Matrix Spike	✓			
Serial Dilution			✓	Zinc %D = 11.7

REVIEWER'S COMMENTS:

AR308400

Lead was analyzed by ICP. The detection limits were not met since the IDL is 10 times the CRDL. All lead data are unusable.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chem Solv
Sampling Date(s) February, 1990
BCM Project No. 00-6012-02
Date Review Completed June, 1990
Field ID CSB-8, CSB-9, and CSB-10
Reviewer M. Kudirka
Telephone No. (215) 825-3800

CONCENTRATION

MATRIX	low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	X			
aqueous				
other				

FURNACE	OK	FYI	ACTION	COMMENTS
Holding Time		✓		BCM031, BCM040, BCM032, and BCM041 preserved to pH 3.
Calibration Blanks	✓			
Initial Calibration	✓			
Continuing Calibration	✓			
Preparation Blank	✓			
Lab Control Sample	✓			
Lab Duplicate	✓	✓		Pb Dup missing
Matrix Spike	✓	✓		Pb spike missing
Duplicate Injections	✓			
Analytical Spike	✓			

AR308401

REVIEWER'S COMMENTS:

GFFA Lead data was incomplete. Results were reported from the ICP analyses.

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chem Solv
BCM Project No. CO-6012-02
Field ID CSB-8, CSB-9, and CSB-10

Sampling Date(s) February, 1990
Date Review Completed June, 1990
Reviewer M. Kudlesky
Telephone No. (215) 825-3800

CONCENTRATION

MATRIX	low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	X			
aqueous				
other				

MERCURY & CYANIDE	OK	FYI	ACTION	COMMENTS
Holding Time		✓		BCM031, 032, 040, & 041 preserved to pH 3.
Calibration Blank	✓			
Initial Calibration			✓	Samples prepared on 3/2/90 & 3/5/90 were not distilled with an ICV
Continuing Calibration	✓			
Preparation Blank		✓		CN prep. blank not prepared 3/2/90 & 3
Lab Duplicate	✓			
Matrix Spike	✓			

AR308402

REVIEWER'S COMMENTS:

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

BCM

BCM ENGINEERS, INC.
INORGANIC DATA VALIDATION SUMMARY

Project Name Chem-Solv Sampling Date(s) February, 1990

BCM Project No. 00-6012-02 Date Review Completed July, 1990

Field ID CSB-8(0.5-2), CSB-8D(0.5-2) Reviewer C.E. Casselberry

CSB-8(2-4), Trip Blank (2/22), Field Blank Telephone No. (215) 825-3800
(2/22), CSB-9(2-4), CSB-9(4-5.5), CSB-10(2-4), CSB-10(0.5-2),
Field Blank (2/27), Trip blank (2/27)

CONCENTRATION

MATRIX	low	med	high	MAXTRIX RELATED COMMENTS
soil/solid	X			
aqueous	X			Trip and field blanks
other				

FURNACE	OK	FYI	ACTION	COMMENTS
Holding Time	✓			
Calibration Blanks	✓			
Initial Calibration	✓			
Continuing Calibration	✓			
Preparation Blank	✓			
Lab Control Sample	✓			
Lab Duplicate	✓			
Matrix Spike	✓			
Duplicate Injections	✓			
Analytical Spike	✓			

AR308403

REVIEWER'S COMMENTS:

Lead Reanalysis Case 868-3, SDG BCM028

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

5120 Butler Pike
Plymouth Meeting
Pennsylvania 19462
215-825-3000
Fax 215-834-0234

RECEIVED
JAN 3 1990

Woodward-Clyde Consultants

PROJECT FILE# 00-6012-02
CC: Bonaker
Marsh

January 2, 1990
89C2906

BCM Engineers
One Plymouth Meeting
Plymouth Meeting, Pennsylvania 19462

Attention: Ms. Peg Bonaker

Re: Laboratory Test Results
Chem-Solv, Inc.

Gentlemen:

Woodward-Clyde Consultants (WCC) is pleased to present herewith the resul of the soil testing that you requested.

A Shelby tube sample was delivered to our laboratory by BCM on Decemb 22, 1989. The sample was marked "CSB-1 (22-24) CHEM-SOLV., Inc." Your project numb for this is 00-6012-02. As per your request, a vertical permeability test and a grain-si determination of the soil sample was conducted. The grain-size curve is attached. T permeability test was conducted using our WCC-designed "closed-loop, constant-volum variable-head" triaxial permeameter system. Results are as follows.

Natural Water Content	=	39.7%
Dry Density	=	78.5 pcf
Effective consolidation pressure used	=	0.5 tsf
Coefficient of permeability	=	1.54×10^{-6} cm/sec

If you have any questions, or if we can be of further service, please call.

Very truly yours,

WOODWARD-CLYDE CONSULTANTS

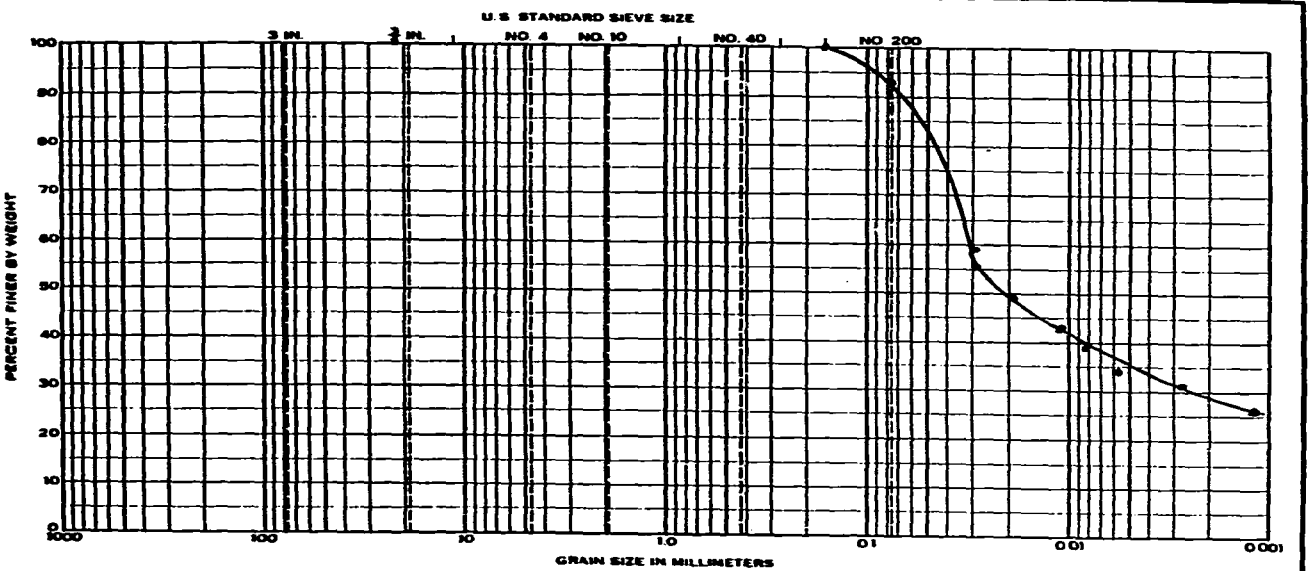
Enrique N. Manuel
Enrique N. Manuel
Laboratory Director

ENM/tjr/22D

Attachment

AR308404

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.



Sample No.	Elev or Depth	Classification	Nat WC	LL	PL	PI
CSB-1	227'	Tan Clayey Silt, Trace Sand	--	--	--	--

Project BCM: Engineer

Date 1/3/90

GRADATION CURVES

Woodward-Clyde Consultants

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK40

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 0227D02

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 100. dec.____ Date Extracted: 2/25/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 2/28/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	Substituted Phenol	19.75	8.	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR308406

FORM I SV-TIC 1/87 Rev

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Lab File ID: 0302409 (S BIK 42) Lab Sample ID:

Date Extracted: 3/ 1/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 3/ 2/90 Time Analyzed: 18:04

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

Instrument ID: EXTR4

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BCM30		0302402	3/ 2/90
2	BCM36		0302403	3/ 2/90
3	BCM37		0302404	3/ 2/90
4	BCM38		0302405	3/ 2/90
5	BCM28		0302410	3/ 2/90
6	BCM29		0302411	3/ 2/90
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: NoTCL Hits

AR308407

page 1 of 1 4 TICs.

FORM IV SV 1/87 Rev.

UNK Ketone RT: 16.28 Est. conc: 500

UNK 16.42 200

UNK 29.15 [illegible]

2 007

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK42

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0302409

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/ 2/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN KETONE	10.28	500.	J
2. - -	UNKNOWN	10.42	200.	J
3. - -	UNKNOWN	29.15	200.	J
4. - -	UNKNOWN	37.93	400.	J
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR3084

FORM I SV-TIC

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Lab File ID: 0319413 (SBK43) Lab Sample ID:

Date Extracted: 3/ 1/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 3/19/90 Time Analyzed: 20:34

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

Instrument ID: EXTR4

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	BCM39		0319408	3/19/90
2	BCM39MS		0319409	3/19/90
3	BCM39MSD		0319410	3/19/90
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: No TCL Hits

1 TIC: unk Ketone (RT: 10.20) est. conc: 100. ppb

AR308409

FORM IV SV 1/87 Rev.

2 009

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK43

Lab Name: IEA Contract: 68-W8-0045

Lab Code: IEA Case No.: 868-3 SAS No.: SDG No.: BCM28

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0319413

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 3/ 1/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 3/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN KETONE	10.20	100.	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

AR300410

FORM I SV-TIC 1/87 Re

If the page filmed in this frame is not as readable or legible as this label, it is due to substandard color or condition of the original page.