205255

SITE INVESTIGATION

PAPERBOARD SPECIALTIES, INC.

PATERSON, PASSAIC COUNTY

EPA ID NO.: NJD147427843

VOLUME 2 OF 3

New Jersey Department of Environmental Protection
Division of Publicly Funded Site Remediation
Environmental Measurements and Site Assessment Section

ATTACHMENT W

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028
Tel. # 609-633-7141
Fax. # 609-777-4285

Karl J. Delaney
Director

Scott A. Weiner
Commissioner

NOV 19 1991

IN THE MATTER OF
CHINA NATIONAL PACKAGING
CORPORATION OF BEIJING, INC.,
OF THE PEOPLES REPUBLIC OF
CHINA, CHIN AM, INC. AND
PAPERBOARD SPECIALTIES OF
PATERSON, INC.

NOTICE OF VIOLATION
AND
OFFER OF SETTLEMENT

ECRA CASE #85317

This NOTICE OF VIOLATION AND OFFER OF SETTLEMENT is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection and Energy (hereinafter "NJDEPE") by N.J.S.A. 13:1D-1 et seq. and the Environmental Cleanup Responsibility Act, ("ECRA") N.J.S.A. 13:1K-6 et seq., and duly delegated to the Assistant Director, Industrial Site Evaluation Element of the Division of Responsible Party Site Remediation pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. Chin Am, Inc., a New Jersey Corporation, operated a recycling cardboard manufacturing facility located at 177-302 Third Avenue and 186-218 Third Avenue, Paterson City, Passaic County; said site being formerly owned by Chin Am, Inc.; said site being currently owned and operated by Paperboard Specialties of Paterson, Inc., said site being further known as Blocks 428, 429, 445, 454, Lot 1; on the tax map of the City of Paterson ("Paterson facility" or "the Site"). The Standard Industrial Classification ("SIC") number which best described the operations at the Paterson facility is 2631. Furthermore, hazardous substances or wastes as defined by ECRA were utilized during at the Paterson facility. The Paterson facility is an Industrial Establishment as defined by ECRA.

2. On or about September 10, 1985, Berles Carton Co. entered into an agreement to sell the real property at the Paterson facility to the China National Packaging Corporation of Beijing, Inc., of the Peoples Republic of China ("China National Corporation"). It was designated that upon completion of the aforementioned transaction, Chin Am, Inc., a wholly-owned

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subsidiary of the China National Corporation, would own and operate the Paterson facility.

3. On January 2, 1986, Chin Am, Inc., China National Corporation and NJDEPE entered into an Administrative Consent Order ("CHC ACO") which allowed the above described sale to be consummated prior to the completion of all the ECRA requirements, and specified a time schedule for completion of ECRA requirements by the Paterson facility (ECRA Case #85317). Chin Am, Inc., China National Corporation and NJDEPE expressly agreed that the sale of the Paterson facility was subject to ECRA.

4. On or about September 29, 1989, Chin Am, Inc. entered into an agreement to sell its business assets and the real property at the Paterson facility to Paperboard Specialties of Paterson, Inc. ("Paperboard Specialties"). Pursuant to the Agreement, upon completion of the aforementioned transaction, Paperboard Specialties would own and operate at the Paterson facility. Additionally, in Section 7 of the Agreement, Paperboard Specialties agreed to assume and perform Chin Am, Inc.'s responsibilities and obligations under ECRA.

5. On December 16, 1989, Chin Am, Inc., China National Corporation and NJDEPE entered into an Amendment to the above referenced Administrative Consent Order ("CHC AMENDMENT") which allowed the sale described in Paragraph 4 of this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT to be consummated prior to the completion of all the ECRA requirements, and specified a time schedule for completion of ECRA requirements for the Paterson facility. Chin Am, Inc., China National Corporation and NJDEPE expressly agreed that the sale of the Paterson facility was subject to ECRA. Chin Am, Inc., China National Corporation and Paperboard Specialties expressly agreed that execution of the CHC AMENDMENT would not release Chin Am, Inc. and/or China National Corporation from any penalties accruing as detailed below in Paragraph 6 of this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT. Chin Am, Inc., China National Corporation, Paperboard Specialties and NJDEPE also agreed that Paperboard Specialities would be the lead party for contact with the NJDEPE and for completion of the ECRA requirements for the Paterson facility.

6. NJDEPE sent a NOTICE OF VIOLATION AND OFFER OF SETTLEMENT dated January 16, 1990 to Chin Am, Inc. and China National Corporation, informing them that they were in violation of ECRA and the Regulations for failure to implement the required Phase I soil and ground water sampling activities as referenced in the Cleanup Plan proposal dated December 5, 1988, and for the failure to submit the required soil and ground water results within the time frame specified by NJDEPE in violation of N.J.A.C. 7:26B-4.3 and Paragraphs 9.B and 9.E of the CHC ACO.

7. On or about January 30, 1990, NJDEPE received a proposed Cleanup Plan for the Paterson facility.

8. On or about February 16, 1990, Chin Am, Inc. filed a Petition for bankruptcy with the United States Bankruptcy Court.

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9. On April 20, 1990, NJDEPE met with representatives from Chin Am, Inc. to discuss the NOTICE OF VIOLATION AND OFFER OF SETTLEMENT dated January 16, 1990. To date, Chin Am, Inc. and/or China National Corporation have not made an offer to the NJDEPE to settle the outstanding penalty matter.

10. By letter dated May 24, 1990, which was received on or about May 29, 1991 by Tomas Espinosa, the designated agent ("Agent") acting on behalf of Chin Am, Inc., NJDEPE granted a Cleanup Plan approval for the Paterson facility with conditions.

11. Chin Am, Inc., China National Corporation and/or Paperboard Specialties did not contest the conditions of the NJDEPE's Cleanup Plan approval letter dated May 24, 1990.

12. On or about June 10, 1990, NJDEPE received a progress report and additional information dated June 6, 1990 from Donald Bello, of Bello Environmental Consultants, Inc., the environmental consultant ("Consultant") for ECRA Case #85317.

13. By letter dated August 20, 1990, which was received on or about August 24, 1991 by the Agent, NJDEPE advised Chin Am, Inc., China National Corporation and Paperboard Specialties that pursuant to item #6 of the May 24, 1990 Cleanup Plan approval, the monthly progress report had not been received by this office within the time frames set by NJDEPE.

14. On or about October 10, 1990, NJDEPE received a letter dated June 6, 1990 from the Consultant informing NJDEPE that there would be some delay in submittal of the previous investigation performed at the Paterson facility but that this material should be resolved within a period of three weeks.

15. By letter dated December 3, 1990, which was received on or about December 7, 1990 by the Agent, NJDEPE advised Chin Am, Inc., China National Corporation and Paperboard Specialties that they were in violation of the CHC ACO for failing to submit progress reports, results, and effectuate the cleanup activities pursuant to the time frames set forth in the May 24, 1990 Cleanup Plan approval. Therefore, NJDEPE required that items #1-7 of the December 3, 1990 letter be submitted to this office along with a new revised cleanup activities schedule within fifteen (15) days after receipt of the December 3, 1990 letter. Additionally, Chin Am, Inc., China National Corporation and Paperboard Specialties were advised that NJDEPE had determined that the June 6, 1990 progress report was deficient and that items #8-13 of the December 3, 1990 letter and a Cleanup Plan Addendum must be submitted along with the progress report due on February 11, 1991.

16. On or about January 28, 1991, NJDEPE received a report dated December 1990 from the Consultant entitled the "Report on the Results of an ECRA Soil/Ground Water Quality Investigation."

17. NJDEPE received letters which contained additional information dated February 22, 1991, March 7, 1991, March 13, 1991, March 19, 1991, April 19, 1991 from Philip J. Vinch of CAV

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Environmental Services, Inc., the new environmental consultant ("new Consultant").

18. On or about June 13, 1991, NJDEPE received a letter dated June 13, 1991 from the new Consultant. Included as part of this June 13, 1990 submittal was a change of authorized agent for ECRA Case #85317 from Tomas Espinosa to the new Consultant.

19. By letter dated June 28, 1991, which was received on or about July 2, 1991 by Jonathan Kohn, the Trustee in Bankruptcy for Chin Am, Inc. ("Trustee"), NJDEPE advised Chin Am, Inc., in response to a letter received from the Trustee dated May 24, 1991, that considerable portions of the cleanup activities on Site had not been performed within the time frames pursuant to the May 24, 1990 Cleanup Plan approval and that the above parties were out of compliance with ECRA and the regulations promulgated pursuant thereto. Additionally, NJDEPE advised Chin Am, Inc. and China National Corporation that they would remain out of compliance and penalties would continue to accrue until such time as all of the requirements of the May 24, 1990 Cleanup Plan approval were met.

20. By letter dated August 16, 1991, which was received on or about August 19, 1991 by the Trustee, Dominick Desidero of Paperboard Specialties and William Oeters of Recovery Technologies Industries (the newest consultant), Chin Am, Inc., China National Corporation and Paperboard Specialties were advised that NJDEPE had determined that the December 1990 "Report on the Results of an ECRA Soil/Ground Water Quality Investigation" was deficient. Therefore, NJDEPE required Chin Am, Inc. and/or China National Corporation to address the deficiencies as stated in the August 16, 1991 letter, implement new sampling in accordance with the August 16, 1991 letter, initiate free product recovery at the Site, and to submit a Cleanup Plan Addendum, a revised QA/QC package and a new revised cleanup activities schedule along with the progress report due on October 15, 1991. Additionally, NJDEPE reiterated that Chin Am, Inc. and/or China National Corporation were out of compliance with the May 24, 1990 Cleanup Plan approval and that NJDEPE reserved its rights to assess penalties back to the original due date of the material.

21. On August 8, 1991, August 20, 1991, August 23, 1991 and September 24, 1991, NJDEPE personnel inspected the Paterson facility. During these inspections, it was confirmed that cleanup activities were not being implemented in accordance with the May 24, 1990 Cleanup Plan approval.

22. Paragraph 11.E of the CHC ACO provides that; In the event that Chin Am, Inc. or China National Corporation fails to comply with any of the provisions of this Administrative Consent Order, Chin Am, Inc. and/or China National Corporation shall pay to NJDEPE stipulated penalties in the amount of $5,000.00 for each day on which Chin Am, Inc. and/or China National Corporation fails to comply with any obligation under this Administrative Consent Order provided, however, that no such stipulated penalty

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shall be payable by Chin Am, Inc. and/or China National Corporation with respect to such period that said failure to comply results from Force Majeure.

23. Paragraph 9.D of the CHC ACO provides that Chin Am, Inc. and/or China National Corporation shall implement any NJDEPE approved Cleanup Plan in accordance with the approved cleanup activities schedule.

24. Paragraph 15.B of the CHC AMENDMENT provides that; In the event that Chin Am, Inc., China National Corporation or Paperboard Specialities fails or refuses to perform any obligation(s) under this ACO as determined by NJDEPE, NJDEPE shall have the right to exercise any option or combination of options available to NJDEPE under this ACO, ECRA, the Regulations or any other statute to ensure full and complete ECRA compliance by Chin Am, Inc., China National Corporation and/or Paperboard Specialities. Notwithstanding the provisions of Paragraph 11.E of the CHC ACO, Paperboard Specialties shall additionally be held responsible for penalties for non compliance with ECRA and the Regulations pursuant to N.J.A.C. 7:26B-9.3.

25. Based on the above FINDINGS, the Department alleges that Chin Am, Inc., China National Corporation and/or Paperboard Specialties failed to comply with ECRA and the Regulations promulgated pursuant thereto, N.J.A.C. 7:26B. Specifically, Chin Am, Inc., China National Corporation and Paperboard Specialties allegedly failed to implement the cleanup activities pursuant to the May 24, 1990 Cleanup Plan approval in accordance with N.J.A.C. 7:26B-5, Paragraph 9.D of the CHC ACO and ECRA and the Regulations promulgated pursuant thereto, N.J.A.C. 7:26B for a period of three-hundred-thirty-five (335) days and have accumulated penalties in the amount of $764,500.00. As of November 8, 1991, the Department has not received the above information.

OFFER OF PENALTY SETTLEMENT

26. NJDEPE may settle any claim for a penalty pursuant to ECRA or N.J.A.C. 7:26B-9.3. NJDEPE will accept a payment in full settlement of this matter in the amount of $458,700.00 for the alleged violation referenced in this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT subject to the following conditions:

a. If NJDEPE receives payment of $458,700.00 within twenty (20) calendar days after Chin Am, Inc.'s, China National Corporation's and/or Paperboard Specialties' receipt of this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT:

b. Payment shall be made by a certified or cashier's check payable to "Treasurer, State of New Jersey" and shall be submitted together with a copy of this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT to:

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New Jersey Department of Environmental Protection and Energy
Bureau of Revenue-DFMPGS
CN 402
401 East State Street
Trenton, New Jersey 08625

c. Payment shall be made by certified mail, return receipt requested or by hand delivery.

d. Chin Am, Inc., China National Corporation and/or Paperboard Specialties shall implement the cleanup activities pursuant to the May 24, 1990 Cleanup Plan approval within twenty (20) days after receipt of this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT.

27. If Chin Am, Inc., China National Corporation and/or Paperboard Specialties do not comply with all of the conditions of Paragraph 26 of this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT within the stipulated time frame, NJDEPE shall immediately refer this matter to the Office of the Attorney General for commencement of litigation pursuant to the Penalty Enforcement Law, N.J.S.A. 2A:58-1 et seq., to collect maximum statutory penalties as allowed by ECRA and to seek any other relief allowed by ECRA or any other law.

28. Except as provided in Paragraph 26 regarding submission of payment to NJDEPE, all submissions, questions or other contact with NJDEPE pursuant to this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT should be addressed to:

Bureau of ECRA Applicability and Compliance
Division of Responsible Party Site Remediation
CN 028
Trenton, New Jersey 08625
Attention: Barbara Murray, Chief
(609) 633-7141

RESERVATION OF RIGHTS

29. Notice is given that this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT is issued only for the violations and period identified hereinabove and that violations of any statutes, rules or permits other than those herein cited may be cause for enforcement actions, either administrative or judicial, being instituted without further notice. By issuing this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT, NJDEPE does not waive its right to initiate enforcement actions.

30. Notice is further given that Chin Am, Inc.'s, China National Corporation's and/or Paperboard Specialties' payment pursuant to this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT shall not relieve Chin Am, Inc., China National Corporation and/or Paperboard Specialties of their obligation to comply with ECRA

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and N.J.A.C. 7:26B and the CHC ACO and the CHC AMENDMENT. NJDEPE's acceptance of any payment made pursuant to this NOTICE OF VIOLATION AND OFFER OF SETTLEMENT shall not constitute a waiver by NJDEPE of its right to compel Chin Am, Inc., China National Corporation and/or Paperboard Specialties to specifically perform their obligations under ECRA, N.J.A.C. 7:26B-3 or of its right to void a sale or transfer of an Industrial Establishment pursuant to ECRA and N.J.A.C. 7:26B and NJDEPE expressly reserves those rights.

Date: 11/15/91

Kenneth T. Hart, Assistant Director, Industrial Site Evaluation Element

cc: Barbara Murray, Chief, BEAC
Anthony Cinque, BEAC
Jeannette Cleary, BEAC
William J. Pascrell, Jr., Mayor, City of Paterson
John J. Ferraioli, Division of Health, City of Paterson
David Shotwell, Northern Field Operations

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ATTACHMENT X

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

TO: Paperboard Specialties file

FROM: Andrew Cyr, HSMS III
Bureau of Environmental Measurements and Quality Assurance, Site Assessment Section

SUBJECT: Public Water Supply Population Served

The population utilizing public water wells within 4 miles of the Paperboard site was estimated using the NJDEP Water withdrawal points map and Compliance evaluation Inspection forms for the various public water suppliers which operate wells located within 4 miles of the site.

The Ridgewood Water Department operates 53 wells of which 32 are located within 4 miles of the site and serves approximately 59,000 people. So 1,113 people are served per well. All the wells draw from the Brunswick Formation.

Distance (miles)	# wells	est. Population
0 - 1/4	0	
1/4 - 1/2	0	
1/2 - 1	0	
1 - 2	2	2,226
2 - 3	9	10,017
3 - 4	19	21,147

The Hawthorne Water Dept. operates approximately 22 wells all of which are located within 4 miles of the site and serve approximately 18,000 people. Equals 818 people/well used 820/well. All wells draw from the Brunswick Formation.

Distance (miles)	# wells	est. Population
0 - 1/2	0	
1/2 - 1	10	8,200
1 - 2	6	4,920
2 - 3	6	4,920
3 - 4	0	

The Garfield Water Dept. operates 16 wells of which 13 are located/operating within 4 miles of the site. Garfield Water Dept. also obtains approximately 36 % of its total capacity from a bulk purchase from the Passaic Valley Water Commission. Total pop. served is 26,000; however only 74 % are served by water from its wells so 16,640 served by Garfield wells. Equals 1,040/well. All wells draw from the Brunswick Formation.

Distance (miles)	# wells	est. Population
0 - 1	0	
1 - 2	4	4,160
2 - 3	9	9,360
3 - 4	0	

The United Water Company (formerly the Hackensack Water Co.) Obtains most of its water form surface water withdraws (approx. 89%). Approximately 8.4 % of its total capacity is from ground water. Total estimated population served is 713,737 so the estimated population obtaining water from ground water wells is 59,954. A total of 17 wells are operated which equals 3,526 people/well.

Distance (miles)		# wells	est. Population
0 - 1		0	
1 - 2	Brunswick	1	3,526
2 - 3	Buns. and Strat.	2	7,052
3 - 4	Drift	0	

The Fairlawn Water Dept. serves an estimated population of 30,548. It obtains its water from 16 wells and two bulk purchases from the United Water Co. and the Passaic Valley Water Commission. No info was found indicating the capacities for the wells and little info was found on the amount of the bulk purchase. The results, counted the bulk purchases as equalling one well each. So the total pop. served was divided by 18 instead of 16. Equals 1,697/well All wells draw from the Brunswick Formation.

Distance (miles)	# wells	est. Population
0 - 1	10	16,970
1 - 2	4	6,788
2 - 3	2	3,394
3 - 4	0	

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT FIELD OPERATIONS
Metro Bureau of Water and Hazardous Waste Enforcement
2 Babcock Place, West Orange, N.J. 07052
(201) 669-3900

March 24, 1995

Mr. Frank Mortiz
Director of Department of Water Supply
Municipal Building
131 North Maple Ave.
Ridgewood, New Jersey 07451

Re: Compliance Evaluation Inspection
Ridgewood Water Department
P.W. ID No.: 0251001
Ridgewood/Bergen County

Dear Mr. Mortiz:

A Compliance Evaluation Inspection of your facility was conducted by a representative of this Bureau on January 24, 25 and 27, 1995. A copy of the completed inspection report form is enclosed for your information.

Your facility received a rating of "UNACCEPTABLE" due to the following deficiencies:

See attached "List B"

NOTE - The manual piping gallery with the altitude valve at the Lafayette storage tank had a leak from the pipe. In addition, at the Vance pump station, the pump that was not on had a constant flow of water going to a small dark blue pipe and out into the storm drain system. It was suggested that the check valve on this pump system was experiencing a leak.

Since the deficiencies cited are presently, or could in the future, adversely affect the quantity and/or quality of water you provide to your customers, you are DIRECTED to institute measures to correct the deficiencies. A written report concerning specific details of the remedial measures to be instituted, as well as an implementation timetable, must be submitted to this Bureau within fourteen (14) calendar days of the date of this correspondence.

List A

WELLS

1.) Fairview - pump was pulled for testing
* 2.) West End
\# 3.) Glen Rock
4.) Brook - pipping and wiring removed, not operational
* 5.) Carr - multiple well
6.) Linwood - pump pulled for testing
\# 7.) Irving
8.) Ames #3 - pump pulled for testing
\# 9.) Ames #5
\# 10.) Ames #6
\# 11.) Ames #7
\# 12.) Russel
* 13.) Eder
\# 14.) Montain
* 15.) Franklin - piped to Van Horten Treatment Facility
\# 16.) Lakeview
17.) Meer - pump pulled apart for testing
* 18.) Van Horten
\# 19.) Cedar Hill #1
20.) Cedar Hill #2 - used for observing water table only
\# 21.) Cedar Hill #3
\# 22.) Cedar Hill #4
\# 23.) Cedar Hill #5
\# 24.) Cedar HiII #6
\# 25.) Weish
* 26.) Newton - piped to Wortendyke
27.) Lafayette - pump pulled apart for testing
\# 28.) Midland
\# 29.) Garden State
* 30.) Wortendyke #2
* 31.) Wortendyke #4
* 32.) Wortendyke #6
* 33.) Wortendyke #7
\# 34.) Waldo
\# 35.) Ravine
* 36.) King
* 37.) Goffle
\# 38.) College St.
\# 39.) Andover
\# 40.) Spring
\# 41.) Grove
\# 42.) Prospect
\# 43.) Ackerman
44.) Leigh
\# 45.) Stevens
* 46.) Twinney
* 47.) Walthery - pipped to Twinney Treatment Facility
* 48.) Paramus - pipped to E. Ridgewood Treatment Facility
* 49.) E. Ridgewood
* 50.) Salem
* 51.) Main - pipped to Southside

* hypochlorite
\# gas chlorination

List A (continued)

PUMP STATIONS

1.) Vance
2.) Sicomac
3.) Aqueduct
4.) Southside
5.) Wortendyke
6.) East Side
7.) Carr

WATER STORAGE

1.) Lafayette
2.) Aqueduct
3.) Glen
4.) East Side
5.) Valley View
6.) Southside
7.) Ames
8.) Vance
9.) Cedar Hill
10.) Wortendyke

LIST B

1). Pursuant to N.J.A.C. 7:10-11.4(l)5, the inner casing of each well shall be provided with a vent which shall be protected with a downfacing elbow or mushroom head as well as screened against the entry of insects. The following wells are deficient in this area:

Cedar Hill #1	Cedar Hill #3	Cedar Hill #4
Cedar Hill #5	Cedar Hill #6	Andover
E. Saddle River	Salem	Spring
Grove	Ravine	

2). Pursuant to N.J.A.C. 7:10-11.4(q)3, each well shall be equipped with a water level indicator, a discharge pressure gauge, flow meter, and protected access to the well to permit the direct measurement of the water level. The following wells either did not have a draw down gauge, access for direct measurement and\or pressure gauge:

Cedar Hill #6	Waldo	Andover
Prospect	Cedar Hill #4	Weisch
Irving	Waldo	College
Grove		

3). Pursuant to N.J.A.C. 7:10-11.4(q)1, the check valve shall be located between the pump and any blowoff, bypass or other connection to the discharge pipe. The following wells have a chlorine solution connection before the check valve:

Glen	Andover	E. Saddle River
Spring	Grove	Ames #5
Ames #7		

4). Pursuant to N.J.A.C. 7:10-11.4(l)4, well pits will be accepted only if adequate provisions are made for their drainage by a sump pump or other arrangement. The following wells are deficient in this area:

Lakeview	Cedar Hill #1	Cedar Hill #3
Cedar Hill #4	Cedar Hill #5	Cedar Hill #6
Weisch	Midland	Glen
Irving	Paramus	E. Saddle River
Salem	Waldo	Goffle
Andover	Spring	Grove
Prospect	Ackerman	Stevens
Twinney	Walthery	Ames #5
Ames #6	Ames #7	Russel

5). Pursuant to N.J.A.C. 7:10-11.4(f)2.iv, well head piping details, showing provision and locations of check valves, surge or air relief valves, gate valves, sampling tap, water level indicator, discharge pressure gage, and blowoff connection are

required to permit pumping to waste. The following wells did not have a treated sampling tap:

Lakeview
Irving

6). Pursuant to N.J.A.C. 7:10-11.13(f)1, the door to the chlorine room shall open outward and shall be provided with panic type hardware (push bar for opening the door) on the inside of the door. The following wells are deficient in this area:

Lakeview
Steven
College
Ravine

7). Pursuant to N.J.A.C. 7:10-11.13(f)4, scales shall be provided for determining the loss of weight of chlorine cylinders. The following scales were broken at the time of the inspection.

Lakeview
E. Saddle River
Stevens

8). Pursuant to N.J.A.C. 7:10-11.13(f)1, the chlorine room shall be provided with suitable ventilation including an exhaust fan near floor level. The following fan\vents were either broken or non-existent at the time of the inspection:

Weisch
E. Saddle River
Stevens
Waldo
Spring
Ames #6
Ravine
Prospect

9). Pursuant to N.J.A.C. 7:10-11.13(f)8, a gas mask, shall be provided and maintained in good operating condition. The following well houses either had improperly maintained masks or had no masks at all:

Lakeview
Glen
Ames #5
Russel
Weisch
Waldo
Andover
Prospect
Salem
Weisch
Irving
Ames #6
Mountain
Midland
Ravine
Spring
Ackerman
Cedar Hill's Collective Chlorine Room
Midland
Linwood
Ames #7
Meer
Garden State
College
Grove
E. Saddle River

10). Pursuant to N.J.A.C. 7:10-11.13(f)2, an automatic alarm, or observation window, to permit visual inspection without opening the door of the chlorination room shall be provided. The following chlorine room was not equipped with an alarm system and the observation window was broken.

Cedar Hill Collective Chlorine Room

LIST B (continued)

11). Pursuant to N.J.A.C. 7:10-8(a)7, each reservoir and tank shall be equipped with an overflow and low level warning or alarm. The following storage tanks do not have a low level alarm:

Lafayette Glen Valley View

12). Pursuant to N.J.A.C. 7:10-11.6(c)3, all floors, dry wells, meter pits, piping galleries and similar locations not intended to contain water, shall be self-draining without possibility of backflow. If necessary, sufficient sump pumping capacity shall be provided for the removal of water. The following storage tank's altitude pit was totally submerged in water.

Vance

13). Pursuant to N.J.A.C. 7:10-11.8(b)1, all equalization reservoirs, standpipes and elevated tanks shall be protected against unauthorized access and vandalism. Fencing, locks and other necessary safeguards shall be provided. The following storage tank is not protected from access:

Ames

14). Pursuant to N.J.A.C. 7:10-11.8(e)1, reservoirs constructed partly or entirely below grade shall be so designed, located and graded as to be secure against uplift and the entry of underground or surface pollution. The following storage tanks had exterior\cosmetic damage on the roof that could allow for possible surface pollution under certain conditions:

Lafayette East Side Cedar Hill
Vance

15). Pursuant to N.J.A.C. 7:10-11.6(g)2, when commercial electrical power is used, two independent sources of power should be available, comprising either: (a) two independent electrical power sources or (b) one electrical source, and one standby source either for emergency power generation or direct drive to the pumping equipment. The following pump stations were not equipped with the alternate power:

Vance Aqueduct Eastside

16). Certain tank foundations are endangered by roots from overgrown vegetation. These tanks being:

Lafayette Eastside

LIST B (continued)

17). According to the Coliform Rule effective 1990, supplies serving over 50,000 people need to prepare a list of locations and a distribution map, and an explanation of how the sites were chosen. At the time of the inspection only a list was reviewed.

Form DWR-143
7/81

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE 9-10-90

GENERAL INFORMATION

PURVEYOR/FACILITY HAWTHORNE WATER DEPARTMENT

FILE LOCATION HAWTHORNE BOROUGH, PASSAIC COUNTY | PW-ID # 1604001

MAILING ADDRESS 445 LAFAYETTE AVE, HAWTHORNE, N.J. 07506

REQUIRED LICENSES T-2 W-3

ADMIN. ART BROKAW

BUSINESS TELEPHONE # Admin.: (201) 427-4760 Licensed Operators: T-3 RON TATHAM W4

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): 19 WELLS (SEE ATTACHED SHEET)

Est Tot Eff Cap: 4.81 MGD

TREATMENT: source, type, capacities(mgd): CARBON FILTER / POTASSIUM PERMANGANATE → GAS CHLORINATION → AIR STRIPPING.

Est Tot Eff Cap: 4.81 MGD

FINISHED WATER STORAGE: descriptions, locations, capacities(mg): MARY ST. GROUND TANK 3.0MG; PEACH TREE COURT TANK 1.0MG, RESERVOIR RD. TANK 1.2MG, FAIRVIEW AVE STANDPIPE 0.187MG, CONCRETE RESERVOIR OFF RESERVOIR RD. 0.5MG.

Est Tot Cap: 5.887 MG

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd): TWO - 8" MAINS FROM PASSAIC VALLEY WATER COMMISSION:

#1 PRESCOTT AND 8TH ST. 360,000 GPD.

#2 WAGARAW + LINCOLN RDS. Est Tot Avail: 0.360 MGD

AUXILIARY POWER: location, type, capabilities: CUMMINGS DIESEL GENERATOR AT GOFFLE HILL RD.

NJDEP - DIVISION OF WATER RESOURCES

PUBLIC COMMUNITY WATER SUPPLY INSPECTION

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd,month,year) Max SEPT.89 3.629 MGD Min MARCH 90 1.636 MGD Annual Average 2.632 MGD

BULK PURCHASES (provider,mgd) NONE

BULK SALES (customer, mgd) NONE

% METERED 100%

NUMBER OF SERVICES 5750

MUNICIPALITIES SERVED (est. services in each) FAIRLAWN, GLEN ROCK, NORTH HALDON, PROSPECT PARK, RIDGEWOOD, WYCKOFF, HAWTHORNE

TOTAL ESTIMATED POPULATION SERVICED 18000

CURRENT/RECENT WATER RESTRICTIONS NONE

NEW CONSTRUCTION (Project Numbers) NONE

DISTRIBUTION MAINS: Sizing 4" (min) to 16" (max)
Pressures 25PSI (min) to 220PSI (max)
Hydrants/Flushing Program 580 12x 4"

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
A-200	MONTHLY	OK THRU 8/90
Coliform	26 MONTH	OK THRU JULY/90
Inorganics	3yrs	87 DUE 90
Nitrate	"	" "
Trihalomethanes	QUARTERLY	OK THRU 8/90
Organics	3yrs	DUE 90
Turbidity		
SECONDARIES	4yrs	DUE 89
RADIOLOGICAL	3yrs	DUE 89

NAME OF LABORATORY LABORATORY RESOURCES CERTIFICATION # 02046

ADDRESS 363 OLD HOOK RD, WESTWOOD, NJ 07675

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES WELL #5 WAGARAW WELL FIELD NOT PROPERLY PROTECTED DURING WORK. WELL #4 COFFIE ROAD FLOOR IS IN POOR SHAPE.

TREATMENT DEFICIENCIES NONE

LES

NORTH STATION

GOFFIE FIELD

CAP.

0.25
0.22
0.36
0.26
0.36
MFORD AVE 0.31
AVE 0.16
IRST AVE 0.16

(Clear well) → (AIR STRIPPING TOWER) → (Clear well + chlorination) → system

SO. STATION TOWERS #1+2

TOWER #1

WAGARAW WELLFIELD

CAP

0.15
0.11
0.30
0.22
0.20
0.30
ATLANTA AVE 0.11
EDAR AVE 0.26

(Clear well) → (AIR STRIPPING) → (Clear well chlorinate) → system

Tower #2

SO. Wagaraw wellfields

CAP

0.2
0.4
0.4

(clear well) → (AIR STRIPPING) → (clear well) → (Treatment Mg Zeolite ACTIVATED CARBON)

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE March 11, 1994

GENERAL INFORMATION

PURVEYOR/ FACILITY: Garfield Water Department

PW-ID #: 0221001

FILE LOCATION: Garfield / Bergen

MAILING ADDRESS: Water Depart. City Hall. Outwater Lane Garfield NJ 07062.

REQUIRED LICENSES: T - 2, W - 3

ADMIN.: John Nunno; City Manager

BUSINESS TELEPHONE # Admin.: (201) 546-2200

Licensed Operators: T - 2 Michael Sterruzzo, W - 4

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): Bulk purchase from Passaic Valley Water Commission (P.V.W.C); Elmwood Park Wells - 1, 2, 4, 5, 7, 8, 10, 11, 12, 16, 17 (2, 4, 5, 10, 11, Operating); 14 is not on line; GARFIELD WELLS - none are operational due to VO levels

Est Tot Eff Cap: 3 MGD

TREATMENT: source, type, capacities(mgd): Elmwood Park wells go to the air stripper Sodium hypochloride at the Elmwood Park Pump Station

Est Tot Eff Cap:

FINISHED WATER STORAGE: descriptions, locations, capacities(mg): Belmont Hill Tanks: 1#(Red) 0.391M, 2#(White) .212 MG, #3(Blue) 0.212 MG, [ALL STANDPIPES]; Harrison Ave. Tan MG [GROUND TANK]; Elmwood Park Station storage reservoir .5 MG

Est Tot Cap: 1.714 MG (com

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd): (1) 10" at Botany Street with P.V. (1) 8" at Monroe Street with P.V.W.C.; (1) 6" at Harrison Ave. & Grand St.; (1) 6" at Harrison Avenue with Lodi Department; (1) 6" at Waterlane and Harrison Ave from Saddlebrook Water Depart.

Est Tot Avail: 6.0 MGD

AUXILIARY POWER: location, type, capabilities: Well # 7A - Direct Drive natural Gas Engine: Bc St. Pump Station - generator on a trailer 3 phase power

BOOSTER PUMPS: (1) booster pump at well 1A; (2) booster pumps at the Bc St. pump station; (1) booster pump at the Harrison reservoir (2 electri 1 gas engine)

NJDEP - DIVISION OF WATER RESOURCES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd,month,year) Max 2.66 Min 1.6 Annual Average 2.1

BULK PURCHASES (provider,mgd) P.V.W.C. SUMMER 1.6MGD WINTER 0.6MGD

BULK SALES (customer, mgd) ≈ 23 homes in Saddle Brook

% METERED 100

NUMBER OF SERVICES 6440

MUNICIPALITIES SERVED (est. services in each) Garfield
Saddle Brook (23 homes)

TOTAL ESTIMATED POPULATION SERVICED 26,000

CURRENT/RECENT WATER RESTRICTIONS

NEW CONSTRUCTION (Project Numbers)

DISTRIBUTION MAINS: Sizing 1¼"(2000') 4" 9% (min) to 30" (max)
Pressures 20 (min) to 100 (max)
Hydrants/Flushing Program yes/yes (August 93)
2 homes

(GW) - Elmwood Park treatment well water

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
Lead & Copper	2/year 93	3/25/93 ≈ 4/23/93
Coliform	36/month	36/month
Inorganics	1/3 years (GW)	
Nitrate	1/year DOWN 93-95	3/18/93; 6/15/93; 9/9/93; 12/20/93
Trihalomethanes	4/year	
Organics		12/9/93
Secondary	1/year (B.P.) V3 (GW)	
Radionuclide	1 x 4 years	10/30/92
A-280	1/year	
Nitrite	1/year	11/16/93
Volatile Organics	1/year (Cd.form)	

NAME OF LABORATORY BERGEN PINES LABORATORY P.V.W.C. laboratory CERTIFICATION # #02075 #16107

ADDRESS East Ridgewood Avenue - Paramus NJ 07652 P.O. BOX 198 Union Blvd & Riverview Dr. Little Falls, NJ 07424

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES Well #14 the pressure gauge was not working. There was no Flowmeter at this well house.

TREATMENT DEFICIENCIES

NJDEP - DIVISION OF WATER RESOURCES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

COMPLIANCE EVALUATION (Continued)

STORAGE AND/OR DISTRIBUTION DEFICIENCIES The Hamson tank had no cage safety on its ladde Elmwood Pump Station is in poor condition (there are plans to refurbish the pumphouse There is No cathodic protection on the three tanks or Harrison tank

LICENSING, MONITORING AND/OR REPORTING DEFICIENCIES Note: this is a reminder that Garf is responsible to sample for inorganics and secondary parameters once every three years at the Elmwood Park treatment station for the wells that are in service. For those systems serving more then 10,000 secondaries are requi between January 1993 to December 1993

COMPLIANCE SAMPLING VIOLATIONS: No samples Taken

LOCATION	DATA SOURCE	PARAM	MAX CONTMNT LEVEL	RESULT	LOCATION	DATA SOURCE	PARAM	MAX CONTMNT LEVEL	RESULT

OVERALL COMPLIANCE RATING:

☐ ACCEPTABLE ☒ CONDITIONALLY ACCEPTABLE ☐ UNACCEPTABLE

NOTICE: YOU ARE REQUIRED TO INFORM THE N.J.D.E.P. IN WRITING OF YOUR ACTUAL OR INTENDED ACTIONS TO COMPLY WITH N.J.S.A. 58:12A-1 ET SEQ. VIA IMPLEMENTATION OF REMEDIAL MEASURES TO CORRECT THE DEFICIENCIES LISTED IN THIS REPORT. FAILURE TO ADEQUATELY RESPOND IN A TIMELY FASHION WILL RENDER YOU LIABLE FOR PENALTIES OF UP TO $5,000.00 FOR EACH VIOLATION, PURSUANT TO N.J.A.C. 7:10-3.

INSPECTOR: Sheila Grimes
Signature

Sheila Grimes
Name

Sr. Environmental Specialist
Title

Metro-Bureau of Water & Hazardous Waste Enforcement
Region

PERSON INTERVIEWED: Mike Sferruzzo
Name

Licensed Operator
Title

Garfield Water Department
Organization

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE May 3, 4, & 8, 1995

GENERAL INFORMATION

PURVEYOR/ FACILITY United Water Company

PW-ID # 0238001

FILE LOCATION Haworth Filtration plant & labatory

MAILING ADDRESS 200 OID Hook Road, Haworth Park, New Jersey 07640

REQUIRED LICENSES T-4 W-4

ADMIN. Donald Correll, President

BUSINESS TELEPHONE # Admin.:

Licensed Operators: Leo Fung T-4 Frank Jackson W-4

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): See attachment "Sheet A"

Est Tot Eff Cap:

TREATMENT: source, type, capacities(mgd): See attachment "Sheet B"

Est Tot Eff Cap:

FINISHED WATER STORAGE: descriptions, locations, capacities(mg): See attachment "Sheet C"

Est Tot Cap:

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd):

Est Tot Avail:

AUXILIARY POWER: location, type, capabilities: See attachment "Sheet E"

Rimor Booster Stations: See attachment "Sheet D"

NJDEP - DIVISION OF WATER RESOURCES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd,month,year) Max June 1994 105.7 MGD Min November 1994 95.6 MGD Annual Average (approximate) 85 MGD

BULK PURCHASES (provider,mgd) P.V.W.C. minimum 14.5 MG, Jersey City (NJDWSC) minimum 300 MG

BULK SALES (customer, mgd) Fairlawn - 0.13 MG, Saddle Brook - 0.57 MG

NUMBER OF SERVICES 188,125

% METERED 100 %

MUNICIPALITIES SERVED (est. services in each) See attachment "sheet F"

TOTAL ESTIMATED POPULATION SERVICED 713,737

CURRENT/RECENT WATER RESTRICTIONS None

NEW CONSTRUCTION (Project Numbers) Weehawkin

DISTRIBUTION MAINS: Sizing 6" (min) to 84" (max)
Pressures 40 psi (min) to 120 psi (max)
Hydrants/Flushing Program 1x year or as needed

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
Lead & Copper	implementing optimal corrosion control 1st sampling due 1/96	
Coliform	240/month	>240/month
Inorganics	1/year for plant 1/3 for wells	11/2/94 (plant)
Nitrate/Nitrite	4/year	1/14/94; 4/26/94; 9/94 & 11/94
Trihalomethanes	4/year	2/11/94; 5/26/94; 9/13/94; 12/23/94
Organics	SOC+POC waivers were submitted and 12/26/94 letter informed UW which P.O.E were denied waiv	
Turbidity	hourly	all < .5 NTU
A-280 (at POE)	1/year (94)	4/29/94
VOC's (POE)	4/year	1st, 5/13/94; 9/20/94; 10/22/94
Secondary	1/year for plant 1/3 for wells	11/2/94 (plant)
Asbestos	waiver was granted 5/11/95	

NAME OF LABORATORY United Water New Jersey CERTIFICATION # 02074

ADDRESS 400 Lake Shore Drive, Haworth N.J. 07641

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES Reservoir #2 which is an open lined reservoir is in violation of N.J.A.C. 7:
(c) 1,

TREATMENT DEFICIENCIES

SHEET "A"

Sources:

I. Surface

A. Raw water impoundment on Hackensack River

1. Lake DeForest (NY)	5.60 BG
2. Lake Tappan	4.00
3. Oradell Reservoir	3.20
4. Woodcliff	0.90

All the above raw water sources go to the Oradell Reservoir

B. Streams - Raw water diversions

1. Saddle River P.S. (Paramus)	20.00 MGD
2. Long Swamp Brook P.S. (New Milford)	2.50
3. Sparkill Creek P.S (Northvale)	2.50
4. Pompton Lakes P.S.	75.00

C. Wells - Raw water diversions

1. Haworth - Lake Shore Drive	0.28 MGD
2. Hillsdale - Church Road	0.24
3. Lafayette #6 - Harrington Park	0.36
4. Lafayette #7 - Harrington Park	0.22
5. Paramus #1 - Paramus Road	0.32
6. Paramus #2 - Paramus Road	0.22
7. Westwood - Sand Rd. & Westwood Ave.	0.80
8. Woodcliff Lake - Ackerman Ave	0.24
	2.68

D. Wells - Raw water for air conditioning only

1. Harrington Park #1	0.22
2. Harrington Park #2	0.22
3. Haworth Filtration #1	0.14
4. Haworth Filtration #2	0.14

II. Ground

A. Wells treated by hypochlorination

1. Bogota #2 - Munn Ave & Elm	0.18 MGD
2. Bogota #3 - W. Grove & Division Street	0.16
3. Bogota #4 - Division St. under viaduct	0.22
4. Old Tappan #10 - Old Tappan Rd. & Riverdale Rd.	0.22
5. Emerson #11 - Glenwood Ave. & Main St.	0.24
6. Rochelle Park - Roosevelt Ave.	0.32
7. Hackensack #2 - Hackensack Ave.	2.25
8. Upper Saddle River #1 - Lake St.	2.00
9. Upper Saddle River #2 - Lake St.	1.15
	6.74

III. Bulk Purchase

1. Jersey City (NJDWSC) (Secaucus)	2.10 MGD
2. P.V.W.C. (Woodridge/Lodi)	0.25

LEGEND

BG = Billion Gallons

MGD = Million Gallons a Day

SHEET "B"

Treatment

1. Haworth Plant
   a. Bar screen, traveling screen, addition of alum and coagulant aid (cationic polymer), ozonation, floatation, detention basin, dual media filter, chlorination, ammonia and caustic soda addition then distribution.

2. Wells treated by hypochlorination (9) 6.74 MGD

3. Rechloramination
   Weehawken - Effluent Res. #2

LEGEND

MGD - Million Gallons a Day

SHEET "C"

Finished Water Storage:

1. Timberline (Alpine)	Elevated Tank	0.25 MG
2. Carlstadt	Ground Tank	3.20
3. Carlstadt	Elevated Tank	0.30
4. Englewood Cliffs	Elevated Tank	1.00
5. Hillside Ave. (Alpine)	Ground Tank	5.00
6. N.E. Reservoir (Alpine)	Ground Tank	9.00
7. Montvale	Ground Tank	1.50
8. Reservoir #2 (Weehawken)	Earth Embankment	69.20
9. Ridgefield #1	Ground Tank	5.0
10. Ridgefield #2	Ground Tank	5.0
11 River Vale	Ground Tank	5.0
12 Western (Woodcliff Lake)	Concrete	2.0
13 Fairview	Ground Tank	10.0

SHEET "D"

Booster Stations

1. Alpine	0.79 MGD
2. Carlstadt	2.50
3. Fairview	10.0
4. Hillside Ave.	23.0
5. New Durham	52.50
6. Ridgefield	25.0
7. River Vale Emergency	2.20
8. River Vale	2.10
9. Upper Saddle River	4.90
10 Western (Woodcliff Lake)	3.20

Pumping Stations

1. Wood-Ridge (Lodi)	12.0 MGD
2. Pompton Lakes	70.0
3. Secaucus	10.0

LEGEND

MG - Million Gallons
MGD - Million Gallons a Day

SHEET "F"

Municipalities:

Alpine
Bergenfield
Bogota
Carlstadt
Cliffside Park
Closter
Cresskill
Demarest
Dumont
East Rutherford
Edgewater
Emerson
Englewood
Englewood Cliffs
Fairlawn
Fairview
Fort Lee
Franklin Lakes
Hackensack
Harrington Park
Hasbrouck Heights
Haworth
Hillsdale
Leonia
West New York
Washington TWP
Westwood
Woodridge
North Bergen
Union City
Little Falls
Lodi
Maywood
Montvale
Monnachie
New Milford
Northvale
Norwood
Old Tappan
Oradell
Palisades Park
Paramus
Ridgefield
Ridgefield Park
River Edge
River Vale
Rochelle Park
Rockleigh
Rutherford
Saddle Brook
South Hackensack
Teaneck
Tenafly
Teterboro
Upper Saddle River
Wallington
Woodcliff Lakes
Guttenberg
Secaucus
Weehawken

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE November 28

GENERAL INFORMATION

PURVEYOR/ FACILITY: Fair Lawn Water Department

FILE LOCATION: Fairlawn/Bergen County (Cadmus Pump Station | PW-ID #: 0217001

MAILING ADDRESS: 8-01 Fair Lawn, New Jersey 07410

REQUIRED LICENSES: T-2 W-4

ADMIN.: Joseph Garger, Borough Manager

TELEPHONE # Admin.: (201) 794-5374 Licensed Operators: Frank Fuch T-2 W-4

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): 13 wells were operational at time of inspectio 3 wells were not operational at the time of inspection; Bulk Purchase from United Water of New Jersey and Passaic Valley Water Commission (See attached sheet)

Est Tot Eff Cap: TOTAL CAPACI POSSIBLE 4.

TREATMENT: source, type, capacities(mgd): gas chlorination at Dorthoy ST. TREATMENT PL Westmoreland TREATMENT PLANT, Cadmus TREATMENT PLANT, and Well #28 treatment plant

Est Tot Eff Cap: 4.7 MG

FINISHED WATER STORAGE: descriptions, locations, capacities(mg):
Facility ID No. 01 → Cadmus ground tanks, 2 million gallons
Facility ID No. 02 → Westmoreland (11th street) ground tanks, 1.5 million gallons
Facility ID No. 09 → Gordon Place elevated tank

Est Tot Cap: 4.5 MG

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd): Capable of hooking up via hyd with Ridgewood water. Bulk purchase connection with P.V.W.C. and United Water. ↳ Hamistown Road

Est Tot Avail: >8.4 MG

AUXILIARY POWER: location, type, capabilities: Cadmus pump station, natural gas

NJDEP - DIVISION OF WATER RES CES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd.month.year) Max June 1994 5.96 MGD Min Nov 1994 3.26 MGD Annual Average 4.19 MGD

BULK PURCHASES (provider.mgd) P.V.W.C. & United Water of New Jersey

BULK SALES (customer. mgd) None

% METERED 100

NUMBER OF SERVICES 11,000

MUNICIPALITIES SERVED (est. services in each) Borough of Fair Lawn

TOTAL ESTIMATED POPULATION SERVICED 30,548

CURRENT/RECENT WATER RESTRICTIONS No restrictions in 1994

NEW CONSTRUCTION (Project Numbers)

DISTRIBUTION MAINS: Sizing 6" (min) to 20" (max)
Pressures 50 psi (min) to 90 psi (max)
Hydrants/Flushing Program 2x/year

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
Lead & Copper	30 samples/1 year	collected 6/23/95 & 8/3/95
Coliform	30 samples/month	>30 samples/month
Inorganics	1x 3 years	due in 1996
Nitrate	1/year	8/23/94
Trihalomethanes	4x year	2/1/94; 5/17/94; 7/19/94; 11/1/94
Organics	Not Applicable	
Turbidity	Not Applicable	
Secondary	1x 3 years	due in 1996
VOC	in 1994 P.O.E 4 quarter	3/94 5/94 6/94 10/94

NAME OF LABORATORY Garden State Laboratory CERTIFICATION # 07044

ADDRESS 399 Stuyvesant Ave Irvington

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES Well #28 was said to still not have access for direct measure

TREATMENT DEFICIENCIES None, (reminder of warning gas alarm light at Westmorland air stripper)

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
ENFORCEMENT & REGULATORY SERVICES

COMPLIANCE EVALUATION INSPECTION
PUBLIC COMMUNITY WATER SUPPLY

DATE January 17, 18 & 20, 1995

GENERAL INFORMATION

PURVEYOR/ FACILITY: Ridgewood Water Department — PW-ID # 0251001

FILE LOCATION: Ridgewood/Bergen County

MAILING ADDRESS: 131 North Maple Ave. Ridgewood, NJ 07451 — REQUIRED LICENSES: T-2, W-4

ADMIN.: Frank Moritz, Director of Dept. of Water Supply

BUSINESS TELEPHONE # Admin.: (201) 670-5526 — Licensed Operators: Steve Florence T-2, W

FACILITY DESCRIPTION

SOURCES: descriptions, locations, capacities(mgd): fifty three (53) wells (see attached list)

Est Tot Eff Cap:

TREATMENT: source, type, capacities(mgd): 25 wells gas chlorination. (18) hypochlorite (7) bubble diffusers, (4) packed column

Est Tot Eff Cap:

FINISHED WATER STORAGE: descriptions, locations, capacities(mg): Southside Tank is actually storing unfinished water that receives aeration and disinfection as water is drawn from the tank. All the other tanks are finished water storage (see attached list for specific tank

Est Tot Cap:

EMERGENCY INTERCONNECTIONS: descriptions, available gallonage(mgd): (1) 6" main with Mahwah Water Department (2) 6" main with Waldwick Water Department, (1) 8" main with Allendale Water Department (2) 6" main with Hackensack Water Co. [Franklin Lakes], (1) 6" main with Hackensack Water Co. (1) 6" main with Hawthorne Water

Est Tot Avail:

AUXILIARY POWER: location, type, capabilities: Portable generator at Wortendyke Center (two Natural Gas generator at Sicomac Booster, gasoline generator at Wortendyke Control Center - Carr pump station has a natural gas generator

NJDEP - DIVISION OF WATER RESOURCES
PUBLIC COMMUNITY WATER SUPPLY INSPECTION

DELIVERY INFORMATION

PLANT DELIVERED WATER (mgd,month,year) Max June 1994 4.4 MGD Min February 94 2.7 MGD ~~Annual~~ Jan 94 - Sept 94 AVG Average 3.5 MGD

BULK PURCHASES (provider,mgd) None

BULK SALES (customer, mgd) None

NUMBER OF SERVICES 18,895 (7,964 in Ridgewood) % METERED (All Ridgewood's)

MUNICIPALITIES SERVED (est. services in each) Ridgewood, Glen Rock, Midland Park, Wyckoff

TOTAL ESTIMATED POPULATION SERVICED All Municipalities ~ 59,000

CURRENT/RECENT WATER RESTRICTIONS Mandatory odd/even from June 15 through September 15

NEW CONSTRUCTION (Project Numbers) On going Phase 2A, 2B projects

DISTRIBUTION MAINS: Sizing 4" (min) to 20" (max)
Pressures 30 psi (min) to 130 psi (max)
Hydrants/Flushing Program yes/yes twice a year

MONITORING & REPORTING

PARAMETER(S)	FREQUENCY REQUIRED	FREQUENCY PERFORMED
Lead + Copper	Currently at desk top level of the Lead & Copper Rule	
Coliform	70/month	80~100/month
Inorganics	1/3 years	1993 (not at pt. of entry)
Nitrate/Nitrite	Some	3/94; 4/94; 10/94; 12/94
Trihalomethanes	4/year	2/28/94; 4/4/94; 8/1/94; 12/2/94
Organics	- NA -	
Turbidity	- NA	
A-280	1 year	5/93 - 10/93
Radiologicals	signed contract 10/94 but have not received bottles yet	
Secondary	1/3 years	3/93 → (not at POE)
Asbestos	received a waiver from BSDW on 5/11/94	
VOC's	values for each well, reviewed 3 log book at voc data	

NAME OF LABORATORY Ridgewood Water Company (coliform only) CERTIFICATION # 02089

Garden State Lab Certification # 02532

COMPLIANCE EVALUATION

SOURCE DEFICIENCIES See Attached "List B"

TREATMENT DEFICIENCIES See Attached "List B"

ATTACHMENT Y

CITY OF PATERSON
P RTMENT OF HUMAN RESOURSES

FRANK X. GRAVES, JR.
MAYOR

NELLIE POU
DIRECTOR

DIVISION OF HEALTH
JOHN J. FERRAIOLI, HEALTH OFFICER

176 Broadway, Paterson, New Jersey 07505
(201) 881-3900

CERTIFIED LETTER #1182
RETURN RECEIPT REQUESTED

April 25, 1990

Paperboard Specialties
177 3rd Avenue
Paterson, NJ 07514

ATTENTION: MR. DOMINICK DESIDERIO, PRESIDENT

Dear Mr. Desiderio:

On Thursday, April 19, 1990 an ECRA inspection was conducted at Paperboard Specialties (PBS). Present for the inspection was Michael McCann and Chris Lacey, New Jersey Department of Environmental Protection (NJDEP); Mr. Don Bello, Consultant; Mr. John Shortino, Plant Supervisor; and myself. During the inspection it was noted that a large transformer had leaked oil onto the pavement. Three transformers were located in the storage lot across from the facility. Some oil was evident on the ground and the pavement appeared to be stained, especially along the fence. As a result of the above discharge, the NJDEP - Action Hotline was notified as required by law. Since transformer oil can contain PCB's, our office is directing you to comply with the following:

1. Immediately cease and desist the discharge and clean-up any residue that is on the pavement.

2. Have all three transformers tested for the presence of PCB's. The tests must be performed by an approved laboratory and a copy of these results sent to our office. If the tests show the oil to contain PCB's, then the oil must be disposed of properly and in compliance with Federal, State, and Local rules and regulations.

3. In the same lot and adjoining lot there are several fifty-five (55) gallon drums which contain waste oil. One drum was not properly closed. Waste oil is considered a hazardous waste and must be collected, stored, and disposed of properly. Past practices at ChinAm has shown negligence and non compliance with the law; hopefully, this will not be the case in future. Instead of moving the drums around as has been the case in the

ATTACHMENT Y-1

(continued)

past, a scavenger waste oil hauler should be hired to remove the oil and provide you with a manifest. Waste oil should not be stored past ninety (90) days from the date of collection and all drums awaiting disposal must be labelled "Hazardous Waste" and have the date of accumulation on the label.

Please provide our office with a timetable which will address the sampling of the transformer oil and the proper disposal of the waste oil. This timetable must be received by this office within seven (7) days from receipt of this letter, failure to do so may result in legal action being taken against you by this office.

If you have any questions, please contact me at 881-3914, 3921.

Sincerely,

Alexis Mudrick

ALEXIS MUDRICK
ENVIRONMENTAL SPECIALIST/HAZARDOUS MATERIALS
OFFICE OF ENVIRONMENTAL SCIENCE

AM:vb

cc: John Shortino, Plant Superintendent - rec 5-1-90
latest 5-9-90 7 working days

ATTACHMENT Y-2

ATTACHMENT Z

SDS SERVICE CO.
P.O. BOX 14
HEWITT N.J. 07421
(201) 853-7444

Febuary 1, 1986

Elson T. Killam Associates, Inc.
P.O. Box 1008
27 Bleeker St.
Millburn, N.J. 07041-1008

ATTN: Richard J. Konkowski

Dear Mr. R. Konkowski

As requested by you, this letter is to inform you of the work performed by SDS service co. at Chi-Nam Inc. 177 3rd ave. Paterson N.J.

Having advised Mr. Irwin Silberman (Chi-Nam Inc. agent) that the 3 oil tanks (1-10,000 gallon and 2-20,000 gallon) must have a Petro-Tite (or similar) test performed to meet New Jersey State regulations, since these tests require the tanks to be filled to capacity. Mr. Silberman decided that SDS service co. should visually inspect the tanks and perform a vacuum test before filling them. Having done this we found that one 20,000 gallon tank (closest to loading dock wall) didn't hold a vacuum upon inspection we found an existing old patch with a weld that appeared split, so we repaired it with a fiberglass patch. Also the oil lines from that same tank appear to be leaking. We did not repair the oil lines neither did we re-test the tank.

Also we steam cleaned oil off the loading dock wall which was bleeding thru from the boiler room. This oil seems to be coming from previous spills and or underground contamination.

All test performed by SDS service co. were only preliminary (no warranty expressed or implied is given) any tank that is to be used must still have Petro-Tite test to insure its integrity.

Yours truly

Robert G. Stibick

RGS/ss

ATTACHMENT Z-1

ATTACHMENT AA

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF PUBLICLY FUNDED SITE REMEDIATION

BUREAU OF ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE

ENVIRONMENTAL MEASUREMENTS SECTION

SAMPLING EVENT PACKAGE

PAPERBOARD SPECIALTIES, INC.
PASSAIC COUNTY, PATERSON, N.J.
GROUND WATER AND SUBSURFACE INVESTIGATION
SEPTEMBER 1, SEPTEMBER 7, SEPTEMBER 27 - OCTOBER 6, 1993

Eva Wallace
Author

Paul M Zamble
Section Chief

ATTACHMENT AA-1

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Scott A. Weiner
Commissioner

Anthony J. Farro
Director

JAN 20 1994

M E M O R A N D U M

TO: TRISH CONTI, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: DENISE RUDE, HSMS I TMZ For DKR
Environmental Measurements Section

FROM: ERICA WALLACE, HSMS II EW 1/18/94
Environmental Measurements Section

SUBJECT: Paperboard Specialties
Paterson, NJ
Ground Water and Subsurface Investigation
Sept. 1, 1993, Sept. 7, 1993 & Sept. 27 - Oct. 6, 1993

Purpose:

In response to your Inter-Divisional Work Request #2022, sampling was conducted by BEMQA at the above referenced site. This Pre-Design sampling consisted of ground water and product sampling from existing monitoring wells and underground storage tank (UST) as well as soil and ground water sampling from boreholes completed with the Geoprobe[R] unit. Results from the ground water sampling will be used to determine the extent of aquifer contamination, and product samples will be identified/characterized for disposal. Soil boring samples will identify the presence of contamination in the soil directly above the ground water table.

Introduction:

All eight (8) existing monitoring wells were sampled, however the ground water was not sampled in the four (4) wells containing floating petroleum product. At these locations, only the product was sampled. Ground water sampling of the four (4) monitoring wells (BEC-1S, BEC-2S, MWB-5, and MWB-1), containing no floating product, was performed on September 1, 1993. The laboratories performing the analysis were ICM Laboratories analyzing for Targeted Compound List (TCL) volatile organics, base neutral-acid extractables and Targeted Analyte List (TAL) metals, and NET Laboratories performing analysis for total dissolved solids (TDS), pH, and dissolved oxygen (D.O.). NET also performed analysis on MWB-5 for Diisopropyl Ether (DIPE),

Tertiary-Butyl Alcohol (TBA), Methyl-Tertiary Butyl Ether (MTBE), Methanol and Ethanol.

The four (4) monitoring wells and one (1) underground storage tank present on site containing petroleum product (BEC-2D, MWB-3, MWB-2 and BEC-1D), were sampled on September 7, 1993. The NJDEPE/BOAS/BRIAS laboratories analyzed the samples for full TCLP, ignitability, reactivity, corrosivity, pH, density, viscosity and GC fingerprint/fuel characterization. The petroleum product sampled from UST B was also analyzed for PCBs.

Ground water and soil samples obtained with the Geoprobe^{R}, were collected from September 27, 1993 through October 6, 1993. Both soil and ground water samples were predominately analyzed by the NJDEPE/BEMQA Mobile Laboratory for volatile organics, total petroleum hydrocarbons (TPHC) and fuel oil characterization/identification. BEMQA personnel analyzed the soils and ground water samples for TPHC via field immuno-assay test kits supplied by ENSYS. As confirmatory samples, a total of seven (7) non-aqueous samples were analyzed by NJDOH for TPHC (method 418.1), and six (6) non-aqueous and one (1) aqueous sample were analyzed by NJDEPE/BOAS for volatile organics + 15, base-neutrals + 15 and GC fingerprint/characterization. BOAS will characterize these samples based on comparison with results from monitoring wells and UST petroleum product characterization. An additional four (4) non-aqueous samples were analyzed by BOAS for base-neutrals + 15 only. All phases of sampling results (performed by a fixed laboratory) were planned for delivery according to normal (40 day) turnaround scheduling.

Personnel on site:

Erica Wallace, EMS 7/20, 9/1, 9/7, 9/27-10/1, 10/4-10/6
Rich Gunoskey, EMS 9/1, 9/27-10/1, 10/4-10/6
John Evenson, EMS 9/1, 9/7, 9/27-10/1, 10/4-10/6
Robert Fowler, EMS 9/1
Chad VanSciver, EMS 7/20, 9/27-10/1, 10/4-10/6
Trish Conti, BEERA 9/7, 9/29, 9/30, 10/4, 10/5
S. Vijayasunderam, BSM 9/7, 9/29
Daryle Clark, BGWPA 9/7, 9/29

weather conditions:

9/1: sunny, hazy, 90°F
9/7: sunny, low 90's^{o}F
9/27: cloudy, 70's^{o}F
9/28: partly cloudy, low 60's^{o}F, rain late
9/29: mostly sunny, low 60's^{o}F
9/30: cloudy, high 50's^{o}F
10/1: sunny, mid 60's^{o}F
10/4: sunny, breezy, low 60's^{o}F
10/5: sunny, breezy, mid 60's^{o}F
10/6: sunny, mid 70's^{o}F

Methodology:

Monitoring Well Ground Water Sampling:

On the day of sampling, headspace readings were taken with a PID followed by water level and total depth of well measurements. This was followed by the evacuation of three (3) well volumes of water. The 4" PVC wells were evacuated with one of the following types of pumps: gas-powered centrifugal, electric centrifugal (Teel) or peristaltic. Dedicated 3/4" polyethylene tubing connected to field decontaminated foot valves was used with the centrifugal pumps, and dedicated Teflon^R and flexible silicon tubing was used with the peristaltic pump.

Samples were collected with dedicated Teflon^R bailers connected to dedicated Teflon^R coated stainless steel leader wire. All bailers and leader wires were previously decontaminated at the Environmental Equipment Service Center prior to use. Surgical gloves were replaced between each sample to prevent cross contamination.

Monitoring Well Petroleum Product Sampling:

Prior to product sampling, total depth/thickness of the product in monitoring wells was determined using an interface probe during a site visit on July 20, 1993. Samples were collected using a stainless steel bacon bomb sampler on three (3) of the monitoring wells and the underground storage tank. A peristaltic pump was used to collect the product in monitoring well BEC-1D.

QA/QC:

One (1) field blank, one (1) trip blank, one (1) duplicate and one (1) matrix spike/matrix spike duplicate sample were performed to aid in QA/QC for the ground water sampling. No quality assurance samples were performed for the product sampling episode.

The field blank was performed by pouring laboratory provided analyte free distilled/deionized water into a bailer and then into appropriate laboratory supplied sample bottles.

Soil Borings and Ground Water Sampling:

Soil borings and ground water sampling were completed through the use of a Hydraulic Soil Probing Unit (Geoprobe^R - Model 8M) equipped with a hammer drill mounted to the back of a pickup truck. In areas where concrete or asphalt was encountered, the Geoprobe^R's rotary drill option was used to drill through to the soil level. Soil samples were retrieved using a nickel plated Large Bore Sampling Tube with a removable acetate liner. The Large Bore Sampling Tube from Geoprobe^R comes with either a brass or acetate inner liner. The acetate liner was chosen and believed acceptable because of high contamination levels encountered at the site, therefore the material of construction was not likely to contribute any significant contamination to the sample. Also, it was intended that a visual inspection and screening

be performed prior to sample extrusion which is only possible with the acetate liner. This tube was hydraulically driven to the desired depth for sample collection, and then retrieved for recovery of the soil core within the tube (recovers cores 24" long and 1 1/8" diameter). The acetate liner holding the soil core was removed from the sample tube and cut lengthwise for visual inspection, screening of soil with a PID or FID, and for transferal to suitable sample container(s) for analysis. All samples for volatile organic analysis were not homogenized. Samples for Total Petroleum Hydrocarbons (TPHC) analysis were homogenized with a stainless steel spatula in the sample container.

At some locations, continuous soil borings from the surface to the ground water table were completed for the purpose of visually inspecting, logging and screening. At other locations, where contamination was not apparent in shallow depths (as determined by nearby shallow soils indicating no contamination by FID/PID), only the interval or two directly above the ground water table was sampled for laboratory and/or field analysis. See tables and attached soil boring logs for more information on sampling intervals and depths to ground water.

Laboratory TPHC analysis was done to further aid in delineation of the contamination plume, and to confirm field and Mobile Laboratory analytical results. Selection of the sample locations were field determined by BEERA and EMS. Individual locations were selected based on noted visual field contamination in the soil: some samples were taken in high contamination areas and some in low contamination areas. In addition, sample locations for fuel characterization analysis were also designated for collection in areas that would verify the similarity or difference of fuel oils encountered over the entire site.

Ground water samples were collected by installing a mill-slotted well point (3' length X 1" diameter) in the same hole as the soil boring location, this was accomplished by attaching the well point to a probe rod and then hydraulically advancing the well point into the ground water table. The ground water sample was collected by inserting Teflon^{R} tubing into the probe rods and into the mill-slotted well point. A peristaltic pump was used to pull the sample through the tubing and directly into sample containers. Following sampling, all borings made through concrete or asphalt were backfilled and sealed with cement.

QA/QC:

No trip, field or duplicate samples were taken as part of the Geoprobe^{R} soil and ground water investigation. The blanks were not performed due to the high site-specific action levels for this investigation, together with the high levels of contamination experienced in the soil and ground water at this site. Any trace amounts of contamination will not have a significant impact on the samples.

Discussion:

Monitoring Wells: Ground Water & Petroleum Product:

The field blank conducted during the ground water sampling event was in the vicinity of MWB-5. The corresponding monitoring well location for the duplicate and the matrix spike/matrix spike duplicate were MWB-1.

All headspace readings taken with an HNU^R on BEC-1S, BEC-2S, MWB-5 and MWB-1 were at non-detectable levels. All monitoring wells sampled without product had slow recharge rates, so they were each pumped to near dryness before sampling.

Despite the laboratory results for volatile and semi-volatile organics, which indicate little contamination in the wells not containing product, monitoring well BEC-1S exhibited a very dark gray color and an oily sheen.

Product samples from monitoring wells and the one (1) underground storage tank were sent to NJDEPE/BOAS laboratories for characterization. The four (4) monitoring wells containing product were discovered to contain weathered or severely weathered fuel oil #6. However, the UST sampled inside the building was discovered to contain fuel oil #2. It is probable that the USTs previously removed from the building were leaking and contributed to the petroleum product found in some monitoring wells. The UST still in place is not leaking, at least not excessively, and it is evident that it is not responsible for the presence of product in the wells.

It should be noted that the four (4) wells containing floating petroleum product had varying thicknesses and consistencies (see Table for further descriptions).

Soil Borings and Ground Water Samples:

Prior to conducting soil borings in the UST room or outside the building, a Ground Penetrating Radar (GPR) survey was conducted by members of NJDEPE/NJGS. This was done to insure that no underground utilities or pipes were encountered while conducting boring activities.

In accordance with the sampling plan, soil/ground water samples were located in and around the UST room and truck bay, with delineation to follow, depending on field analysis and site conditions. As a result of the GPR survey, locations for borings within the UST room were limited. A total of three (3) borings were completed inside the UST room near the east wall, and a total of three (3) borings outside the UST room (sidewalk) were completed. A total of four (4) borings were completed inside the truck bay area near the wall dividing it from the UST room. One (1) boring just outside on the sidewalk and one (1) directly across 3rd Avenue were also completed.

Twelve (12) additional borings were completed (S-1 through S-12) to further delineate the property for petroleum contamination. This includes investigation of the contamination near monitoring well BEC-1D, which was originally considered to be a separate plume from another source. However, based on the type and lower levels of contamination found near BEC-1D, contamination from only one source is most probable (see results and site map for sample locations).

Re-sampling of Phase II post-excavation area in the parking lot (near old location SA-7) was also completed. Four (4) locations were sampled (PA-1 through PA-4) from the 5 - 5.5 foot and 5.5 - 6 foot intervals. At one (1) location (PA-1), the 5 - 5.5 foot interval was field-screened for TPHC with an immuno-assay test kit. No contamination was detected at this interval and there was no odor or positive result from direct reading instruments on samples from the other three locations, so all four samples from this interval were discarded. Sample from the 5.5 - 6 foot interval from all four sample locations were then transferred to appropriate sample containers. These samples were sent to NJDEPE/BOAS laboratories for analysis of base-neutrals + 15.

While sampling in the parking area, another area of contamination was discovered, it was detected while sampling PA-1 through PA-4. A total of three (3) borings were completed to ground water in the parking area. Contamination in this area was considered separate from the contamination found in and around the building. This is due to the odor and consistency of the fuel product found: it was thin and watery and had an odor like diesel fuel. This is in contrast to the thick black oily product found in the building. A separate EMS report, documenting further delineation sampling in this area conducted at a later date, will be forthcoming.

Based on monitoring well and soil characterization results, the type of petroleum contamination found in and around the building is the same slightly or severely weathered Fuel Oil # 6. The only dissimilar fuel oil is in UST B which contains Fuel Oil # 2.

Results and Conclusions:

Ground water contamination is greatest and exceeds the 1000 ppb action level directly under the UST room, where the UST was leaking, and extends into the truck bay. This is verified by the presence of product in monitoring well MWB-2 located in the truck bay, and also in five ground water samples taken in the UST room and truck bay. No other ground water samples exceed the 1000 ppb action level outside of these two areas with the exception of samples in and around the parking area which are highly contaminated, and which are due to another source of contamination (see Discussion). It should be noted, that even though ground water sampled from borings S-2 and S-3 do not show high contamination levels, a thin layer of floating petroleum product is present in nearby monitoring wells BEC-2D and MWB-3. This may be due to the petroleum product's insolubility in ground water. Borings to the level of ground water were not possible at most other locations near Rt. 20 due to the presence of bedrock, although ground

water contamination is evident at monitoring well BEC-1D containing more than four feet of product.

Soils contamination extends in the same general areas as the ground water contamination. Contamination levels in the soil borings exceed the 10,000 ppm action level in the UST room and truck bay areas. Outside this area, only one (1) sample (S-7) located on Rt. 20 South exceeds the action level at a depth of 5-7 feet. However, sample S-10 directly across from the S-7 location on Rt. 20 North shows no contamination. As previously stated, another source of contamination exists in the parking area where soils also exceed the action level.

Petroleum product in soils is present at depths of 10-12 feet below ground surface in the UST room, and from 6-10 feet below ground surface in the truck bay. This does not represent a difference in depth however, because the UST room is raised approximately 3-4 feet above the level of the truck bay. Samples located near Rt. 20S (S-4, S-5 and S-7), showed contamination at approximately 5-8 feet below ground surface. This shallower depth to contamination compared to that in the building is due to the natural ground slope.

At a minimum, removal (pumping) of petroleum fuel oil found in monitoring wells and in soil and ground water directly under the UST room and truck bay should be conducted.

It is difficult to compare the overall performance of immuno-assay tests with that of the mobile laboratory. Both volatile and total petroleum hydrocarbon results, done by the Mobile Lab, must be combined when compared to the immuno-assay results, and both were not performed for most samples. However, when applicable, they are generally consistent when compared. The only anomalies are with non-aqueous sample S-1 and with aqueous sample PA-6:

Sample S-1: immuno-assay results indicated contamination to be at or above 1000 ppm, however, mobile laboratory and NJDOH TPHC analysis did not confirm this. If one small portion of the core recovery was petroleum contaminated, insufficient homogenization of the sampling tube's contents could cause a difference in results.

Sample PA-6: Mobile Laboratory results for volatile organics indicated higher contamination than the immuno-assay test. The volatile organics scan may contain early eluting gasses that are not petroleum hydrocarbons, such as methane and ethane. Immuno-assay results will not include these light non-petroleum hydrocarbons compounds.

Results from NJDOH TPHC analysis were consistent with field screening or visual observations noted on sample boring logs. See attached tables for a summary of immuno-assay, mobile laboratory and NJDOH results in addition to monitoring well evacuation and sampling data.

All samples were collected in accordance with the NJDEPE Field Sampling Procedures Manual (May 1992 ed.), with the exception of

excluding field or trip blanks during the Geoprobe^R soil and ground water investigation (see QA/QC). NJDEPE Chain of Custody forms were completed for each laboratory sample, therefore maintaining the integrity of the samples.

NJDEPE/BOAS sample results from the monitoring well petroleum product sampling event and from the Geoprobe^R investigation have not been received by BEMQA. Results have been delayed from the lab, but they will be forwarded as soon as they are received.

If there are any further questions regarding these sampling events, please contact myself or John Evenson at 984-1693.

c: S. Vijayasundaram, BSM
Daryle Clark, BGWPA
Bill Buchanan, BOC
John Evenson, EMS

ATTACHMENT AA-9

TABLE I

MONITORING WELL EVACUATION AND SAMPLING DATA - 9/1/93

Sample #	Well #	DOW (ft.)	DTW (ft.)	Evacuation Time	Volumes (gal.) (1 Vol.)	(Vol.purged)	Sample Time	Samplers	Well Headspace (HNU)	Bag Headspace (OVA)	Well Casing	Pump Used for Evacuation	Lab Analysis
PS9193BEC-1S	BEC-1S	11.93	5.48	1145-1152	4.25	8.5	1510-1515	EW,RG	ND	180	4"	gas centrifugal	TCL VO & BNA, TAL Metals, pH, D.O., TDS
PS9193BEC-2S	BEC-2S	12.1	7.55	1158-1205 1225-1230	3.0	7	1415-1425	RF,JE	ND	7.3	4"	elec. centrifugal	TCL VO & BNA, TAL Metals, pH, D.O., TDS
PS9193MWB-5	MWB-5	11.91	8.35	1227-1305	2.35	8	1445-1530	RF,JE	ND	6.8	4"	peristaltic	TCL VO & BNA, TAL Metals, pH, D.O., TDS, MTBE, TBA, DIPE, MeOH, Ethanol
PS9193MWB-1	MWB-1	21.68	13.9	1306-1330	5.13	12	1410-1450	RG,EW	ND	5.0	4"	gas centrifugal	TCL VO & BNA, TAL Metals, pH, D.O., TDS
PS9193DUP	MWB-1	--	--	--	--	--	1410-1450	RG,EW	--	--	--	--	TCL VO & BNA, TAL Metals, pH, D.O., TDS
PS9193FB (field blank)	--	--	--	--	--	--	1430-1435	JE,RF	--	--	--	--	TCL VO & BNA, TAL Metals, pH, D.O., TDS, MTBE, TBA, DIPE, MeOH, Ethanol
PS9193TB (trip blank)	--	--	--	--	--	--	1000-1500	--	--	--	--	--	TCL VO, MTBE, TBA, DIPE, MeOH, Ethanol

DOW: Total depth of well
DTW: Depth to water

TCL VO & BNA: Targeted Compound List Volatile Organics and Base/Neutrals Acid Extractables
TAL Metals: Targeted Analyte List Metals
D.O.: Dissolved Oxygen
TDS: Total Dissolved Solids
MTBE: Methyl Tertiary Butyl Ether
TBA: Tertiary Butyl Alcohol
DIPE: Diisopropyl Ether
MeOH: Methyl Alcohol

ND: Not Detected

ATTACHMENT AA-10

TABLE II

MONITORING WELL PRODUCT SAMPLING DATA

Sample #	Well #	Product Thickness	DTW (ft.)	Well Casing	Sample Time	Visual Field Observations	Lab Analysis	BOAS Fuel Identification
PS9793BEC-2D	BEC-2D	1.08"	10.45	4"	1215	thin black oil	(1)	slightly weathered fuel oil # 6
PS9793MWB-3	MWB-3	2.88"	8.06	4"	1055	thin black oil	(1)	severely weathered fuel oil # 6
PS9793MWB-2	MWB-2	7'2.16"	14.8	4"	1415	thick black oil	(1)	severely weathered fuel oil # 6
PS9793BEC-1D	BEC-1D	4'9.6"	13.98	8"	1245	thin black oil	(1)	severely weathered fuel oil # 6
PS9793TANKB	UST B	--	--	--	1305	thin black oil	(1), PCBs	fuel oil # 2

DTW: Depth to water (product/water interface)
(1): Analyzed for TCLP (organics & inorganics), ignitability, corrosivity, reactivity, pH, density, viscosity, GC fuel oil characterization

Table III

PAPERBOARD SPECIALTIES - (Sept. 27 - Oct. 5)

SOIL AND GROUND WATER IMMUNO-ASSAY AND MOBILE LAB ANALYTICAL DATA

GROUND WATER						SOILS					
		Immuno-assay		Mobile Lab			Immuno-assay		Mobile Lab		NJDOH
Sample Location	GW Depth (feet)	210 (ppb)	1000 (ppb)	Volatile (ppb)	TPHC (ppb)	Sample Depth (feet)	1000 (ppm)	10,000 (ppm)	Volatile (ppm)	TPHC (ppm)	TPHC (ppm)
TRB-1	10	--	--	6,500	--	8-10	--	--	17.4	20,200	--
TRB-2	--	--	--	--	--	6-8	--	--	14.2	6,090	--
TRB-3	--	--	--	--	--	6-8	--	--	11.9	29,200	--
TRB-4**	10	--	--	7,760	--	6-8	--	--	24.9	10,000	--
TRB-5*	--	--	--	--	--	8-10	--	--	--	--	17,115
TRB-6	12	Pos.	Neg.	264	--	10-12	Neg.	Neg.	0.0341J	--	--
UST-1	10	--	--	14,800	--	10-12	--	--	25.1	94.1J	--
UST-2	10	--	--	9,060	--	8-10	--	--	--	ND	--
	--	--	--	--	--	10-11	--	--	--	11,800	--
UST-3***	10	--	--	8,480	--	10-12	--	--	--	--	3,739
UST-4	--	--	--	--	--	8-10	Pos.	Neg.	0.206	--	--
UST-5*	--	--	--	--	--	10-12	Pos.	Pos.	--	--	14,823
UST-6	--	--	--	--	--	11-12	Neg.	Neg.	8.84	--	--
S-1*	9	Pos.	Pos.	471	--	7-9	Pos.	Neg.	0.0961J	ND	29.2
S-2*	8	--	Neg.	--	--	6-8	Neg.	Neg.	0.0412J	--	25.6
S-3	8	Pos.	Neg.	37.9	--	6-8	Neg.	Neg.	0.0264J	--	--
S-4	--	--	--	--	--	5-6	Pos.	Neg.	--	--	--
S-5**	--	--	--	--	--	7-8	Pos.	Neg.	--	--	--
S-6	6.5	Pos.	Neg.	ND	--	5-7	Neg.	Neg.	ND	ND	--

ATTACHMENT A1

Table III (cont.)

GROUND WATER						SOILS					
		Immuno-assay		Mobile Lab			Immuno-assay		Mobile Lab		NJDOH
Sample Location	GW Depth (feet)	210 (ppb)	1000 (ppb)	Volatile (ppb)	TPHC (ppb)	Sample Depth (feet)	1000 (ppm)	10,000 (ppm)	Volatile (ppm)	TPHC (ppm)	TPHC (ppm)
S-7**	--	--	--	--	--	5-7	Pos.	Neg.	15,000	--	--
S-8*	--	--	--	--	--	5-7	Neg.	Neg.	ND	--	28.0
S-9*	--	--	--	--	--	5-7	Neg.	Neg.	ND	--	71.0
S-10	--	--	--	--	--	4-6	Neg.	Neg.	ND	--	--
S-11**	--	--	--	--	--	13-14.5	Neg.	Neg.	ND	--	--
S-12**	10	Pos.	Neg.	156	--	9-11	Neg.	Neg.	ND	ND	--
PA-1	--	--	--	--	--	5-5.5	Neg.	Neg.	--	--	--
PA-2	8	Pos.	Pos.	24,200	239,000	5.5-6	--	--	ND	ND	--
PA-5**	10 --	Pos. --	Pos. --	13,700 --	-- --	6-8 8-10	-- Pos.	-- Pos.	156,000 --	9,050 --	-- --
PA-6	10 --	Neg. --	Neg. --	2,450 --	-- --	7-9 9-11	Neg. Neg.	Neg. Neg.	58.1J ND	ND ND	-- --

TRB: Truck Bay Area

UST: Underground Storage Tank Area

PA : Parking area

* : Sample lab analyzed for Total Petroleum Hydrocarbons (meth. 418.1)

** : Sample lab analyzed for Volatile Organics (meth. 624), Base-Neutrals (meth. 625) and GC Fingerprint Analysis

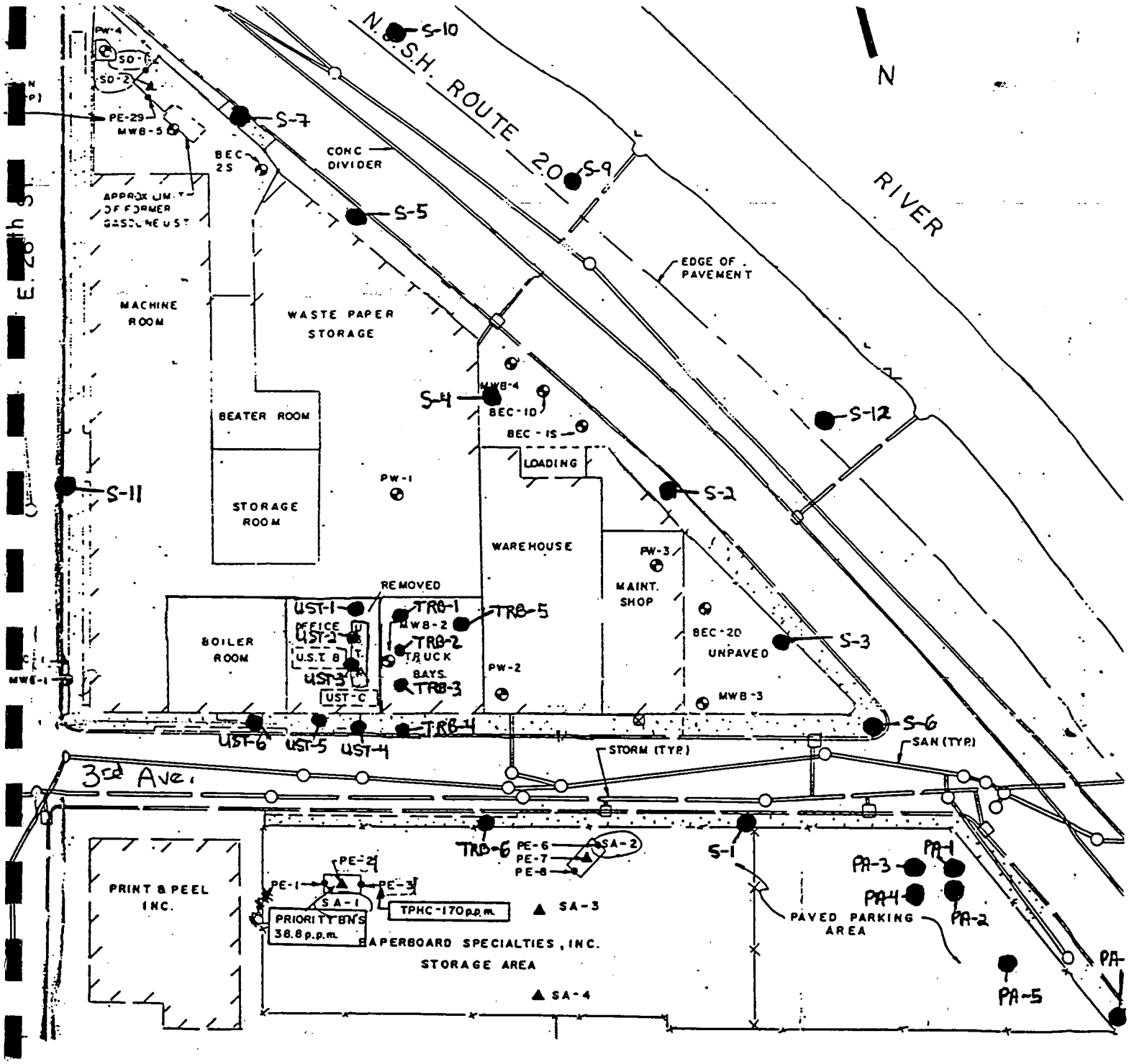
***: Sample lab analyzed for Total Petroleum Hydrocarbons (meth. 418.1), Volatile Organics (meth. 624), Base Neutrals (meth. 625) and GC Fingerprint Analysis

-- : Sample not analyzed

Pos.: Result is greater than or equal to targeted concentration
Neg.: Result is less than targeted concentration

Volatile: Volatile Organics fraction (compounds lighter than napthlalene)
TPHC: Total Petroleum Hydrocarbon fraction (compounds heavier than napthalene)

ATTACHMENT AA-1



PAPERBOARD SPECIALTIES, INC.
BEMQA/EMS SOIL/GROUNDWATER INVESTIGATION
Sept. 27, 1993 – Oct. 5, 1993

● – SAMPLE LOCATIONS

ATTACHMENT AA-14

Not to Scale

ATTACHMENT BB

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF PUBLICLY FUNDED SITE REMEDIATION

BUREAU OF ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE

ENVIRONMENTAL MEASUREMENTS SECTION

SAMPLING EVENT PACKAGE

PAPERBOARD SPECIALTIES - PATERSON
AREA-A SAMPLING FOR GW AND SOIL
NOVEMBER 9-10, 1993

Author

Section Chief

ATTACHMENT BB-1

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Scott A. Weiner
Commissioner

Anthony J. Farro
Director

JAN 20 1994

M E M O R A N D U M

TO: TRISH CONTI, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: CHAD VAN SCIVER, HSMS I CVS
Bureau of Environmental Measurements and Quality Assurance

FROM: JOHN EVENSON, HSMS III JE 1/20/94
Environmental Measurements Section

SUBJECT: PAPERBOARD SPECIALTIES - PATERSON
Soil Boring and Well Point Sampling Episode - Nov. 9-10, 1993
BEMQA Log #2085

Purpose

Pursuant to your request, the Environmental Measurements Section has completed a ground water and sub-surface soil investigation at the above-mentioned site. Sampling was performed in accordance with the Phase II scope of work for the purpose of delineating the soil contamination in the Area A parking lot.

Introduction

On November 9, Environmental Measurements Section (EMS) personnel measured out three sample locations within the Area A parking lot; one located upgradient, one downgradient and one sidegradient of the suspected contamination. At-depth soil boring samples were collected from the three locations and analyzed by NJDEPE Bureau of Organic and Analytical Services (BOAS) and the Bureau of Radiation and Inorganic Analytical Services (BRIAS) for Target Compound List (TCL) Volatile Organics (method 624), TCL Base neutral/Acid extractables (method 8270), PCB's (method 8080) and Target Analyte List (TAL) Metals, respectively. Soil samples were also analyzed by the NJDEPE Mobile Laboratory for the Total Volatile Organics fraction by heated headspace capillary column gas chromatography with flame ionization and TPHC (Total Petroleum Hydrocarbon) by GC/MS. A total of five borings were made during the two day sampling event. In addition, two well point piezometers were installed, one upgradient and one downgradient of the suspected source areas for ground water characterization. Samples were collected from the well points on November 10 and analyzed by the Mobile laboratory for the Total Volatiles fraction and TPHC. Ensys Enzyme Immunoassay Petro kits for

ATTACHMENT BB-2

soil and water were employed to aid in the delineation of the soil and characterization of the suspected ground water contamination. For complete sample information, please refer to Table I.

Personnel on site:

John Evenson, EMS	11/9-11/10
Erica Wallace, EMS	11/10
Rich Gunoskey, EMS	11/9-11/10
John Caruso, EMS	11/9-11/10
Trish Conti, BEERA	11/9-11/10
S. Vijay, BSM	11/9-11/10
Daryle Clark, BGWPA	11/9-11/10
Leslie Reid-Green, OSSH	11/10
Geological Survey	11/10

Methodology

Prior to conducting soil borings on November 10, a Ground Penetrating Radar survey was conducted inside the parking area by the NJGS to determine the location of four underground storage tanks; the four tanks were considered to be the main source of contamination. The survey revealed that the tanks had been removed from the parking area. As a result, borings PA-7 and PA-8 were moved to the middle of the parking lot in an area where the tanks were expected to be located.

A tripod mounted, motorized cathead unit (Acker) containing a one-hundred forty pound slide hammer was employed to advance two (2) inch diameter split spoons into the overburden at two (2) foot increments to ground water (approximately 8-10 ft.), according to location. Once retreived, the spoons were opened and the collected contents were scanned with a Photoionization detector (HNu^R PI-101) for the presence of Volatile organic vapors. Samples for TCL Volatile organics were collected by directly transferring soil into sample containers utilizing dedicated stainless steel spatulas/trowels. All other samples were collected by placing the soil in a stainless steel pan, mixing its contents, and then transferring samples into proper containers using dedicated spatulas/trowels. For additional information, refer to the attached soil logs.

For ground water collection, the Acker was used to advance the well points approximately two (2) feet into the ground water interface. The well points were five (5) feet in length and constructed of continuous wrapped stainless steel mesh (0.010 " slot size) over perforated galvanized pipe, with a carbon steel drive point. The riser pipe casing was constructed of galvanized steel; at no time did the casing contact the ground water. Ground water samples were collected using a flow controlled peristaltic pump with Teflon^R and Silicon tubing.

Ensys Enzyme Immunoassay field analysis kits for petroleum hydrocarbons were employed to assist in the delineation of suspected contaminated soils and ground water characterization. All tests were performed in accordance with procedures outlined by the manufacturer.

ATTACHMENT BB-3

These test kits are the only petroleum hydrocarbon immunoassay test listed as an approved method under SW-846 (Method 4030).

Discussion

Based upon Mobile Laboratory results, only the downgradient soil sample (PSDG) was reported to have results above the minimum quantifiable amount for TPHC's. The petroleum product from this sample appears identical to sample PA-2, a sample that was collected in the same general area of Parking Area A during the September 27 - October 6 sampling episode, but differs significantly from samples collected from soil borings in and around the main building and from product sampled from monitor wells and the underground storage tank. The downgradient sample is characterized as having a molecular weight range consistent with a kerosene or diesel fuel (C11 to C21) with the major constituent of the oil being a C15 compound (Trimethyldecane), with little or no detectable gasoline or BTEX fraction. For further information regarding sample analysis results, please refer to the attached Mobile Laboratory report.

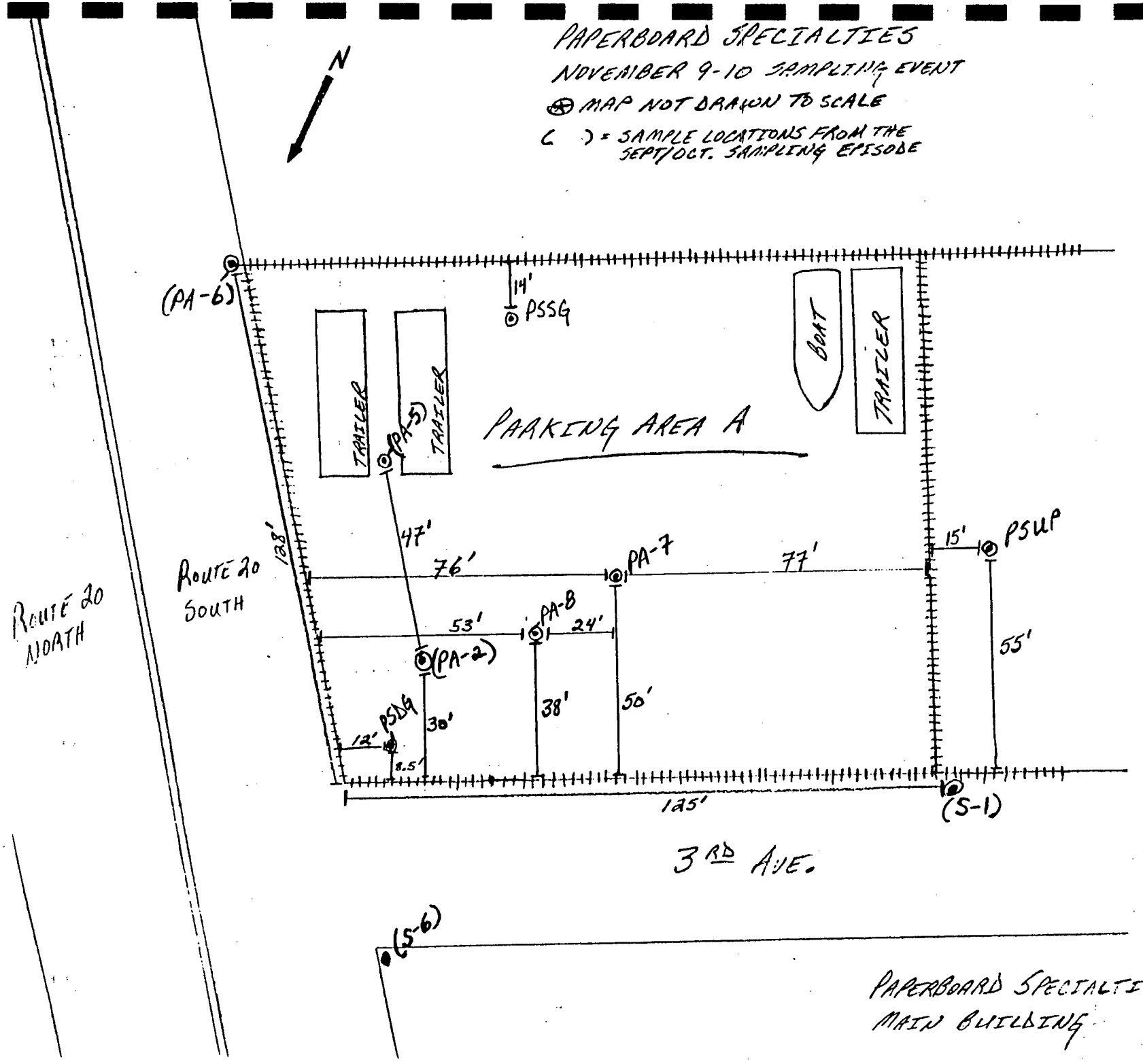
Based upon Mobile Laboratory results, Ensys Immunoassay tests, visual inspection and PID field screening, the contamination is localized in the east end of the parking lot extending out towards Route 20. Samples PA-2, PA-5 and PSDG are heavily contaminated in both soil and ground water. Boring PA-6 results did not indicate soil contamination, however, ground water was contaminated by the petroleum product. See E. Wallace report for results of PA-2, PA-5 and PA-6. Soil boring samples collected from PA-8, PA-7, PSSG and PSUP were not contaminated. Ground water samples collected at PSUP were also considered to be clean. For the excavation, it is recommended that the contaminated soil from the northeast end of the parking lot be removed down to the water table between boring PA-8 and the Route 20 fence line and extend to the southeast between boring location PSSG and PA-6. Borings PA-8 and PSSG are the closest sample locations to the Route 20 fence line considered free of contamination. See attached map for sample locations. The use the of Ensys Immunoassay petroleum kits may be employed to assist in the delineation of the soils during the excavation. Any questions may be addressed to the writer at 4-1693.

JE
w/attachments

c: William F. Lowry, BEMQA
Vijay, BSM
Daryle Clark, BGWPA
Erica Wallace, EMS
Rich Gunoskey, EMS
John Caruso, EMS

ATTACHMENT BB-4

PAPERBOARD SPECIALTIES
NOVEMBER 9-10 SAMPLING EVENT
⊗ MAP NOT DRAWN TO SCALE
( ) = SAMPLE LOCATIONS FROM THE SEPT/OCT. SAMPLING EPISODE



PAPERBOARD SPECIALTIES
MAIN BUILDING

ATTACHMENT B-

TABLE 1
PAPERBOARD SPECIALTIES, INC.
SOIL BORING/WELL POINT SAMPLING
EPISODE - NOVEMBER 9 - 10, 1993

SAMPLE LOCATION	SAMPLE NUMBER	SAMPLE DEPTH	SAMPLE TIME	PARAMETERS	IMMUNOASSAY - SOIL 1000ppm	IMMUNOASSAY - SOIL 10,000ppm	IMMUNOASSAY - WATER 165ppb	IMMUNOASSAY - WATER 1,000ppb
UPGRADIENT SOIL	PSUP1109938-10	10-12 ft	1030	IMMUNOASSAY TEST ONLY.	(-)	(-)	(-)	(-)
UPGRADIENT SOIL	PSUP11099310-12	8-10 ft	1030	VOA'S (624), BN/AE (8270), PCB (8080), TAL METALS.	N/A	N/A	N/A	N/A
UPGRADIENT WATER	PSUP111093W-1	N/A	1110	TPHC (GC/MS),TOTAL VOLATILES	N/A	N/A	(-)	(-)
DOWNGRADIENT SOIL	PSDG1109936-8	6-8 ft	1545	VOA'S (624), BN/AE (8270), PCB (8080), TAL METALS, TPHC (GC/MS),TOTAL VOLATILES	(-)	(-)	N/A	N/A
DOWNGRAD. WATER	PSDG111093W-2	N/A	0900	TPHC (GC/MS),TOTAL VOLATILES	N/A	N/A	(+)	(+)
SIDEGRADIENT SOIL	PSSG1109938-10	8-10 ft	1300	TPHC (GC/MS),TOTAL VOLATILES	(-)	(-)	N/A	N/A
PARKING 7-A SOIL	PS111093PA-7	8-10 ft	1430	VOA'S (624), BN/AE (8270), PCB (8080), TAL METALS, TPHC (GC/MS),TOTAL VOLATILES	(-)	(-)	N/A	N/A
PARKING 8-A SOIL	PS111093PA-8	8-10 ft	1515	IMMUNOASSAY TEST ONLY.	(-)	(-)	N/A	N/A
FIELD BLANK	PS110993FB	N/A	1610	VOA'S (624).	N/A	N/A	N/A	N/A
TRIP BLANK	TB	N/A	11/9-11/10	TOTAL VOLATILES.	N/A	N/A	N/A	N/A

TPHC (GC/MS) AND THE TOTAL VOLATILE ORGANICS FRACTION ANALYSIS WAS PERFORMED BY THE MOBILE LABORATORY.
VOLATILE ORGANICS (624), BN/AE (8270), PCB (8080), TAL METALS ANALYSIS WAS PERFORMED BY BOAS/BRIAS.
(-): Result is less than targeted concentration.
(+): Result is greater than or equal to targeted concentration.

ATTACHMENT BB

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
Location: PSLRP – UPGRADIENT
Contractor:
Field Scientist/Engineer: J. EVERSON
Notes: WELL POINT I WAS INSTALLED AT THIS LOCATION

PROJECT NO.:
Coordinates:
Date: 11/09/93
Water Table Depth: 11-12' Approx
Organic Vapor Instrument Used: HNU PI-101

BORING NO.:
Drilling Method Used: ACKER
Hammer Weight: 140 lb.

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
1	X	7, 7	18"	ND	Dk. black fill material → 0-1' Brown sandy soil → 14-18"	14"	No petroleum odor	
2	X	6, 6		↓				
3	X	12, 8		N/A	No Recovery		N/A	
4	X	6, 4		↓				
5	X	5, 7		N/A	No Recovery		N/A	
6	X	4, 3		↓				
7	X	3, 4		N/A	No Recovery		N/A	
8	X	7, 7		↓				
9	X	11, 24	6"	ND	Brown/red sand loam		No Petroleum odor	BOAS/BRAS: VOCs, BNAs, PCB TAL METALS
10	X	44, 48		↓				
11	X	33, 19	1"	ND	Same as above.		No Petroleum odor	Immunoassay only
12	X	9, 15		↓				
13								
14								
15								

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
Location: PSSG - SIDE GRADIENT
Contractor: ____
Field Scientist/Engineer: J. EVELSON
Notes: ____

PROJECT NO.: ____
Coordinates: ____
Date: 11/09/93
Water Table Depth: ____
Organic Vapor Instrument Used: Hnu-PI 101

BORING NO.: ____
Drilling Method Used: ACKER
Hammer Weight: 140 lb

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
1	X	4, 7	10"	ND	Black fill material - feels like cork. Contained some glass		No petroleum odor	
2	X	6, 3		↓				
3	X	6, 4	4"	ND	Same as above		No petroleum odor	
4	X	2, 2		↓				
5	X	6, 3	10"	ND	Same as above w/ some coarse sands		No petroleum odor	
6	X	3, 5		↓				
7	X	8, 8	6"	ND	Brown coarse sand		No petroleum odor	
8	X	9, 19		↓				
9	X	34, 22	14"	ND	Brown/Red sand		No petroleum odor	Immuno assay on
10	X	22, 36		↓				
11								
12								
13								
14								
15								

ATTACHMENT BB-8

BORING LOG

PROJECT NO.:

BORING NO.:

Drilling Method Used: ACKER

Hammer Weight: 140 lb.

Coordinates:

Date: 11/09/93

Water Table Depth: 8' Approx.

Organic Vapor Instrument Used: HNu-PI-101

OBJECT: PAPERBOARD SPECIALTIES

Location: PSDG - DOWN GRADIENT

Contractor:

Field Scientist/Engineer: J. EVENSON

Notes: WELL POINT 2 WAS INSTALLED AT THIS LOCATION

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
	X	3, 4	5"	ND	Dk. brown, coarse sand		No petroleum odor	
1	X	4, 3		↓				
2	X	4, 5	4"	ND	Same as above		No petroleum odor	
3	X	2, 2		↓				
4	X	3, 2		N/A	No RECOVERY			
5	X	1, 2		↓				
6	X	5, 5	12"	5-15 ppm	Brown sand; some gray & red coloring		Petroleum odor present Analysis for BOAS/BRIAS, Immunassay + Mobile Laboratory	PSDG 11099 6-8
7	X	12, 22						
8								
9								
10								
11								
12								
13								
14								
15								

ATTACHMENT BB-9

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
PROJECT NO.:
BORING NO.:
Location: PA-7
Coordinates:
Drilling Method Used: ACKER
Contractor:
Date: 11/10/93
Hammer Weight: 140 lb.
Field Scientist/Engineer: E. WALLACE
Water Table Depth: 8' approx.
Organic Vapor Instrument Used: HNu - PI-101
Notes:

Depth (feet)	Sample Interval	Blows per 6 inches	Adv./Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
		11, 10	14"	ND	Rocky, dk. brown/black coarse sand with silt no petroleum odor (fill material)?			
1		6, 5		↓				
		4, 5	1-2"	ND	Dk. brown/black coarse sand, rocky No petroleum odor (fill material)? (little recovery)			
3		2, 2		↓				
4		1, 1	5"	ND	Same as above, No petroleum odor			
5		2, 5		↓				
6		10, 24	10"	ND	Med. brown coarse sand No petroleum odor			
7		16, 13		↓				
8		7, 15	18"	ND	Same as above, but rocky and wet No petroleum odor		BCAS: VOAs, BNAs PCB, TAL METALS Immunoassay & Mobile Laboratory	PS1104
9		13, 25		↓				
10								
11								
12								
13								
14								
15								

ATTACHMENT BB-1

BORING LOG

PROJECT: Paperboard Spec.
Location: PA-8
Contractor:
Field Scientist/Engineer: E Wallace
Notes:

PROJECT NO.:
Coordinates:
Date: 11/10/93
Water Table Depth: 8' approx
Organic Vapor Instrument Used: HNU

BORING NO.:
Drilling Method Used: Acker
Hammer Weight: 140 lb.

Depth (feet)	Sample Interval	Blows per 6 inches	Adv./ Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
		9 / 9	20"	ND	Bottom 6" whitish clay silt.			
1		5 / 3		↓	Black - brown coarse sandy silt small pebbles. no petrol odor.			
2		4 / 2	6"	ND	white sandy silt mixed w/ dk. brown coarse sand no petrol. odor			
3		1 / 1		↓				
4		3 / 2	20"	ND	Bottom 5" dk. brown/blk. silt. Top is same as above, but w/ glass mixed in. No petrol. odor throughout.			
5		1 / 2		↓				
6		4 / 16	6"	ND	Bottom 2" coarse dk. brown sand. Above is ~~sandy~~ sandy clay. rocky. No petrol odor.		Mobile Lab VO + TPHC	AS116093PA-
7		12 / 11		↓				
8		3 / 1	3"	ND	Rocky dk. brown-red sandy clay. No petrol odor		IA	PA-8
9		15 / 24		↓				
10								
11								
12								
13								
14								
15								

ATTACHMENT BB-

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

FINAL REPORT

Paperboard Specialties, Paterson

November 18, 1993

1.0 INTRODUCTION

NOTE: This report is an addendum to the Paperboard Specialties report dated October 12, 1993, and includes analytical results for samples obtained during a subsequent sampling event.

Groundwater and soil samples were collected from the Paperboard Specialties site, in Paterson, NJ.

The sampling occurred during the period:
From 11/9/93 To 11/12/93 '93.

The parameters requested for this analysis included:

Total Petroleum Hydrocarbons (TPHC) by GC/MS, including characterization; and, Total Hydrocarbons (THC) Volatile Fraction by Heated Headspace Capillary Column Gas Chromatography With Flame Ionization Detector.

Results of both of these analyses are shown in the two Analytical Results Reports, attached.

2.0 PROCEDURES

2.1 FIELD SAMPLING PROCEDURES

2.11 Samples For Semi Volatile Extraction And GC/MS Analysis.

Soil samples were collected in glass jars with screw cap lids. Sampling was conducted in accordance with procedures specified in the NJDEPE Field Sampling Procedures Manual.

2.12 Samples For Heated Headspace Gas Chromatography THC Analysis.

Soil samples were collected in glass jars with screw cap lids. Water samples were collected in 40-ml VOA vials with Teflon lined screw cap lids. Sampling was conducted in accordance with procedures specified in the NJDEPE Field Sampling Procedures Manual.

ATTACHMENT BB-12

2.2 ANALYTICAL METHODS

2.21 Samples For Semi Volatile Extraction And GC/MS Analysis/Characterization.

In the Mobile Environmental Laboratory a portion of each of the soil samples was weighed into a 25 ml extraction flask with a teflon lined screw cap. The samples were spin/extracted with methylene chloride. The methylene chloride semi-volatiles extract was analyzed by Capillary Column Gas Chromatography/Mass Spectrometry.

2.22 Samples For Total Hydrocarbons Volatile Fraction

These samples were analyzed by the method of Heated Headspace Capillary Column Gas Chromatography With Flame Ionization Detector. The contents of the VOA vials were decanted (water samples) into 20-ml HHS vials. Portions of the soil samples were weighed into HHS vials containing a Matrix Modifying Solution. The analysis of Total Hydrocarbons Volatile Fraction is based on the total response of all volatile hydrocarbons which elute before Naphthalene and quantitation is based on the response factor of Benzene (Naphthalene and higher boiling compounds are not included as volatile components of this analysis). This method is not intended to distinguish Total Non-Methane Hydrocarbons (TNMHC) from Total Hydrocarbons.

For the methods outlined above, the minimum quantifiable amount (MQA) for TPHC by GC/MS in soil/sediment has been tentatively set at 1,000 ppm. The MQA by GC/MS for TPHC in water has been tentatively set at 100 ppm.

The minimum quantifiable amount (MQA) for THC Volatile Fraction by HHS GC in soil/sediment has been tentatively set at 100 ppb. The MQA by HHS GC for THC Volatile Fraction in water has been tentatively set at 20 ppb.

3.0 CHARACTERIZATION OF TPHC SAMPLES

3.1 GC/MS FINGERPRINTING

Samples were "fingerprinted" by the on board UNIX computer system, matching the mass spectra of the most abundant hydrocarbon peaks of each sample with those found in the mobile laboratory's 43,000 compound NBS mass spectral computer library.

Samples were characterized still further by examining the extracted ion chromatograms of the mass 57 ion fragments, characteristic of alkane/alkene (straight and branched chain) petroleum hydrocarbon structure.

This computer analysis, as well as the mass spectral analysis mentioned above, typically identified the major constituents of the one reported sample as branched chain C11 to C21 hydrocarbons (the proportion of PNA's in the total "product" was extremely small).

3.2 CONCLUSIONS

Only one soil sample analyzed by GC/MS was reported as having TPHC's above the minimum quantifiable amount. This sample did not appear similar to the "product", identified as "Paperboard BEC", withdrawn from the wellhead and analyzed prior to this sampling event.

In contrast, this sample appeared identical to the sample analyzed and reported in the previous report referenced above, identified as "PA-5" (See Mobile Laboratory Report for Paperboard Specialties dated Oct. 12, 1993).

This sample is characterized as having a molecular weight range consistent with a kerosene or diesel fuel (C11 to C 21) with the major constituent of the oil being a C15 compound (Trimethyldecane), with little or no detectable gasoline or BTEX fraction. The major constituents of the oil are branched chain hydrocarbons with minor amounts of higher molecular weight branched chain hydrocarbons, and trimethyl naphthalenes. Much higher molecular weight compounds (as high as C29, "nonacosane") were also seen; however, their proportion in the total mixture was exceedingly small. Please see significant mass spectra, attached.

The individual compounds, identified from the NBS mass spectral library, were not confirmed with actual standards - their mass spectra may be reviewed with the mobile laboratory staff if desired.

PCB's (Arochlors) were not detected in any of the samples analyzed.

Please direct questions or comments to Kenneth Glasser or Corey Lakin at the Mobile Environmental Laboratory, EESC, Windsor Industrial Park, Windsor NJ, 609-448-6244.

11/18/93

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

ANALYTICAL RESULTS REPORT

LAB METHOD: Total Hydrocarbons, Volatile Fraction, in Water and Soil Samples by Heated Headspace Capillary Column Gas Chromatography with FID Detector.

SITE NAME: Paperboard Specialties
DATE REC'D: 11/10 - 11/12
ANALYZED: 11/10 - 11/17

FIELD SAMP NUMBER	LABORATORY NUM/DESCRIP	MATRIX	TEST PARAMETERS (ppb) THC VOL FRACTION
TB	PPRD1	AQUEOUS	ND
PSSG1109938-10	PPRD2	SOIL	ND
PSUP111093W-1	PPRD3	AQUEOUS	ND
PS111093PA-7	PPRD4	SOIL	ND
PSDG1109936-8	PPRD5	SOIL	4.82E+04
PSDG111093W-2	PPRD6	AQUEOUS	2.29E+04
PA111093PA-8	PPRD7	SOIL	1.35E+02

Ken Chase for C. W. Lakin
NJDEPE MOBILE ENVIRONMENTAL LABORATORY

NOTE:
Results are reported in scientific notation, where the factor "E+XX" signifies powers of ten.
Results are based on the response factor of Benzene.

LEGEND:
B = DETECTED IN BOTH SAMPLE & TRIP BLANK,
J = DETECTED BELOW MINIMUM QUANTIFIABLE AMOUNT
ND = NOT DETECTED

ATTACHMENT BB-15

11/18/93

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

ANALYTICAL RESULTS REPORT

LAB METHOD: Total Petroleum Hydrocarbons in Water and Soil Samples by Capillary Column Gas Chromatography/Mass Spectrometry.

SITE NAME: Paperboard Specialties
DATE REC'D: 11/10 - 11/12
ANALYZED: 11/11 - 11/17

TEST PARAMETERS (ppm)

FIELD SAMP NUMBER	LABORATORY NUM/DESCRIP	MATRIX	TPHC
PS11093PA-7	PSPA-7	SOIL	ND
PSSG1109938-10	PSSG-810	SOIL	ND
PSDG1109936-8	PSDG-68	SOIL	1.74E+03
PA111093PA-8	PA-8	SOIL	ND

Ken Glass

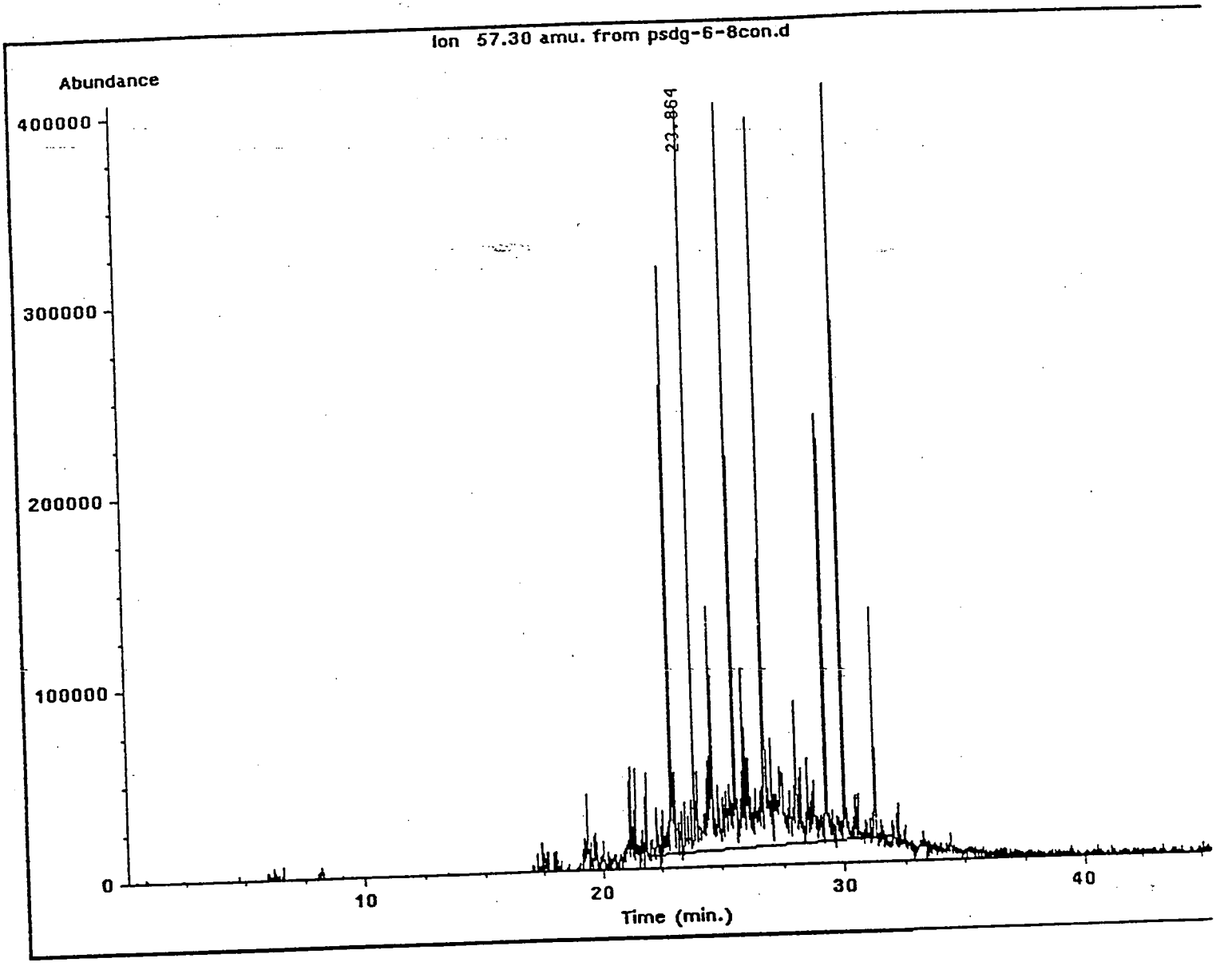
NJDEPE MOBILE ENVIRONMENTAL LABORATORY

NOTE:
Results are reported in scientific notation, where the factor "E+XX" signifies powers of ten.
Results are based on supplied TPHC product.

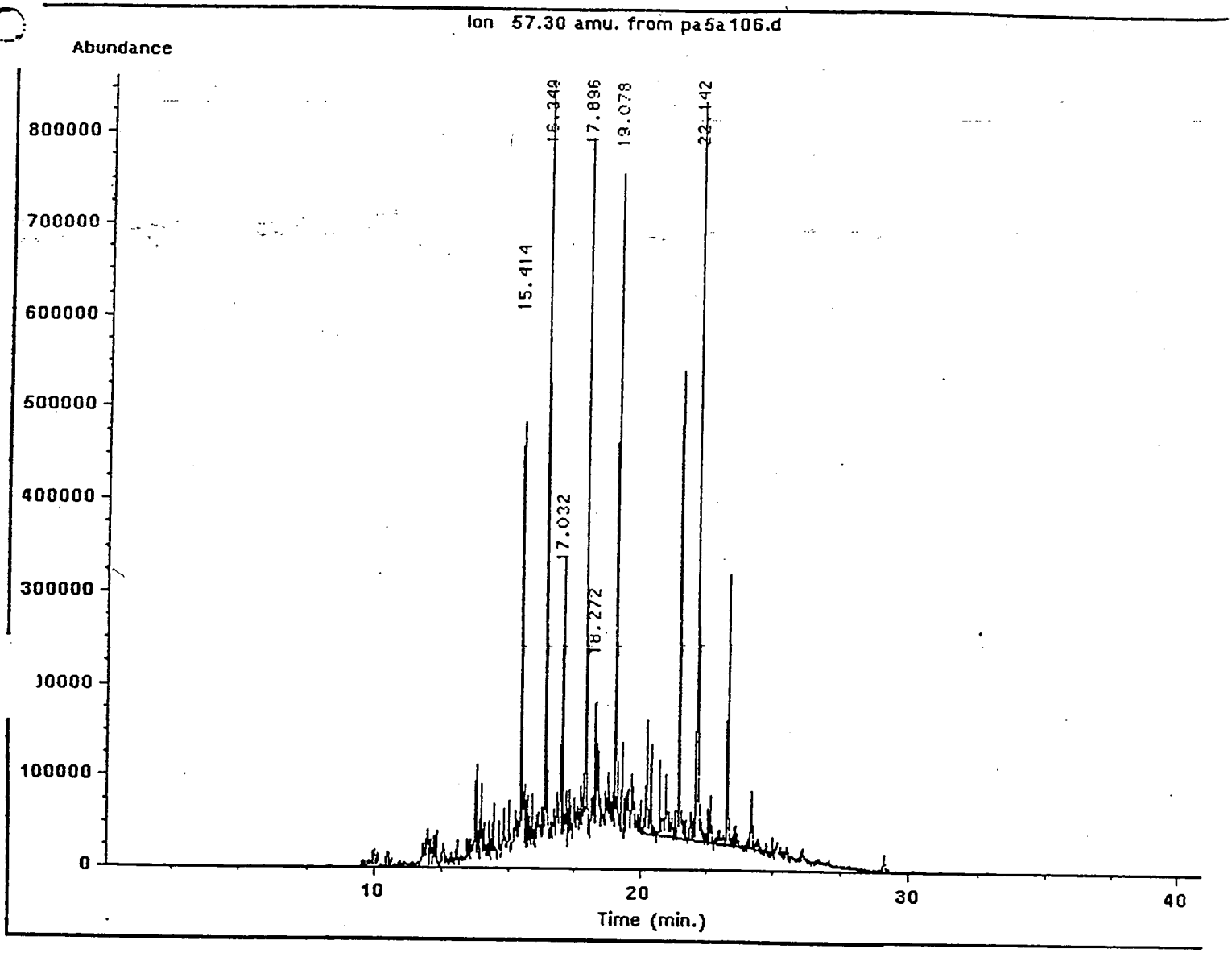
LEGEND:
B = DETECTED IN BOTH SAMPLE & TRIP BLANK,
J = DETECTED BELOW MINIMUM QUANTIFIABLE AMOUNT

ND = NOT DETECTED

ATTACHMENT BB-1-



ATTACHMENT BB-17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19.079
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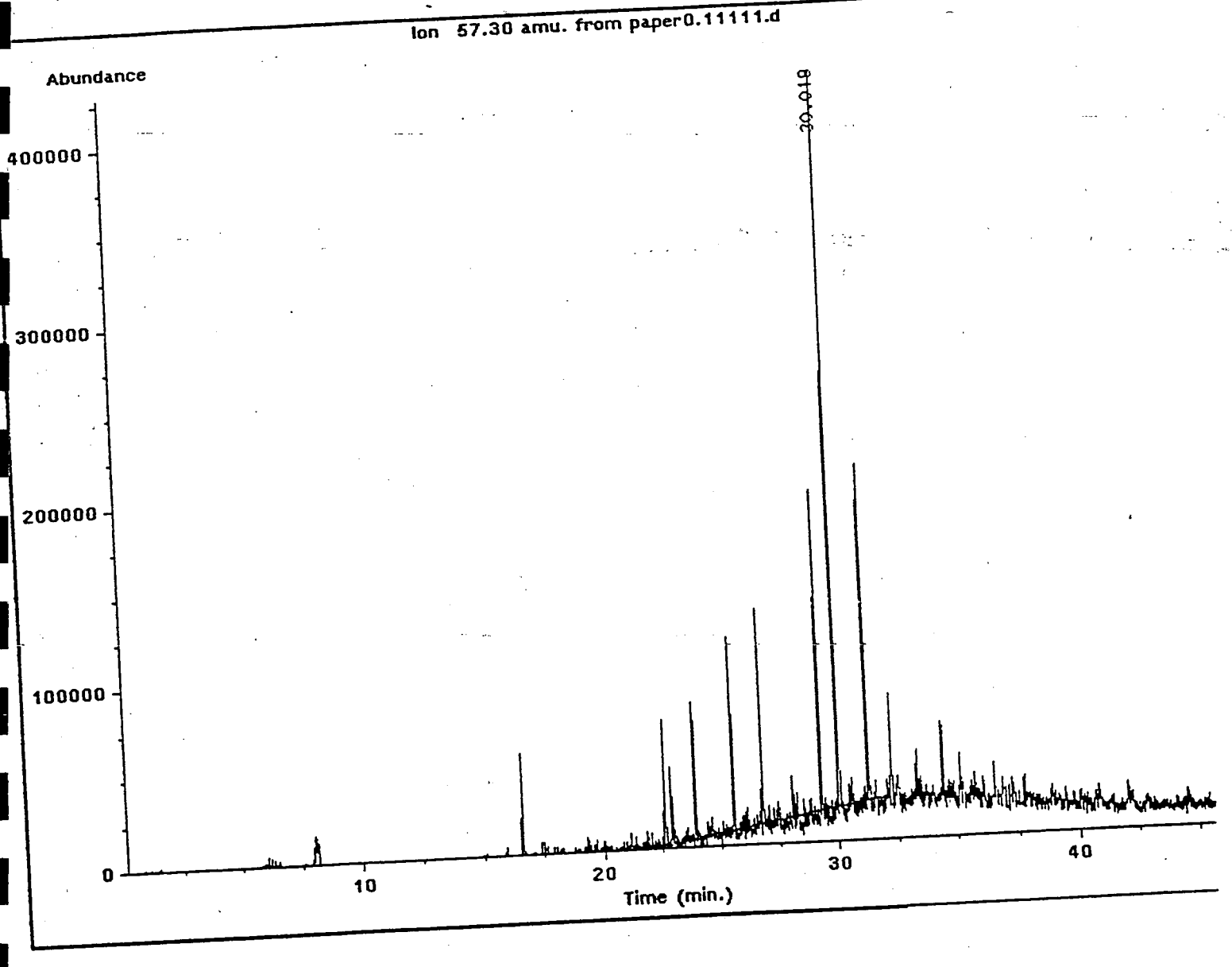
10
20
30
40
Time (min.)

RR-18



ATTACHMENT BB-19

NEW JERSEY DEPARTMENT OF HEALTH

SOIL BORINGS

ENVIRONMENTAL & CHEMICAL LABORATORY SERVICES

SAMPLE DATA PACKAGE

General Chemistry

920110

dpgc2.gal

ATTACHMENT BB-2

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

00002

Laboratory Sample No. 9305102 Field No: ... TRB-5
Collection Date: ..... 931005.XXXX Receipt Date: 931006.1015
Laboratory Batch No. 93PFS00016 Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	17115		16.7	931022
Percent Loss on Drying	14.1		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.
NOTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.
ANR = Analyte Not Request QNS = Quantity Not Sufficient
J-MI = Approximate value due to matrix interferences
J-QC = Approximate value due to quality control problems.
J-EHT or HT = Approximate value due to the sample exceeding the holding time.
NA = Not Applicable EFAILURE = Equipment failure
This is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples
/LP/gsphc02.rpt <931227.0856>

ATTACHMENT BB-21

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

000022

Laboratory Sample No. 9305103
Collection Date: 931005.XXXX
Laboratory Batch No. 93PFS00016

Field No: ... UST-5E
Receipt Date: 931006.1015
Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	14823		16.7	931022
Percent Loss on Drying	7.7		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.

NOTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.

ANR = Analyte Not Request
QNS = Quantity Not Sufficient
J-MI = Approximate value due to matrix interferences
J-QC = Approximate value due to quality control problems.
J-EHT or HT = Approximate value due to the sample exceeding the holding time.
NA = Not Applicable
EFAILURE = Equipment failure

This is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples

/LP/gsphc02.rpt <931227.0856>

ATTACHMENT BB-22

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

Laboratory Sample No. 9305104
Collection Date: 931005.XXXX
Laboratory Batch No. 93PFS00016

Field No: ... S-1C
Receipt Date: 931006.1015
Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	29.2		16.7	931022
Percent Loss on Drying	9.0		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.

NOTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.

AR = Analyte Not Request
QNS = Quantity Not Sufficient
J MI = Approximate value due to matrix interferences
J QC = Approximate value due to quality control problems.
J EHT or HT = Approximate value due to the sample exceeding the holding time.
NA = Not Applicable
EFAILURE = Equipment failure

T ; is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples

/P/gsphc02.rpt <931227.0856>

ATTACHMENT BB-2

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

Laboratory Sample No. 9305105
Collection Date: 931005.XXXX
Laboratory Batch No. 93PFS00016

Field No: ... S-2C
Receipt Date: 931006.1015
Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	25.6		16.7	931022
Percent Loss on Drying	7.2		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.

NOTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.

ANR = Analyte Not Request
QNS = Quantity Not Sufficient
J-MI = Approximate value due to matrix interferences
J-QC = Approximate value due to quality control problems.
JEHT or HT = Approximate value due to the sample exceeding the holding time.
N = Not Applicable
EFAILURE = Equipment failure
T ; is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples

/LP/gsphc02.rpt <931227.0856>

ATTACHMENT BB-24

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

Laboratory Sample No. 9305106 Field No: ... S-8A
Collection Date: ..... 931005.XXXX Receipt Date: 931006.1015
Laboratory Batch No. 93PFS00016 Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	28.0		16.7	931022
Percent Loss on Drying	9.1		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.

OTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.

ANR = Analyte Not Request QNS = Quantity Not Sufficient
-MI = Approximate value due to matrix interferences
J-QC = Approximate value due to quality control problems.
-EHT or HT = Approximate value due to the sample exceeding the holding time.
N' = Not Applicable EFAILURE = Equipment failure
; is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples

LP/gsphc02.rpt <931227.0856>

ATTACHMENT BB-25

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

Laboratory Sample No. 9305107
Collection Date: 931005.XXXX
Laboratory Batch No. 93PFS00016

Field No: ... S-9A
Receipt Date: 931006.1015
Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	71.0		16.7	931022
Percent Loss on Drying	11.2		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.

NOTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.

AR = Analyte Not Request
QNS = Quantity Not Sufficient
J-MI = Approximate value due to matrix interferences
J-QC = Approximate value due to quality control problems.
J-EHT or HT = Approximate value due to the sample exceeding the holding time.
= Not Applicable
EFAILURE = Equipment failure

T ; is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples

/LP/gsphc02.rpt <931227.0856>

ATTACHMENT BB-24

NEW JERSEY STATE DEPARTMENT of HEALTH
ENVIRONMENTAL and CHEMICAL LABORATORY SERVICES
GENERAL CHEMISTRY

Laboratory Sample No. 9305108
Collection Date: 931005.XXXX
Laboratory Batch No. 93PFS00016

Field No: ... UST-3
Receipt Date: 931006.1015
Report Date: DEC. 27 1993

	Sample Results	Result Qualifier	MDL	Analysis Date
Petroleum Hydrocarbons **	3739		16.7	931022
Percent Loss on Drying	18.2		-	931013

** The petroleum hydrocarbons results are on a DRY weight basis.

NOTE: Sample results, method blanks and MDLs are expressed in parts per million (ppm), unless otherwise specified.

AN = Analyte Not Request
QNS = Quantity Not Sufficient
J-MI = Approximate value due to matrix interferences
J-QC = Approximate value due to quality control problems.
J-EHT or HT = Approximate value due to the sample exceeding the holding time.
-- = Not Applicable
EFAILURE = Equipment failure

This is an abbreviated General Chemistry report form. Use only for reporting petroleum hydrocarbons and percent loss on drying samples

/[illegible]/gsphc02.rpt <931227.0856>

ATTACHMENT BB-2

NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
ENVIRONMENTAL SAFETY, HEALTH AND ANALYTICAL PROGRAMS
BUREAU OF ORGANIC ANALYTICAL SERVICES

Monitoring Wells

OIL

IDENTIFICATION

ANALYSIS

OILS AND PETROLEUM PRODUCTS ARE QUALITATIVELY ANALYZED BY UTILIZING ANALYTICAL FINGERPRINTING TECHNIQUES. THE FINGERPRINTS OF THE SAMPLE ARE COMPARED AGAINST THOSE OF A SUSPECTED SOURCE FOR SIMILAR PATTERNS AND UNIQUE CHARACTERISTICS. TABULATION OF THE RESULTS INDICATES WHETHER OR NOT AN OIL SAMPLE OR PETROLEUM PRODUCT IS PRESENT IN AN ENVIRONMENTAL SAMPLE.

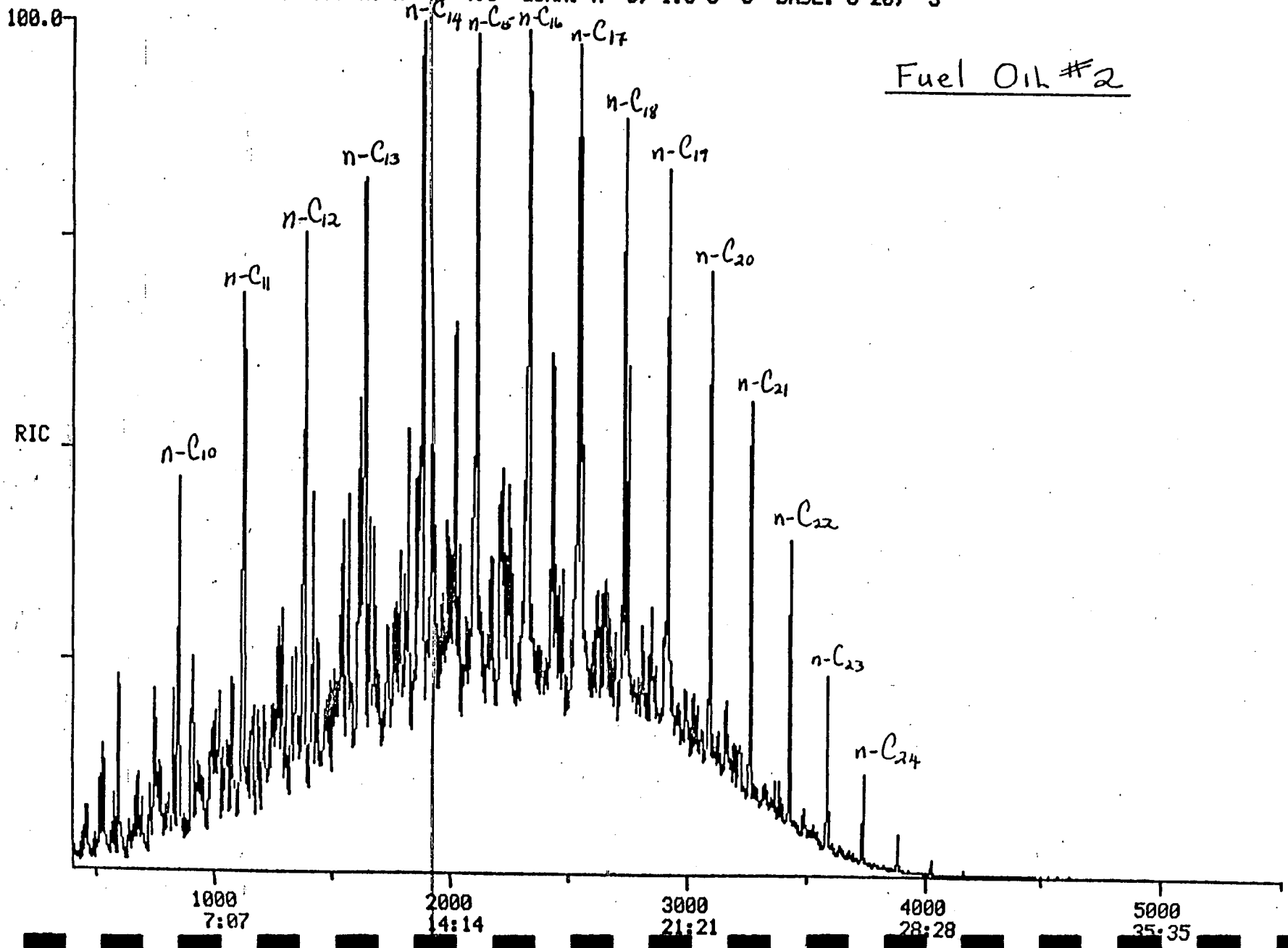
ATTACHMENT BB-28

MIDRIC
09/29/93 14:11:00
SAMPLE:
CONDS.:
RANGE: G 1.5621 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: FOIL2 #1
CALI: 23048B #2

SCANS 400 TO 5500

(1)



(5)

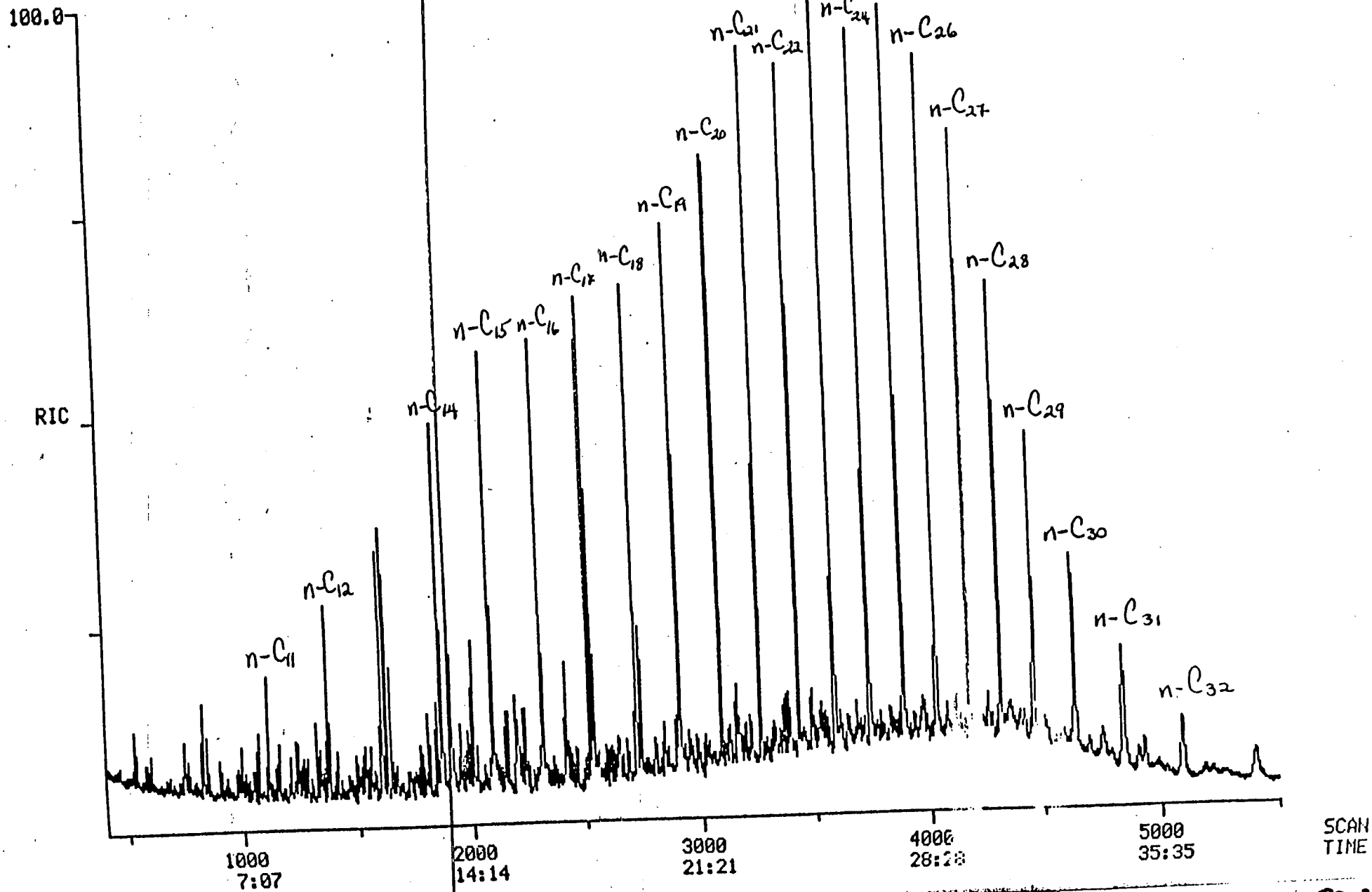
MIDRIC
09/29/93 16:42:00
SAMPLE: CAPILLARY RUN FOR METHOD 625 BN/AE
CONDS.: 30M X .32MM, .25UM FLIM THICKNESS OF DB-5
RANGE: G 1,5500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: FOIL6 #1
CALI: 23048B #2

SCANS 400 TO 5500

Fuel Oil #6

15568.



[redacted]ACH[redacted]NT [redacted]

GC/MS QUALITATIVE ANALYSIS

TANK B

SAMPLE LC# : 23629
EXTRACTION DATE : 9/29/93
ANALYSIS DATE : 9/29/93
REPORT DATE : 10/15/93

SAMPLE MATRIX : PETROLEUM PRODUCT
ANALYST : ED REILLY
INITIAL WT. : 0.1022 G
FINAL VOLUME : 0.5 ML

QUALITATIVE CONCLUSION : The petroleum product found in sample LC# 23629 was a fuel oil# 2. The homologous series of n-alkanes found in the sample ranged from n-C11 through n-C27. When compared to the fuel oil# 2 sample, both the n-alkane series and the unresolved regions are almost identical. The unresolved region can be observed from scan 1000 through 4000 in both the fuel oil# 2 sample and sample LC# 23629. The is a large number of constituents in the petroleum mixture which are not resolvable with a non-polar column, these constituents are responsible for the unresolved region.

The sample contains a high concentration of alkyl benzenes and alkyl naphthalenes which may be the result of organics mixed with the fuel oil. The ion chromatograms of various unique biomarkers found in the sample are included in the package.

METHOD SUMMARY : Using a Pasteur pipet, a small portion (approximately 0.1 g) of sample was transferred to a tared two ml vial. The vial was then weighted using an analytical balance to determine the weight of the sample. A pipet was used to transfer 0.5 ml of methylene chloride to the same vial. The sample was dissolved by shaking vigorously.

The sample was analyzed using a GC/MS with a semi-volatile capillary column (DB-5 30m x 0.32mm i.d. with 0.25um film thickness). The mass spectrometer was scanning from 40 amu to 450 amu at a rate of 0.5 sec/scan. The extracted ion current profile of various organic biomarkers found in the sample, are obtained to evaluate the sample's unique characteristics. The method blank and instrument tune report are also included in the package.

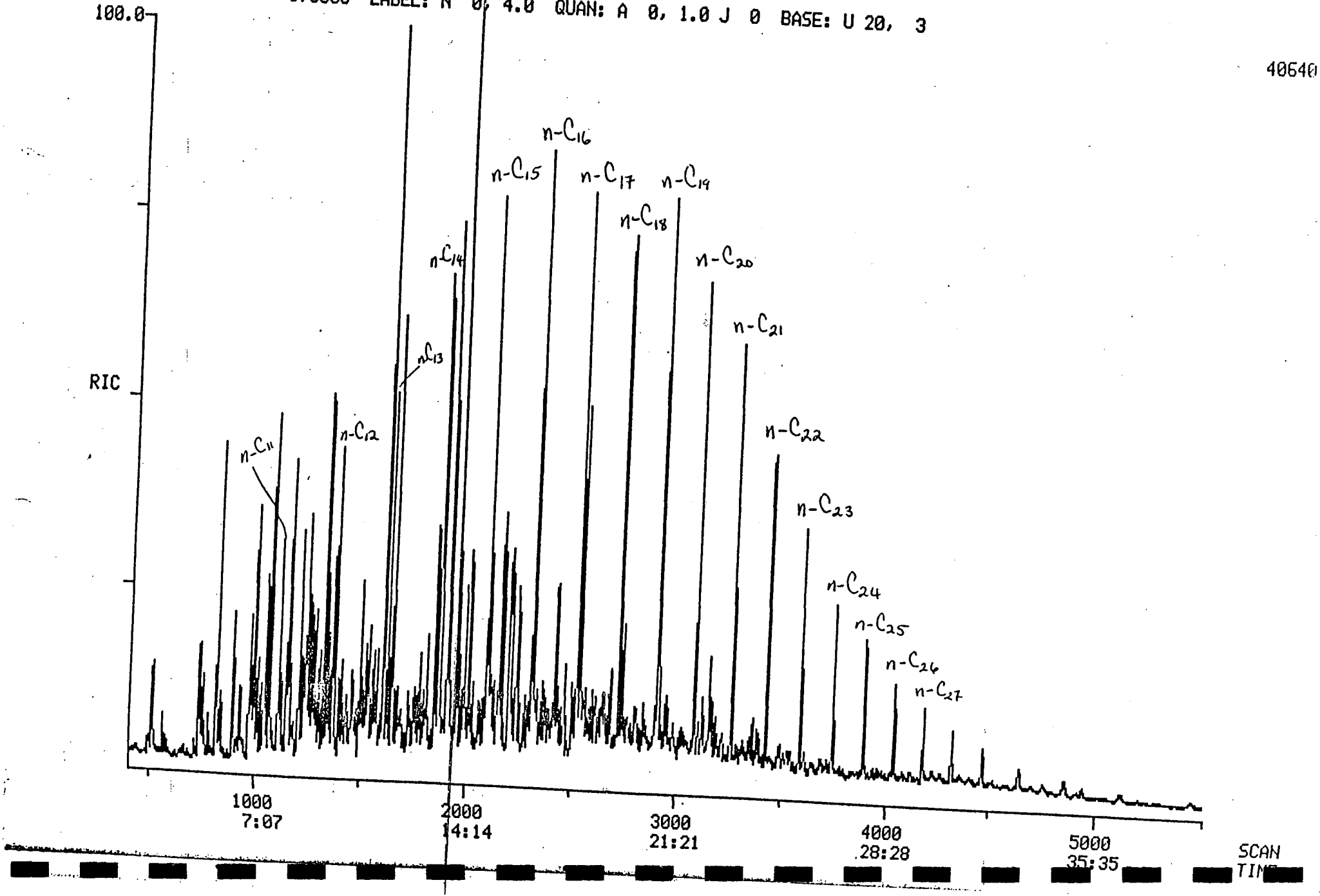
ATTACHMENT BB-3

MIDRIC
09/29/93 19:49:00
SAMPLE:
CONDS.:
RANGE: G 1,5500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 23629 #1
CALI: 23048B #2

SCANS 400 TO 5500

40640



GC/MS QUALITATIVE ANALYSIS

Monitoring well : BEC-1D

SAMPLE LC# : 23630
EXTRACTION DATE : 9/29/93
ANALYSIS DATE : 9/29/93
REPORT DATE : 10/15/93

SAMPLE MATRIX : PETROLEUM PRODUCT
ANALYST : ED REILLY
INITIAL WT. : 0.0483 G
FINAL VOLUME : 0.5 ML

QUALITATIVE CONCLUSION : The petroleum product found in sample LC# 23630 was a severely weathered fuel oil# 6. The homologous series of n-alkanes generally found in fuel oils were not present in the sample. The unresolved region of the sample's chromatogram is identical to the fuel oil# 6 standard. The unresolved region in the sample can be observed from scan 1500 through 5000. There is a large number of constituents in the petroleum mixture which are not resolvable with a non-polar column, these constituents are responsible for the unresolved region. The heavier aromatic biomarkers typically found in fuel oil# 6 samples were also found in sample LC# 23630. The n-alkanes will be the first group of compounds to experience degradation due to weathering, while the aromatic biomarkers will be the last group.

The ion chromatograms of various unique biomarkers found in the sample are included in the package. The same characteristic ion chromatograms found in sample LC# 23630 were also found in samples LC# 23631, LC# 23632, and LC# 23633. However, it should be noted that the petroleum product found in the sample LC# 23633 was only slightly weathered.

METHOD SUMMARY : Using a Pasteur pipet, a small portion (approximately 0.1 g) of sample was transferred to a tared two ml vial. The vial was then weighted using an analytical balance to determine the weight of the sample. A pipet was used to transfer 0.5 ml of methylene chloride to the same vial. The sample was dissolved by shaking vigorously.

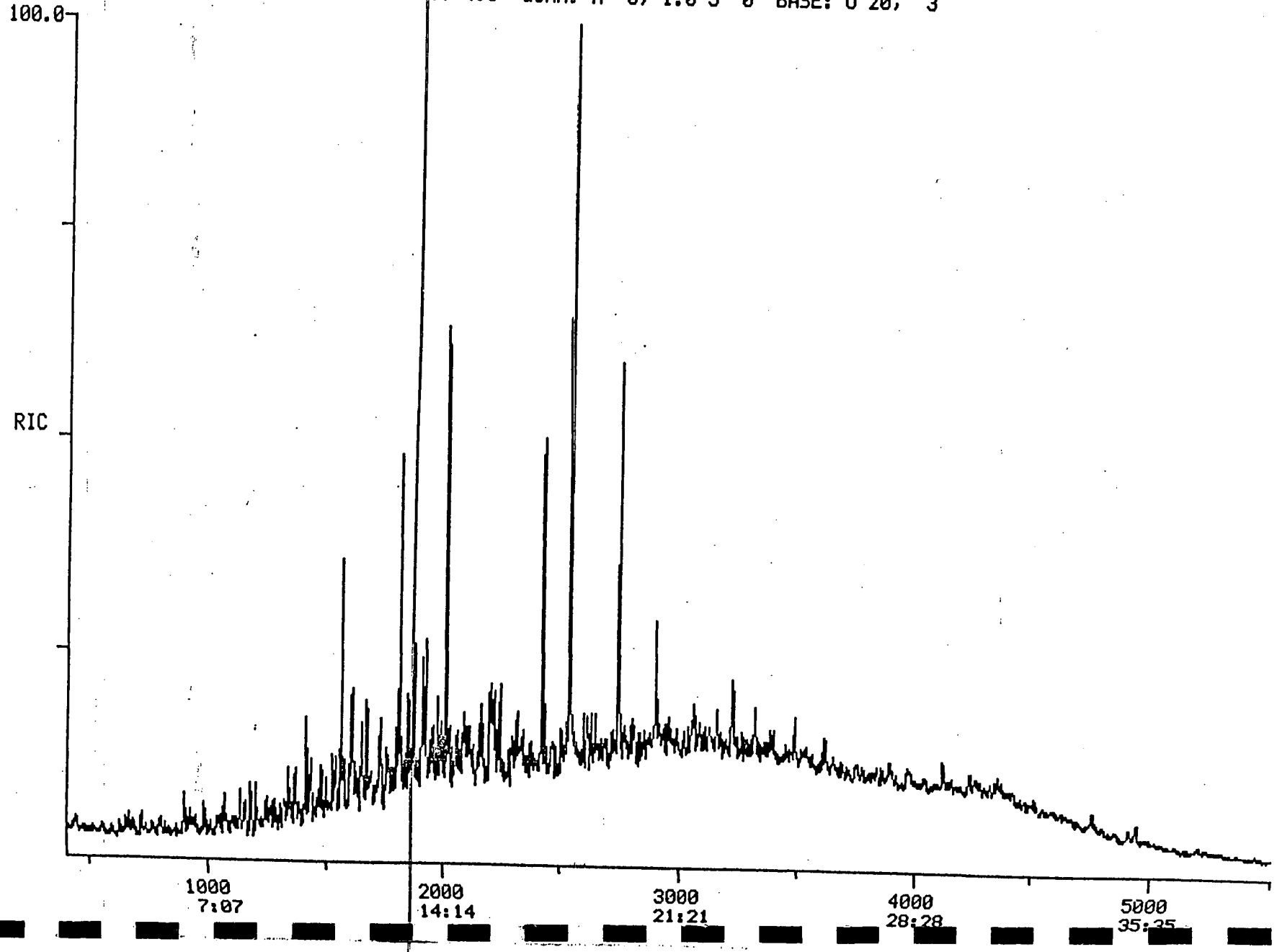
The sample was analyzed using a GC/MS with a semi-volatile capillary column (DB-5 30m x 0.32mm i.d. with 0.25um film thickness). The mass spectrometer was scanning from 40 amu to 450 amu at a rate of 0.5 sec/scan. The extracted ion current profile of various organic biomarkers found in the sample, are obtained to evaluate the sample's unique characteristics. The method blank and instrument tune report are also included in the package.

MIDRIC
09/29/93 17:28:00
SAMPLE:
CONDS.: CAPILLARY RUN FOR METHOD 625 BN/AE
RANGE: G 1,5500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 23630 #1
CALI: 23048B #2

SCANS 400 TO 5500

3622



GC/MS QUALITATIVE ANALYSIS

Monitoring Well B-2

SAMPLE LC# : 23631
EXTRACTION DATE : 9/29/93
ANALYSIS DATE : 9/29/93
REPORT DATE : 10/15/93

SAMPLE MATRIX : PETROLEUM PRODUCT
ANALYST : ED REILLY
INITIAL WT. : 0.1065 G
FINAL VOLUME : 0.5 ML

QUALITATIVE CONCLUSION : The petroleum product found in sample LC# 23631 was a severely weathered fuel oil# 6. The homologous series of n-alkanes generally found in fuel oils were not present in the sample. The unresolved region of the sample's chromatogram is identical to the fuel oil# 6 standard. The unresolved region in the sample can be observed from scan 1500 through 5000. There is a large number of constituents in the petroleum mixture which are not resolvable with a non-polar column, these constituents are responsible for the unresolved region. The heavier aromatic biomarkers typically found in fuel oil# 6 samples were also found in sample LC# 23631. The n-alkanes will be the first group of compounds to experience degradation due to weathering, while the aromatic biomarkers will be the last group.

The ion chromatograms of various unique biomarkers found in the sample are included in the package. The same characteristic ion chromatograms found in sample LC# 23631 were also found in samples LC# 23630, LC# 23632, and LC# 23633. However, it should be noted that the petroleum product found in the sample LC# 23633 was only slightly weathered.

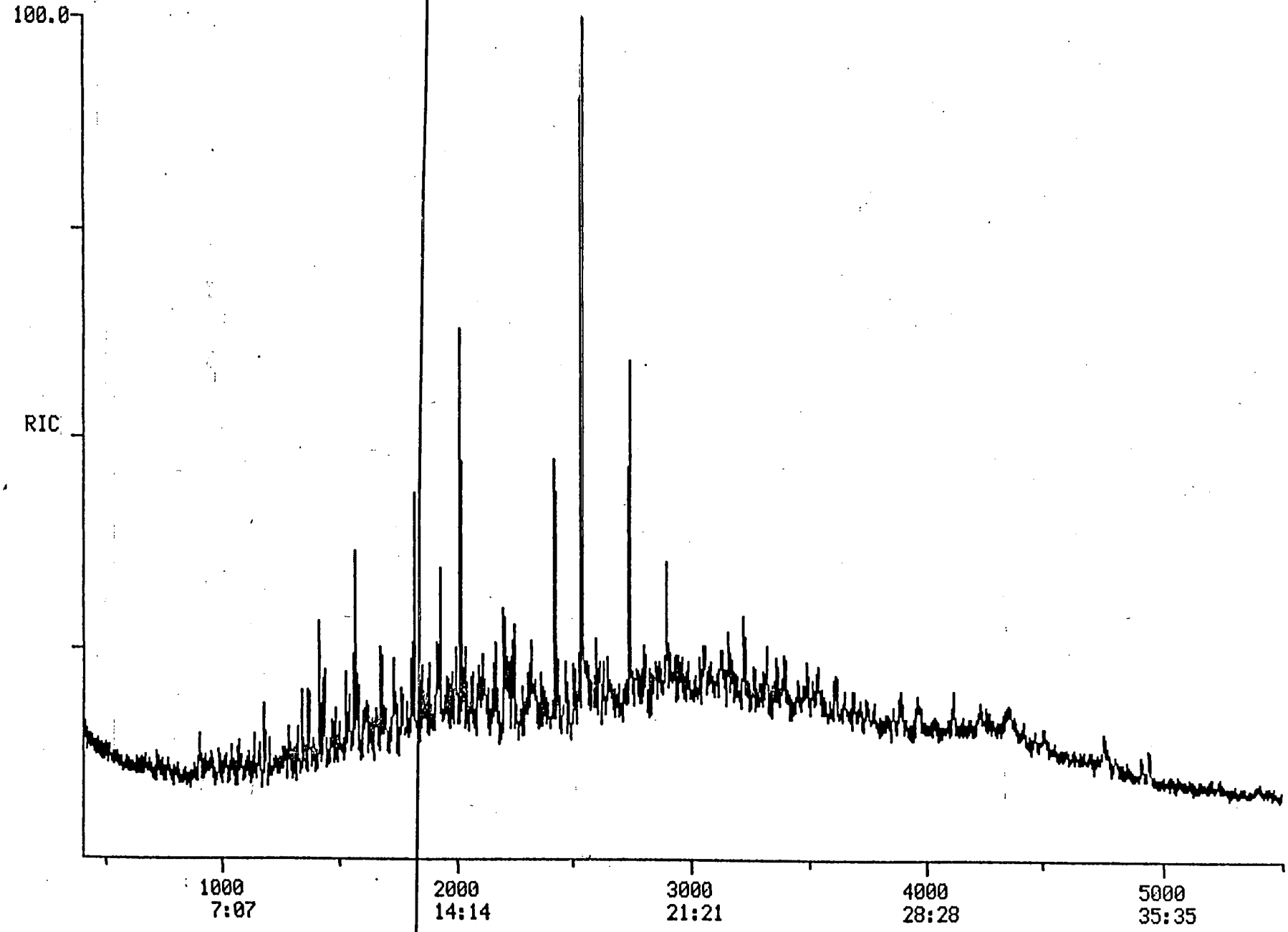
METHOD SUMMARY : Using a Pasteur pipet, a small portion (approximately 0.1 g) of sample was transferred to a tared two ml vial. The vial was then weighted using an analytical balance to determine the weight of the sample. A pipet was used to transfer 0.5 ml of methylene chloride to the same vial. The sample was dissolved by shaking vigorously.

The sample was analyzed using a GC/MS with a semi-volatile capillary column (DB-5 30m x 0.32mm i.d. with 0.25um film thickness). The mass spectrometer was scanning from 40 amu to 450 amu at a rate of 0.5 sec/scan. The extracted ion current profile of various organic biomarkers found in the sample, are obtained to evaluate the sample's unique characteristics. The method blank and instrument tune report are also included in the package.

MIDRIC
09/29/93 20:35:00
SAMPLE:
CONDS.:
RANGE: G 1,5500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 23631 #1
CALI: 23048B #2

SCANS 400 TO 5500



6928

GC/MS QUALITATIVE ANALYSIS

Monitoring Well B-3

SAMPLE LC# : 23632
EXTRACTION DATE : 9/29/93
ANALYSIS DATE : 9/29/93
REPORT DATE : 10/15/93

SAMPLE MATRIX : PETROLEUM PRODUCT IN WATER
ANALYST : ED REILLY
INITIAL WT. : 0.0668 G
FINAL VOLUME : 0.5 ML

QUALITATIVE CONCLUSION : The petroleum product found in sample LC# 23632 was a severely weathered fuel oil# 6. The homologous series of n-alkanes generally found in fuel oils were not present in the sample. The unresolved region of the sample's chromatogram is identical to the fuel oil# 6 standard. The unresolved region in the sample can be observed from scan 1500 through 5000. There is a large number of constituents in the petroleum mixture which are not resolvable with a non-polar column, these constituents are responsible for the unresolved region. The heavier aromatic biomarkers typically found in fuel oil# 6 samples were also found in sample LC# 23632. The n-alkanes will be the first group of compounds to experience degradation due to weathering, while the aromatic biomarkers will be the last group.

The ion chromatograms of various unique biomarkers found in the sample are included in the package. The same characteristic ion chromatograms found in sample LC# 23632 were also found in samples LC# 23630, LC# 23631, and LC# 23633. However, it should be noted that the petroleum product found in the sample LC# 23633 was only slightly weathered.

METHOD SUMMARY : Using a Pasteur pipet, a small portion (approximately 0.1 g) of sample was transferred to a tared two ml vial. The vial was then weighted using an analytical balance to determine the weight of the sample. A pipet was used to transfer 0.5 ml of methylene chloride to the same vial. The sample was dissolved by shaking vigorously.

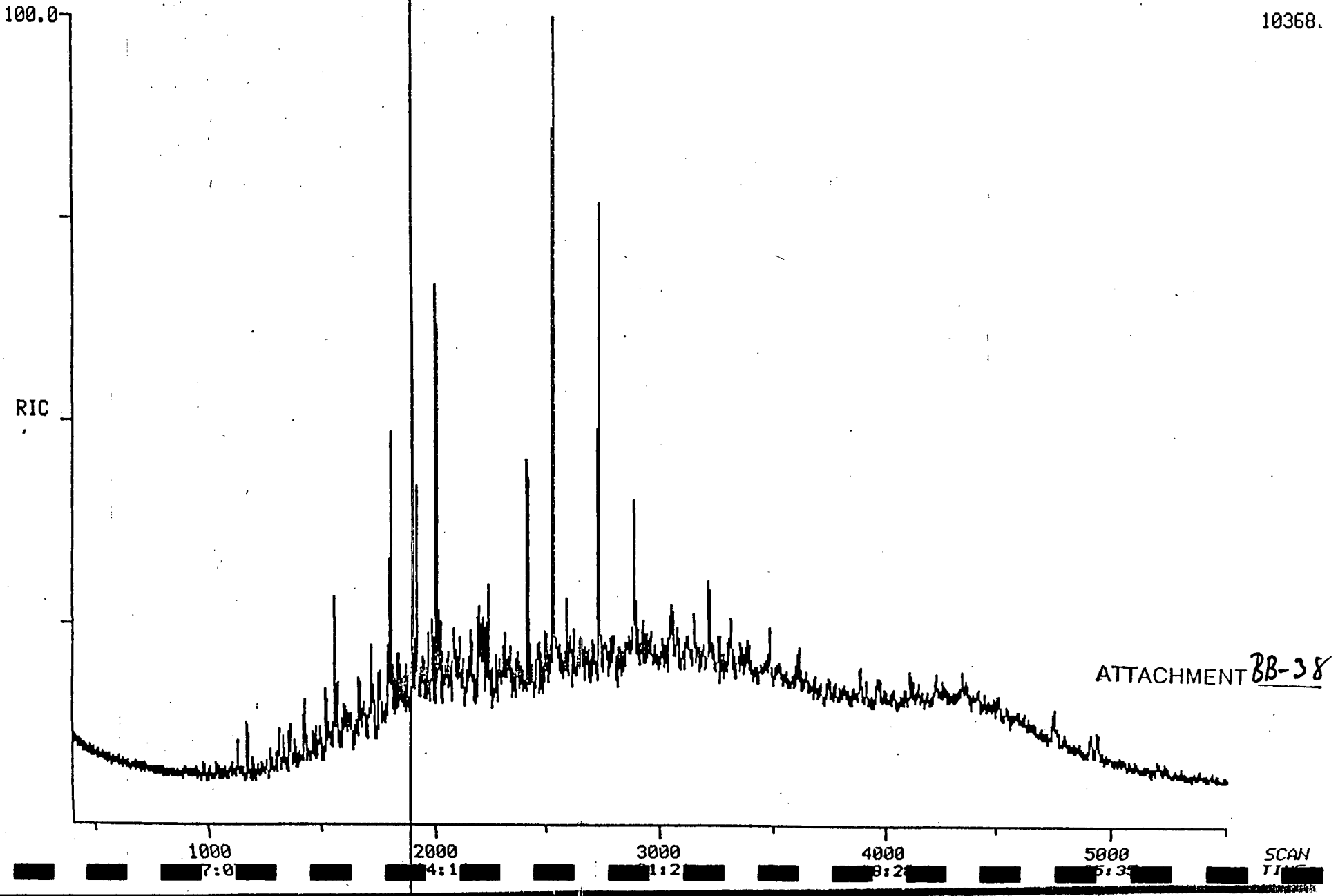
The sample was analyzed using a GC/MS with a semi-volatile capillary column (DB-5 30m x 0.32mm i.d. with 0.25um film thickness). The mass spectrometer was scanning from 40 amu to 450 amu at a rate of 0.5 sec/scan. The extracted ion current profile of various organic biomarkers found in the sample, are obtained to evaluate the sample's unique characteristics. The method blank and instrument tune report are also included in the package.

ATTACHMENT BB-3

MIDRIC
09/29/93 18:15:00
SAMPLE: SAMPLE # 1
CONDS.: CAPILLARY RUN FOR METHOD 625 BN/AE
RANGE: G 1,5500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 23632 #1
CALI: 23048B #2

SCANS 400 TO 5500



ATTACHMENT BB-38

GC/MS QUALITATIVE ANALYSIS

Monitoring Well: BEC-2D

SAMPLE LC# : 23633
EXTRACTION DATE : 9/29/93
ANALYSIS DATE : 9/29/93
REPORT DATE : 10/15/93

SAMPLE MATRIX : PETROLEUM PRODUCT IN WATER
ANALYST : ED REILLY
INITIAL WT. : 0.0745 G
FINAL VOLUME : 0.5 ML

QUALITATIVE CONCLUSION : The petroleum product found in sample LC# 23633 was a slightly weathered fuel oil# 6. The homologous series of n-alkanes found in the sample ranged from n-C12 through n-C25. Although the n-alkane series resembles a fuel oil# 2, the unresolved region of the chromatogram is identical to the fuel oil# 6 standard. The unresolved region in the sample can be observed from scan 1500 through 5000. There is a large number of constituents in the petroleum mixture which are not resolvable with a non-polar column, these constituents are responsible for the unresolved region. The varying intensities of the n-alkanes in the sample's chromatogram suggest the sample experienced some degradation due to weathering.

The ion chromatograms of various unique biomarkers found in the sample are included in the package. The same characteristic ion chromatograms found in sample LC# 23633 were also found in samples LC# 23630, LC# 23631, and LC# 23632. However, it should be noted that the petroleum product found in the other three sample (LC# 23630, LC# 23631, LC# 23632) were severely weathered.

METHOD SUMMARY : Using a Pasteur pipet, a small portion (approximately 0.1 g) of sample was transferred to a tared two ml vial. The vial was then weighted using an analytical balance to determine the weight of the sample. A pipet was used to transfer 0.5 ml of methylene chloride to the same vial. The sample was dissolved by shaking vigorously.

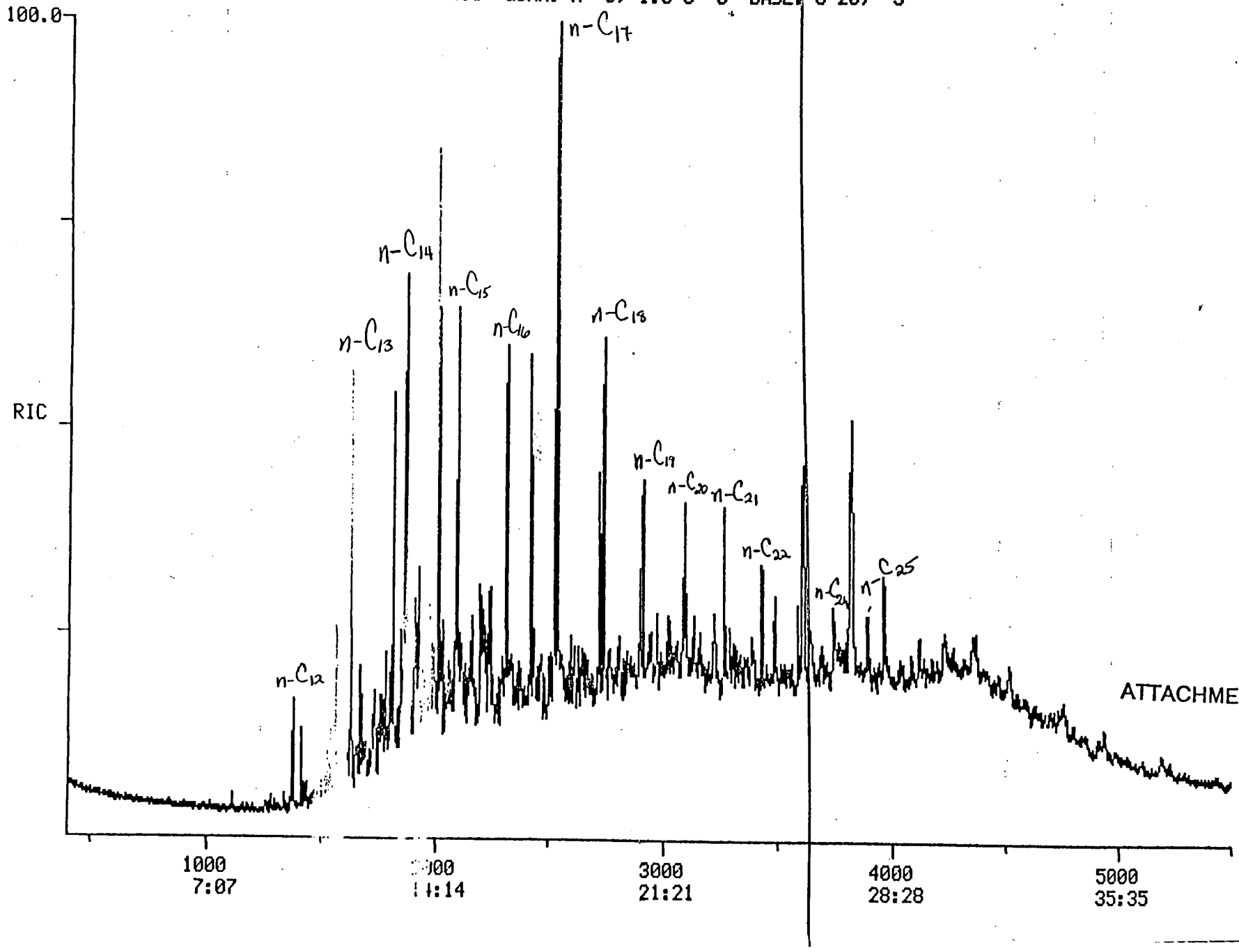
The sample was analyzed using a GC/MS with a semi-volatile capillary column (DB-5 30m x 0.32mm i.d. with 0.25um film thickness). The mass spectrometer was scanning from 40 amu to 450 amu at a rate of 0.5 sec/scan. The extracted ion current profile of various organic biomarkers found in the sample, are obtained to evaluate the sample's unique characteristics. The method blank and instrument tune report are also included in the package.

ATTACHMENT BB-3c

MIDRIC
09/29/93 19:02:00
SAMPLE: SAMPLE # 2
CONDS.: CAPILLARY RUN FOR METHOD 625 BN/AE
RANGE: G 1,5500 LABEL: N 0 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 23633 #1
CALI: 23048B #2

SCANS 400 TO 5500



ATTACHMENT B1

ABSTRACT

The New Jersey Department of Environmental Protection has been involved in developing analytical techniques which will help determine the responsible party in an oil spill. Environmental samples and the suspected source oils are qualitatively analyzed by utilizing three analytical fingerprinting techniques. The analytical fingerprints are generated from a GC/MS, UV fluorescence spectrometer, and an infra red spectrometer.

The GC/MS is used to generate extracted ion current profiles for different biomarkers such as the triterpanes and steranes. The relative abundance of various isomeric biomarkers in a petroleum product is indigenous to its geographical orgin. The ion chromatograms of many biomarkers are usually unique to the petroleum product and are ideal for identification. The data is supported by the use of UV fluorescence and infra red spectroscopy as the confirming methods.

Data from each environmental sample is compared against data generated from each suspected source oil for similar patterns and unique characteristics. Tabulation of the results indicates whether or not an environmental sample is contaminated with the suspected source oil or petroleum product.

ATTACHMENT BB-4

GC/MS ANALYSIS

CHROMATOGRAPHIC COMPARISON

A. n-ALKANE PEAKS

B. BRANCH PARAFFIN PEAKS

C. ISOPRENOIDAL RATIOS

D. GENERAL CONTOUR OF THE UNRESOLVED REGION.

ATTACHMENT BB-42

GC/MS ANALYSIS

EXTRACTED ION CURRENT PROFILES OF SELECTED BIOMARKERS

A. UNIQUE CHARACTERISTICS OF ION CHROMATOGRAMS

B. MINIMUM AMOUNT OF BIODEGRADATION

C. RELATIVE ABUNDANCE IN PETROLEUM PRODUCT IS INDIGENOUS TO ITS GEOGRAPHICAL ORGIN

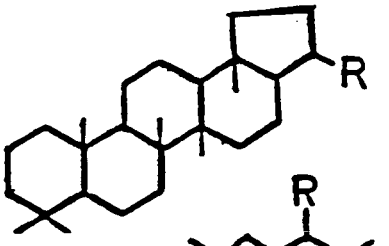
D. OIL EXPLORATION BY PETROLEUM INDUSTRY

ATTACHMENT BB-43

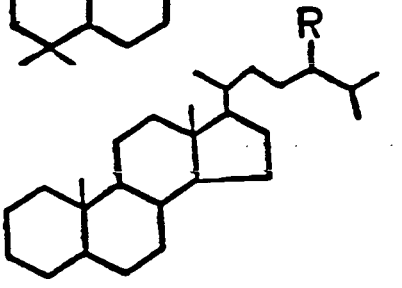
EICP COMPARISON

- MONITOR THE RELATIVE ABUNDANCE OF VARIOUS BIOMARKERS

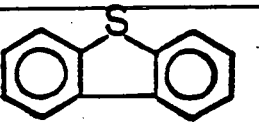
- TRITERPANES
  m/e = 191



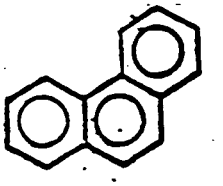
- STERANES
  m/e = 217



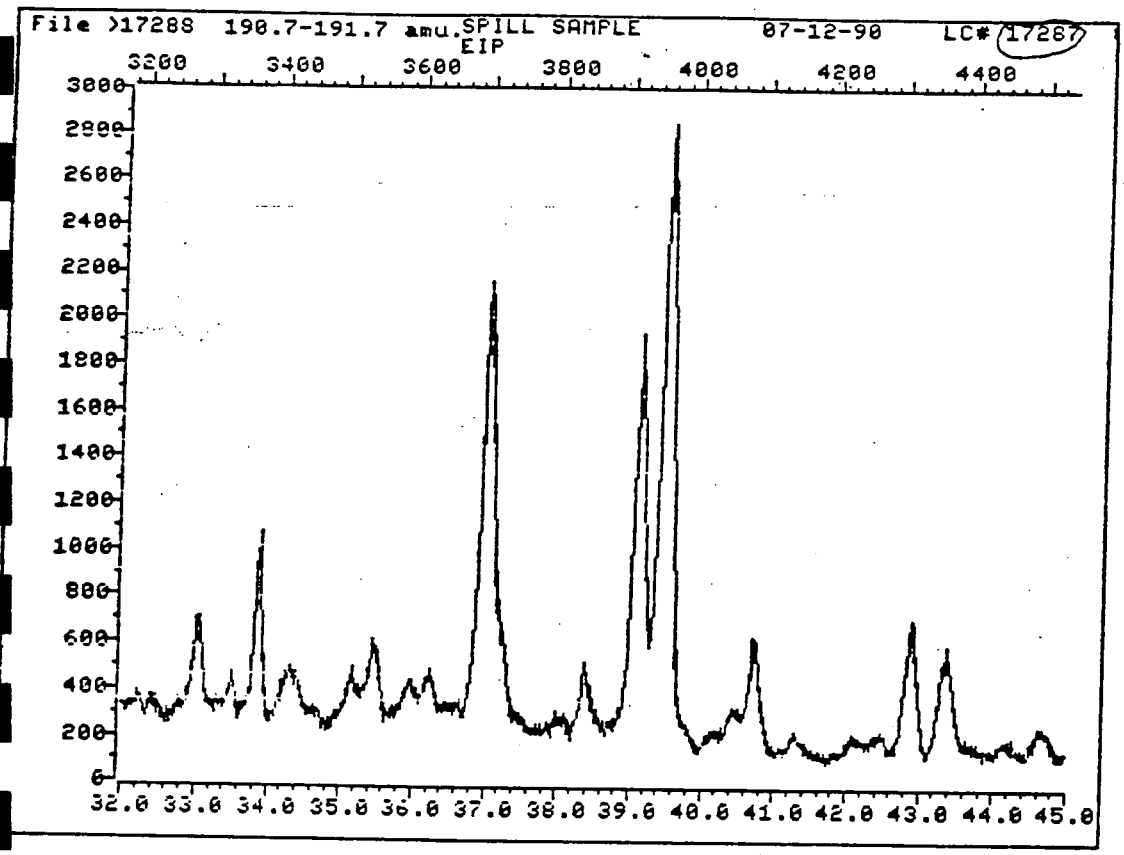
- DIBENZOTHIOPHENE
  C-2 m/e = 212
  C-3 m/e = 226



- PHENANTHRENE
  C-2 m/e = 206
  C-3 m/e = 220



ATTACHMENT BB-44

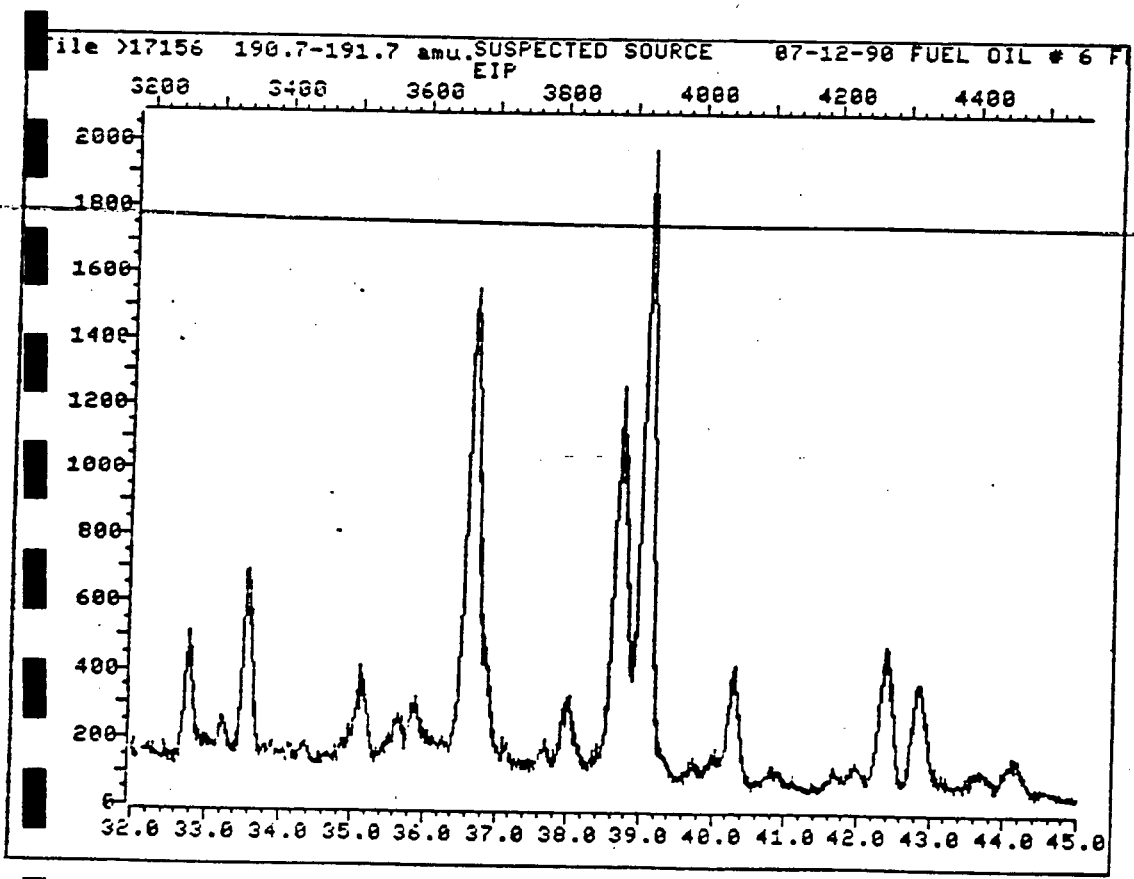


17288 E.R.

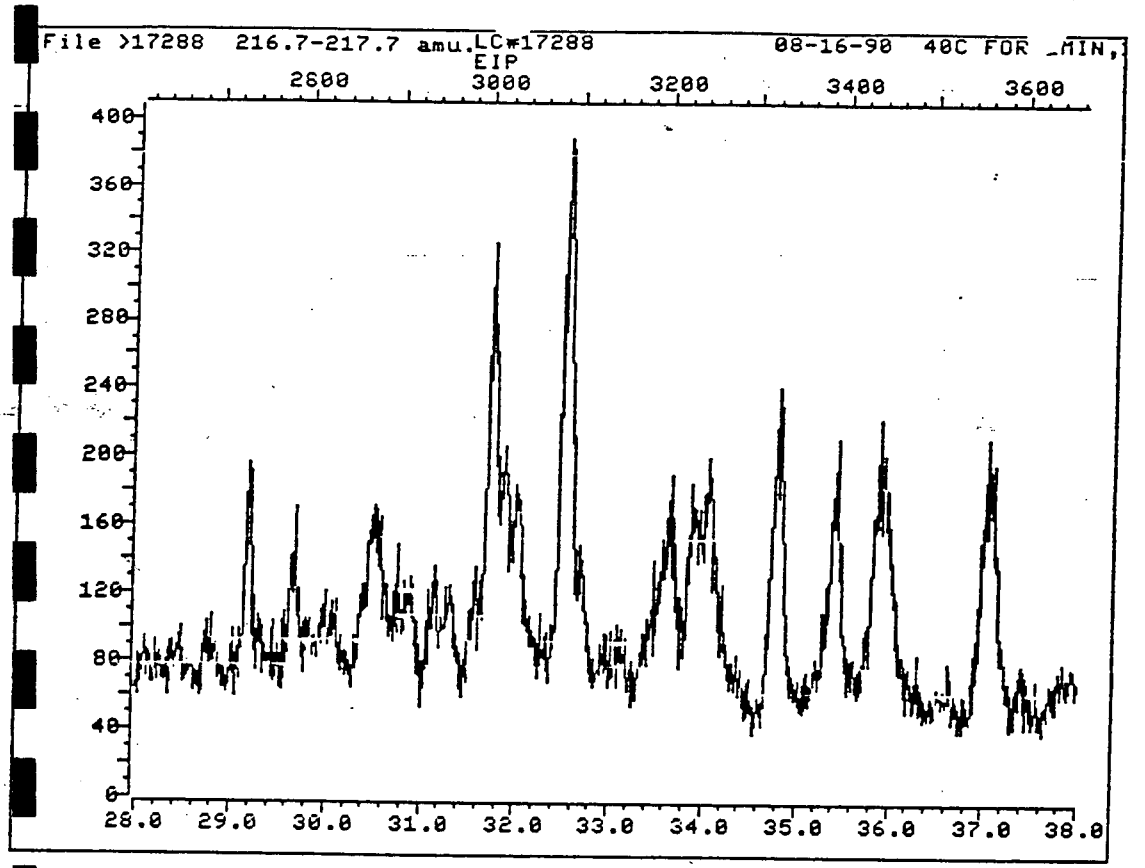
C Reilly 7-12-90

Triterpanes (m/e 191)

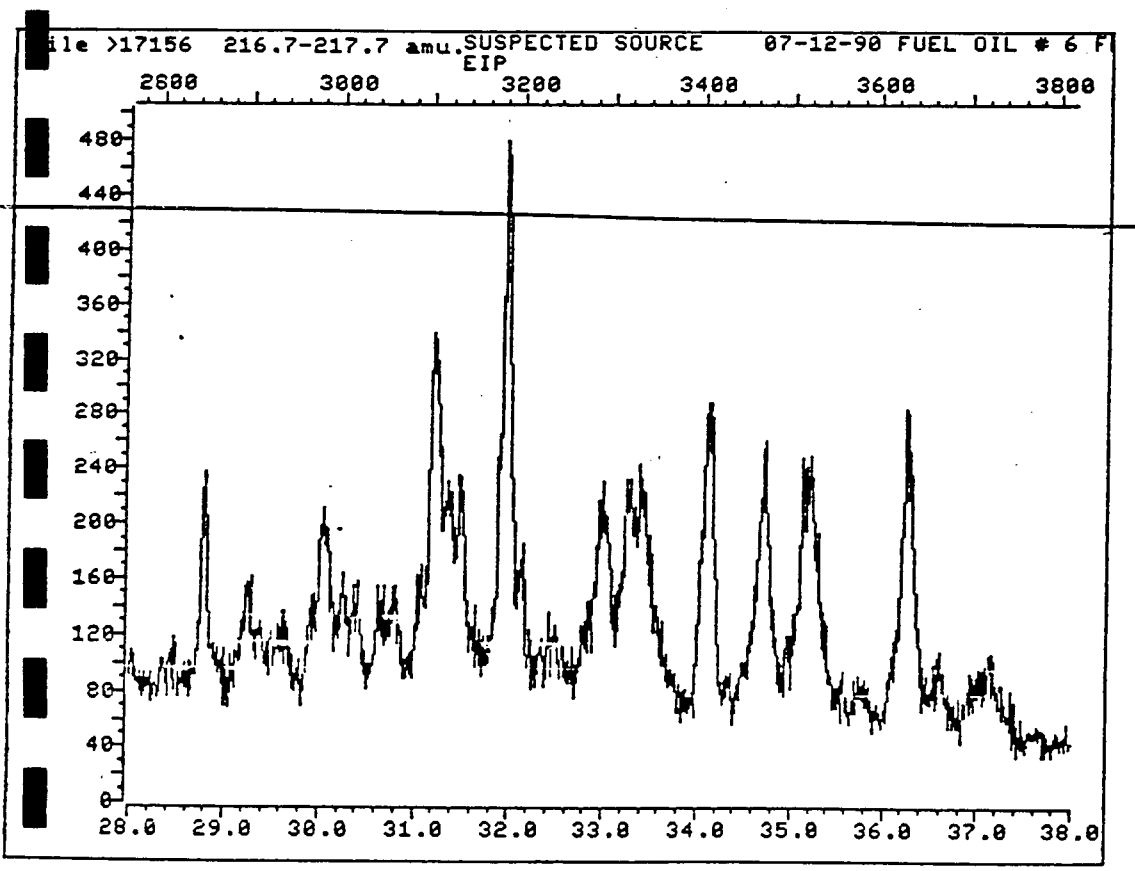
Match



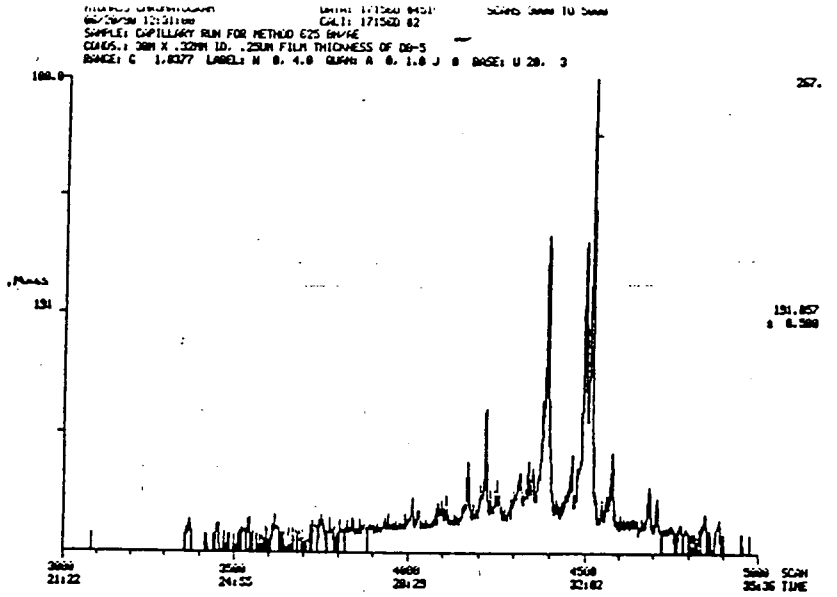
ATTACHMENT BB-45



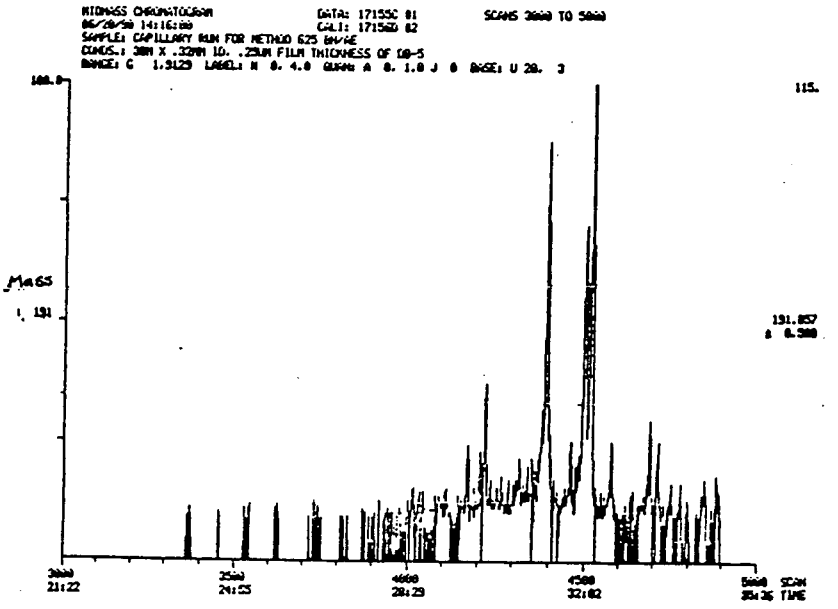
Steranes (m/e 217)



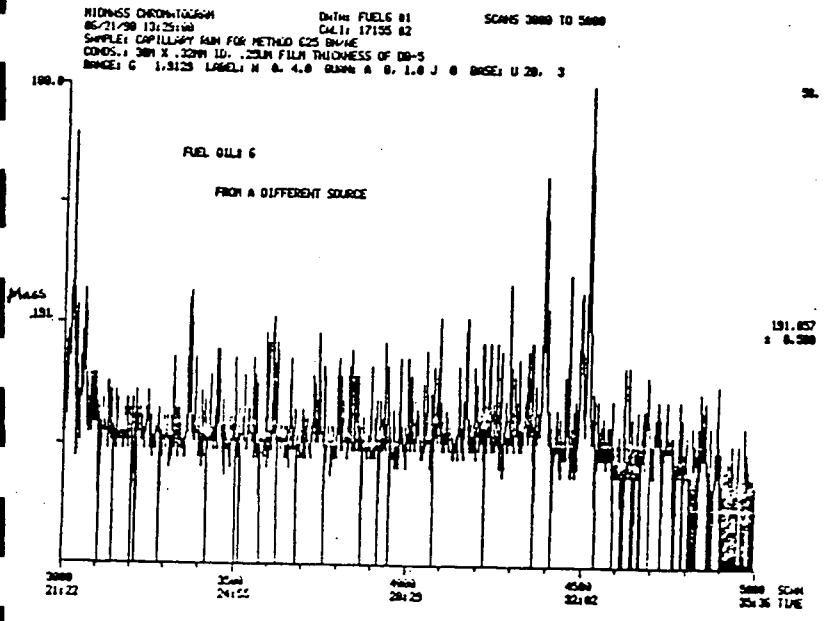
ATTACHMENT BB-46



SUSPECTED SOURCE OIL



TAR BALL SAMPLE



DIFFERENT SOURCE

ATTACHMENT BB-47

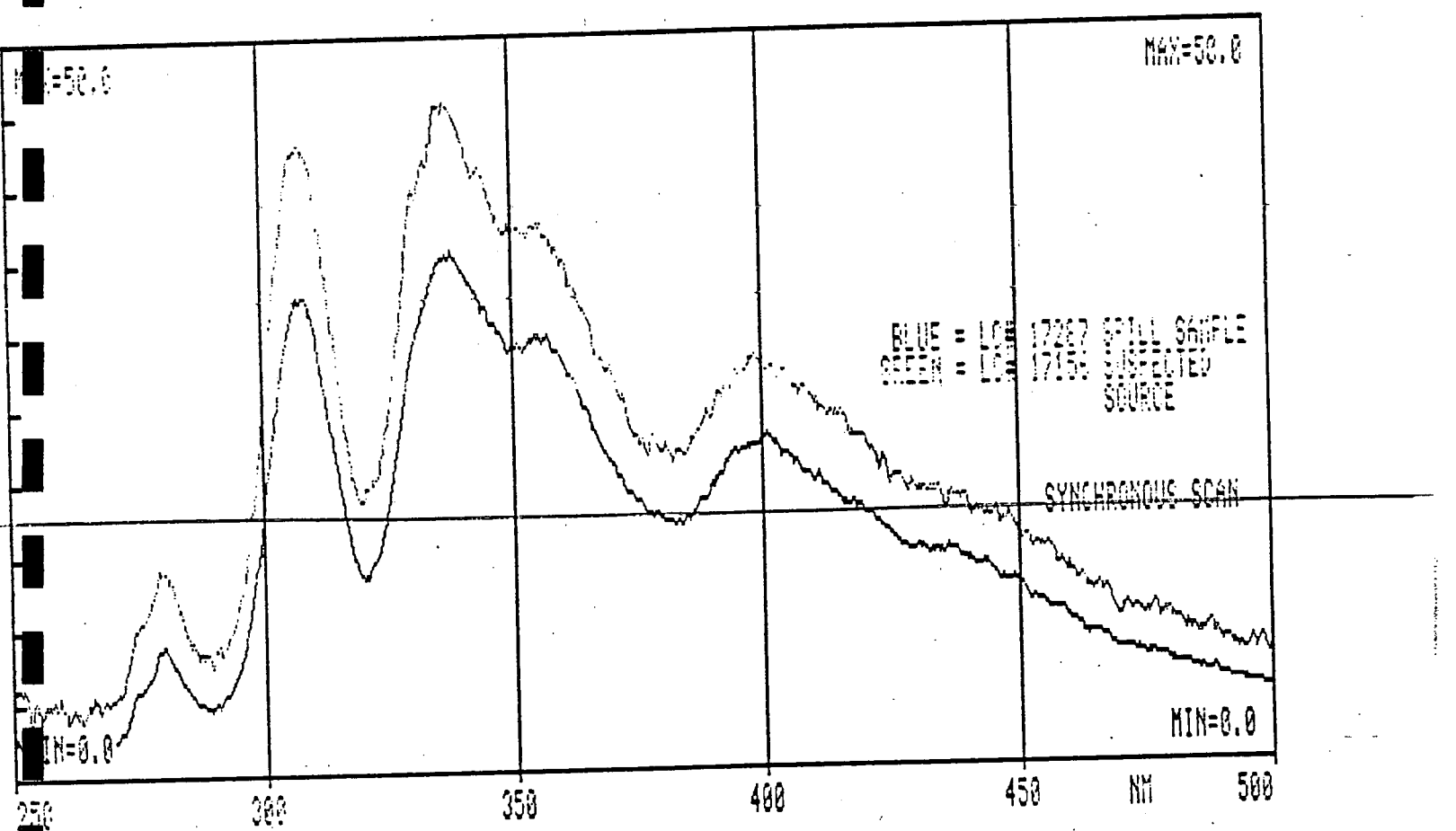
UV FLUORESCENCE
ANALYSIS

A. EMISSION SCAN

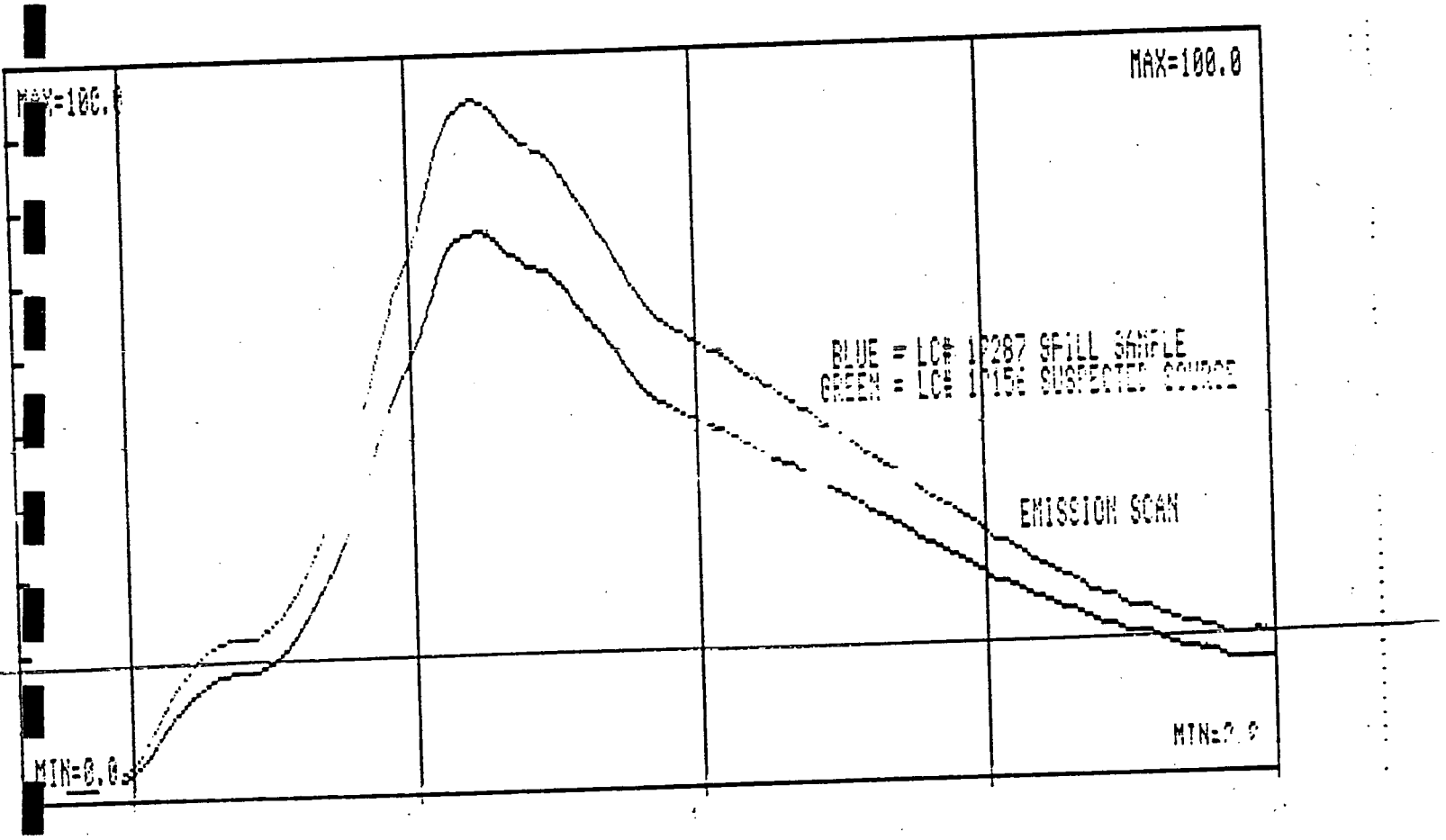
B. SYNCHRONOUS SCAN

C. 3-D UV SCAN

ATTACHMENT BB-48



ATTACHMENT BB-49



ATTACHMENT BB-50

ICP ANALYSIS
ELEMENTAL SCAN

A. RAPID SEMI-QUNTITATIVE SCANNING OF OIL BASE MEDIUM

B. SENSITIVITIES IN PPB RANGE FOR MN, V, Cr, Ni

C. ELEMENTAL RATIOS

D. ELEMENTAL SULFUR AND PHOSPHOROUS SCANS

ATTACHMENT BB-51

ERICA WALLACE
BEMQA-EMS

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Jeanne M. Fox
Acting Commissioner

Anthony J. Farro
Director

NOV 19 1993

M E M O R A N D U M

TO: Trish Conti, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief 11/19/93
Joseph Sanguiliano 11/19/93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Atiya Wahab A.W 11.19.93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Validation of water samples collected from the **Paperboard Specialties Inc.** for CLP deliverables; Analyses done by Industrial Corrosion Management.

Field ID#	Lab. ID#	Sample Date	Matrix
PS9193MWB1	173320	09/01/93	WATER
PS9193MWB5	173321	09/01/93	WATER
PS9193BEC1S	173322	09/01/93	WATER
PS9193MWDUP	173323	09/01/93	WATER
PS9193BEC2S	173324	09/01/93	WATER
PS9193FB	173325	09/01/93	WATER
PS9193TB	173326	09/01/93	WATER

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for organics and inorganics according to the latest Statements of Work, SOW OLM01.8 and SOW ILM02.1. The data are acceptable with the exception of the QC deficiencies noted below. Please refer to the Target and Non-target Compound Summary List for additional information. A detailed data validation report is available for your review.

ATTACHMENT BB-52

VOLATILES:

The data are acceptable as presented.

SEMIVOLATILES:

The data are acceptable as presented.

PESTICIDES:

The analysis was not requested.

INORGANICS:

Silver results in all samples are qualified because the pre-digestion spike analysis was 74.4% which did not meet the QC limits (75-125%).

Antimony and Silver results are estimated and biased high because the CRDL standard analysis results of these analytes (125.8% and 122% respectively) exceeded the quality control limits (80-120%).

Iron, Magnesium and Manganese results are qualified because the serial dilution analysis results for these analytes (12.7%, 10.2% and 11.8% respectively) exceeded the quality control limit (10%).

Cyanide analysis was not performed.

If you have any questions concerning this review, please do not hesitate to contact this office at 3-0752.

cc: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT BB-53

ERICA WALLACE
BEMQA - EMS

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Jeanne M. Fox
Acting Commissioner

Anthony J. Farro
Director

NOV 24 1993

MEMORANDUM

TO: V. Vijayasundaram, Site Manager, BSM

FROM: Trish Conti, Technical Coordinator, BEERA TC

SUBJECT: Analytical Data Validation for Groundwater Samples Collected September 1, 1993, for Paperboard Specialties Inc.

DATE: November 24, 1993.

The subject review was received at BEERA on November 22, 1993, from the Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance. The analytical data validation review for the four monitoring well (lab ID# 173320-173322, 173324) and one duplicate (lab ID# 173323) groundwater samples, as well as two blank (lab ID# 173325 and 173326) water samples, finds the data acceptable as submitted. The review did not identify any significant problems with the data as presented by Industrial Corrosion Management.

If you have any questions regarding the above information, please feel free to call me at 4-9773.

c: Daryle Clark, Geologist, BGWPA
Anne Hayton, Supervisor, BEERA

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ATTACHMENT BB-54

ERICA WALLACE
BEMQA-EMS

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Jeanne M. Fox
Acting Commissioner

Anthony J. Farro
Director

DEC 0 2 1993

M E M O R A N D U M

TO: Trish Conti, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief 12/1/93
Joseph Sanguiliano 12-2-93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Atiya Wahab A.W. 12-2-93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Review of samples collected from the **Paperboard Specialties Inc.** for Regulatory deliverables. Analyses done by NJDEPE-BOAS.

Field ID#	Lab. ID#	Sample Date	Matrix
PS9793BEC1D	236A30	09/07/93	OILY PRODUCT
PS9793BEC2D	236A33	09/07/93	OILY PRODUCT
PS9793MWB2	236A31	09/07/93	OILY PRODUCT
PS9793MWB3	236A32	09/07/93	OILY PRODUCT
PS9793TANKA	236A29	09/07/93	OILY PRODUCT

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for pertroleum hydrocarbons. The qualitative analyses were performed by GC-MS with a semi-volatile capillary column.

GENERAL:

The tune summary and the blank associated with the analyses were acceptable.

ATTACHMENT BB-55

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SAMPLE 23629:

QAS agrees with the laboratory's identification of the petroleum product as a fuel oil #2.

SAMPLE 23630:

QAS agrees with the laboratory's identification of the petroleum product as a severely weathered fuel oil #6.

SAMPLE 23631:

QAS agrees with the laboratory's identification of the petroleum product as a severely weathered fuel oil #6.

SAMPLE 23632:

QAS agrees with the laboratory's identification of the petroleum product as a severely weathered fuel oil #6.

SAMPLE 23633:

QAS agrees with the laboratory's identification of the petroleum product as a slightly weathered fuel oil #6.

The comparison of fuel oil #6 chromatograms for biomarkers such as C-2 phenanthrene, C-3 phenanthrene and triterpene in samples 23630, 23631, 23632 and 23633 indicate that some differences exist in the relative distribution of their components. From these comparisons, it can be deduced that the fuel oil #6 in samples 23630, 23633 and 23632 is possibly unrelated to the fuel oil #6 in sample 23631.

If you have any questions concerning this review, please do not hesitate to contact this office at 3-0752.

cc: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT BB-56

State of New Jersey
Department of Environmental Protection and Energy
Division of Environmental Safety, Health and Analytical Programs
CN 411
Trenton, NJ 08625
Tel. # 609-530-4100

Jeanne M. Fox
Acting Commissioner

Gerald P. Nicholls, Ph.D.
Director

MEMORANDUM

TO: Erica Wallace
Bureau of Environmental Measurements and Quality Assurance

FROM: Robert L. Reinowski RLR
DEPE Analytical Services

SUBJECT: Analytical Results

DATE: February 1, 1994

Enclosed are the Environmental Laboratory's analytical results for the following samples(s):

Lab Control #(s): 23629 - 23633

If you have any questions, please call me at 530-4105.

Enclosure(s)

No ignitable corrosive [illegible]

380 Scotch Rd.
CN 411

~~VOLATILE ORGANICS ANALYSIS~~

Analytical Data Report Package

for the

NJDEPE/BEMQA

25 Arctic parkway, Trenton, NJ 08638 FEB 01 1994

Attention: Erica Wallace

Project: Paperboard Specialties TCLP analyses VO, BNA, PESTICIDES

Report Date: 09/30/93

Field Sample #	Laboratory Sample #	Date & Time of Collection
PS9793TANKA	23629	09/07/93 1305
PS9793BECID	23630	09/07/93 1245
PS9793MWB2	23631	09/07/93 1415
PS9793MWB3	23632	09/07/93 1055
PS9793BEC2D	23633	09/07/93 1215

Laboratory Name: NJ Dept. of Env. Prot. & Energy Lab

Certification #: EPANJ197, NJ11149

Quality Assurance Officer Signature: Robert L Reinowski

Printed Name: Robert Reinowski

Analyst Signature: Joseph E Dierkes

Printed Name: Joseph E. Dierkes

ATTACHMENT BB-58

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)

*** VOLATILE SAMPLE ANALYSIS ***

NEW JERSEY DEPT of ENVIRONMENTAL PROTECTION and ENERGY
ENVIRONMENTAL SAFETY, HEALTH, and ANALYTICAL PROGRAMS
BUREAU of ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23629
SAMPLE TYPE: OILY WASTE
FIELD ID# PS9793TANKA WALLACE
ANALYSIS DATE: 09-29-93
REPORT DATE: 09-30-93
NOTEBOOK REF: 212-27

ANALYST: JOSEPH E. DIERKES
DILUTION FACTOR: 25.00
REVIEWED BY: RB 10/4/93
GC/MS capillary column

VOLATILE ANALYTES	SAMPLE RESULT ug/L	DETECTION LIMITS, ug/L Normal	DETECTION LIMITS, ug/L Analyzed	METHOD BLANK ug/L
1,2-Dichloroethane-d4 SURR	55.88	–	–	51.41
Toluene-d8 SURR	52.46	–	–	52.01
p-Bromofluorobenzene SURR	59.25	–	–	52.37
Vinyl Chloride	ND	0.41	10.25	ND
1,1-Dichloroethene	ND	0.27	6.75	ND
Chloroform	ND	0.19	4.75	ND
Carbon Tetrachloride	ND	0.24	6.00	ND
Benzene	104	0.27	6.75	ND
1,2-Dichloroethane	ND	0.27	6.75	ND
2-Butanone (MEK)	ND	4.01	100.25	ND
Trichloroethene	ND	0.17	4.25	ND
Tetrachloroethene	ND	0.29	7.25	ND
Chlorobenzene	ND	0.20	5.00	ND
1,4-Dichlorobenzene	ND	0.21	5.25	ND

1. REFERENCE METHODS: EPA FED.REGISTER Pt.136 App. A 40CFR Ch.I(7-1-89)
   USEPA METHOD 8240 Rev 1 December 1987
2. METHOD DETECTION LIMITS CALCULATED FEBRUARY 1993, BY METHOD 624
3. METHOD DETECTION LIMIT for MEK CALCULATED DEC 1990

ATTACHMENT BB-59

BN/AE TCLP ANALYSIS

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
ENVIRONMENTAL SAFETY, HEALTH, AND ANALYTICAL SERVICES
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# : 23629
SAMPLE TYPE: PETROLEUM PRODUCT
FIELD ID#: PS9793 TankA
EXTRACTION DATE : 9-27-93
ANALYSIS DATE : 11-4-93
REPORT DATE : 11-15-93

ANALYST: ED REILLY
REVIEWED BY : CB 11/18/93
INITIAL VOLUME : 250 ML
BN FINAL VOLUME :1.0 ML
AE FINAL VOLUME :1.0 ML

BN/AE ANALYTES	SAMPLE CONC. UG/L	METHOD BLANK CONC UG/L	MDL UG/L	SOLVENT BLANK CONC. UG/L
PYRIDINE	ND	ND	-	ND
O-CRESOL	598	ND	-	ND
P & M-CRESOL	1189	ND	-	ND
HEXACHLOROETHANE	ND	ND	2.6	ND
NITROBENZENE	ND	ND	5.8	ND
HEXACHLOROBUTADIENE	ND	ND	3.3	ND
2,4,6-TRICHLOROPHENOL	ND	ND	10.4	ND
2,4,5-TRICHLOROPHENOL	ND	ND	-	ND
2,4-DINITROTOLUENE	ND	ND	5.1	ND
HEXACHLOROBENZENE	ND	ND	8.7	ND
PENTACHLOROPHENOL	ND	ND	27.2	ND

1. REFERENCE METHOD:EPA SW-846 METHOD 8270, NOV. 1986.
2. METHOD DETECTION LIMITS:EPA FEDERAL REGISTER OCT. 1984 PTS SOP 7.1.10.
3. TOXICITY CHARACTERISTIC LEACHING PROCEDURE: EPA SW-846 METHOD 1311, NOV. 1990.

ND=NOT DETECTED
BMDL=BELOW METHOD DETECTION LIMIT

SURROGATE RECOVERY DATA

ANALYTE	CONC. ADDED UG	% RECOVERY	CONTROL LIMITS LOWERUPPER	*QUALIFIED
2-FLUOROPHENOL	100	27	21-----100	
PHENOL-D5	100	34	10-------94	
NITROBENZENE-D5	100	50	35-----114	
2-FLUOROBIPHENYL	100	40	43-----116	
2,4,6-TRIBROMOPHENOL	100	79	10-----123	
TERPHENYL-D14	100	78	33-----141	

* IF DATA IS QUALIFIED SEE COMMENT BELOW.

ATTACHMENT BB-CC

*** TCLP SAMPLE ANALYSIS ***

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23629
SAMPLE TYPE: FUEL OIL
FIELD ID# PS9793 TANK A
EXTRACTION DATE: 9/28/93
ANALYSIS DATE: 11/05/93
REPORT DATE: 12/13/93
MATRIX SPIKE LC#: 23631
INITIAL VOL: 250 ML.
FINAL VOLUME: 5ML.
DILUTION:

ANALYST: PHYLIS COUCH
REVIEWED BY: Ed Reilly 1-3-94
METHOD: EPA METHOD 8080
INSTRUMENT: 5890 B
COLUMN: DB 5 & 608(CONFIRMATION)
OVEN:140'C (2min) to 240'C
@ 10'C/min for 5 min.
to 265 @ 5'C/min. for 8min.
INJ.TEMP:250'C DET.TEMP:300'C
NOTEBOOK #: 190 PG.78

PARAMETER	SAMPLE CONC. ug/L	MDL ug/L	METHOD BLANK ug/L	MATRIX SPIKE CONC. ADDED ug	MATRIX SPIKE % SPIKE RECOVERY	MATRIX SPIKE % SPIKE DUPLICATE RECOVERY
Gamma-BHC	ND	0.0150	ND	0.50	99.26	--
Heptachlor	10.12	0.0160	ND	0.50	71.95	--
Heptachlor epoxide	ND	0.0020	ND	0.50	99.36	--
Endrin	ND	0.0040	ND	0.50	106.53	--
Methoxychlor	ND	--	ND	0.50	87.83	--
Chlordane	ND	0.039	ND	--	--	--
Toxaphene	ND	0.035	ND	--	--	--

REFERENCE METHODS: EPA SW-846 METHOD 8080
ESHAP/BOAS SOP 7.1.7
EPA SW-846 TCLP PROCEDURE, METHOD 1311

METHOD DETECTION LIMITS (MDL) : Calculated AUG., 1989 by Method 608
ND = Not Detected NA = NOT APPLICABLE

COMMENTS: See Attachments.

ATTACHMENT BB-61

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)

*** VOLATILE SAMPLE ANALYSIS ***

NEW JERSEY DEPT of ENVIRONMENTAL PROTECTION and ENERGY
ENVIRONMENTAL SAFETY, HEALTH, and ANALYTICAL PROGRAMS
BUREAU of ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23633
SAMPLE TYPE: OILY WASTE
FIELD ID# PS9793BEC2D WALLACE
ANALYSIS DATE: 09-29-93
REPORT DATE: 09-30-93
NOTEBOOK REF: 212-27

ANALYST: JOSEPH E. DIERKES
DILUTION FACTOR: 25.00
REVIEWED BY: RCB 10/4/93
GC/MS capillary column

VOLATILE ANALYTES	SAMPLE RESULT ug/L	DETECTION LIMITS, ug/L Normal	DETECTION LIMITS, ug/L Analyzed	METHOD BLANK ug/L
1,2-Dichloroethane-d4 SURR	57.72	-	-	51.41
Toluene-d8 SURR	52.23	-	-	52.01
p-Bromofluorobenzene SURR	56.36	-	-	52.37
Vinyl Chloride	ND	0.41	10.25	ND
1,1-Dichloroethene	ND	0.27	6.75	ND
Chloroform	ND	0.19	4.75	ND
Carbon Tetrachloride	ND	0.24	6.00	ND
Benzene	ND	0.27	6.75	ND
1,2-Dichloroethane	ND	0.27	6.75	ND
2-Butanone (MEK)	ND	4.01	100.25	ND
Trichloroethene	ND	0.17	4.25	ND
Tetrachloroethene	ND	0.29	7.25	ND
Chlorobenzene	ND	0.20	5.00	ND
1,4-Dichlorobenzene	ND	0.21	5.25	ND

1. REFERENCE METHODS: EPA FED.REGISTER Pt.136 App. A 40CFR Ch.I(7-1-89)
   USEPA METHOD 8240 Rev 1 December 1987
2. METHOD DETECTION LIMITS CALCULATED FEBRUARY 1993, BY METHOD 624
3. METHOD DETECTION LIMIT for MEK CALCULATED DEC 1990

ATTACHMENT BB-C2

BN/AE TCLP ANALYSIS

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
ENVIRONMENTAL SAFETY, HEALTH, AND ANALYTICAL SERVICES
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# : 23633
SAMPLE TYPE: PETROLEUM PRODUCT
FIELD ID#: PS9793BEC2D
EXTRACTION DATE : 9-27-93
ANALYSIS DATE : 11-5-93
REPORT DATE : 11-15-93

ANALYST: ED REILLY
REVIEWED BY : RB 11/12/93
INITIAL VOLUME : 100 ML
BN FINAL VOLUME :1.0 ML
AE FINAL VOLUME :1.0 ML

BN/AE ANALYTES	SAMPLE CONC. UG/L	METHOD BLANK CONC UG/L	MDL UG/L	SOLVENT BLANK CONC. UG/L
PYRIDINE	ND	ND	-	ND
O-CRESOL	ND	ND	-	ND
P & M-CRESOL	ND	ND	-	ND
HEXACHLOROETHANE	ND	ND	2.6	ND
NITROBENZENE	ND	ND	5.8	ND
HEXACHLOROBUTADIENE	ND	ND	3.3	ND
2,4,6-TRICHLOROPHENOL	ND	ND	10.4	ND
2,4,5-TRICHLOROPHENOL	ND	ND	-	ND
2,4-DINITROTOLUENE	ND	ND	5.1	ND
HEXACHLOROBENZENE	ND	ND	8.7	ND
PENTACHLOROPHENOL	ND	ND	27.2	ND

1. REFERENCE METHOD:EPA SW-846 METHOD 8270, NOV. 1986.
2. METHOD DETECTION LIMITS:EPA FEDERAL REGISTER OCT. 1984
   PTS SOP 7.1.10.
3. TOXICITY CHARACTERISTIC LEACHING PROCEDURE: EPA SW-846
   METHOD 1311, NOV. 1990.

ND=NOT DETECTED
BMDL=BELOW METHOD DETECTION LIMIT

SURROGATE RECOVERY DATA

ANALYTE	CONC. ADDED UG	% RECOVERY	CONTROL LIMITS LOWERUPPER	*QUALIFIED
2-FLUOROPHENOL	100	30	21-----100	
PHENOL-D5	100	41	10------94	
NITROBENZENE-D5	100	74	35-----114	
2-FLUOROBIPHENYL	100	18	43-----116	* YES
2,4,6-TRIBROMOPHENOL	100	66	10-----123	
TERPHENYL-D14	100	61	33-----141	

* IF DATA IS QUALIFIED SEE COMMENT BELOW.

ATTACHMENT BB-C3

*** TCLP SAMPLE ANALYSIS ***

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
BUREAU OF ORGANIC ANALYTICAL SERVICES

ANALYST: PHYLIS COUCH

SAMPLE LC# 23633
SAMPLE TYPE: FUEL OIL IN WATER
FIELD ID# PS9793 BEC2D
EXTRACTION DATE: 9/28/93
ANALYSIS DATE: 11/05/93
REPORT DATE: 12/13/93
MATRIX SPIKE LC#: 23631
INITIAL VOL: 100 ML.
FINAL VOLUME: 5ML.
DILUTION:

REVIEWED BY: Ed Reilly 1-3-94
METHOD: EPA METHOD 8080
INSTRUMENT: 5890 B
COLUMN: DB 5 & 608(CONFIRMATION)
OVEN:140'C (2min) to 240'C
@ 10'C/min for 5 min.
to 265 @ 5'C/min. for 8min.
INJ.TEMP:250'C DET.TEMP:300'C
NOTEBOOK #: 190 P6.78

PARAMETER	SAMPLE CONC. ug/L	MDL ug/L	METHOD BLANK ug/L	MATRIX SPIKE CONC. ADDED ug	MATRIX SPIKE % SPIKE RECOVERY	MATRIX SPIKE % SPIKE DUPLICATE RECOVERY
Gamma-BHC	ND	0.0150	ND	0.50	99.26	--
Heptachlor	ND	0.0160	ND	0.50	71.95	--
Heptachlor epoxide	ND	0.0020	ND	0.50	99.36	--
Endrin	ND	0.0040	ND	0.50	106.53	--
Methoxychlor	ND	--	ND	0.50	87.83	--
Chlordane	ND	0.039	ND	--	--	--
Toxaphene	ND	0.035	ND	--	--	--

REFERENCE METHODS: EPA SW-846 METHOD 8080
ESHAP/BOAS SOP 7.1.7
EPA SW-846 TCLP PROCEDURE, METHOD 1311

METHOD DETECTION LIMITS (MDL) : Calculated AUG., 1989 by Method 608
ND = Not Detected NA = NOT APPLICABLE

COMMENTS: See Attachments.

ATTACHMENT BB-64

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)

*** VOLATILE SAMPLE ANALYSIS ***

NEW JERSEY DEPT of ENVIRONMENTAL PROTECTION and ENERGY
ENVIRONMENTAL SAFETY, HEALTH, and ANALYTICAL PROGRAMS
BUREAU of ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23631
SAMPLE TYPE: OILY WASTE
FIELD ID# PS9793MWB2 WALLACE
ANALYSIS DATE: 09-29-93
REPORT DATE: 09-30-93
NOTEBOOK REF: 212-27

ANALYST: JOSEPH E. DIERKES
DILUTION FACTOR: 25.00
REVIEWED BY: RCB 10/4/93
GC/MS capillary column

VOLATILE ANALYTES	SAMPLE RESULT ug/L	DETECTION LIMITS, ug/L Normal	DETECTION LIMITS, ug/L Analyzed	METHOD BLANK ug/L
1,2-Dichloroethane-d4 SURR	57.83	-	-	51.41
Toluene-d8 SURR	51.48	-	-	52.01
p-Bromofluorobenzene SURR	54.84	-	-	52.37
Vinyl Chloride	ND	0.41	10.25	ND
1,1-Dichloroethene	ND	0.27	6.75	ND
Chloroform	ND	0.19	4.75	ND
Carbon Tetrachloride	ND	0.24	6.00	ND
Benzene	ND	0.27	6.75	ND
1,2-Dichloroethane	ND	0.27	6.75	ND
2-Butanone (MEK)	ND	4.01	100.25	ND
Trichloroethene	ND	0.17	4.25	ND
Tetrachloroethene	ND	0.29	7.25	ND
Chlorobenzene	ND	0.20	5.00	ND
1,4-Dichlorobenzene	ND	0.21	5.25	ND

1. REFERENCE METHODS: EPA FED.REGISTER Pt.136 App. A 40CFR Ch.I(7-1-89)
   USEPA METHOD 8240 Rev 1 December 1987
2. METHOD DETECTION LIMITS CALCULATED FEBRUARY 1993, BY METHOD 624
3. METHOD DETECTION LIMIT for MEK CALCULATED DEC 1990

ATTACHMENT BB-65

U

BN/AE TCLP ANALYSIS

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
ENVIRONMENTAL SAFETY, HEALTH, AND ANALYTICAL SERVICES
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# : 23631
SAMPLE TYPE: PETROLEUM PRODUCT
FIELD ID#: PS9793MWB2
EXTRACTION DATE : 9-27-93
ANALYSIS DATE : 11-5-93
REPORT DATE : 11-15-93

ANALYST: ED REILLY
REVIEWED BY : RCB 11/18/93
INITIAL VOLUME : 250 ML
BN FINAL VOLUME :1.0 ML
AE FINAL VOLUME :1.0 ML

BN/AE ANALYTES	SAMPLE CONC. UG/L	METHOD BLANK CONC UG/L	MDL UG/L	SOLVENT BLANK CONC. UG/L
PYRIDINE	ND	ND	-	ND
O-CRESOL	ND	ND	-	ND
P & M-CRESOL	ND	ND	-	ND
HEXACHLOROETHANE	ND	ND	2.6	ND
NITROBENZENE	ND	ND	5.8	ND
HEXACHLOROBUTADIENE	ND	ND	3.3	ND
2,4,6-TRICHLOROPHENOL	ND	ND	10.4	ND
2,4,5-TRICHLOROPHENOL	ND	ND	-	ND
2,4-DINITROTOLUENE	ND	ND	5.1	ND
HEXACHLOROBENZENE	ND	ND	8.7	ND
PENTACHLOROPHENOL	ND	ND	27.2	ND

1. REFERENCE METHOD:EPA SW-846 METHOD 8270, NOV. 1986.
2. METHOD DETECTION LIMITS:EPA FEDERAL REGISTER OCT. 1984 PTS SOP 7.1.10.
3. TOXICITY CHARACTERISTIC LEACHING PROCEDURE: EPA SW-846 METHOD 1311, NOV. 1990.

ND=NOT DETECTED
BMDL=BELOW METHOD DETECTION LIMIT

SURROGATE RECOVERY DATA

ANALYTE	CONC. ADDED UG	% RECOVERY	CONTROL LIMITS LOWERUPPER	*QUALIFIED
2-FLUOROPHENOL	100	62	21-----100	
PHENOL-D5	100	59	10------94	
NITROBENZENE-D5	100	42	35-----114	
2-FLUOROBIPHENYL	100	17	43-----116	* YES
2,4,6-TRIBROMOPHENOL	100	56	10-----123	
TERPHENYL-D14	100	56	33-----141	

* IF DATA IS QUALIFIED SEE COMMENT BELOW.

ATTACHMENT BB-66

(44)

*** TCLP SAMPLE ANALYSIS ***

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23631
SAMPLE TYPE: FUEL OIL
FIELD ID# PS9793 MWB2
EXTRACTION DATE: 9/28/93
ANALYSIS DATE: 11/05/93
REPORT DATE: 12/13/93
MATRIX SPIKE LC#: 23631
INITIAL VOL: 250 ML.
FINAL VOLUME: 5ML.
DILUTION:

ANALYST: PHYLIS COUCH
REVIEWED BY: Ed Reilly 1-3-94
METHOD: EPA METHOD 8080
INSTRUMENT: 5890 B
COLUMN: DB 5 & 608(CONFIRMATION)
OVEN:140'C (2min) to 240'C
@ 10'C/min for 5 min.
to 265 @ 5'C/min. for 8min.
INJ.TEMP:250'C DET.TEMP:300'C
NOTEBOOK #: 190 PG.78

PARAMETER	SAMPLE CONC. ug/L	MDL ug/L	METHOD BLANK ug/L	MATRIX SPIKE CONC. ADDED ug	MATRIX SPIKE % SPIKE RECOVERY	MATRIX SPIKE % SPIKE DUPLICATE RECOVERY
Gamma-BHC	ND	0.0150	ND	0.50	99.26	--
Heptachlor	ND	0.0160	ND	0.50	71.95	--
Heptachlor epoxide	ND	0.0020	ND	0.50	99.36	--
Endrin	ND	0.0040	ND	0.50	106.53	--
Methoxychlor	ND	--	ND	0.50	87.83	--
Chlordane	ND	0.039	ND	--	--	--
Toxaphene	ND	0.035	ND	--	--	

REFERENCE METHODS: EPA SW-846 METHOD 8080
ESHAP/BOAS SOP 7.1.7
EPA SW-846 TCLP PROCEDURE, METHOD 1311

METHOD DETECTION LIMITS (MDL) : Calculated AUG., 1989 by Method 608
ND = Not Detected NA = NOT APPLICABLE

COMMENTS: See Attachments.

ATTACHMENT BB-C7

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)

*** VOLATILE SAMPLE ANALYSIS ***

NEW JERSEY DEPT of ENVIRONMENTAL PROTECTION and ENERGY
ENVIRONMENTAL SAFETY, HEALTH, and ANALYTICAL PROGRAMS
BUREAU of ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23632
SAMPLE TYPE: OILY WASTE
FIELD ID# PS9793MWB3 WALLACE
ANALYSIS DATE: 09-29-93
REPORT DATE: 09-30-93
NOTEBOOK REF: 212-27

ANALYST: JOSEPH E. DIERKES
DILUTION FACTOR: 25.00
REVIEWED BY: RB 10/4/93
GC/MS capillary column

VOLATILE ANALYTES	SAMPLE RESULT ug/L	DETECTION LIMITS, ug/L Normal	DETECTION LIMITS, ug/L Analyzed	METHOD BLANK ug/L
1,2-Dichloroethane-d4 SURR	57.84	-	-	51.41
Toluene-d8 SURR	51.45	-	-	52.01
p-Bromofluorobenzene SURR	56.33	-	-	52.37
Vinyl Chloride	ND	0.41	10.25	ND
1,1-Dichloroethene	ND	0.27	6.75	ND
Chloroform	ND	0.19	4.75	ND
Carbon Tetrachloride	ND	0.24	6.00	ND
Benzene	ND	0.27	6.75	ND
1,2-Dichloroethane	ND	0.27	6.75	ND
2-Butanone (MEK)	ND	4.01	100.25	ND
Trichloroethene	ND	0.17	4.25	ND
Tetrachloroethene	ND	0.29	7.25	ND
Chlorobenzene	ND	0.20	5.00	ND
1,4-Dichlorobenzene	ND	0.21	5.25	ND

1. REFERENCE METHODS: EPA FED.REGISTER Pt.136 App. A 40CFR Ch.I(7-1-89)
   USEPA METHOD 8240 Rev 1 December 1987
2. METHOD DETECTION LIMITS CALCULATED FEBRUARY 1993, BY METHOD 624
3. METHOD DETECTION LIMIT for MEK CALCULATED DEC 1990

ATTACHMENT BB-68

BN/AE TCLP ANALYSIS

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
ENVIRONMENTAL SAFETY, HEALTH, AND ANALYTICAL SERVICES
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# : 23632
SAMPLE TYPE: PETROLEUM PRODUCT
FIELD ID#: P39793MWB3
EXTRACTION DATE : 9-27-93
ANALYSIS DATE : 11-5-93
REPORT DATE : 11-15-93

ANALYST: ED REILLY
REVIEWED BY : AB 11/18/93
INITIAL VOLUME : 100 ML
BN FINAL VOLUME :1.0 ML
AE FINAL VOLUME :1.0 ML

BN/AE ANALYTES	SAMPLE CONC. UG/L	METHOD BLANK CONC UG/L	MDL UG/L	SOLVENT BLANK CONC. UG/L
PYRIDINE	ND	ND	-	ND
O-CRESOL	ND	ND	-	ND
P & M-CRESOL	ND	ND	-	ND
HEXACHLOROETHANE	ND	ND	2.6	ND
NITROBENZENE	ND	ND	5.8	ND
HEXACHLOROBUTADIENE	ND	ND	3.3	ND
2,4,6-TRICHLOROPHENOL	ND	ND	10.4	ND
2,4,5-TRICHLOROPHENOL	ND	ND	-	ND
2,4-DINITROTOLUENE	ND	ND	5.1	ND
HEXACHLOROBENZENE	ND	ND	8.7	ND
PENTACHLOROPHENOL	ND	ND	27.2	ND

1. REFERENCE METHOD:EPA SW-846 METHOD 8270, NOV. 1986.
2. METHOD DETECTION LIMITS:EPA FEDERAL REGISTER OCT. 1984 PTS SOP 7.1.10.
3. TOXICITY CHARACTERISTIC LEACHING PROCEDURE: EPA SW-846 METHOD 1311, NOV. 1990.

ND=NOT DETECTED
~~BMDL=BELOW METHOD DETECTION LIMIT~~

SURROGATE RECOVERY DATA

ANALYTE	CONC. ADDED UG	% RECOVERY	CONTROL LIMITS LOWERUPPER	*QUALIFIED
2-FLUOROPHENOL	100	35	21-----100	
PHENOL-D5	100	50	10------94	
NITROBENZENE-D5	100	71	35-----114	
2-FLUOROBIPHENYL	100	17	43-----116	* YES
2,4,6-TRIBROMOPHENOL	100	38	10-----123	
TERPHENYL-D14	100	59	33-----141	

* IF DATA IS QUALIFIED SEE COMMENT BELOW.

ATTACHMENT BB-19

TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)

*** VOLATILE SAMPLE ANALYSIS ***

NEW JERSEY DEPT of ENVIRONMENTAL PROTECTION and ENERGY
ENVIRONMENTAL SAFETY, HEALTH, and ANALYTICAL PROGRAMS
BUREAU of ORGANIC ANALYTICAL SERVICES

SAMPLE LC# 23630
SAMPLE TYPE: OILY WASTE
FIELD ID# PS9793BECID WALLACE
ANALYSIS DATE: 09-29-93
REPORT DATE: 09-30-93
NOTEBOOK REF: 212-27

ANALYST: JOSEPH E. DIERKES
DILUTION FACTOR: 25.00
REVIEWED BY: RB 10/4/93
GC/MS capillary column

VOLATILE ANALYTES	SAMPLE RESULT ug/L	DETECTION LIMITS, ug/L Normal	DETECTION LIMITS, ug/L Analyzed	METHOD BLANK ug/L
1,2-Dichloroethane-d4 SURR	56.35	-	-	51.41
Toluene-d8 SURR	52.88	-	-	52.01
p-Bromofluorobenzene SURR	56.32	-	-	52.37
Vinyl Chloride	ND	0.41	10.25	ND
1,1-Dichloroethene	ND	0.27	6.75	ND
Chloroform	ND	0.19	4.75	ND
Carbon Tetrachloride	ND	0.24	6.00	ND
Benzene	ND	0.27	6.75	ND
1,2-Dichloroethane	ND	0.27	6.75	ND
2-Butanone (MEK)	ND	4.01	100.25	ND
Trichloroethene	ND	0.17	4.25	ND
Tetrachloroethene	ND	0.29	7.25	ND
Chlorobenzene	ND	0.20	5.00	ND
1,4-Dichlorobenzene	ND	0.21	5.25	ND

1. REFERENCE METHODS: EPA FED.REGISTER Pt.136 App. A 40CFR Ch.I(7-1-89)
   USEPA METHOD 8240 Rev 1 December 1987
2. METHOD DETECTION LIMITS CALCULATED FEBRUARY 1993, BY METHOD 624
3. METHOD DETECTION LIMIT for MEK CALCULATED DEC 1990

ATTACHMENT BB-70

BN/AE TCLP ANALYSIS

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
ENVIRONMENTAL SAFETY, HEALTH, AND ANALYTICAL SERVICES
BUREAU OF ORGANIC ANALYTICAL SERVICES

SAMPLE LC# : 23630
SAMPLE TYPE: PETROLEUM PRODUCT
FIELD ID#: PS9793BECID
EXTRACTION DATE : 9-27-93
ANALYSIS DATE : 11-5-93
REPORT DATE : 11-15-93

ANALYST: ED REILLY
REVIEWED BY : RB 11/18/93
INITIAL VOLUME : 250 ML
BN FINAL VOLUME :1.0 ML
AE FINAL VOLUME :1.0 ML

BN/AE ANALYTES	SAMPLE CONC. UG/L	METHOD BLANK CONC UG/L	MDL UG/L	SOLVENT BLANK CONC. UG/L
PYRIDINE	ND	ND	-	ND
O-CRESOL	ND	ND	-	ND
P & M-CRESOL	ND	ND	-	ND
HEXACHLOROETHANE	ND	ND	2.6	ND
NITROBENZENE	ND	ND	5.8	ND
HEXACHLOROBUTADIENE	ND	ND	3.3	ND
2,4,6-TRICHLOROPHENOL	ND	ND	10.4	ND
2,4,5-TRICHLOROPHENOL	ND	ND	-	ND
2,4-DINITROTOLUENE	ND	ND	5.1	ND
HEXACHLOROBENZENE	ND	ND	8.7	ND
PENTACHLOROPHENOL	ND	ND	27.2	ND

1. REFERENCE METHOD:EPA SW-846 METHOD 8270, NOV. 1986.
2. METHOD DETECTION LIMITS:EPA FEDERAL REGISTER OCT. 1984 PTS SOP 7.1.10.
3. TOXICITY CHARACTERISTIC LEACHING PROCEDURE: EPA SW-846 METHOD 1311, NOV. 1990.

ND=NOT DETECTED
BMDL=BELOW METHOD DETECTION LIMIT

SURROGATE RECOVERY DATA

ANALYTE	CONC. ADDED UG	% RECOVERY	CONTROL LIMITS LOWERUPPER	*QUALIFIED
2-FLUOROPHENOL	100	44	21-----100	
PHENOL-D5	100	47	10------94	
NITROBENZENE-D5	100	55	35-----114	
2-FLUOROBIPHENYL	100	83	43-----116	
2,4,6-TRIBROMOPHENOL	100	67	10-----123	
TERPHENYL-D14	100	56	33-----141	

* IF DATA IS QUALIFIED SEE COMMENT BELOW.

ATTACHMENT BD-71

*** TCLP SAMPLE ANALYSIS ***

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
BUREAU OF ORGANIC ANALYTICAL SERVICES

ANALYST: PHYLIS COUCH

SAMPLE LC# 23630
SAMPLE TYPE: FUEL OIL
FIELD ID# PS9793 BECID
EXTRACTION DATE: 9/28/93
ANALYSIS DATE: 11/05/93
REPORT DATE: 12/13/93
MATRIX SPIKE LC#: 23631
INITIAL VOL: 250 ML.
FINAL VOLUME: 5ML.
DILUTION:

REVIEWED BY: Ed Reilly 1-3-94
METHOD: EPA METHOD 8080
INSTRUMENT: 5890 B
COLUMN: DB 5 & 608(CONFIRMATION)
OVEN:140'C (2min) to 240'C
@ 10'C/min for 5 min.
to 265 @ 5'C/min. for 8min.
INJ.TEMP:250'C DET.TEMP:300'C
NOTEBOOK #: 190 PG.78

PARAMETER	SAMPLE CONC. ug/L	MDL ug/L	METHOD BLANK ug/L	MATRIX SPIKE CONC. ADDED ug	MATRIX SPIKE % SPIKE RECOVERY	MATRIX SPIKE % SPIKE DUPLICATE RECOVERY
Gamma-BHC	ND	0.0150	ND	0.50	99.26	--
Heptachlor	ND	0.0160	ND	0.50	71.95	--
Heptachlor epoxide	ND	0.0020	ND	0.50	99.36	--
Endrin	ND	0.0040	ND	0.50	106.53	--
Methoxychlor	ND	--	ND	0.50	87.83	--
Chlordane	ND	0.039	ND	--	--	--
Toxaphene	ND	0.035	ND	--	--	--

REFERENCE METHODS: EPA SW-846 METHOD 8080
ESHAP/BOAS SOP 7.1.7
EPA SW-846 TCLP PROCEDURE, METHOD 1311

METHOD DETECTION LIMITS (MDL) : Calculated AUG., 1989 by Method 608
ND = Not Detected NA = NOT APPLICABLE

COMMENTS: See Attachments.

ATTACHMENT BB-72

*****TCLP/METALS SAMPLE ANALYSIS*****
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
BUREAU OF RADIATION AND INORGANIC
ANALYTICAL SERVICES

SAMPLE LC#: 23633
FIELD SAMPLE#: PS9793BEC2D
SAMPLE TYPE: FUEL OIL IN H2O

REPORT DATE: 01/12/94

ANALYST: NICHOLAS TUMMILLO

DUPLICATE LC#: 23629
SPIKE LC#: 23629

SECTION SUPERVISOR B. Pass

PARAMETER	SAMPLE CONC. mg/L	MDL (BRIAS) mg/L	REAGENT BLANK mg/L	DUPLI-CATE mg/L	DUP REL %DIFF	CONC. ADDED mg/L	%SPIKE RECOVERY
ARSENIC	ND	0.001	<0.001	ND	NA	1.0	96
BARIUM	1.02	0.05	<0.05	0.43	2.4	1.0	97
CADMIUM	ND	0.01	<0.01	ND	NA	1.0	93
CHROMIUM	ND	0.05	<0.05	ND	NA	1.0	96
LEAD	ND	0.05	<0.05	0.15	6.9	1.0	94
MERCURY	ND	0.001	<0.001	ND	NA	2.0 UG/L	103
SELENIUM	ND	0.001	<0.001	ND	NA	1.0	94
SILVER	ND	0.01	<0.01	ND	NA	1.0	95

METHOD REFERENCE: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP), FEDERAL REGISTER JUNE 29, 1990.

METHOD DETECTION LIMITS(MDL): BRIAS ESTABLISHED JANUARY,1993.

ND = NOT DETECTED
NA = NOT APPLICABLE

REMARKS: Due to the fact that this sample was a mixture of fuel oil and water, there was insufficient sample to perform some of the other analyses requested. These analyses were ignitibility, reactivity, corrosivity(pH), density, and viscosity.

ATTACHMENT BB-73

*****TCLP/METALS SAMPLE ANALYSIS*****
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
BUREAU OF RADIATION AND INORGANIC
ANALYTICAL SERVICES

SAMPLE LC#: 23632
FIELD SAMPLE#: PS9793MWB3
SAMPLE TYPE: FUEL OIL IN H2O

REPORT DATE: 01/12/94

ANALYST: NICHOLAS TUMMILLO

DUPLICATE LC#: 23629
SPIKE LC#: 23629

SECTION SUPERVISOR B. Parsa

PARAMETER	SAMPLE CONC. mg/L	MDL (BRIAS) mg/L	REAGENT BLANK mg/L	DUPLI-CATE mg/L	DUP REL %DIFF	CONC. ADDED mg/L	%SPIKE RECOVERY
ARSENIC	0.002	0.001	<0.001	ND	NA	1.0	96
BARIUM	0.77	0.05	<0.05	0.43	2.4	1.0	97
CADMIUM	ND	0.01	<0.01	ND	NA	1.0	93
CHROMIUM	ND	0.05	<0.05	ND	NA	1.0	96
LEAD	ND	0.05	<0.05	0.15	6.9	1.0	94
MERCURY	ND	0.001	<0.001	ND	NA	2.0 UG/L	103
SELENIUM	0.001	0.001	<0.001	ND	NA	1.0	94
SILVER	ND	0.01	<0.01	ND	NA	1.0	95

METHOD REFERENCE: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP), FEDERAL REGISTER JUNE 29, 1990.

METHOD DETECTION LIMITS(MDL): BRIAS ESTABLISHED JANUARY,1993.

ND = NOT DETECTED
NA = NOT APPLICABLE

REMARKS: Due to the fact that this sample was a mixture of fuel oil and water, there was insufficient sample to perform some of the other analyses requested. These analyses were ignitibility, reactivity, corrosivity(pH), density, and viscosity.

ATTACHMENT BB-74

*****TCLP/METALS SAMPLE ANALYSIS*****
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
BUREAU OF RADIATION AND INORGANIC
ANALYTICAL SERVICES

REPORT DATE: 01/12/94

SAMPLE LC#: 23631
FIELD SAMPLE#: PS9793MWB2
SAMPLE TYPE: FUEL OIL

ANALYST: NICHOLAS TUMMILLO

DUPLICATE LC#: 23629
SPIKE LC#: 23629

SECTION SUPERVISOR B. Passo

PARAMETER	SAMPLE CONC. mg/L	MDL (BRIAS) mg/L	REAGENT BLANK mg/L	DUPLI-CATE mg/L	DUP REL %DIFF	CONC. ADDED mg/L	%SPIKE RECOVERY
ARSENIC	0.002	0.001	<0.001	ND	NA	1.0	96
BARIUM	0.46	0.05	<0.05	0.43	2.4	1.0	97
CADMIUM	ND	0.01	<0.01	ND	NA	1.0	93
CHROMIUM	ND	0.05	<0.05	ND	NA	1.0	96
LEAD	0.08	0.05	<0.05	0.15	6.9	1.0	94
MERCURY	ND	0.001	<0.001	ND	NA	2.0 UG/L	103
SELENIUM	ND	0.001	<0.001	ND	NA	1.0	94
SILVER	ND	0.01	<0.01	ND	NA	1.0	95

METHOD REFERENCE: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP), FEDERAL REGISTER JUNE 29, 1990.

METHOD DETECTION LIMITS(MDL): BRIAS ESTABLISHED JANUARY,1993.

ND = NOT DETECTED
NA = NOT APPLICABLE

REMARKS:

ATTACHMENT BB-75

*****TCLP/METALS SAMPLE ANALYSIS*****
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
BUREAU OF RADIATION AND INORGANIC
ANALYTICAL SERVICES

REPORT DATE: 01/12/94

SAMPLE LC#: 23629
FIELD SAMPLE#: PS9793TANKA
SAMPLE TYPE: FUEL OIL

ANALYST: NICHOLAS TUMMILLO

SECTION SUPERVISOR B. Parsa

DUPLICATE LC#: 23629
SPIKE LC#: 23629

PARAMETER	SAMPLE CONC. mg/L	MDL (BRIAS) mg/L	REAGENT BLANK mg/L	DUPLI-CATE mg/L	DUP REL %DIFF	CONC. ADDED mg/L	%SPIKE RECOVERY
ARSENIC	ND	0.001	<0.001	ND	NA	1.0	96
BARIUM	0.41	0.05	<0.05	0.43	2.4	1.0	97
CADMIUM	ND	0.01	<0.01	ND	NA	1.0	93
CHROMIUM	ND	0.05	<0.05	ND	NA	1.0	96
LEAD	0.14	0.05	<0.05	0.15	6.9	1.0	94
MERCURY	ND	0.001	<0.001	ND	NA	2.0 UG/L	103
SELENIUM	ND	0.001	<0.001	ND	NA	1.0	94
SILVER	ND	0.01	<0.01	ND	NA	1.0	95

METHOD REFERENCE: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP), FEDERAL REGISTER JUNE 29, 1990.

METHOD DETECTION LIMITS(MDL): BRIAS ESTABLISHED JANUARY,1993.

ND = NOT DETECTED
NA = NOT APPLICABLE

REMARKS:

ATTACHMENT BB-7

*****TCLP/METALS SAMPLE ANALYSIS*****
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
BUREAU OF RADIATION AND INORGANIC
ANALYTICAL SERVICES

SAMPLE LC#: 23630
FIELD SAMPLE#: PS9793BEC1D
SAMPLE TYPE: FUEL OIL

REPORT DATE: 01/12/94

ANALYST: NICHOLAS TUMMILLO

DUPLICATE LC#: 23629
SPIKE LC#: 23629

SECTION SUPERVISOR B. Parsa

PARAMETER	SAMPLE CONC. mg/L	MDL (BRIAS) mg/L	REAGENT BLANK mg/L	DUPLI-CATE mg/L	DUP REL %DIFF	CONC. ADDED mg/L	%SPIKE RECOVERY
ARSENIC	0.003	0.001	<0.001	ND	NA	1.0	96
BARIUM	0.60	0.05	<0.05	0.43	2.4	1.0	97
CADMIUM	ND	0.01	<0.01	ND	NA	1.0	93
CHROMIUM	ND	0.05	<0.05	ND	NA	1.0	96
LEAD	ND	0.05	<0.05	0.15	6.9	1.0	94
MERCURY	ND	0.001	<0.001	ND	NA	2.0 UG/L	103
SELENIUM	ND	0.001	<0.001	ND	NA	1.0	94
SILVER	ND	0.01	<0.01	ND	NA	1.0	95

METHOD REFERENCE: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP), FEDERAL REGISTER JUNE 29, 1990.

METHOD DETECTION LIMITS(MDL): BRIAS ESTABLISHED JANUARY,1993.

ND = NOT DETECTED
NA = NOT APPLICABLE

REMARKS:

ATTACHMENT BB-77

ATTACHMENT CC

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282330

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282330I2V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 9 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	6	JB
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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	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

FORM I VOA

OLM03.0

ATTACHMENT CC-1

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282330

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282330I2V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 9 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 24

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN CYCLOHEXANE DERIVATI	11.84	6	J
2.		UNKNOWN CYCLOHEXANE DERIVATI	12.75	7	J
3.		UNKNOWN CYCLOHEXANE DERIVATI	13.11	8	J
4.		UNKNOWN ALKANE	13.30	7	J
5.		UNKNOWN POLYCYCLIC HYDROCARB	13.41	7	J
6.		UNKNOWN ALKANE	13.48	11	J
7.		UNKNOWN ALKANE	13.67	7	J
8.		UNKNOWN CYCLOHEXANE DERIVATI	14.01	20	J
9.		UNKNOWN	14.17	10	J
10.		UNKNOWN ALIPHATIC COMPOUND W	14.27	15	JZ
11.		UNKNOWN	14.36	12	J
12.		UNKNOWN POLYCYCLIC HYDROCARB	14.64	8	J
13.		UNKNOWN POLYCYCLIC HYDROCARB	14.88	6	J
14.		UNKNOWN SUBSTITUTED BENZENE	15.05	14	J
15.		UNKNOWN ALKYLCYCLOHEXANE	15.12	19	J
16.		UNKNOWN ALIPHATIC COMPOUND	15.55	14	J
17.		UNKNOWN SUBSTITUTED BENZENE	15.71	6	J
18.	493-02-7	NAPHTHALENE, DECAHYDRO-, TRA	15.88	45	NJ
19.		UNKNOWN CYCLOHEXANE DERIVATI	16.04	22	J
20.		UNKNOWN CYCLOHEXANE DERIVATI	16.16	31	J
21.		UNKNOWN CYCLOHEXANE DERIVATI	16.33	27	J
22.		UNKNOWN AROMATIC HYDROCARBON	16.70	14	JZ
23.		UNKNOWN CYCLOHEXANE DERIVATI	16.85	15	J
24.		UNKNOWN POLYCYCLIC HYDROCARB	16.99	39	J
25.					
26.					
27.					
28.					
29.					
30.					

CC-2

1B

SEMIVOLATILE ORGANI ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282330

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282330D2S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1400	U
111-44-4	bis(-2-Chloroethyl)Ether	1400	U
95-57-8	2-Chlorophenol	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
95-48-7	2-Methylphenol	1400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1400	U
106-44-5	4-Methylphenol	1400	U
621-64-7	N-Nitroso-di-n-propylamine	1400	U
67-72-1	Hexachloroethane	1400	U
98-95-3	Nitrobenzene	1400	U
78-59-1	Isophorone	1400	U
88-75-5	2-Nitrophenol	1400	U
105-67-9	2,4-Dimethylphenol	1400	U
111-91-1	bis(2-Chloroethoxy)methane	1400	U
120-83-2	2,4-Dichlorophenol	1400	U
120-82-1	1,2,4-Trichlorobenzene	1400	U
91-20-3	Naphthalene	1400	U
106-47-8	4-Chloroaniline	1400	U
87-68-3	Hexachlorobutadiene	1400	U
59-50-7	4-Chloro-3-Methylphenol	1400	U
91-57-6	2-Methylnaphthalene	1400	U
77-47-4	Hexachlorocyclopentadiene	1400	U
88-06-2	2,4,6-Trichlorophenol	1400	U
95-95-4	2,4,5-Trichlorophenol	3600	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	3600	U
131-11-3	Dimethylphthalate	1400	U
208-96-8	Acenaphthylene	1400	U
606-20-2	2,6-Dinitrotoluene	1400	U
99-09-2	3-Nitroaniline	3600	U
83-32-9	Acenaphthene	1400	U

ATTACHMENT CC-3

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282330

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282330D2S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3600	U
100-02-7	4-Nitrophenol	3600	U
132-64-9	Dibenzofuran	1400	U
121-14-2	2,4-Dinitrotoluene	1400	U
84-66-2	Diethylphthalate	1400	U
7005-72-3	4-Chlorophenyl-phenylether	1400	U
86-73-7	Fluorene	1400	U
100-01-6	4-Nitroaniline	3600	U
534-52-1	4,6-Dinitro-2-methylphenol	3600	U
86-30-6	N-nitrosodiphenylamine (1)	1400	U
101-55-3	4-Bromophenyl-phenylether	1400	U
118-74-1	Hexachlorobenzene	1400	U
87-86-5	Pentachlorophenol	3600	U
85-01-8	Phenanthrene	1400	U
120-12-7	Anthracene	1400	U
86-74-8	Carbazole	1400	U
84-74-2	Di-n-butylphthalate	1400	U
206-44-0	Fluoranthene	1400	U
129-00-0	Pyrene	68	J
85-68-7	Butylbenzylphthalate	1400	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)anthracene	1400	U
218-01-9	Chrysene	1400	U
117-81-7	bis(2-Ethylhexyl)phthalate	1400	U
117-84-0	Di-n-octylphthalate	1400	U
205-99-2	Benzo(b)fluoranthene	1400	U
207-08-9	Benzo(k)fluoranthene	1400	U
50-32-8	Benzo(a)pyrene	1400	U
193-39-5	Indeno(1,2,3-cd)pyrene	1400	U
53-70-3	Dibenz(a,h)anthracene	1400	U
191-24-2	Benzo(g,h,i)perylene	1400	U
92-87-5	Benzidine	3600	U
110-86-1	Pyridine	1400	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLA[illegible] ORGANICS ANALYSIS DATA SHEET
T[illegible]ATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282330

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282330D2S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs found: 19

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.34	15000	ANJB
2.	3744-02-3	4-PENTENE-2-ONE, 4-METHYL	3.92	770	ANJB
3.		UNKNOWN ALIPHATIC COMPOUND	6.05	400	J
4.		UNKNOWN	7.00	300	J
5.		UNKNOWN ALIPHATIC COMPOUND	7.24	850	J
6.		UNKNOWN	7.39	340	J
7.		UNKNOWN ALIPHATIC COMPOUND	7.54	320	J
8.		UNKNOWN ALIPHATIC COMPOUND	7.64	330	J
9.		UNKNOWN ALIPHATIC COMPOUND	7.70	1000	J
10.		UNKNOWN ALIPHATIC COMPOUND	7.90	390	JB
11.		UNKNOWN ALIPHATIC COMPOUND	8.01	1500	J
12.		UNKNOWN	8.86	410	J
13.		UNKNOWN	9.03	360	J
14.		UNKNOWN	9.09	320	J
15.		UNKNOWN C3-ALKYLNAPHTHALENE	9.16	310	JZ
16.		UNKNOWN	9.19	360	J
17.		UNKNOWN	9.94	410	J
18.		UNKNOWN ORGANIC ACID ESTER	15.52	710	JB
19.		UNKNOWN	20.66	1200	J
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282330

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 8 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	72	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

ATTACHMENT CC-6

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 262365

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282365V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 13 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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	11	U
67-64-1	Acetone	8	JB
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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WDS1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282365

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282365V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 13 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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30.				

FORM I VOA-TIC

OLM03.0

ATTACHMENT CC-8 000037

EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

WDS1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282365

Sample wt/vol: 30.0 (g/mL) G Lab File ID: R282365S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

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
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	900	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	900	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	900	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	360	U

OLM03.0

FORM I SV-1

ATTACHMENT CC-9 00025

EPA SAMPLE NO.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

WDS1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

SDG No.: WDS1

Lab Code: INCHVT Case No.: PA121395 SAS No.:

Lab Sample ID: 282365

Matrix: (soil/water) SOIL

Lab File ID: R282365S

Sample wt/vol: 30.0 (g/mL) G

Date Received: 12/16/95

Level: (low/med) LOW

Date Extracted: 12/26/95

% Moisture: 8 decanted: (Y/N) N

Date Analyzed: 01/16/96

Concentrated Extract Volume: 500 (uL)

Dilution Factor: 1.0

Injection Volume: 2.0 (uL)

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	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	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	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	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	22	J
206-44-0	Fluoranthene	99	J
129-00-0	Pyrene	92	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	56	J
218-01-9	Chrysene	55	J
117-81-7	bis(2-Ethylhexyl)phthalate	36	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	39	J
207-08-9	Benzo(k)fluoranthene	51	J
50-32-8	Benzo(a)pyrene	50	J
193-39-5	Indeno(1,2,3-cd)pyrene	27	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	27	J
92-87-5	Benzidine	900	U
110-86-1	Pyridine	360	U

(1) - Cannot be separated from Diphenylamine

CLM03.0

FORM I SV-2

ATTACHMENT CC-10 000300

EPA SAMPLE NO.

WDS1

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282365

Sample wt/vol: 30.0 (g/mL) G Lab File ID: R282365S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

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

Number TICs found: 12

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.62	530	NJAB
2.	UNKNOWN SILOXANE DERIVATIVE	5.96	97	JB
3.	UNKNOWN ALIPHATIC COMPOUND	8.70	560	JB
4.	UNKNOWN ALIPHATIC COMPOUND	9.90	88	JB
5.	UNKNOWN	10.68	80	J
6.	UNKNOWN	15.13	89	JB
7.	UNKNOWN ALIPHATIC ACID ESTER	16.48	270	JB
8.	UNKNOWN	17.09	150	JB
9.	UNKNOWN	18.86	170	JB
10.	UNKNOWN	19.36	140	JB
11.	UNKNOWN	20.50	160	JB
12.	UNKNOWN	25.89	230	JB
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OLM03.0

FORM I SV-TIC

ATTACHMENT CC-11

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95225

Lab Code: INCHVT Case No.: PA121 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282365

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 8 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/24/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55 9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

ATTACHMENT CC-12 000641

VOLATILE ORGANICS ANALYSIS DATA SHEET

WDS2

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282346

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0282346V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 8 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND		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	11	U
67-64-1	Acetone	6	JB
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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	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

ATTACHMENT CC-13

TENTATIVELY IDENTIFIED COMPOUNDS

WDS2

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282346

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282346V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 8 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 104-76-7	1-HEXANOL, 2-ETHYL-	15.59	6	NJ
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ATTACHMENT CC-14

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

WDS2

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282346

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282346S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0

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

CAS NO.	COMPOUND		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
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	900	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	900	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	900	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene		

OLM03.0

FORM I SV-1

ATTACHMENT CC-15

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS2

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282346

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282346S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	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	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	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	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	20	J
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	21	J
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
92-87-5	Benzidine	900	U
110-86-1	Pyridine	360	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-16

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WDS2

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282346

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282346S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0

Number TICs found: 16

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.16	450	JB
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.38	6700	ANJB
3.		UNKNOWN	3.89	86	J
4.	3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.93	1200	ANJB
5.		UNKNOWN	4.27	74	J
6.	541-02-6	CYCLOPENTASILOXANE, DECAMETH	5.43	200	NJB
7.		UNKNOWN ALIPHATIC COMPOUND	7.93	360	JB
8.		UNKNOWN	9.05	280	JB
9.		UNKNOWN	9.82	87	JB
10.		UNKNOWN ORGANIC ACID ESTER	15.54	900	JB
11.		UNKNOWN ALIPHATIC COMPOUND	16.15	130	JB
12.		UNKNOWN ALIPHATIC COMPOUND	17.90	220	JB
13.		UNKNOWN	18.37	550	JB
14.		UNKNOWN ALIPHATIC COMPOUND	19.50	140	JB
15.		UNKNOWN ALIPHATIC COMPOUND	21.11	78	JB
16.		UNKNOWN	23.84	490	JB
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ATTACHMENT CC-17

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS2

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282346

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 8 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	3.6	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	18	U
72-43-5	Methoxychlor	3.6	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	1.8	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	36	U
12674-11-2	Aroclor-1016	72	U
11104-28-2	Aroclor-1221	36	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260		

ATTACHMENT CC-18

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

WDS3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282366

Sample wt./vol: 5.0 (g/mL) G Lab File ID: 0282366V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 11 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND	C	
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	11	U
67-64-1	Acetone	15	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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	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

OLM03.0

FORM I VOA

ATTACHMENT CC-19 000044

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WDS3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 232366

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282366V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 11 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ATTACHMENT CC-20 000045

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282366

Sample wt/vol: 30.3 (g/mL) G Lab File ID: R2023668

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

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
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	910	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	360	U

ATTACHMENT CC-21 000338

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282366

Sample wt/vol: 30.3 (g/mL) G Lab File ID: R282366S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	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	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	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	910	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	22	J
206-44-0	Fluoranthene	42	J
129-00-0	Pyrene	44	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	25	J
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	17	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	22	J
207-08-9	Benzo(k)fluoranthene	30	J
50-32-8	Benzo(a)pyrene	28	J
193-39-5	Indeno(1,2,3-cd)pyrene	18	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	19	J
92-87-5	Benzidine	910	U
110-86-1	Pyridine	360	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM03.0

ATTACHMENT CC-22

EPA SAMPLE NO.

WDS3

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Contract: 95X22651

Lab Name: INCHCAPE ENVIRONMENTAL

SDG No.: WDS1

Lab Code: INCHVT Case No.: PA121395 SAS No.:

Lab Sample ID: 282366

Matrix: (soil/water) SOIL

Lab File ID: R282366S

Sample wt/vol: 30.3 (g/mL) G

Date Received: 12/16/95

Level: (low/med) LOW

Date Extracted: 12/26/95

% Moisture: 10 decanted: (Y/N) N

Date Analyzed: 01/16/96

Concentrated Extract Volume: 500 (uL)

Dilution Factor: 1.0

Injection Volume: 2.0 (uL)

GPC Cleanup: (Y/N) Y pH: 8.5

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

Number TICs found: 12

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.63	570	NJAB
2.	UNKNOWN SILOXANE DERIVATIVE	5.96	110	JB
3.	UNKNOWN ALIPHATIC COMPOUND	8.71	610	JB
4.	UNKNOWN ALIPHATIC COMPOUND	9.91	260	JB
5.	UNKNOWN ALIPHATIC COMPOUND	10.67	120	JB
6.	UNKNOWN	15.13	96	JB
7.	UNKNOWN ALIPHATIC ACID ESTER	16.49	860	JB
8.	UNKNOWN	17.10	120	JB
9.	UNKNOWN	18.86	140	JB
10.	UNKNOWN	19.36	77	JB
11.	UNKNOWN	20.50	120	JB
12.	UNKNOWN	25.91	380	JB
13.				
14.				
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CLM03.0

FORM I SV-TIC

ATTACHMENT CC-23 000339

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WDS3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95225

Lab Code: INCHVT Case No.: PA121 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282366

Sample wt/vol: 30.4 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 01/24/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-36-3	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

ATTACHMENT CC-24 000650

VOLATILE ORGANICS ANALYSIS DATA SHEET

P1CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282340

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282340V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 10 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	11	U
67-64-1	Acetone	46	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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	6	J
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	1	J
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	7	J
1330-20-7	Xylene (total)		

FORM I VOA OLM03.0

ATTACHMENT CC-25

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P1CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282340

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282340V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 10 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
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ATTACHMENT CC-2C

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282340

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282340DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 11.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	720	U
111-44-4	bis(-2-Chloroethyl)Ether	720	U
95-57-8	2-Chlorophenol	720	U
541-73-1	1,3-Dichlorobenzene	720	U
106-46-7	1,4-Dichlorobenzene	720	U
95-50-1	1,2-Dichlorobenzene	720	U
95-48-7	2-Methylphenol	720	U
108-60-1	2,2'-oxybis(1-Chloropropane)	720	U
106-44-5	4-Methylphenol	720	U
621-64-7	N-Nitroso-di-n-propylamine	720	U
67-72-1	Hexachloroethane	720	U
98-95-3	Nitrobenzene	720	U
78-59-1	Isophorone	720	U
88-75-5	2-Nitrophenol	720	U
105-67-9	2,4-Dimethylphenol	720	U
111-91-1	bis(2-Chloroethoxy)methane	720	U
120-83-2	2,4-Dichlorophenol	720	U
120-82-1	1,2,4-Trichlorobenzene	720	U
91-20-3	Naphthalene	120	J
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	720	U
59-50-7	4-Chloro-3-Methylphenol	720	U
91-57-6	2-Methylnaphthalene	72	J
77-47-4	Hexachlorocyclopentadiene	720	U
88-06-2	2,4,6-Trichlorophenol	720	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	720	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	720	U
208-96-8	Acenaphthylene	41	J
606-20-2	2,6-Dinitrotoluene	720	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	210	J

ATTACHMENT CC-2

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282340

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282340DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 11.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	160	J
121-14-2	2,4-Dinitrotoluene	720	U
84-66-2	Diethylphthalate	720	U
7005-72-3	4-Chlorophenyl-phenylether	720	U
86-73-7	Fluorene	320	J
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-nitrosodiphenylamine (1)	720	U
101-55-3	4-Bromophenyl-phenylether	720	U
118-74-1	Hexachlorobenzene	720	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	4300	
120-12-7	Anthracene	690	J
86-74-8	Carbazole	150	J
84-74-2	Di-n-butylphthalate	720	U
206-44-0	Fluoranthene	5500	
129-00-0	Pyrene	5700	
85-68-7	Butylbenzylphthalate	720	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	3400	
218-01-9	Chrysene	3600	
117-81-7	bis(2-Ethylhexyl)phthalate	250	J
117-84-0	Di-n-octylphthalate	720	U
205-99-2	Benzo(b)fluoranthene	4600	Y
207-08-9	Benzo(k)fluoranthene	720	U
50-32-8	Benzo(a)pyrene	3000	
193-39-5	Indeno(1,2,3-cd)pyrene	1200	
53-70-3	Dibenz(a,h)anthracene	560	J
191-24-2	Benzo(g,h,i)perylene	1400	
92-87-5	Benzidine	1800	U
110-86-1	Pyridine	720	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-28

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P1CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282340

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282340DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 11.2

Number TICs found: 30

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.16	420	JB
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.36	8700	ANJB
3.	3744-02-3	4-PENTENE-2-ONE, 4-METHYL	3.63	950	ANJB
4.		UNKNOWN ALIPHATIC COMPOUND	7.90	340	JB
5.	832-71-3	PHENANTHRENE, 3-METHYL-	11.92	680	NJ
6.	2531-84-2	PHENANTHRENE, 2-METHYL-	11.98	720	NJ
7.	613-12-7	ANTHRACENE, 2-METHYL-	12.06	230	NJ
8.	203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.15	890	NJZ
9.	610-48-0	ANTHRACENE, 1-METHYL-	12.20	450	NJ
10.	612-94-2	NAPHTHALENE, 2-PHENYL-	12.54	430	NJ
11.	84-65-1	9,10-ANTHRACENEDIONE	12.61	240	NJ
12.		UNKNOWN DIMETHYLPHENANTHRENE	13.10	410	J
13.		UNKNOWN DIMETHYLPHENANTHRENE	13.16	240	JZ
14.		UNKNOWN	13.58	220	J
15.		UNKNOWN AROMATIC COMPOUND	13.70	260	J
16.		UNKNOWN C17H12-PAH	14.55	220	J
17.	238-84-6	11H-BENZO[A]FLUORENE	14.60	530	NJ
18.		UNKNOWN C17H12-PAH	14.72	300	J
19.	2381-21-7	PYRENE, 1-METHYL-	15.00	320	NJ
20.		UNKNOWN C17H12-PAH	15.06	410	J
21.		UNKNOWN	15.78	240	J
22.		UNKNOWN BENZANTHRACENONE	16.15	220	J
23.		UNKNOWN C19H14-PAH W/UNKNOWN	16.93	360	JZ
24.		UNKNOWN	17.14	370	J
25.		UNKNOWN C19H14-PAH	17.31	360	J
26.		UNKNOWN	17.55	360	J
27.		UNKNOWN	17.61	370	J
28.		UNKNOWN	18.53	240	J
29.		UNKNOWN POLYCYCLIC HYDROCARB	19.80	460	J
30.		UNKNOWN POLYCYCLIC HYDROCARB	20.78	500	J

ATTACHMENT CC-29

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

P1CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282340

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 9 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 11.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.2	U
319-85-7	beta-BHC	9.2	U
319-86-8	delta-BHC	9.2	U
58-89-9	gamma-BHC (Lindane)	9.2	U
76-44-8	Heptachlor	9.2	U
309-00-2	Aldrin	5.4	J
1024-57-3	Heptachlor epoxide	9.2	U
959-98-8	Endosulfan I	62	
60-57-1	Dieldrin	18	U
72-55-9	4,4'-DDE	14	JP
72-20-8	Endrin	9.5	JP
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	20	
72-43-5	Methoxychlor	92	U
53494-70-5	Endrin ketone	9.6	JP
7421-36-3	Endrin aldehyde	17	JP
5103-71-9	alpha-Chlordane	4.9	JP
5103-74-2	gamma-Chlordane	9.2	U
8001-35-2	Toxaphene	920	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	360	U
1114-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	180	U
11096-82-5	Aroclor-1260	220	

ATTACHMENT CC-30

P1CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282341

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M282341E2V

Level: (low/med) MED Date Received: 12/16/95

% Moisture: not dec. 40 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.7

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13000	U
74-83-9	Bromomethane	13000	U
75-01-4	Vinyl Chloride	13000	U
75-00-3	Chloroethane	13000	U
75-09-2	Methylene Chloride	13000	U
67-64-1	Acetone	6200	J
75-15-0	Carbon Disulfide	13000	U
75-35-4	1,1-Dichloroethene	13000	U
75-34-3	1,1-Dichloroethane	13000	U
540-59-0	1,2-Dichloroethene (total)	13000	U
67-66-3	Chloroform	13000	U
107-06-2	1,2-Dichloroethane	13000	U
78-93-3	2-Butanone	13000	U
71-55-6	1,1,1-Trichloroethane	13000	U
56-23-5	Carbon Tetrachloride	13000	U
75-27-4	Bromodichloromethane	13000	U
78-87-5	1,2-Dichloropropane	13000	U
10061-01-5	cis-1,3-Dichloropropene	13000	U
79-01-6	Trichloroethene	13000	U
124-48-1	Dibromochloromethane	13000	U
79-00-5	1,1,2-Trichloroethane	13000	U
71-43-2	Benzene	13000	U
10061-02-6	trans-1,3-Dichloropropene	13000	U
75-25-2	Bromoform	13000	U
108-10-1	4-Methyl-2-Pentanone	13000	U
591-78-6	2-Hexanone	13000	U
127-18-4	Tetrachloroethene	13000	U
79-34-5	1,1,2,2-Tetrachloroethane	13000	U
108-88-3	Toluene	13000	U
108-90-7	Chlorobenzene	180000	
100-41-4	Ethylbenzene	13000	U
100-42-5	Styrene	3100	J
1330-20-7	Xylene (total)		

FORM I VOA OLM03.0

ATTACHMENT CC-31

TENTATIVELY IDENTIFIED COMPOUNDS

P1CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282341

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M282341E2V

Level: (low/med) MED Date Received: 12/16/95

% Moisture: not dec. 40 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.7

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 14

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN CYCLOALKANE W/ALKANE	13.53	8500	JZ
2.	98-82-8	BENZENE, (1-METHYLETHYL)-	13.67	17000	NJ
3.		UNKNOWN ETHYLMETHYLBENZENE	14.29	67000	J
4.	611-14-3	BENZENE, 1-ETHYL-2-METHYL-	14.64	53000	NJ
5.	95-63-6	BENZENE, 1,2,4-TRIMETHYL-	14.87	11000	NJ
6.		UNKNOWN ALKYLCYCLOHEXANE W/C	15.21	12000	JZ
7.		UNKNOWN C4-ALKYLBENZENE W/AL	15.30	12000	JZ
8.	526-73-8	BENZENE, 1,2,3-TRIMETHYL-	15.47	9000	NJ
9.		UNKNOWN SUBSTITUTED BENZENE	15.78	63000	J
10.		UNKNOWN SUBSTITUTED BENZENES	15.89	11000	JZ
11.		UNKNOWN SUBSTITUTED BENZENE	16.15	11000	J
12.		UNKNOWN C4-ALKYLBENZENE	16.39	18000	J
13.		UNKNOWN C4-ALKYLBENZENE	16.53	19000	J
14.		UNKNOWN SUBSTITUTED BENZENES	16.77	8600	JZ
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ATTACHMENT CC-32

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282341

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282341DS

Level: (low/med) MED Date Received: 12/16/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	21000	U
111-44-4	bis(-2-Chloroethyl)Ether	21000	U
95-57-8	2-Chlorophenol	21000	U
541-73-1	1,3-Dichlorobenzene	21000	U
106-46-7	1,4-Dichlorobenzene	21000	U
95-50-1	1,2-Dichlorobenzene	21000	U
95-48-7	2-Methylphenol	21000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	21000	U
106-44-5	4-Methylphenol	21000	U
621-64-7	N-Nitroso-di-n-propylamine	21000	U
67-72-1	Hexachloroethane	21000	U
98-95-3	Nitrobenzene	21000	U
78-59-1	Isophorone	21000	U
88-75-5	2-Nitrophenol	21000	U
105-67-9	2,4-Dimethylphenol	21000	U
111-91-1	bis(2-Chloroethoxy)methane	21000	U
120-83-2	2,4-Dichlorophenol	21000	U
120-82-1	1,2,4-Trichlorobenzene	3800	J
91-20-3	Naphthalene	21000	U
106-47-8	4-Chloroaniline	21000	U
87-68-3	Hexachlorobutadiene	21000	U
59-50-7	4-Chloro-3-Methylphenol	10000	J
91-57-6	2-Methylnaphthalene	21000	U
77-47-4	Hexachlorocyclopentadiene	21000	U
88-06-2	2,4,6-Trichlorophenol	53000	U
95-95-4	2,4,5-Trichlorophenol	21000	U
91-58-7	2-Chloronaphthalene	53000	U
88-74-4	2-Nitroaniline	21000	U
131-11-3	Dimethylphthalate	21000	U
208-96-8	Acenaphthylene	21000	U
606-20-2	2,6-Dinitrotoluene	53000	U
99-09-2	3-Nitroaniline	21000	U
83-32-9	Acenaphthene		

ATTACHMENT CC-33

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282341

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282341DS

Level: (low/med) MED Date Received: 12/16/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	53000	U
100-02-7	4-Nitrophenol	53000	U
132-64-9	Dibenzofuran	21000	U
121-14-2	2,4-Dinitrotoluene	21000	U
84-66-2	Diethylphthalate	21000	U
7005-72-3	4-Chlorophenyl-phenylether	21000	U
86-73-7	Fluorene	5900	J
100-01-6	4-Nitroaniline	53000	U
534-52-1	4,6-Dinitro-2-methylphenol	53000	U
86-30-6	N-nitrosodiphenylamine (1)	21000	U
101-55-3	4-Bromophenyl-phenylether	21000	U
118-74-1	Hexachlorobenzene	21000	U
87-86-5	Pentachlorophenol	53000	U
85-01-8	Phenanthrene	18000	J
120-12-7	Anthracene	3300	J
86-74-8	Carbazole	21000	U
84-74-2	Di-n-butylphthalate	21000	U
206-44-0	Fluoranthene	8800	J
129-00-0	Pyrene	16000	J
85-68-7	Butylbenzylphthalate	21000	U
91-94-1	3,3'-Dichlorobenzidine	21000	U
56-55-3	Benzo(a)anthracene	6200	J
218-01-9	Chrysene	7700	J
117-81-7	bis(2-Ethylhexyl)phthalate	21000	U
117-84-0	Di-n-octylphthalate	21000	U
205-99-2	Benzo(b)fluoranthene	5500	YJ
207-08-9	Benzo(k)fluoranthene	21000	U
50-32-8	Benzo(a)pyrene	3700	J
193-39-5	Indeno(1,2,3-cd)pyrene	1800	J
53-70-3	Dibenz(a,h)anthracene	21000	U
191-24-2	Benzo(g,h,i)perylene	2800	J
92-87-5	Benzidine	53000	U
110-86-1	Pyridine	21000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

ATTACHMENT CC-34 OLM03.0

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P1CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282341

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282341DS

Level: (low/med) MED Date Received: 12/16/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs found: 30

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.92	9800	J
2.		UNKNOWN AROMATIC COMPOUND	6.02	7300	J
3.		UNKNOWN AROMATIC COMPOUNDS	6.12	13000	JZ
4.	90-12-0	NAPHTHALENE, 1-METHYL-	7.54	16000	NJ
5.		UNKNOWN ALIPHATIC COMPOUND	8.08	8700	J
6.		UNKNOWN DIMETHYLNAPHTHALENE	8.34	15000	J
7.	575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.48	28000	NJ
8.		UNKNOWN ALIPHATIC COMPOUND	8.53	15000	J
9.		UNKNOWN DIMETHYLNAPHTHALENE	8.67	8100	J
10.		UNKNOWN ALIPHATIC COMPOUND	8.72	9100	J
11.		UNKNOWN ALIPHATIC COMPOUND	8.86	11000	J
12.		UNKNOWN	8.98	7800	J
13.		UNKNOWN C3-ALKYLNAPHTHALENE	9.44	13000	J
14.		UNKNOWN C3-ALKYLNAPHTHALENE	9.49	18000	J
15.		UNKNOWN C3-ALKYLNAPHTHALENE	9.65	13000	J
16.		UNKNOWN C3-ALKYLNAPHTHALENE	9.81	7300	J
17.		UNKNOWN C14H12-PAH	11.18	11000	J
18.		UNKNOWN AROMATIC COMPOUND	11.83	14000	J
19.		UNKNOWN AROMATIC COMPOUND	12.22	15000	J
20.		UNKNOWN AROMATIC COMPOUND	12.83	16000	J
21.	832-71-3	PHENANTHRENE, 3-METHYL-	12.91	9400	NJ
22.	2531-84-2	PHENANTHRENE, 2-METHYL-	12.96	11000	NJ
23.		UNKNOWN	13.06	10000	J
24.	203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	13.16	18000	NJZ
25.		UNKNOWN AROMATIC COMPOUND	13.59	7600	J
26.		UNKNOWN DIMETHYLPHENANTHRENE	13.85	7100	J
27.		UNKNOWN DIMETHYLPHENANTHRENE	14.10	16000	J
28.		UNKNOWN AROMATIC COMPOUND	14.67	27000	J
29.		UNKNOWN POLYCYCLIC HYDROCARB	21.39	9800	J
30.		UNKNOWN	25.90	16000	JB

ATTACHMENT CC-35

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282341

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 15 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	gamma-BHC (Lindane)	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	52	P
959-98-8	Endosulfan I	38	U
60-57-1	Dieldrin	41	P
72-55-9	4,4'-DDE	38	U
72-20-8	Endrin	38	U
33213-65-9	Endosulfan II	38	U
72-54-8	4,4'-DDD	38	U
1031-07-8	Endosulfan sulfate	38	U
50-29-3	4,4'-DDT	200	U
72-43-5	Methoxychlor	38	U
53494-70-5	Endrin ketone	38	U
7421-36-3	Endrin aldehyde	20	U
5103-71-9	alpha-Chlordane	20	U
5103-74-2	gamma-Chlordane	2000	U
8001-35-2	Toxaphene	380	U
12674-11-2	Aroclor-1016	780	U
11104-28-2	Aroclor-1221	380	U
1114-16-5	Aroclor-1232	380	U
53469-21-9	Aroclor-1242	380	U
12672-29-6	Aroclor-1248	380	U
11097-69-1	Aroclor-1254	380	U
11096-82-5	Aroclor-1260		

ATTACHMENT CC-3C

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

P1CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282338

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282338V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 12 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	11	U
67-64-1	Acetone	6	JB
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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	2	J
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)		

FORM I VOA OLM03.0

ATTACHMENT CC-37

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P1CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282338

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282338V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 12 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282338

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282338S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

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
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	59	J
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	56	J
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	910	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	910	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	600	
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	910	U
		22	J

ATTACHMENT CC-39

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282338

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282338S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	36	J
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	69	J
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	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	910	U
85-01-8	Phenanthrene	430	
120-12-7	Anthracene	150	J
86-74-8	Carbazole	52	J
84-74-2	Di-n-butylphthalate	44	J
206-44-0	Fluoranthene	1400	
129-00-0	Pyrene	2200	
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	1400	
218-01-9	Chrysene	1800	
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	2600	
207-08-9	Benzo(k)fluoranthene	2500	
50-32-8	Benzo(a)pyrene	2500	
193-39-5	Indeno(1,2,3-cd)pyrene	1000	
53-70-3	Dibenz(a,h)anthracene	500	
191-24-2	Benzo(g,h,i)perylene	900	
92-87-5	Benzidine	910	U
110-86-1	Pyridine	360	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-40

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P1CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282338

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282338S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.50	1300	ANJ
2. 3744-02-3	4-PENTENE-2-ONE, 4-METHYL	3.98	1200	ANJB
3. 95-13-6	INDENE	4.88	190	NJ
4.	UNKNOWN AROMATIC COMPOUND	5.23	180	J
5.	UNKNOWN AROMATIC COMPOUND	5.65	190	J
6.	UNKNOWN NAPHTHALENE DERIVATI	7.78	210	JZ
7.	UNKNOWN ALIPHATIC COMPOUND	7.93	490	JB
8.	UNKNOWN	9.82	220	J
9.	UNKNOWN W/ALKANE	9.86	230	JZ
10. 2531-84-2	PHENANTHRENE, 2-METHYL-	12.00	200	NJ
11. 203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.18	280	NJZ
12.	UNKNOWN DIMETHYLPHENANTHRENE	13.12	240	J
13.	UNKNOWN AROMATIC COMPOUND	13.32	330	J
14.	UNKNOWN C17H12-PAH	14.40	170	J
15. 238-84-6	11H-BENZO[A]FLUORENE	14.63	350	NJ
16.	UNKNOWN METHYLPYRENE	14.84	310	J
17. 2381-21-7	PYRENE, 1-METHYL-	15.03	260	NJ
18.	UNKNOWN C17H12-PAH	15.08	210	J
19.	UNKNOWN ORGANIC ACID ESTER	15.57	420	J
20.	UNKNOWN BENZANTHRACENONE	15.73	230	J
21. 195-19-7	BENZO[C]PHENANTHRENE	16.00	220	NJ
22. 203-12-3	BENZO[GHI]FLUORANTHENE	16.04	230	NJ
23.	UNKNOWN BENZANTHRACENONE	16.18	200	J
24. 92-24-0	NAPHTHACENE	16.71	220	NJ
25.	UNKNOWN C19H14-PAH	17.33	270	J
26.	UNKNOWN C19H14-PAH	17.60	180	J
27.	UNKNOWN C20H12-PAH	18.85	470	J
28. 192-97-2	BENZO[E]PYRENE	19.16	1000	NJ
29. 198-55-0	PERYLENE	19.39	500	NJ
30.	UNKNOWN ALIPHATIC COMPOUND	20.19	400	J

PESTICIDE CHECK

P1CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PAI21395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282338

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/01/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.4	U
319-85-7	beta-BHC	9.4	U
319-86-8	delta-BHC	9.4	U
58-89-9	gamma-BHC (Lindane)	9.4	U
76-44-8	Heptachlor	9.4	U
309-00-2	Aldrin	9.4	U
1024-57-3	Heptachlor epoxide	45	
959-98-8	Endosulfan I	18	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	12	JP
1031-07-8	Endosulfan sulfate	18	U
50-29-3	4,4'-DDT	94	U
72-43-5	Methoxychlor	10	JP
53494-70-5	Endrin ketone	18	U
7421-36-3	Endrin aldehyde	9.4	U
5103-71-9	alpha-Chlordane	9.4	U
5103-74-2	gamma-Chlordane	940	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	180	U
1114-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	180	U
11096-82-5	Aroclor-1260	180	U

OLM03.0

FORM I PEST

ATTACHMENT CC-42

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

P1CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282339

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M282339E2V

Level: (low/med) MED Date Received: 12/16/95

% Moisture: not dec. 23 Date Analyzed: 01/03/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1600	U
74-83-9	Bromomethane	1600	U
75-01-4	Vinyl Chloride	1600	U
75-00-3	Chloroethane	1600	U
75-09-2	Methylene Chloride	1600	U
67-64-1	Acetone	1600	U
75-15-0	Carbon Disulfide	1600	U
75-35-4	1,1-Dichloroethene	1600	U
75-34-3	1,1-Dichloroethane	1600	U
540-59-0	1,2-Dichloroethene (total)	1600	U
67-66-3	Chloroform	1600	U
107-06-2	1,2-Dichloroethane	690	JB
78-93-3	2-Butanone	1600	U
71-55-6	1,1,1-Trichloroethane	1600	U
56-23-5	Carbon Tetrachloride	1600	U
75-27-4	Bromodichloromethane	1600	U
78-87-5	1,2-Dichloropropane	1600	U
10061-01-5	cis-1,3-Dichloropropene	1600	U
79-01-6	Trichloroethene	1600	U
124-48-1	Dibromochloromethane	1600	U
79-00-5	1,1,2-Trichloroethane	1600	U
71-43-2	Benzene	1000	J
10061-02-6	trans-1,3-Dichloropropene	1600	U
75-25-2	Bromoform	1600	U
108-10-1	4-Methyl-2-Pentanone	1600	U
591-78-6	2-Hexanone	1600	U
127-18-4	Tetrachloroethene	1600	U
79-34-5	1,1,2,2-Tetrachloroethane	640	J
108-88-3	Toluene	1600	U
108-90-7	Chlorobenzene	4000	
100-41-4	Ethylbenzene	1600	U
100-42-5	Styrene	2900	
1330-20-7	Xylene (total)		

FORM I VOA

OLM03.0.

ATTACHMENT CC-43

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P1CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282339

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M282339E2V

Level: (low/med) MED Date Received: 12/16/95

% Moisture: not dec. 23 Date Analyzed: 01/03/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 30 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-87-2	CYCLOHEXANE, METHYL-	9.49	1900	NJ
2.		UNKNOWN C9-ALKANE	11.49	1200	J
3.		UNKNOWN C3-ALKYLCYCLOHEXANE	11.88	3000	J
4.		UNKNOWN C9-ALKANE	12.05	1300	J
5.		UNKNOWN C3-ALKYLCYCLOHEXANE	12.14	2000	J
6.		UNKNOWN C9-ALKANE	12.30	2300	J
7.		UNKNOWN C3-ALKYLCYCLOHEXANE	12.78	4700	J
8.		UNKNOWN C3-ALKYLCYCLOHEXANE	13.16	3000	J
9.		UNKNOWN C10-ALKANE	13.35	5400	J
10.	1678-92-8	CYCLOHEXANE, PROPYL- W/C10-A	13.52	7600	NJZ
11.	98-82-8	BENZENE, (1-METHYLETHYL)- W/	13.69	4100	NJZ
12.		UNKNOWN	14.05	6400	J
13.	103-65-1	BENZENE, PROPYL-	14.16	2200	NJ
14.		UNKNOWN CYCLOALKANE W/ETHYLM	14.33	7200	JZ
15.		UNKNOWN ALIPHATIC COMPOUNDS	14.54	1400	JZ
16.		UNKNOWN ALIPHATIC COMPOUNDS	14.66	3200	JZ
17.	95-63-6	BENZENE, 1,2,4-TRIMETHYL- W/	14.85	2800	NJZ
18.		UNKNOWN	14.93	1800	J
19.	1678-93-9	CYCLOHEXANE, BUTYL-	15.17	8800	NJ
20.		UNKNOWN ALKANE W/BENZENE 1,2	15.47	1400	JZ
21.		UNKNOWN CYCLOALKANE	15.59	4300	J
22.		UNKNOWN SUBSTITUTED BENZENES	15.76	5200	JZ
23.		UNKNOWN DECAHYDRONAPHTHALENE	15.92	8800	JZ
24.		UNKNOWN CYCLOALKANE W/SUBSTI	16.07	5300	JZ
25.		UNKNOWN CYCLOALKANE	16.21	5700	J
26.		UNKNOWN CYCLOALKANE	16.38	4700	J
27.		UNKNOWN C4-ALKYLBENZENE	16.52	7500	J
28.		UNKNOWN SUBSTITUTED BENZENES	16.76	5300	JZ
29.		UNKNOWN	16.90	2300	J
30.		UNKNOWN	17.06	7200	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282339

Sample wt/vol: 1.0 (g/mL) G Lab File ID: R282339DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	71000	U
111-44-4	bis(-2-Chloroethyl)Ether	71000	U
95-57-8	2-Chlorophenol	71000	U
541-73-1	1,3-Dichlorobenzene	71000	U
106-46-7	1,4-Dichlorobenzene	71000	U
95-50-1	1,2-Dichlorobenzene	71000	U
95-48-7	2-Methylphenol	71000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	71000	U
106-44-5	4-Methylphenol	71000	U
621-64-7	N-Nitroso-di-n-propylamine	71000	U
67-72-1	Hexachloroethane	71000	U
98-95-3	Nitrobenzene	71000	U
78-59-1	Isophorone	71000	U
88-75-5	2-Nitrophenol	71000	U
105-67-9	2,4-Dimethylphenol	71000	U
111-91-1	bis(2-Chloroethoxy)methane	71000	U
120-83-2	2,4-Dichlorophenol	71000	U
120-82-1	1,2,4-Trichlorobenzene	71000	U
91-20-3	Naphthalene	71000	U
106-47-8	4-Chloroaniline	9800	J
87-68-3	Hexachlorobutadiene	71000	U
59-50-7	4-Chloro-3-Methylphenol	71000	U
91-57-6	2-Methylnaphthalene	71000	U
77-47-4	Hexachlorocyclopentadiene	91000	
88-06-2	2,4,6-Trichlorophenol	71000	U
95-95-4	2,4,5-Trichlorophenol	71000	U
91-58-7	2-Chloronaphthalene	180000	U
88-74-4	2-Nitroaniline	71000	U
131-11-3	Dimethylphthalate	180000	U
208-96-8	Acenaphthylene	71000	U
606-20-2	2,6-Dinitrotoluene	71000	U
99-09-2	3-Nitroaniline	71000	U
83-32-9	Acenaphthene	180000	U
		71000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282339

Sample wt/vol: 1.0 (g/mL) G Lab File ID: R282339DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	180000	U
100-02-7	4-Nitrophenol	180000	U
132-64-9	Dibenzofuran	71000	U
121-14-2	2,4-Dinitrotoluene	71000	U
84-66-2	Diethylphthalate	71000	U
7005-72-3	4-Chlorophenyl-phenylether	71000	U
86-73-7	Fluorene	9600	J
100-01-6	4-Nitroaniline	180000	U
534-52-1	4,6-Dinitro-2-methylphenol	180000	U
86-30-6	N-nitrosodiphenylamine (1)	71000	U
101-55-3	4-Bromophenyl-phenylether	71000	U
118-74-1	Hexachlorobenzene	71000	U
87-86-5	Pentachlorophenol	180000	U
85-01-8	Phenanthrene	26000	J
120-12-7	Anthracene	71000	U
86-74-8	Carbazole	71000	U
84-74-2	Di-n-butylphthalate	71000	U
206-44-0	Fluoranthene	71000	U
129-00-0	Pyrene	8800	J
85-68-7	Butylbenzylphthalate	71000	U
91-94-1	3,3'-Dichlorobenzidine	71000	U
56-55-3	Benzo(a)anthracene	4400	J
218-01-9	Chrysene	9600	J
117-81-7	bis(2-Ethylhexyl)phthalate	71000	U
117-84-0	Di-n-octylphthalate	71000	U
205-99-2	Benzo(b)fluoranthene	71000	U
207-08-9	Benzo(k)fluoranthene	71000	U
50-32-8	Benzo(a)pyrene	4300	J
193-39-5	Indeno(1,2,3-cd)pyrene	71000	U
53-70-3	Dibenz(a,h)anthracene	71000	U
191-24-2	Benzo(g,h,i)perylene	71000	U
92-87-5	Benzidine	180000	U
110-86-1	Pyridine	71000	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-46

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P1CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282339

Sample wt/vol: 1.0 (g/mL) G Lab File ID: R282339DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/18/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIPHATIC COMPOUND	5.26	22000	J
2.	UNKNOWN AROMATIC COMPOUND	5.52	42000	J
3.	UNKNOWN ALIPHATIC COMPOUND	5.78	34000	J
4.	UNKNOWN INDENE DERIVATIVE	6.01	36000	J
5.	UNKNOWN BENZENE DERIVATIVES	6.12	81000	JZ
6.	UNKNOWN INDENE DERIVATIVE W/	6.51	32000	JZ
7.	UNKNOWN AROMATIC COMPOUND	7.10	23000	J
8. 90-12-0	NAPHTHALENE, 1-METHYL-	7.54	93000	NJ
9.	UNKNOWN DIMETHYLNAPHTHALENE	8.34	89000	J
10. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.48	79000	NJ
11.	UNKNOWN DIMETHYLNAPHTHALENE	8.52	71000	J
12.	UNKNOWN ALIPHATIC COMPOUND	8.86	39000	J
13.	UNKNOWN C3-ALKYLNAPHTHALENE	9.23	42000	J
14.	UNKNOWN C3-ALKYLNAPHTHALENE	9.44	34000	J
15.	UNKNOWN C3-ALKYLNAPHTHALENE	9.49	67000	J
16.	UNKNOWN C3-ALKYLNAPHTHALENE	9.65	47000	J
17.	UNKNOWN C3-ALKYLNAPHTHALENE	9.81	30000	J
18.	UNKNOWN	9.99	22000	J
19.	UNKNOWN C3-ALKYLNAPHTHALENE	10.06	38000	J
20.	UNKNOWN AROMATIC COMPOUND	10.36	22000	J
21.	UNKNOWN C14H12-PAH	11.17	37000	J
22. 832-71-3	PHENANTHRENE, 3-METHYL-	12.90	24000	NJ
23. 2531-84-2	PHENANTHRENE, 2-METHYL- W/UN	12.95	39000	NJZ
24.	UNKNOWN METHYLPHENANTHRENE	13.15	35000	J
25.	UNKNOWN W/ALKANE	13.21	37000	JZ
26.	UNKNOWN DIMETHYLPHENANTHRENE	13.83	24000	JZ
27.	UNKNOWN DIMETHYLPHENANTHRENE	14.10	51000	J
28.	UNKNOWN DIMETHYLPHENANTHRENE	14.16	22000	JZ
29.	UNKNOWN C3-ALKYLPHENANTHRENE	15.06	33000	J
30.	UNKNOWN POLYCYCLIC HYDROCARB	21.41	34000	J

ATTACHMENT CC-47

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282339

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 30 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	24	U
319-85-7	beta-BHC	24	U
319-86-8	delta-BHC	24	U
58-89-9	gamma-BHC (Lindane)	11	JP
76-44-8	Heptachlor	24	U
309-00-2	Aldrin	24	U
1024-57-3	Heptachlor epoxide	24	U
959-98-8	Endosulfan I	31	P
60-57-1	Dieldrin	47	U
72-55-9	4,4'-DDE	100	P
72-20-8	Endrin	39	JP
33213-65-9	Endosulfan II	34	JP
72-54-8	4,4'-DDD	47	U
1031-07-8	Endosulfan sulfate	44	JP
50-29-3	4,4'-DDT	47	U
72-43-5	Methoxychlor	240	U
53494-70-5	Endrin ketone	49	
7421-36-3	Endrin aldehyde	47	U
5103-71-9	alpha-Chlordane	28	P
5103-74-2	gamma-Chlordane	31	P
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	470	U
11104-28-2	Aroclor-1221	950	U
1114-16-5	Aroclor-1232	470	U
53469-21-9	Aroclor-1242	470	U
12672-29-6	Aroclor-1248	470	U
11097-69-1	Aroclor-1254	470	U
11096-82-5	Aroclor-1260	470	U

ATTACHMENT CC-48

P2CS1ARE

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342R1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282342I2V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 15 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	12	U
67-64-1	Acetone	6	JB
75-15-0	Carbon Disulfide	2	J
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	2	J
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

FORM I VOA OLM03.0

ATTACHMENT CC-49

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P2CS1ARE

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342R1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282342I2V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 15 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN NAPHTHALENE DERIVATI	12.22	8	JX
2.		UNKNOWN ALKANE	12.86	28	JX
3.		UNKNOWN POLYCYCLIC HYDROCARB	14.22	17	JX
4.		UNKNOWN POLYCYCLIC HYDROCARB	14.94	42	JX
5.		UNKNOWN SILOXANE DERIVATIVE	16.71	14	JX
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ATTACHMENT CC-50

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282333

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M282333DV

Level: (low/med) MED Date Received: 12/16/95

% Moisture: not dec. 19 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	3000	U
74-83-9	Bromomethane	3000	U
75-01-4	Vinyl Chloride	3000	U
75-00-3	Chloroethane	3000	U
75-09-2	Methylene Chloride	3000	U
67-64-1	Acetone	3000	U
75-15-0	Carbon Disulfide	3000	U
75-35-4	1,1-Dichloroethene	3000	U
75-34-3	1,1-Dichloroethane	3000	U
540-59-0	1,2-Dichloroethene (total)	3000	U
67-66-3	Chloroform	3000	U
107-06-2	1,2-Dichloroethane	3000	U
78-93-3	2-Butanone	3000	U
71-55-6	1,1,1-Trichloroethane	3000	U
56-23-5	Carbon Tetrachloride	3000	U
75-27-4	Bromodichloromethane	3000	U
78-87-5	1,2-Dichloropropane	3000	U
10061-01-5	cis-1,3-Dichloropropene	3000	U
79-01-6	Trichloroethene	3000	U
124-48-1	Dibromochloromethane	3000	U
79-00-5	1,1,2-Trichloroethane	3000	U
71-43-2	Benzene	3000	U
10061-02-6	trans-1,3-Dichloropropene	3000	U
75-25-2	Bromoform	3000	U
108-10-1	4-Methyl-2-Pentanone	3000	U
591-78-6	2-Hexanone	3000	U
127-18-4	Tetrachloroethene	3000	U
79-34-5	1,1,2,2-Tetrachloroethane	3000	U
108-88-3	Toluene	3000	U
108-90-7	Chlorobenzene	3000	U
100-41-4	Ethylbenzene	3000	U
100-42-5	Styrene	3000	U
1330-20-7	Xylene (total)	3000	U

ATTACHMENT CC-51

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPL1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282333

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M282333DV

Level: (low/med) MED Date Received: 12/16/95

% Moisture: not dec. 19 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume: 10000(uL) Soil Aliquot Volume: 100(uL)

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN C9-ALKANE	11.50	3000	J
2.	UNKNOWN C9-ALKANE	11.66	2500	J
3.	UNKNOWN C3-ALKYLCYCLOHEXANE	11.88	4700	J
4.	UNKNOWN C9-ALKANE	12.05	3600	J
5.	UNKNOWN C3-ALKYLCYCLOHEXANE	12.16	4600	J
6.	UNKNOWN CYCLOALKANE	12.71	2200	J
7.	UNKNOWN C3-ALKYLCYCLOHEXANE	12.79	8900	J
8.	UNKNOWN C3-ALKYLCYCLOHEXANE	13.17	11000	J
9.	UNKNOWN C10-ALKANE	13.34	11000	J
10. 1678-92-8	CYCLOHEXANE, PROPYL- W/C10-A	13.52	19000	NJZ
11.	UNKNOWN C10-ALKANE	13.72	11000	J
12.	UNKNOWN	14.07	11000	J
13.	UNKNOWN C4-ALKYLCYCLOHEXANE	14.22	6700	JZ
14.	UNKNOWN CYCLOALKANE	14.33	16000	J
15.	UNKNOWN CYCLOALKANE	14.41	11000	J
16.	UNKNOWN C11-ALKANE	14.72	14000	J
17.	UNKNOWN	14.85	4500	J
18.	UNKNOWN	14.93	4600	J
19.	UNKNOWN	15.05	7200	J
20. 1678-93-9	CYCLOHEXANE, BUTYL-	15.17	19000	NJ
21.	UNKNOWN	15.60	4500	J
22.	UNKNOWN C4-ALKYLBENZENE	15.76	3800	J
23. 493-02-7	NAPHTHALENE, DECAHYDRO-, TRA	15.93	27000	J
24.	UNKNOWN CYCLOALKANE	16.09	11000	J
25.	UNKNOWN CYCLOALKANE	16.21	13000	J
26.	UNKNOWN ALIPHATIC COMPOUND	16.40	14000	J
27.	UNKNOWN C4-ALKYLBENZENE	16.52	9100	J
28.	UNKNOWN SUBSTITUTED BENZENES	16.76	4600	JZ
29.	UNKNOWN	16.92	5300	J
30.	UNKNOWN METHYLDECAHYDRONAPHT	17.06	23000	JZ

ATTACHMENT CC-52

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282333

Sample wt/vol: 1.2 (g/mL) G Lab File ID: R282333DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 6.7

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	69000	U
111-44-4	bis(-2-Chloroethyl)Ether	69000	U
95-57-8	2-Chlorophenol	69000	U
541-73-1	1,3-Dichlorobenzene	69000	U
106-46-7	1,4-Dichlorobenzene	69000	U
95-50-1	1,2-Dichlorobenzene	69000	U
95-48-7	2-Methylphenol	69000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	69000	U
106-44-5	4-Methylphenol	69000	U
621-64-7	N-Nitroso-di-n-propylamine	69000	U
67-72-1	Hexachloroethane	69000	U
98-95-3	Nitrobenzene	69000	U
78-59-1	Isophorone	69000	U
88-75-5	2-Nitrophenol	69000	U
105-67-9	2,4-Dimethylphenol	69000	U
111-91-1	bis(2-Chloroethoxy)methane	69000	U
120-83-2	2,4-Dichlorophenol	69000	U
120-82-1	1,2,4-Trichlorobenzene	69000	U
91-20-3	Naphthalene	69000	U
106-47-8	4-Chloroaniline	69000	U
87-68-3	Hexachlorobutadiene	69000	U
59-50-7	4-Chloro-3-Methylphenol	69000	U
91-57-6	2-Methylnaphthalene	69000	U
77-47-4	Hexachlorocyclopentadiene	69000	U
88-06-2	2,4,6-Trichlorophenol	69000	U
95-95-4	2,4,5-Trichlorophenol	69000	U
91-58-7	2-Chloronaphthalene	170000	U
88-74-4	2-Nitroaniline	69000	U
131-11-3	Dimethylphthalate	170000	U
208-96-8	Acenaphthylene	69000	U
606-20-2	2,6-Dinitrotoluene	69000	U
99-09-2	3-Nitroaniline	69000	U
83-32-9	Acenaphthene	170000	U
		69000	U

ATTACHMENT CC-53

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282333

Sample wt/vol: 1.2 (g/mL) G Lab File ID: R282333DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 6.7

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	170000	U
100-02-7	4-Nitrophenol	170000	U
132-64-9	Dibenzofuran	69000	U
121-14-2	2,4-Dinitrotoluene	69000	U
84-66-2	Diethylphthalate	69000	U
7005-72-3	4-Chlorophenyl-phenylether	69000	U
86-73-7	Fluorene	6000	J
100-01-6	4-Nitroaniline	170000	U
534-52-1	4,6-Dinitro-2-methylphenol	170000	U
86-30-6	N-nitrosodiphenylamine (1)	69000	U
101-55-3	4-Bromophenyl-phenylether	69000	U
118-74-1	Hexachlorobenzene	69000	U
87-86-5	Pentachlorophenol	170000	U
85-01-8	Phenanthrene	8400	J
120-12-7	Anthracene	69000	U
86-74-8	Carbazole	69000	U
84-74-2	Di-n-butylphthalate	69000	U
206-44-0	Fluoranthene	69000	U
129-00-0	Pyrene	69000	U
85-68-7	Butylbenzylphthalate	69000	U
91-94-1	3,3'-Dichlorobenzidine	69000	U
56-55-3	Benzo(a)anthracene	69000	U
218-01-9	Chrysene	69000	U
117-81-7	bis(2-Ethylhexyl)phthalate	14000	BJ
117-84-0	Di-n-octylphthalate	69000	U
205-99-2	Benzo(b)fluoranthene	69000	U
207-08-9	Benzo(k)fluoranthene	69000	U
50-32-8	Benzo(a)pyrene	69000	U
193-39-5	Indeno(1,2,3-cd)pyrene	69000	U
53-70-3	Dibenz(a,h)anthracene	69000	U
191-24-2	Benzo(g,h,i)perylene	69000	U
92-87-5	Benzidine	170000	U
110-86-1	Pyridine	69000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM03.0

ATTACHMENT CC-54

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282333

Sample wt/vol: 1.2 (g/mL) G Lab File ID: R282333DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 6.7

GPC Cleanup: (Y/N) Y pH: 7.4

Number TICs found: 30

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALIPHATIC COMPOUND	5.26	28000	J
2.		UNKNOWN	5.72	36000	J
3.		UNKNOWN ALIPHATIC COMPOUND	5.78	45000	J
4.		UNKNOWN C4-SUBSTITUTED BENZE	6.11	54000	JZ
5.		UNKNOWN	6.34	32000	J
6.		UNKNOWN	6.37	41000	J
7.		UNKNOWN C5-ALKYLBENZENE W/AL	6.57	20000	JZ
8.		UNKNOWNS	7.29	29000	JZ
9.	90-12-0	NAPHTHALENE, 1-METHYL-	7.54	78000	NJ
10.		UNKNOWN AROMATIC COMPOUND	7.72	19000	J
11.		UNKNOWN	7.77	22000	J
12.		UNKNOWN	7.89	27000	J
13.		UNKNOWN ALIPHATIC COMPOUND	8.03	29000	J
14.		UNKNOWN	8.18	20000	J
15.	1127-76-0	NAPHTHALENE, 1-ETHYL-	8.24	19000	NJ
16.		UNKNOWN DIMETHYLNAPHTHALENE	8.34	100000	J
17.	575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.48	110000	NJ
18.		UNKNOWN ALIPHATIC COMPOUND	8.53	110000	J
19.		UNKNOWN DIMETHYLNAPHTHALENE	8.67	19000	J
20.	571-61-9	NAPHTHALENE, 1,5-DIMETHYL- W	8.72	18000	NJZ
21.		UNKNOWN ALIPHATIC COMPOUND	8.87	66000	J
22.		UNKNOWN ALIPHATIC COMPOUND	8.98	18000	J
23.		UNKNOWN C3-ALKYLNAPHTHALENE	9.22	29000	J
24.		UNKNOWN C3-ALKYLNAPHTHALENE	9.43	42000	J
25.		UNKNOWN C3-ALKYLNAPHTHALENE	9.48	58000	J
26.		UNKNOWN C3-ALKYLNAPHTHALENE	9.64	43000	J
27.		UNKNOWN C3-ALKYLNAPHTHALENE	9.80	31000	J
28.		UNKNOWN C3-ALKYLNAPHTHALENE	10.05	28000	J
29.		UNKNOWN DIMETHYLBIPHENYL	10.35	18000	J
30.		UNKNOWN	19.67	34000	J

ATTACHMENT CC-55

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282333

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 19 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 01/24/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.0	U
7421-36-3	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	82	U
1114-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

ATTACHMENT CC-5C

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282336

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282336V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 15 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	12	U
67-64-1	Acetone	9	JB
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

ATTACHMENT CC-57

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282336

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282336V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 15 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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ATTACHMENT CC-58

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282336

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282336S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 14 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

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
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	79	J
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	100	J
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	380	U
91-58-7	2-Chloronaphthalene	960	U
88-74-4	2-Nitroaniline	380	U
131-11-3	Dimethylphthalate	960	U
208-96-8	Acenaphthylene	380	U
606-20-2	2,6-Dinitrotoluene	38	J
99-09-2	3-Nitroaniline	380	U
83-32-9	Acenaphthene	960	U
		35	J

ATTACHMENT CC-59

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282336

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282336S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 14 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 30

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.42	3000	ANJB
2.	3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.94	1400	ANJB
3.	90-12-0	NAPHTHALENE, 1-METHYL-	6.82	120	NJ
4.		UNKNOWN DIMETHYLNAPHTHALENE	7.56	110	J
5.	575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	7.69	150	NJ
6.		UNKNOWN ALIPHATIC COMPOUND	7.72	290	J
7.		UNKNOWN ALIPHATIC COMPOUND	7.93	420	J
8.		UNKNOWN ALIPHATIC COMPOUND	8.03	220	J
9.		UNKNOWN	9.04	120	JB
10.		UNKNOWN	9.82	130	J
11.	832-71-3	PHENANTHRENE, 3-METHYL-	11.94	180	NJ
12.	2531-84-2	PHENANTHRENE, 2-METHYL-	12.00	200	NJ
13.		UNKNOWN METHYLPHENANTHRENE W	12.17	280	JZ
14.	610-48-0	ANTHRACENE, 1-METHYL-	12.21	160	NJ
15.		UNKNOWN DIMETHYLPHENANTHRENE	13.11	180	J
16.		UNKNOWN	13.17	150	J
17.	238-84-6	11H-BENZO[A]FLUORENE	14.59	250	NJ
18.		UNKNOWN METHYLPYRENE	14.80	200	J
19.	2381-21-7	PYRENE, 1-METHYL-	14.99	210	NJ
20.		UNKNOWN C17H12-PAH	15.05	220	J
21.		UNKNOWN ORGANIC ACID ESTER	15.55	400	JB
22.	92-24-0	NAPHTHACENE W/UNKNOWN	16.65	130	NJZ
23.		UNKNOWN C19H14-PAH	17.28	240	J
24.		UNKNOWN C19H14-PAH	17.36	140	J
25.		UNKNOWN C19H14-PAH	17.55	160	J
26.	192-97-2	BENZO[E]PYRENE	19.07	380	NJ
27.		UNKNOWN	19.63	230	J
28.		UNKNOWN	19.76	300	J
29.		UNKNOWN POLYCYCLIC HYDROCARB	20.17	530	J
30.		UNKNOWN POLYCYCLIC HYDROCARB	20.71	380	J

FORM I SV-TIC

OLM03.0

ATTACHMENT CC-60

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282336

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282336S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 14 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	960	U
100-02-7	4-Nitrophenol	960	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	73	J
100-01-6	4-Nitroaniline	960	U
534-52-1	4,6-Dinitro-2-methylphenol	960	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	960	U
85-01-8	Phenanthrene	470	
120-12-7	Anthracene	69	J
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	59	J
206-44-0	Fluoranthene	580	
129-00-0	Pyrene	900	
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	470	
218-01-9	Chrysene	640	
117-81-7	bis(2-Ethylhexyl)phthalate	380	U
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	450	
207-08-9	Benzo(k)fluoranthene	480	
50-32-8	Benzo(a)pyrene	620	
193-39-5	Indeno(1,2,3-cd)pyrene	230	J
53-70-3	Dibenz(a,h)anthracene	76	J
191-24-2	Benzo(g,h,i)perylene	260	J
92-87-5	Benzidine	960	U
110-86-1	Pyridine	380	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-61

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282336

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 14 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	1.2	J
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	8.2	
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	2.5	JP
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-36-3	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	78	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

ATTACHMENT CC-62

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL4

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282337

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0282337V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 18 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	12	U
67-64-1	Acetone	10	JB
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

ATTACHMENT CC-63

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL4

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282337

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0282337V

Level: (low/med) LOW Date Received: 12/16/95

Moisture: not dec. 18 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
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OLM03.0

FORM I VOA-TIC

ATTACHMENT CC-C4

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL4

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282337

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282337DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	800	U
111-44-4	bis(-2-Chloroethyl)Ether	800	U
95-57-8	2-Chlorophenol	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
95-50-1	1,2-Dichlorobenzene	800	U
95-48-7	2-Methylphenol	800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	800	U
106-44-5	4-Methylphenol	800	U
621-64-7	N-Nitroso-di-n-propylamine	800	U
67-72-1	Hexachloroethane	800	U
98-95-3	Nitrobenzene	800	U
78-59-1	Isophorone	800	U
88-75-5	2-Nitrophenol	800	U
105-67-9	2,4-Dimethylphenol	800	U
111-91-1	bis(2-Chloroethoxy)methane	800	U
120-83-2	2,4-Dichlorophenol	800	U
120-82-1	1,2,4-Trichlorobenzene	800	U
91-20-3	Naphthalene	800	U
106-47-8	4-Chloroaniline	200	J
87-68-3	Hexachlorobutadiene	800	U
59-50-7	4-Chloro-3-Methylphenol	800	U
91-57-6	2-Methylnaphthalene	800	U
77-47-4	Hexachlorocyclopentadiene	270	J
88-06-2	2,4,6-Trichlorophenol	800	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	800	U
606-20-2	2,6-Dinitrotoluene	160	J
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	2000	U
		250	J

ATTACHMENT CC-65

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL4

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282337

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282337DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	160	J
121-14-2	2,4-Dinitrotoluene	800	U
84-66-2	Diethylphthalate	150	J
7005-72-3	4-Chlorophenyl-phenylether	800	U
86-73-7	Fluorene	310	J
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-nitrosodiphenylamine (1)	800	U
101-55-3	4-Bromophenyl-phenylether	800	U
118-74-1	Hexachlorobenzene	800	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	2800	
120-12-7	Anthracene	550	J
86-74-8	Carbazole	250	J
84-74-2	Di-n-butylphthalate	800	U
206-44-0	Fluoranthene	3300	
129-00-0	Pyrene	3200	
85-68-7	Butylbenzylphthalate	800	U
91-94-1	3,3'-Dichlorobenzidine	800	U
56-55-3	Benzo(a)anthracene	1800	
218-01-9	Chrysene	2100	
117-81-7	bis(2-Ethylhexyl)phthalate	800	U
117-84-0	Di-n-octylphthalate	800	U
205-99-2	Benzo(b)fluoranthene	3200	Y
207-08-9	Benzo(k)fluoranthene	800	U
50-32-8	Benzo(a)pyrene	2000	
193-39-5	Indeno(1,2,3-cd)pyrene	660	J
53-70-3	Dibenz(a,h)anthracene	220	J
191-24-2	Benzo(g,h,i)perylene	700	J
92-87-5	Benzidine	2000	U
110-86-1	Pyridine	800	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL4

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: — SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282337

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282337DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.39	2400	ANJB
2.	UNKNOWN DIMETHYLNAPHTHALENE	7.55	410	J
3. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	7.68	390	NJ
4.	UNKNOWN ALIPHATIC COMPOUND	7.72	530	J
5.	UNKNOWN ALIPHATIC COMPOUND	8.03	380	J
6. 832-71-3	PHENANTHRENE, 3-METHYL-	11.94	610	NJ
7. 2531-84-2	PHENANTHRENE, 2-METHYL-	12.01	690	NJ
8. 203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.18	1000	NJZ
9. 610-48-0	ANTHRACENE, 1-METHYL-	12.22	570	NJ
10. 35465-71-5	2-PHENYLNAPHTHALENE	12.56	380	NJ
11. 84-65-1	9,10-ANTHRACENEDIONE	12.63	350	NJ
12.	UNKNOWN DIMETHYLPHENANTHRENE	13.12	430	J
13.	UNKNOWN	13.18	370	J
14.	UNKNOWN C17H12-PAH	14.38	370	J
15. 238-84-6	11H-BENZO[A]FLUORENE	14.60	860	NJ
16. 243-17-4	11H-BENZO[B]FLUORENE	14.74	370	NJ
17.	UNKNOWN METHYLPYRENE	14.81	680	J
18. 2381-21-7	PYRENE, 1-METHYL-	15.01	520	NJ
19.	UNKNOWN C17H12-PAH	15.07	530	J
20.	UNKNOWN	15.51	320	J
21. 239-35-0	BENZO[B]NAPHTHO[2,1-D]THIOPH	15.90	350	NJ
22. 195-19-7	BENZO[C]PHENANTHRENE	15.97	430	NJ
23. 203-12-3	BENZO[GHI]FLUORANTHENE	16.00	310	NJ
24.	UNKNOWN BENZANTHRACENONE	16.15	300	J
25. 92-24-0	NAPHTHACENE W/C18H10-PAH	16.68	410	NJZ
26.	UNKNOWN C19H14-PAH	17.29	550	J
27.	UNKNOWN C19H14-PAH	17.37	310	J
28.	UNKNOWN C19H14-PAH	17.56	280	J
29. 192-97-2	BENZO[E]PYRENE	19.10	1200	NJ
30.	UNKNOWN POLYCYCLIC HYDROCARB	20.17	660	J

ATTACHMENT CC-67

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL4

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282337

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 18 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

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 (Lindane)	10	U
76-44-8	Heptachlor	10	U
309-00-2	Aldrin	10	U
1024-57-3	Heptachlor epoxide	67	
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	28	P
72-55-9	4,4'-DDE	11	JP
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	100	U
72-43-5	Methoxychlor	14	J
53494-70-5	Endrin ketone	20	U
7421-36-3	Endrin aldehyde	5.4	JP
5103-71-9	alpha-Chlordane	10	U
5103-74-2	gamma-Chlordane	1000	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	400	U
11104-28-2	Aroclor-1221	200	U
1114-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	200	U
11096-82-5	Aroclor-1260	200	U

ATTACHMENT CC-68

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282335DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	52000	U
111-44-4	bis(-2-Chloroethyl)Ether	52000	U
95-57-8	2-Chlorophenol	52000	U
541-73-1	1,3-Dichlorobenzene	52000	U
106-46-7	1,4-Dichlorobenzene	52000	U
95-50-1	1,2 Dichlorobenzene	52000	U
95-48-7	2-Methylphenol	52000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	52000	U
106-44-5	4-Methylphenol	52000	U
621-64-7	N-Nitroso-di-n-propylamine	52000	U
67-72-1	Hexachloroethane	52000	U
98 95-3	Nitrobenzene	52000	U
78-59-1	Isophorone	52000	U
88-75-5	2-Nitrophenol	52000	U
105-67-9	2,4-Dimethylphenol	52000	U
111-91-1	bis(2-Chloroethoxy)methane	52000	U
120-83-2	2,4-Dichlorophenol	52000	U
120-82-1	1,2,4-Trichlorobenzene	52000	U
91-20-3	Naphthalene	52000	U
106-47-8	4-Chloroaniline	52000	U
87-68-3	Hexachlorobutadiene	52000	U
59-50-7	4-Chloro-3-Methylphenol	52000	U
91-57-6	2-Methylnaphthalene	52000	U
77-47-4	Hexachlorocyclopentadiene	52000	U
88-06-2	2,4,6-Trichlorophenol	130000	U
95-95-4	2,4,5-Trichlorophenol	52000	U
91-58-7	2-Chloronaphthalene	130000	U
88-74-4	2-Nitroaniline	52000	U
131-11-3	Dimethylphthalate	52000	U
208-96-8	Acenaphthylene	52000	U
606-20-2	2,6-Dinitrotoluene	130000	U
99-09-2	3-Nitroaniline	52000	U
83-32-9	Acenaphthene	52000	U

OLM03.0

FORM I SV-1

ATTACHMENT CC-69 00118.1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282335DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	130000	U
100-02-7	4-Nitrophenol	130000	U
132-64-9	Dibenzofuran	52000	U
121-14-2	2,4-Dinitrotoluene	52000	U
84-66-2	Diethylphthalate	52000	U
7005-72-3	4-Chlorophenyl-phenylether	52000	U
86-73-7	Fluorene	52000	U
100-01-6	4-Nitroaniline	130000	U
534-52-1	4,6-Dinitro-2-methylphenol	130000	U
86-30-6	N-nitrosodiphenylamine (1)	52000	U
101-55-3	4-Bromophenyl-phenylether	52000	U
118-74-1	Hexachlorobenzene	52000	U
87-86-5	Pentachlorophenol	130000	U
85-01-8	Phenanthrene	52000	U
120-12-7	Anthracene	52000	U
86-74-8	Carbazole	52000	U
84-74-2	Di-n-butylphthalate	52000	U
206-44-0	Fluoranthene	52000	U
129-00-0	Pyrene	52000	U
85 68-7	Butylbenzylphthalate	52000	U
91-94-1	3,3'-Dichlorobenzidine	52000	U
56-55-3	Benzo(a)anthracene	52000	U
218-01-9	Chrysene	52000	U
117-81-7	bis(2-Ethylhexyl)phthalate	52000	U
117-84-0	Di-n-octylphthalate	52000	U
205-99-2	Benzo(b)fluoranthene	52000	U
207-08-9	Benzo(k)fluoranthene	52000	U
50-32-8	Benzo(a)pyrene	52000	U
193-39-5	Indeno(1,2,3-cd)pyrene	52000	U
53-70-3	Dibenz(a,h)anthracene	52000	U
191-24-2	Benzo(g,h,i)perylene	130000	U
92-87-5	Benzidine	52000	U
110-86-1	Pyridine		

(1) - Cannot be separated from Diphenylamine

OLM03.0

FORM I SV-2

ATTACHMENT CC-90 001185

EPA SAMPLE NO.

EPL2B

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282335DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/18/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.4

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

Number TICs found: 26

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIPHATIC COMPOUND	5.26	13000	J
2.	UNKNOWN	5.71	21000	J
3.	UNKNOWN ALIPHATIC COMPOUND	5.77	34000	J
4.	UNKNOWN	5.99	10000	J
5.	UNKNOWN	6.03	12000	J
6.	UNKNOWN ALIPHATIC COMPOUND	6.12	22000	J
7.	UNKNOWN	6.29	14000	J
8.	UNKNOWN	6.33	28000	J
9.	UNKNOWN ALIPHATIC COMPOUND	6.37	13000	J
10.	UNKNOWN	6.62	12000	J
11.	UNKNOWN	7.29	22000	J
12.	UNKNOWN AROMATIC COMPOUND	7.40	11000	J
13. 90-12-0	NAPHTHALENE, 1-METHYL-	7.54	18000	NJ
14.	UNKNOWN	7.72	15000	J
15.	UNKNOWN	7.77	12000	J
16.	UNKNOWN	7.89	14000	J
17.	UNKNOWN	8.03	11000	J
18.	UNKNOWN	8.18	15000	J
19.	UNKNOWN DIMETHYLNAPHTHALENE	8.34	16000	J
20. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.48	23000	NJ
21.	UNKNOWN ALIPHATIC COMPOUND	8.52	34000	J
22.	UNKNOWN ALIPHATIC COMPOUND	8.86	25000	J
23.	UNKNOWN C3-ALKYLNAPHTHALENE	9.23	14000	J
24.	UNKNOWN C3-ALKYLNAPHTHALENE	9.48	18000	J
25.	UNKNOWN C3-ALKYLNAPHTHALENE	9.64	15000	J
26.	UNKNOWN	25.80	26000	JB
27.				
28.				
29.				
30.				

OLM03.0

FORM I SV-TIC

001186

ATTACHMENT CC-71

Dodecane, 2,6,10-trimethyl-	11.21	17000	NJ
Tetracosane	11.72	60000	NJ
Hexadecane	14.16	20000	NJ
Docosane	14.95	56000	NJ
Tricosane	15.70	70000	NJ
Tetracosane	16.43	68000	NJ
Pentacosane	17.14	49000	NJ
Heneicosane	17.81	32000	NJ
Docosane	18.45	23000	NJ

Client Sample ID: EPL2B Lab Sample ID: 282335 File ID: R282335DS

Compound	RT	Est. Conc.	Q
Unknown Cycloalkane	4.99	12000	J
Unknown alkane	5.80	16000	J
Unknown Cycloalkane	5.92	55000	J
Unknown Alkane	6.20	12000	J
Undecane, 2,6-dimethyl-	6.50	47000	NJ
Octadecane	6.56	13000	NJ
Unknown Cycloalkane	6.69	26000	J
Unknown Cycloalkane	6.78	37000	J
Tridecane, 7-methyl-	6.97	130000	NJ
Unknown Cycloalkane	7.16	24000	J
Undecane, 5-ethyl-	7.34	42000	NJ
Unknown Cycloalkane	7.47	14000	J
Unknown Cycloalkane	7.64	40000	J
Dodecane, 2,6,11-trimethyl-	7.84	100000	NJ
Pentadecane, 6-methyl-	8.07	26000	NJ
Hexadecane	8.57	84000	NJ
Pentatriacontane	9.41	18000	NJ
Hexatriacontane	9.51	12000	NJ
Hexacosane	10.27	36000	NJ
Pentadecane, 2,6,10,14-tetramethyl-	10.78	60000	NJ
Dodecane, 2,6,10-trimethyl-	11.72	18000	NJ

Client Sample ID: P1CS1B Lab Sample ID: 282339 File ID: R282339DS

Compound	RT	Est. Conc.	Q
Unknown Cycloalkane	5.92	46000	J
Unknown Cycloalkane	6.69	43000	J
Unknown Cycloalkane	6.79	34000	J
Tridecane, 7-methyl-	6.97	90000	NJ
Unknown Cycloalkane	7.16	31000	J
Unknown alkane	7.34	28000	J
Unknown Cycloalkane	7.65	34000	J
Dodecane, 2,6,10-trimethyl-	7.84	100000	NJ
Unknown Cycloalkane	8.08	32000	J
Decane, 5-propyl-	8.58	82000	NJ
Decane, 3,6-dimethyl-	9.41	43000	NJ
Tridecane, 2-methyl-	10.27	110000	NJ
Unknown Cycloalkane	10.44	21000	J
Pentadecane, 2,6,10,14-tetramethyl	10.78	280000	NJ
Tetradecane	11.21	32000	NJ
Unknown Cycloalkane	11.38	26000	J
Eicosane	11.72	180000	NJ
Unknown Cycloalkane	12.30	22000	J
Octadecane	12.45	63000	NJ
Pentadecane	13.34	21000	NJ
Tetradecane, 2-methyl-	13.99	40000	NJ
Heptadecane, 8-methyl-	14.44	28000	NJ

ATTACHMENT CC-72

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 13 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/24/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	3.8	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	19	U
72-43-5	Methoxychlor	3.8	U
53494-70-5	Endrin ketone	3.8	U
7421-36-3	Endrin aldehyde	1.9	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	190	U
8001-35-2	Toxaphene	38	U
12674-11-2	Aroclor-1016	76	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

ATTACHMENT CC-73 002332

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282335DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	52000	U
111-44-4	bis(-2-Chloroethyl)Ether	52000	U
95-57-8	2-Chlorophenol	52000	U
541-73-1	1,3-Dichlorobenzene	52000	U
106-46-7	1,4-Dichlorobenzene	52000	U
95-50-1	1,2-Dichlorobenzene	52000	U
95-48-7	2-Methylphenol	52000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	52000	U
106-44-5	4-Methylphenol	52000	U
621-64-7	N-Nitroso-di-n-propylamine	52000	U
67-72-1	Hexachloroethane	52000	U
98-95-3	Nitrobenzene	52000	U
78-59-1	Isophorone	52000	U
88-75-5	2-Nitrophenol	52000	U
105-67-9	2,4-Dimethylphenol	52000	U
111-91-1	bis(2-Chloroethoxy)methane	52000	U
120-83-2	2,4-Dichlorophenol	52000	U
120-82-1	1,2,4-Trichlorobenzene	52000	U
91-20-3	Naphthalene	52000	U
106-47-8	4-Chloroaniline	52000	U
87-68-3	Hexachlorobutadiene	52000	U
59-50-7	4-Chloro-3-Methylphenol	52000	U
91-57-6	2-Methylnaphthalene	52000	U
77-47-4	Hexachlorocyclopentadiene	52000	U
88-06-2	2,4,6-Trichlorophenol	52000	U
95-95-4	2,4,5-Trichlorophenol	130000	U
91-58-7	2-Chloronaphthalene	52000	U
88-74-4	2-Nitroaniline	130000	U
131-11-3	Dimethylphthalate	52000	U
208-96-8	Acenaphthylene	52000	U
606-20-2	2,6-Dinitrotoluene	52000	U
99-09-2	3-Nitroaniline	130000	U
83-32-9	Acenaphthene	52000	U

ATTACHMENT CC-74

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282335DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	130000	U
100-02-7	4-Nitrophenol	130000	U
132-64-9	Dibenzofuran	52000	U
121-14-2	2,4-Dinitrotoluene	52000	U
84-66-2	Diethylphthalate	52000	U
7005-72-3	4-Chlorophenyl-phenylether	52000	U
86-73-7	Fluorene	52000	U
100-01-6	4-Nitroaniline	130000	U
534-52-1	4,6-Dinitro-2-methylphenol	130000	U
86-30-6	N-nitrosodiphenylamine (1)	52000	U
101-55-3	4-Bromophenyl-phenylether	52000	U
118-74-1	Hexachlorobenzene	52000	U
87-86-5	Pentachlorophenol	130000	U
85-01-8	Phenanthrene	52000	U
120-12-7	Anthracene	52000	U
86-74-8	Carbazole	52000	U
84-74-2	Di-n-butylphthalate	52000	U
206-44-0	Fluoranthene	52000	U
129-00-0	Pyrene	52000	U
85-68-7	Butylbenzylphthalate	52000	U
91-94-1	3,3'-Dichlorobenzidine	52000	U
56-55-3	Benzo(a)anthracene	52000	U
218-01-9	Chrysene	52000	U
117-81-7	bis(2-Ethylhexyl)phthalate	52000	U
117-84-0	Di-n-octylphthalate	52000	U
205-99-2	Benzo(b)fluoranthene	52000	U
207-08-9	Benzo(k)fluoranthene	52000	U
50-32-8	Benzo(a)pyrene	52000	U
193-39-5	Indeno(1,2,3-cd)pyrene	52000	U
53-70-3	Dibenz(a,h)anthracene	52000	U
191-24-2	Benzo(g,h,i)perylene	52000	U
92-87-5	Benzidine	130000	U
110-86-1	Pyridine	52000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM03.0

ATTACHMENT CC-75

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282335DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/18/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs found: 26

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIPHATIC COMPOUND	5.26	13000	J
2.	UNKNOWN	5.71	21000	J
3.	UNKNOWN ALIPHATIC COMPOUND	5.77	34000	J
4.	UNKNOWN	5.99	10000	J
5.	UNKNOWN	6.03	12000	J
6.	UNKNOWN ALIPHATIC COMPOUND	6.12	22000	J
7.	UNKNOWN	6.29	14000	J
8.	UNKNOWN	6.33	28000	J
9.	UNKNOWN ALIPHATIC COMPOUND	6.37	13000	J
10.	UNKNOWN	6.62	12000	J
11.	UNKNOWN	7.29	22000	J
12.	UNKNOWN AROMATIC COMPOUND	7.40	11000	J
13. 90-12-0	NAPHTHALENE, 1-METHYL-	7.54	18000	NJ
14.	UNKNOWN	7.72	15000	J
15.	UNKNOWN	7.77	12000	J
16.	UNKNOWN	7.89	14000	J
17.	UNKNOWN	8.03	11000	J
18.	UNKNOWN	8.18	15000	J
19.	UNKNOWN DIMETHYLNAPHTHALENE	8.34	16000	J
20. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.48	23000	NJ
21.	UNKNOWN ALIPHATIC COMPOUND	8.52	34000	J
22.	UNKNOWN ALIPHATIC COMPOUND	8.86	25000	J
23.	UNKNOWN C3-ALKYLNAPHTHALENE	9.23	14000	J
24.	UNKNOWN C3-ALKYLNAPHTHALENE	9.48	18000	J
25.	UNKNOWN C3-ALKYLNAPHTHALENE	9.64	15000	J
26.	UNKNOWN	25.88	26000	JB
27.				
28.				
29.				
30.				

ATTACHMENT CC-7C

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282335

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 13 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/24/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.8	U
7421-36-3	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	76	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

ATTACHMENT CC-77

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

P2CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282342V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 15 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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	12	U
67-64-1	Acetone	8	JB
75-15-0	Carbon Disulfide	3	J
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

ATTACHMENT CC-78

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P2CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282342V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 15 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
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30.				

ATTACHMENT CC-79

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282342D3S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 3.3

GPC Cleanup: (Y/N) Y pH: 9.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1200	U
111-44-4	bis(-2-Chloroethyl)Ether	1200	U
95-57-8	2-Chlorophenol	1200	U
541-73-1	1,3-Dichlorobenzene	1200	U
106-46-7	1,4-Dichlorobenzene	1200	U
95-50-1	1,2-Dichlorobenzene	1200	U
95-48-7	2-Methylphenol	1200	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1200	U
106-44-5	4-Methylphenol	1200	U
621-64-7	N-Nitroso-di-n-propylamine	1200	U
67-72-1	Hexachloroethane	1200	U
98-95-3	Nitrobenzene	1200	U
78-59-1	Isophorone	1200	U
88-75-5	2-Nitrophenol	1200	U
105-67-9	2,4-Dimethylphenol	1200	U
111-91-1	bis(2-Chloroethoxy)methane	1200	U
120-83-2	2,4-Dichlorophenol	1200	U
120-82-1	1,2,4-Trichlorobenzene	1200	U
91-20-3	Naphthalene	140	J
106-47-8	4-Chloroaniline	1200	U
87-68-3	Hexachlorobutadiene	1200	U
59-50-7	4-Chloro-3-Methylphenol	1200	U
91-57-6	2-Methylnaphthalene	140	J
77-47-4	Hexachlorocyclopentadiene	1200	U
88-06-2	2,4,6-Trichlorophenol	1200	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	1200	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethylphthalate	1200	U
208-96-8	Acenaphthylene	71	J
606-20-2	2,6-Dinitrotoluene	1200	U
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	490	J

ATTACHMENT CC-80

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

P2CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 13 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	2.1	P
1024-57-3	Heptachlor epoxide	1.2	JP
959-98-8	Endosulfan I	23	
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	6.4	
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	7.0	P
7421-36-3	Endrin aldehyde	2.8	JP
5103-71-9	alpha-Chlordane	1.9	JP
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	76	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

OLM03.0

FORM I PEST

ATTACHMENT CC-83

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P2CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282342D3S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 3.3

GPC Cleanup: (Y/N) Y pH: 9.2

Number TICs found: 30

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.08	500	JB
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.26	11000	ANJB
3.	3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.84	620	ANJB
4.	132-65-0	DIBENZOTHIOPHENE	10.57	280	NJ
5.	832-71-3	PHENANTHRENE, 3-METHYL-	11.79	820	NJ
6.	2531-84-2	PHENANTHRENE, 2-METHYL-	11.85	920	NJ
7.	613-12-7	ANTHRACENE, 2-METHYL-	11.93	310	NJ
8.	203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.01	1100	NJZ
9.	610-48-0	ANTHRACENE, 1-METHYL-	12.07	490	NJ
10.	612-94-2	NAPHTHALENE, 2-PHENYL-	12.40	440	NJ
11.		UNKNOWN DIMETHYLPHENANTHRENE	12.96	310	J
12.		UNKNOWN	13.12	300	J
13.		UNKNOWN AROMATIC COMPOUND	13.55	410	J
14.	205-12-9	7H-BENZO[C]FLUORENE	14.20	450	NJ
15.	238-84-6	11H-BENZO[A]FLUORENE	14.43	1300	NJ
16.	243-17-4	11H-BENZO[B]FLUORENE	14.56	480	NJ
17.		UNKNOWN METHYLPYRENE W/ALKAN	14.63	980	JZ
18.	2381-21-7	PYRENE, 1-METHYL-	14.82	380	NJ
19.		UNKNOWN C17H12-PAH	14.88	360	J
20.		UNKNOWN ORGANIC ACID ESTER	15.40	900	JB
21.		UNKNOWN BENZANTHRACENONE	15.52	520	J
22.	239-35-0	BENZO[B]NAPHTHO[2,1-D]THIOPH	15.72	470	NJ
23.	195-19-7	BENZO[C]PHENANTHRENE	15.79	570	NJ
24.		UNKNOWN BENZANTHRACENONE	15.96	480	J
25.	92-24-0	NAPHTHACENE	16.47	430	NJ
26.		UNKNOWN C19H14-PAH	17.09	670	J
27.		UNKNOWN C19H14-PAH	17.17	390	J
28.		UNKNOWN C20H12-PAH	18.58	740	J
29.	192-97-2	BENZO[E]PYRENE	18.89	1500	NJ
30.	198-55-0	PERYLENE	19.12	490	NJ

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282342

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282342D3S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/22/96

Injection Volume: 2.0 (uL) Dilution Factor: 3.3

GPC Cleanup: (Y/N) Y pH: 9.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	380	J
~~121-14-2~~	~~2,4-Dinitrotoluene~~	1200	U
84-66-2	Diethylphthalate	1200	U
7005-72-3	4-Chlorophenyl-phenylether	1200	U
86-73-7	Fluorene	740	J
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-methylphenol	3200	U
86-30-6	N-nitrosodiphenylamine (1)	1200	U
101-55-3	4-Bromophenyl-phenylether	1200	U
118-74-1	Hexachlorobenzene	1200	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	6400	
120-12-7	Anthracene	1400	
86-74-8	Carbazole	550	J
84-74-2	Di-n-butylphthalate	1200	U
206-44-0	Fluoranthene	5600	
129-00-0	Pyrene	6600	
85-68-7	Butylbenzylphthalate	1200	U
91-94-1	3,3'-Dichlorobenzidine	1200	U
56-55-3	Benzo(a)anthracene	3100	
218-01-9	Chrysene	3100	
117-81-7	bis(2-Ethylhexyl)phthalate	1200	U
117-84-0	Di-n-octylphthalate	1200	U
205-99-2	Benzo(b)fluoranthene	2200	
207-08-9	Benzo(k)fluoranthene	1800	
50-32-8	Benzo(a)pyrene	2300	
193-39-5	Indeno(1,2,3-cd)pyrene	1800	
53-70-3	Dibenz(a,h)anthracene	850	J
191-24-2	Benzo(g,h,i)perylene	2000	
92-87-5	Benzidine	3200	U
110-86-1	Pyridine	1200	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CG-81

VOLATILE ORGANICS ANALYSIS DATA SHEET

P2CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282343

Sample wt/vol: 1.0 (g/mL) G Lab File ID: O282343DV

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 16 Date Analyzed: 01/09/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	60	U
74-83-9	Bromomethane	60	U
75-01-4	Vinyl Chloride	60	U
75-00-3	Chloroethane	60	U
75-09-2	Methylene Chloride	60	U
67-64-1	Acetone	18	JB
75-15-0	Carbon Disulfide	60	U
75-35-4	1,1-Dichloroethene	60	U
75-34-3	1,1-Dichloroethane	60	U
540-59-0	1,2-Dichloroethene (total)	60	U
67-66-3	Chloroform	60	U
107-06-2	1,2-Dichloroethane	60	U
78-93-3	2-Butanone	60	U
71-55-6	1,1,1-Trichloroethane	60	U
56-23-5	Carbon Tetrachloride	60	U
75-27-4	Bromodichloromethane	60	U
78-87-5	1,2-Dichloropropane	60	U
10061-01-5	cis-1,3-Dichloropropene	60	U
79-01-6	Trichloroethene	60	U
124-48-1	Dibromochloromethane	60	U
79-00-5	1,1,2-Trichloroethane	60	U
71-43-2	Benzene	10	J
10061-02-6	trans-1,3-Dichloropropene	60	U
75-25-2	Bromoform	60	U
108-10-1	4-Methyl-2-Pentanone	60	U
591-78-6	2-Hexanone	60	U
127-18-4	Tetrachloroethene	60	U
79-34-5	1,1,2,2-Tetrachloroethane	60	U
108-88-3	Toluene	12	J
108-90-7	Chlorobenzene	60	U
100-41-4	Ethylbenzene	19	J
100-42-5	Styrene	60	U
1330-20-7	Xylene (total)	380	

ATTACHMENT CC-84

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P2CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282343

Sample wt/vol: 1.0 (g/mL) G Lab File ID: O282343DV

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 16 Date Analyzed: 01/09/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 30

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE, METHYL-	9.46	1600	NJ
2.	UNKNOWN CYCLOHEXANE DERIVATI	10.65	1400	J
3.	UNKNOWN CYCLOHEXANE DERIVATI	11.84	1900	J
4.	UNKNOWN CYCLOHEXANE DERIVATI	12.10	1500	J
5.	UNKNOWN ALKANE	12.26	1200	J
6.	UNKNOWN CYCLOALKANE	12.74	2000	J
7.	UNKNOWN CYCLOHEXANE DERIVATI	13.12	1800	J
8.	UNKNOWN CYCLOHEXANE DERIVATI	13.49	4200	JZ
9.	UNKNOWN ALKANE W/BENZENE, (1	13.66	2000	NJZ
10.	UNKNOWN CYCLOHEXANE DERIVATI	14.03	3100	J
11. 103-65-1	BENZENE, PROPYL-	14.13	1100	NJ
12.	UNKNOWN CYCLOHEXANE DERIVATI	14.29	3600	J
13.	UNKNOWNS	14.37	2600	JZ
14.	UNKNOWN AROMATIC HYDROCARBON	14.60	2000	JZ
15.	UNKNOWN ALKANE	14.70	2800	J
16.	UNKNOWN	14.81	1500	J
17.	UNKNOWN ALKANE W/UNKNOWN	14.91	1200	JZ
18.	UNKNOWN ALKANE W/UNKNOWN	15.01	2500	JZ
19.	UNKNOWN ALKYLCYCLOHEXANE	15.15	3700	J
20. 526-73-8	BENZENE, 1,2,3-TRIMETHYL- W/	15.41	1200	NJZ
21.	UNKNOWN ALIPHATIC COMPOUND	15.57	1600	J
22.	UNKNOWN AROMATIC HYDROCARBON	15.74	3500	J
23. 91-17-8	NAPHTHALENE, DECAHYDRO- W/UN	15.90	3800	NJZ
24.	UNKNOWN CYCLOHEXANE DERIVATI	16.06	2100	J
25.	UNKNOWN CYCLOHEXANE DERIVATI	16.18	2300	J
26.	UNKNOWN CYCLOALKANES	16.35	2000	JZ
27.	UNKNOWN C3-ALKYLBENZENE	16.49	2300	J
28.	UNKNOWN AROMATIC HYDROCARBON	16.72	1300	JZ
29.	UNKNOWN CYCLOHEXANE DERIVATI	16.87	900	JZ
30.	UNKNOWN POLYCYCLIC HYDROCARB	17.03	2000	J

ATTACHMENT CC-85

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282343

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282343DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 17 decanted: (Y/N) N Date Extracted:12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/18/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	22000	U
111-44-4	bis(-2-Chloroethyl)Ether	22000	U
95-57-8	2-Chlorophenol	22000	U
541-73-1	1,3-Dichlorobenzene	22000	U
106-46-7	1,4-Dichlorobenzene	22000	U
95-50-1	1,2-Dichlorobenzene	22000	U
95-48-7	2-Methylphenol	22000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	22000	U
106-44-5	4-Methylphenol	22000	U
621-64-7	N-Nitroso-di-n-propylamine	22000	U
67-72-1	Hexachloroethane	22000	U
98-95-3	Nitrobenzene	22000	U
78-59-1	Isophorone	22000	U
88-75-5	2-Nitrophenol	22000	U
105-67-9	2,4-Dimethylphenol	22000	U
111-91-1	bis(2-Chloroethoxy)methane	22000	U
120-83-2	2,4-Dichlorophenol	22000	U
120-82-1	1,2,4-Trichlorobenzene	22000	U
91-20-3	Naphthalene	22000	U
106-47-8	4-Chloroaniline	22000	U
87-68-3	Hexachlorobutadiene	22000	U
59-50-7	4-Chloro-3-Methylphenol	22000	U
91-57-6	2-Methylnaphthalene	12000	J
77-47-4	Hexachlorocyclopentadiene	22000	U
88-06-2	2,4,6-Trichlorophenol	22000	U
95-95-4	2,4,5-Trichlorophenol	55000	U
91-58-7	2-Chloronaphthalene	22000	U
88-74-4	2-Nitroaniline	55000	U
131-11-3	Dimethylphthalate	22000	U
208-96-8	Acenaphthylene	22000	U
606-20-2	2,6-Dinitrotoluene	22000	U
99-09-2	3-Nitroaniline	55000	U
83-32-9	Acenaphthene	22000	U

ATTACHMENT CC-86

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282343

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282343DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 17 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	55000	U
100-02-7	4-Nitrophenol	55000	U
132-64-9	Dibenzofuran	22000	U
121-14-2	2,4-Dinitrotoluene	22000	U
84-66-2	Diethylphthalate	22000	U
7005-72-3	4-Chlorophenyl-phenylether	22000	U
86-73-7	Fluorene	1300	J
100-01-6	4-Nitroaniline	55000	U
534-52-1	4,6-Dinitro-2-methylphenol	55000	U
86-30-6	N-nitrosodiphenylamine (1)	22000	U
101-55-3	4-Bromophenyl-phenylether	22000	U
118-74-1	Hexachlorobenzene	22000	U
87-86-5	Pentachlorophenol	55000	U
85-01-8	Phenanthrene	3400	J
120-12-7	Anthracene	22000	U
86-74-8	Carbazole	22000	U
84-74-2	Di-n-butylphthalate	22000	U
206-44-0	Fluoranthene	22000	U
129-00-0	Pyrene	22000	U
85-68-7	Butylbenzylphthalate	22000	U
91-94-1	3,3'-Dichlorobenzidine	22000	U
56-55-3	Benzo(a)anthracene	22000	U
218-01-9	Chrysene	22000	U
117-81-7	bis(2-Ethylhexyl)phthalate	1600	BJ
117-84-0	Di-n-octylphthalate	22000	U
205-99-2	Benzo(b)fluoranthene	22000	U
207-08-9	Benzo(k)fluoranthene	22000	U
50-32-8	Benzo(a)pyrene	22000	U
193-39-5	Indeno(1,2,3-cd)pyrene	22000	U
53-70-3	Dibenz(a,h)anthracene	22000	U
191-24-2	Benzo(g,h,i)perylene	22000	U
92-87-5	Benzidine	55000	U
110-86-1	Pyridine	22000	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-87

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P2CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282343

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282343DS

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 17 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 6.9

Number TICs found: 26

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALIPHATIC COMPOUND	5.77	5200	J
2.		UNKNOWN ALIPHATIC COMPOUND	5.92	7200	J
3.		UNKNOWN C4-SUBSTITUTED BENZE	6.12	8400	JZ
4.	90-12-0	NAPHTHALENE, 1-METHYL-	7.55	11000	NJ
5.		UNKNOWN ALIPHATIC COMPOUND	8.04	7000	J
6.		UNKNOWN ALIPHATIC COMPOUND	8.07	5200	J
7.		UNKNOWN DIMETHYLNAPHTHALENE	8.34	12000	J
8.	575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.49	13000	NJ
9.		UNKNOWN DIMETHYLNAPHTHALENE	8.53	14000	JZ
10.		UNKNOWN ALIPHATIC COMPOUND	8.73	8900	JB
11.		UNKNOWN ALIPHATIC COMPOUND	8.87	11000	J
12.		UNKNOWN C3-ALKYLNAPHTHALENE	9.24	6100	J
13.		UNKNOWN C3-ALKYLNAPHTHALENE	9.43	7800	J
14.		UNKNOWN C3-ALKYLNAPHTHALENE	9.49	12000	J
15.		UNKNOWN C3-ALKYLNAPHTHALENE	9.64	8200	J
16.		UNKNOWN C3-ALKYLNAPHTHALENE	9.81	5300	J
17.		UNKNOWN C3-ALKYLNAPHTHALENE	10.06	5700	J
18.	2531-84-2	PHENANTHRENE, 2-METHYL-	12.96	6900	NJ
19.		UNKNOWN METHYLPHENANTHRENE	13.16	6500	J
20.		UNKNOWN DIMETHYLPHENANTHRENE	14.09	9000	J
21.		UNKNOWN TRIMETHYLPHENANTHREN	15.06	8100	J
22.		UNKNOWN	17.10	6000	J
23.		UNKNOWN	20.86	7700	J
24.		UNKNOWN POLYCYCLIC HYDROCARB	21.41	12000	J
25.		UNKNOWN POLYCYCLIC HYDROCARB	22.07	9900	J
26.		UNKNOWN	25.91	12000	JB
27.					
28.					
29.					
30.					

ATTACHMENT CC-88

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282343

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 17 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 01/25/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	1.4	J
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	1.5	J
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	2.6	JP
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	5.5	P
7421-36-3	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	80	U
1114-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

ATTACHMENT CC-89

VOLATILE ORGANICS ANALYSIS DATA SHEET

P2CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282344

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 0282344V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 11 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND		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	11	U
67-64-1	Acetone	12	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	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	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	11	U
591-78-6	2-Hexanone	11	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

FORM I VOA OLM03.0

ATTACHMENT CC-90

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P2CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282344

Sample wt/vol: 5.0 (g/mL) G Lab File ID: O282344V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 11 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN SILOXANE DERIVATIVE	16.70	8	J
2.				
3.				
4.				
5.				
6.				
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FORM I VOA-TIC

OLM03.0

ATTACHMENT CC-91

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282344

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282344S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 12 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.9

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
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	160	J
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	150	J
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	940	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	940	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	310	J
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	940	U
83-32-9	Acenaphthene	210	J

ATTACHMENT CC-92

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282344

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282344S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 12 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940	U
100-02-7	4-Nitrophenol	940	U
132-64-9	Dibenzofuran	180	J
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	300	J
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	940	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	940	U
85-01-8	Phenanthrene	3000	
120-12-7	Anthracene	490	
86-74-8	Carbazole	210	J
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	2600	
129-00-0	Pyrene	2900	
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	1800	
218-01-9	Chrysene	2000	
117-81-7	bis(2-Ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	2100	Y
207-08-9	Benzo(k)fluoranthene	1400	
50-32-8	Benzo(a)pyrene	1800	
193-39-5	Indeno(1,2,3-cd)pyrene	1000	
53-70-3	Dibenz(a,h)anthracene	580	
191-24-2	Benzo(g,h,i)perylene	880	
92-87-5	Benzidine	940	U
110-86-1	Pyridine	370	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT CC-93

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P2CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282344

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282344S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 12 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.9

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.36	3900	ANJB
~~2. 3744-02-3~~	~~4-PENTEN-2-ONE, 4-METHYL-~~	~~3.91~~	~~1100~~	~~ANJB~~
3.	UNKNOWN	4.49	1400	J
4. 95-13-6	INDENE	4.86	740	NJ
5.	UNKNOWN C4-SUBSTITUTED BENZE	5.17	780	J
6.	UNKNOWN C4-SUBSTITUTED BENZE	5.21	840	J
7.	UNKNOWN C4-SUBSTITUTED BENZE	5.38	610	J
8.	UNKNOWN AROMATIC COMPOUND	5.41	650	J
9.	UNKNOWN INDENE DERIVATIVE	5.58	1100	J
10.	UNKNOWN INDENE DERIVATIVE	5.64	1400	J
11.	UNKNOWN AROMATIC COMPOUND	6.09	440	J
12.	UNKNOWN	6.17	360	J
13.	UNKNOWN AROMATIC COMPOUND	6.36	520	J
14.	UNKNOWN AROMATIC COMPOUND	6.43	490	J
15.	UNKNOWN AROMATIC COMPOUND	6.80	340	J
16.	UNKNOWN AROMATIC COMPOUND	7.09	320	J
17.	UNKNOWN AROMATIC COMPOUND	7.36	850	J
18.	UNKNOWN ALIPHATIC COMPOUND	7.91	440	J
19. 832-71-3	PHENANTHRENE, 3-METHYL-	11.92	340	NJ
20. 2531-84-2	PHENANTHRENE, 2-METHYL-	11.98	340	NJ
21. 203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	12.17	420	NJZ
22.	UNKNOWN ORGANIC ACID ESTER	15.54	680	JB
23.	UNKNOWN BENZANTHRACENONE	15.70	500	J
24. 195-19-7	BENZO[C]PHENANTHRENE	15.96	420	NJ
25.	UNKNOWN BENZANTHRACENONE	16.15	500	J
26.	UNKNOWN C19H14-PAH	17.29	440	J
27. 192-97-2	BENZO[E]PYRENE	19.11	1000	NJ
28.	UNKNOWN POLYCYCLIC HYDROCARB	20.17	430	J
29.	UNKNOWN ALIPHATIC COMPOUND	20.21	420	J
30.	UNKNOWN POLYCYCLIC HYDROCARB	20.71	740	J

ATTACHMENT CC-94

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282344

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 12 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 01/25/96

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 9.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
58-89-9	gamma-BHC (Lindane)	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	54	P
60-57-1	Dieldrin	18	JP
72-55-9	4,4'-DDE	37	U
72-20-8	Endrin	37	U
33213-65-9	Endosulfan II	37	U
72-54-8	4,4'-DDD	37	U
1031-07-8	Endosulfan sulfate	37	U
50-29-3	4,4'-DDT	37	U
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	37	U
7421-36-3	Endrin aldehyde	37	U
5103-71-9	alpha-Chlordane	19	JP
5103-74-2	gamma-Chlordane	19	U
8001-35-2	Toxaphene	1900	U
12674-11-2	Aroclor-1016	370	U
11104-28-2	Aroclor-1221	750	U
1114-16-5	Aroclor-1232	370	U
53469-21-9	Aroclor-1242	370	U
12672-29-6	Aroclor-1248	370	U
11097-69-1	Aroclor-1254	370	U
11096-82-5	Aroclor-1260	370	U

ATTACHMENT CC-95

VOLATILE ORGANICS ANALYSIS DATA SHEET

P2CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282345

Sample wt/vol: 1.0 (g/mL) G Lab File ID: O282345DV

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 8 Date Analyzed: 01/09/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	54	U
74-83-9	Bromomethane	54	U
75-01-4	Vinyl Chloride	54	U
75-00-3	Chloroethane	54	U
75-09-2	Methylene Chloride	54	U
67-64-1	Acetone	36	JB
75-15-0	Carbon Disulfide	54	U
75-35-4	1,1-Dichloroethene	54	U
75-34-3	1,1-Dichloroethane	54	U
540-59-0	1,2-Dichloroethene (total)	54	U
67-66-3	Chloroform	54	U
107-06-2	1,2-Dichloroethane	54	U
78-93-3	2-Butanone	54	U
71-55-6	1,1,1-Trichloroethane	54	U
56-23-5	Carbon Tetrachloride	54	U
75-27-4	Bromodichloromethane	54	U
78-87-5	1,2-Dichloropropane	54	U
10061-01-5	cis-1,3-Dichloropropene	54	U
79-01-6	Trichloroethene	54	U
124-48-1	Dibromochloromethane	54	U
79-00-5	1,1,2-Trichloroethane	54	U
71-43-2	Benzene	54	U
10061-02-6	trans-1,3-Dichloropropene	54	U
75-25-2	Bromoform	54	U
108-10-1	4-Methyl-2-Pentanone	54	U
591-78-6	2-Hexanone	54	U
127-18-4	Tetrachloroethene	54	U
79-34-5	1,1,2,2-Tetrachloroethane	54	U
108-88-3	Toluene	54	U
108-90-7	Chlorobenzene	54	U
100-41-4	Ethylbenzene	54	U
100-42-5	Styrene	54	U
1330-20-7	Xylene (total)	50	J

ATTACHMENT CC-96

VOLATILE ORGANICS
TENTATIVELY IDENTIFIED COMPOUNDS

P2CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282345

Sample wt/vol: 1.0 (g/mL) G Lab File ID: O282345DV

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 8 Date Analyzed: 01/09/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

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

Number TICs found: 30

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN CYCLOHEXANE DERIVATI	11.08	210	J
2.		UNKNOWN ALKANE	11.46	240	J
3.		UNKNOWN ALKANE	11.60	130	J
4.		UNKNOWN CYCLOHEXANE DERIVATI	11.84	760	J
5.		UNKNOWN	12.00	160	J
6.		UNKNOWN CYCLOHEXANE DERIVATI	12.10	500	J
7.		UNKNOWN CYCLOHEXANE DERIVATI	12.57	290	J
8.		UNKNOWN CYCLOHEXANE DERIVATI	12.74	920	J
9.		UNKNOWN ALKANE	13.31	1700	J
10.		UNKNOWN ALKANE	13.48	1900	J
11.		UNKNOWN ALKANE W/UNKNOWN	13.67	1000	JZ
12.		UNKNOWN ALIPHATIC COMPOUND	14.02	2500	J
13.		UNKNOWNS	14.18	1200	JZ
14.		UNKNOWN	14.28	1500	J
15.		UNKNOWN CYCLOHEXANE DERIVATI	14.37	1400	J
16.		UNKNOWN CYCLOHEXANE DERIVATI	14.49	380	J
17.		UNKNOWN	14.63	910	J
18.		UNKNOWN	14.80	510	J
19.		UNKNOWN ALKANE W/UNKNOWN	14.91	620	JZ
20.		UNKNOWN SUBSTITUTED BENZENE	15.03	1600	JZ
21.		UNKNOWN ALKANE W/UNKNOWN	15.44	380	JZ
22.		UNKNOWN ALIPHATIC COMPOUND	15.56	1200	J
23.		UNKNOWN SUBSTITUTED BENZENES	15.72	950	JZ
24.	91-17-8	NAPHTHALENE, DECAHYDRO-	15.89	3500	NJ
25.		UNKNOWN CYCLOALKANE W/SUBSTI	16.05	570	JZ
26.		UNKNOWN CYCLOHEXANE DERIVATI	16.17	2400	J
27.		UNKNOWN CYCLOHEXANE DERIVATI	16.36	2000	J
28.		UNKNOWN AROMATIC HYDROCARBON	16.71	1700	JZ
29.		UNKNOWN	16.87	820	J
30.		UNKNOWN POLYCYCLIC HYDROCARB	17.02	2600	J

ATTACHMENT CC-97

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282345

Sample wt/vol: 1.2 (g/mL) G Lab File ID: R282345S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	9200	U
111-44-4	bis(-2-Chloroethyl)Ether	9200	U
95-57-8	2-Chlorophenol	9200	U
541-73-1	1,3-Dichlorobenzene	9200	U
106-46-7	1,4-Dichlorobenzene	9200	U
95-50-1	1,2-Dichlorobenzene	9200	U
95-48-7	2-Methylphenol	9200	U
108-60-1	2,2'-oxybis(1-Chloropropane)	9200	U
106-44-5	4-Methylphenol	9200	U
621-64-7	N-Nitroso-di-n-propylamine	9200	U
67-72-1	Hexachloroethane	9200	U
98-95-3	Nitrobenzene	9200	U
78-59-1	Isophorone	9200	U
88-75-5	2-Nitrophenol	9200	U
105-67-9	2,4-Dimethylphenol	9200	U
111-91-1	bis(2-Chloroethoxy)methane	9200	U
120-83-2	2,4-Dichlorophenol	9200	U
120-82-1	1,2,4-Trichlorobenzene	9200	U
91-20-3	Naphthalene	9200	U
106-47-8	4-Chloroaniline	9200	U
87-68-3	Hexachlorobutadiene	9200	U
59-50-7	4-Chloro-3-Methylphenol	9200	U
91-57-6	2-Methylnaphthalene	9200	U
77-47-4	Hexachlorocyclopentadiene	9200	U
88-06-2	2,4,6-Trichlorophenol	9200	U
95-95-4	2,4,5-Trichlorophenol	23000	U
91-58-7	2-Chloronaphthalene	9200	U
88-74-4	2-Nitroaniline	23000	U
131-11-3	Dimethylphthalate	9200	U
208-96-8	Acenaphthylene	9200	U
606-20-2	2,6-Dinitrotoluene	9200	U
99-09-2	3-Nitroaniline	23000	U
83-32-9	Acenaphthene	9200	U

ATTACHMENT CC-98

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282345

Sample wt/vol: 1.2 (g/mL) G Lab File ID: R282345S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	23000	U
100-02-7	4-Nitrophenol	23000	U
132-64-9	Dibenzofuran	9200	U
121-14-2	2,4-Dinitrotoluene	9200	U
84-66-2	Diethylphthalate	9200	U
7005-72-3	4-Chlorophenyl-phenylether	9200	U
86-73-7	Fluorene	910	J
100-01-6	4-Nitroaniline	23000	U
534-52-1	4,6-Dinitro-2-methylphenol	23000	U
86-30-6	N-nitrosodiphenylamine (1)	9200	U
101-55-3	4-Bromophenyl-phenylether	9200	U
118-74-1	Hexachlorobenzene	9200	U
87-86-5	Pentachlorophenol	23000	U
85-01-8	Phenanthrene	9200	U
120-12-7	Anthracene	9200	U
86-74-8	Carbazole	9200	U
84-74-2	Di-n-butylphthalate	9200	U
206-44-0	Fluoranthene	9200	U
129-00-0	Pyrene	550	J
85-68-7	Butylbenzylphthalate	9200	U
91-94-1	3,3'-Dichlorobenzidine	9200	U
56-55-3	Benzo(a)anthracene	9200	U
218-01-9	Chrysene	880	J
117-81-7	bis(2-Ethylhexyl)phthalate	1700	BJ
117-84-0	Di-n-octylphthalate	9200	U
205-99-2	Benzo(b)fluoranthene	9200	U
207-08-9	Benzo(k)fluoranthene	9200	U
50-32-8	Benzo(a)pyrene	9200	U
193-39-5	Indeno(1,2,3-cd)pyrene	9200	U
53-70-3	Dibenz(a,h)anthracene	9200	U
191-24-2	Benzo(g,h,i)perylene	9200	U
92-87-5	Benzidine	23000	U
110-86-1	Pyridine	9200	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P2CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282345

Sample wt/vol: 1.2 (g/mL) G Lab File ID: R282345S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted:12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/18/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIPHATIC COMPOUND	5.77	3700	J
2.	UNKNOWN ALIPHATIC COMPOUND	5.93	5500	J
3.	UNKNOWN	7.32	3600	J
4. 90-12-0	NAPHTHALENE, 1-METHYL- W/UNK	7.55	5500	NJZ
5.	UNKNOWN	7.78	3300	J
6.	UNKNOWN	7.89	3500	J
7.	UNKNOWN ALIPHATIC COMPOUND	8.04	8900	J
8.	UNKNOWN	8.45	3000	J
9. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.49	3700	NJ
10.	UNKNOWN ALIPHATIC COMPOUND	8.54	11000	J
11.	UNKNOWN ALIPHATIC COMPOUND	8.72	10000	J
12.	UNKNOWN	8.81	3500	J
13.	UNKNOWN ALIPHATIC COMPOUND	8.87	12000	J
14.	UNKNOWN	8.98	4400	J
15.	UNKNOWN C3-ALKYLNAPHTHALENE	9.65	5700	J
16.	UNKNOWN	9.77	3000	J
17.	UNKNOWN BIPHENYL DERIVATIVE	9.98	3100	J
18.	UNKNOWN BIPHENYL DERIVATIVE	10.09	3300	J
19.	UNKNOWN	10.36	3200	J
20.	UNKNOWN C14H12-PAH	11.17	4600	J
21.	UNKNOWN	12.19	3100	J
22.	UNKNOWN ALIPHATIC COMPOUND	12.95	3400	J
23.	UNKNOWN	13.16	3700	J
24.	UNKNOWN PNA COMPOUND	13.43	2900	J
25.	UNKNOWN DIMETHYLPHENANTHRENE	14.10	4600	J
26.	UNKNOWN C3-ALKYLPHENANTHRENE	15.07	4800	J
27.	UNKNOWN STERANE DERIVATIVE	15.58	4200	J
28.	UNKNOWN POLYCYCLIC HYDROCARB	21.98	4700	J
29.	UNKNOWN POLYCYCLIC HYDROCARB	22.07	6700	J
30.	UNKNOWN	25.92	16000	JB

ATTACHMENT CC-100

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P2CS2B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282345

Sample wt/vol: 30.4 (g/mL) G Lab File ID: _____

% Moisture: 9 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/25/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	0.98	JP
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	2.2	JP
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

ATTACHMENT CC-101

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

278

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282369

Sample wt/vol: 0.5 (g/mL) G Lab File ID: 0282369DV

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 25 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	130	U
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	130	U
67-64-1	Acetone	100	JB
75-15-0	Carbon Disulfide	130	U
75-35-4	1,1-Dichloroethene	130	U
75-34-3	1,1-Dichloroethane	130	U
540-59-0	1,2-Dichloroethene (total)	130	U
67-66-3	Chloroform	130	U
107-06-2	1,2-Dichloroethane	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	130	U
56-23-5	Carbon Tetrachloride	130	U
75-27-4	Bromodichloromethane	130	U
78-87-5	1,2-Dichloropropane	130	U
10061-01-5	cis-1,3-Dichloropropene	130	U
79-01-6	Trichloroethene	130	U
124-48-1	Dibromochloromethane	130	U
79-00-5	1,1,2-Trichloroethane	130	U
71-43-2	Benzene	130	U
10061-02-6	trans-1,3-Dichloropropene	130	U
75-25-2	Bromoform	130	U
108-10-1	4-Methyl-2-Pentanone	130	U
591-78-6	2-Hexanone	130	U
127-18-4	Tetrachloroethene	130	U
79-34-5	1,1,2,2-Tetrachloroethane	130	U
108-88-3	Toluene	130	U
108-90-7	Chlorobenzene	130	U
100-41-4	Ethylbenzene	130	U
100-42-5	Styrene	78	J
1330-20-7	Xylene (total)		

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

278

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282369

Sample wt/vol: 0.5 (g/mL) G Lab File ID: 0282369DV

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 25 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE, METHYL-	9.46	960	NJ
2. 592-27-8	HEPTANE, 2-METHYL	10.20	620	NJ
3.	UNKNOWN CYCLOHEXANE DERIVATI	11.84	1500	J
4.	UNKNOWN CYCLOHEXANE DERIVATI	12.10	930	J
5.	UNKNOWN ALKANE	12.25	1100	J
6.	UNKNOWN CYCLOHEXANE DERIVATI	12.74	1400	J
7.	UNKNOWN CYCLOHEXANE DERIVATI	13.12	1200	J
8.	UNKNOWN CYCLOHEXANE DERIVATI	13.48	2700	ZJ
9.	UNKNOWN ALKANE W/UNKNOWN	13.67	1300	JZ
10.	UNKNOWN CYCLOHEXANE DERIVATI	14.02	2500	J
11.	UNKNOWN ALIPHATIC COMPOUND W	14.16	610	JZ
12.	UNKNOWN ALKENE W/UNKNOWN	14.28	3000	JZ
13.	UNKNOWN CYCLOHEXANE DERIVATI	14.37	2000	J
14. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	14.61	2200	NJ
15.	UNKNOWN ALKANE	14.70	1700	J
16.	UNKNOWN ALKANE W/UNKNOWN	15.01	1600	ZJ
17.	UNKNOWN CYCLOHEXANE DERIVATI	15.13	2600	J
18.	UNKNOWN ALKANE W/BENZENE DER	15.44	1200	JZ
19.	UNKNOWN ALKENE	15.56	1700	J
20.	UNKNOWN AROMATIC COMPOUND	15.74	3200	J
21. 91-17-8	NAPHTHALENE, DECAHYDRO- W/UN	15.89	3000	ZNJ
22.	UNKNOWN CYCLOHEXANE DERIVATI	16.05	2000	ZJ
23.	UNKNOWN CYCLOHEXANE DERIVATI	16.17	2000	J
24.	UNKNOWN CYCLOALKANE W/ALIPHA	16.35	2300	ZJ
25.	UNKNOWN C4-ALKYLBENZENE	16.48	3100	J
26.	UNKNOWN BENZENE DERIVATIVE	16.71	2200	J
27.	UNKNOWN ALIPHATIC COMPOUNDS	16.87	900	ZJ
28.	UNKNOWN NAPHTHALENE DERIVATI	17.01	2000	J
29. 4292-92-6	CYCLOHEXANE, PENTYL-	17.14	1700	NJ
30.	UNKNOWN NAPHTHALENE DERIVATI	17.44	1800	J

ATTACHMENT CC-103 00005

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

278

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282369

Sample wt/vol: 1.0 (g/mL) G Lab File ID: R282369S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/17/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	29000	U
100-02-7	4-Nitrophenol	29000	U
132-64-9	Dibenzofuran	11000	U
121-14-2	2,4-Dinitrotoluene	11000	U
84-66-2	Diethylphthalate	11000	U
7005-72-3	4-Chlorophenyl-phenylether	11000	U
86-73-7	Fluorene	11000	U
100-01-6	4-Nitroaniline	29000	U
534-52-1	4,6-Dinitro-2-methylphenol	29000	U
86-30-6	N-nitrosodiphenylamine (1)	11000	U
101-55-3	4-Bromophenyl-phenylether	11000	U
118-74-1	Hexachlorobenzene	11000	U
87-86-5	Pentachlorophenol	29000	U
85-01-8	Phenanthrene	1900	J
120-12-7	Anthracene	11000	U
86-74-8	Carbazole	11000	U
84-74-2	Di-n-butylphthalate	11000	U
206-44-0	Fluoranthene	11000	U
129-00-0	Pyrene	1000	J
85-68-7	Butylbenzylphthalate	11000	U
91-94-1	3,3'-Dichlorobenzidine	11000	U
56-55-3	Benzo(a)anthracene	11000	U
218-01-9	Chrysene	11000	U
117-81-7	bis(2-Ethylhexyl)phthalate	11000	U
117-84-0	Di-n-octylphthalate	11000	U
205-99-2	Benzo(b)fluoranthene	11000	U
207-08-9	Benzo(k)fluoranthene	11000	U
50-32-8	Benzo(a)pyrene	11000	U
193-39-5	Indeno(1,2,3-cd)pyrene	11000	U
53-70-3	Dibenz(a,h)anthracene	11000	U
191-24-2	Benzo(g,h,i)perylene	11000	U
92-87-5	Benzidine	29000	U
110-86-1	Pyridine	11000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM03.0

ATTACHMENT CC-104 0003E

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

278

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282369

Sample wt/vol: 1.0 (g/mL) G Lab File ID: R282369S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/17/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	11000	U
111-44-4	bis(-2-Chloroethyl)Ether	11000	U
95-57-8	2-Chlorophenol	11000	U
541-73-1	1,3-Dichlorobenzene	11000	U
106-46-7	1,4-Dichlorobenzene	11000	U
95-50-1	1,2-Dichlorobenzene	11000	U
95-48-7	2-Methylphenol	11000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11000	U
106-44-5	4 Methylphenol	11000	U
621-64-7	N-Nitroso-di-n-propylamine	11000	U
67-72-1	Hexachloroethane	11000	U
98-95-3	Nitrobenzene	11000	U
78-59-1	Isophorone	11000	U
88-75-5	2-Nitrophenol	11000	U
105-67-9	2,4-Dimethylphenol	11000	U
111-91-1	bis(2-Chloroethoxy)methane	11000	U
120-83-2	2,4-Dichlorophenol	11000	U
120-82-1	1,2,4-Trichlorobenzene	11000	U
91-20-3	Naphthalene	11000	U
106-47-8	4-Chloroaniline	11000	U
87-68-3	Hexachlorobutadiene	11000	U
59-50-7	4-Chloro-3-Methylphenol	5400	J
91-57-6	2-Methylnaphthalene	11000	U
77-47-4	Hexachlorocyclopentadiene	11000	U
88-06-2	2,4,6-Trichlorophenol	29000	U
95-95-4	2,4,5-Trichlorophenol	11000	U
91-58-7	2-Chloronaphthalene	29000	U
88-74-4	2-Nitroaniline	11000	U
131-11-3	Dimethylphthalate	11000	U
208-96-8	Acenaphthylene	11000	U
606-20-2	2,6-Dinitrotoluene	29000	U
99-09-2	3-Nitroaniline	11000	U
83-32-9	Acenaphthene		

OLM03.0

FORM I SV-1

ATTACHMENT CC-105 0003

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

278

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282369

Sample wt/vol: 1.0 (g/mL) G Lab File ID: R282369S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/17/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

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

Number TICs found: 30

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE W/AROMATIC HY	6.03	2400	JZ
2.	UNKNOWN AROMATIC HYDROCARBON	6.12	5000	JZ
3.	UNKNOWN	6.69	3300	J
4.	UNKNOWN	7.17	2300	J
5.	UNKNOWN METHYLNAPHTHALENE	7.55	5500	J
6.	UNKNOWN	8.08	2900	J
7.	UNKNOWN DIMETHYLNAPHTHALENE	8.35	5400	J
8.	UNKNOWN DIMETHYLNAPHTHALENE	8.49	6500	J
9.	UNKNOWN DIMETHYLNAPHTHALENE	8.53	4900	JZ
10.	UNKNOWN ALIPHATIC COMPOUND	8.73	15000	JB
11.	UNKNOWN	8.87	3100	J
12.	UNKNOWN NAPHTHALENE DERIVATI	9.23	2900	J
13.	UNKNOWN TRIMETHYLNAPHTHALENE	9.44	3300	J
14.	UNKNOWN TRIMETHYLNAPHTHALENE	9.49	4700	JZ
15.	UNKNOWN TRIMETHYLNAPHTHALENE	9.65	3700	J
16.	UNKNOWN ALIPHATIC COMPOUND	10.70	2900	J
17.	UNKNOWN PAH	11.17	2300	J
18.	UNKNOWN PAH	12.96	3000	J
19.	UNKNOWN PAH	13.15	2600	J
20.	UNKNOWN DIMETHYLPHENANTHRENE	14.10	3500	J
21.	UNKNOWN DIMETHYLPHENANTHRENE	14.17	2400	JZ
22.	UNKNOWN TRIMETHYLPHENANTHREN	15.06	2600	J
23.	UNKNOWN	15.57	2700	J
24.	UNKNOWNS	17.11	2700	JZ
25.	UNKNOWN	17.63	3100	J
26.	UNKNOWN	18.88	2500	J
27.	UNKNOWN SILOXANE DERIVATIVE	19.23	2800	J
28.	UNKNOWN POLYCYCLIC HYDROCARB	21.41	3200	J
29.	UNKNOWN POLYCYCLIC HYDROCARB	22.07	2900	J
30.	UNKNOWN	25.92	5300	JB

ATTACHMENT CC-106 00037

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

278

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95225

Lab Code: INCHVT Case No.: PA121 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282369

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 13 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/24/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	3.6	P
959-98-8	Endosulfan I	3.8	U
60-57-1	Dieldrin	7.8	P
72-55-9	4,4'-DDE	6.4	
72-20-8	Endrin	4.2	
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.9	P
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	20	U
72-43-5	Methoxychlor	3.8	U
53494-70-5	Endrin ketone	14	
7421-36-3	Endrin aldehyde	2.0	U
5103 71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	38	U
12674-11-2	Aroclor-1016	77	U
11104-28-2	Aroclor-1221	38	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

ATTACHMENT CC-107 00066

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

279

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282370

Sample wt/vol: 4.0 (g/mL) G Lab File ID: 0282370I2V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 8 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	U
67-64-1	Acetone	5	JB
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

CLM03.0

FORM I VOA

ATTACHMENT CC-108 000111

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

279

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282370

Sample wt/vol: 4.0 (g/mL) G Lab File ID: O282370I2V

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: not dec. 8 Date Analyzed: 12/26/95

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLOHEXANE DERIVATI	12.75	7	J
2.	UNKNOWN CYCLOHEXANE DERIVATI	13.11	8	J
3.	UNKNOWN ALIPHATIC COMPOUND	13.40	8	J
4.	UNKNOWN ALKANE W/CYCLOHEXANE	13.47	11	ZJ
5.	UNKNOWN CYCLOHEXANE DERIVATI	14.03	18	J
6.	UNKNOWN CYCLOALKANE W/UNKNOW	14.18	8	JZ
7.	UNKNOWN CYCLOALKANE W/UNKNOW	14.28	15	JZ
8.	UNKNOWN ALIPHATIC COMPOUND W	14.35	11	ZJ
9.	UNKNOWN	14.63	8	J
10.	UNKNOWN C4-ALKYLBENZENE	15.05	13	J
11.	UNKNOWN CYCLOHEXANE DERIVATI	15.13	15	J
12.	UNKNOWN ALKENE	15.55	11	J
13. 91-17-8	NAPHTHALENE, DECAHYDRO-	15.88	39	NJ
14.	UNKNOWN CYCLOHEXANE DERIVATI	16.03	13	ZJ
15.	UNKNOWN CYCLOHEXANE DERIVATI	16.15	19	J
16.	UNKNOWN CYCLOHEXANE DERIVATI	16.34	20	ZJ
17.	UNKNOWN BENZENE DERIVATIVES	16.71	13	J
18.	UNKNOWNS	16.84	11	J
19.	UNKNOWN NAPHTHALENE DERIVATI	16.98	32	J
20. 4292-92-6	CYCLOHEXANE, PENTYL-	17.12	12	NJ
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ATTACHMENT CC-109000112

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

279

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282370

Sample wt/vol: 30.1 (g/mL) G Lab File ID: R282370DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	720	U
111-44-4	bis(-2-Chloroethyl)Ether	720	U
95-57-8	2-Chlorophenol	720	U
541-73-1	1,3-Dichlorobenzene	720	U
106-46-7	1,4-Dichlorobenzene	720	U
95-50-1	1,2-Dichlorobenzene	720	U
95-48-7	2-Methylphenol	720	U
108-60-1	2,2'-oxybis(1-Chloropropane)	720	U
106-44-5	4-Methylphenol	720	U
621-64-7	N-Nitroso-di-n-propylamine	720	U
67-72-1	Hexachloroethane	720	U
98-95-3	Nitrobenzene	720	U
78-59-1	Isophorone	720	U
88-75-5	2-Nitrophenol	720	U
105-67 9	2,4-Dimethylphenol	720	U
111-91-1	bis(2-Chloroethoxy)methane	720	U
120-83-2	2,4-Dichlorophenol	720	U
120-82-1	1,2,4-Trichlorobenzene	720	U
91-20-3	Naphthalene	720	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	720	U
59-50-7	4-Chloro-3-Methylphenol	720	U
91-57-6	2-Methylnaphthalene	720	U
77-47-4	Hexachlorocyclopentadiene	720	U
88-06-2	2,4,6-Trichlorophenol	720	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	720	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	720	U
208-96-8	Acenaphthylene	720	U
606-20-2	2,6-Dinitrotoluene	720	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	720	U

ATTACHMENT CC-110 000435

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

279

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282370

Sample wt/vol: 30.1 (g/mL) G Lab File ID: R282370DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/16/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	720	U
121-14-2	2,4-Dinitrotoluene	720	U
84-66-2	Diethylphthalate	720	U
7005-72-3	4-Chlorophenyl-phenylether	720	U
86-73-7	Fluorene	720	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-nitrosodiphenylamine (1)	720	U
101-55-3	4-Bromophenyl-phenylether	720	U
118-74-1	Hexachlorobenzene	720	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	720	U
120-12-7	Anthracene	720	U
86-74-8	Carbazole	720	U
84-74-2	Di-n-butylphthalate	720	U
206 44-0	Fluoranthene	720	U
129-00-0	Pyrene	720	U
85-68-7	Butylbenzylphthalate	720	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	720	U
218-01-9	Chrysene	720	U
117-81-7	bis(2-Ethylhexyl)phthalate	720	U
117-84-0	Di-n-octylphthalate	720	U
205-99-2	Benzo(b)fluoranthene	720	U
207-08-9	Benzo(k)fluoranthene	720	U
50-32-8	Benzo(a)pyrene	720	U
193-39-5	Indeno(1,2,3-cd)pyrene	720	U
53-70-3	Dibenz(a,h)anthracene	720	U
191-24-2	Benzo(g,h,i)perylene	720	U
92-87-5	Benzidine	1800	U
110-86-1	Pyridine	720	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

279

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282370

Sample wt/vol: 30.1 (g/mL) G Lab File ID: R282370DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/16/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 9.3

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

Number TICs found: 30

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALIPHATIC COMPOUND	7.16	300	J
2.		UNKNOWN	7.91	320	J
3.		UNKNOWN POLYCYCLIC HYDROCARB	8.05	460	J
4.		UNKNOWN	8.46	320	J
5.		UNKNOWN POLYCYCLIC HYDROCARB	8.54	1100	J
6.		UNKNOWN	8.63	300	J
7.		UNKNOWN ALIPHATIC COMPOUND	8.72	550	JB
8.		UNKNOWN	8.87	1200	J
9.		UNKNOWN CYCLOHEXANE DERIVATI	8.98	440	J
10.		UNKNOWN NAPHTHALENE DERIVATI	9.23	370	J
11.		UNKNOWN TRIMETHYLNAPHTHALENE	9.49	560	JZ
12.		UNKNOWN TRIMETHYLNAPHTHALENE	9.65	560	J
13.		UNKNOWN TRIMETHYLNAPHTHALENE	10.07	410	JZ
14.		UNKNOWN PAH	10.36	300	J
15.		UNKNOWN	10.75	460	J
16.		UNKNOWN	10.86	360	J
17.		UNKNOWN	11.00	330	J
18.		UNKNOWN	11.16	480	J
19.		UNKNOWN PAH	11.42	420	J
20.		UNKNOWN	11.60	410	J
21.		UNKNOWN	12.20	300	J
22.		UNKNOWN	12.95	340	J
23.		UNKNOWN PAH	14.11	590	J
24.		UNKNOWN PAH	15.08	500	J
25.		UNKNOWN ALIPHATIC ACID ESTER	16.51	610	JB
26.		UNKNOWN	17.12	440	JB
27.		UNKNOWN	20.90	480	J
28.		UNKNOWN POLYCYCLIC HYDROCARB	21.44	830	J
29.		UNKNOWN POLYCYCLIC HYDROCARB	22.01	480	J
30.		UNKNOWN POLYCYCLIC HYDROCARB	22.10	740	J

ALKANE NARRATIVE REPORT
Report date : 01/25/96
SDG: WDS1

Client Sample ID: WDS1MS Lab Sample ID: 282365MS File ID: R282365MSS

Compound	RT	Est. Conc.	Q
Cyclododecane	10.68	84	NJ

Client Sample ID: WDS1MSD Lab Sample ID: 282365MD File ID: R282365MDS

Compound	RT	Est. Conc.	Q
Cyclododecane	10.68	82	NJ

Client Sample ID: WDS1 Lab Sample ID: 282365 File ID: R282365S

Compound	RT	Est. Conc.	Q
Unknown alkane	18.45	79	J
Unknown alkane	19.08	120	J
Unknown alkane	19.68	120	J
Unknown alkane	20.92	74	J

Client Sample ID: 279 Lab Sample ID: 282370 File ID: R282370DS

Compound	RT	Est. Conc.	Q
Unknown cycloalkane	5.92	210	JZ
Unknown cycloalkane	6.78	320	J
Unknown alkane	6.97	950	J
Unknown cycloalkane	7.66	440	J
Unknown alkane	7.85	1600	J
Unknown alkane	8.59	1700	J
Unknown cycloalkane	8.94	260	J
Unknown alkane	9.42	640	J
Unknown alkane	9.53	410	J
Unknown alkane	10.28	2000	J
Unknown cycloalkane	10.45	420	J
Unknown alkane	10.81	5800	J
Unknown alkane	11.24	650	J
Unknown alkane	11.75	3900	J
Unknown alkane	11.97	460	J
Unknown alkane	12.47	1500	J
Unknown alkane	13.18	370	JZ
Unknown alkane	13.23	730	JZ
Unknown alkane	13.36	320	J
Unknown alkane	14.01	980	J

Client Sample ID: 278 Lab Sample ID: 282369 File ID: R282369S

Compound	RT	Est. Conc.	Q
Unknown cycloalkane	5.93	2800	JZ
Unknown alkane	6.51	5300	J
Unknown cycloalkane	6.78	2400	J
Unknown alkane	6.97	5700	J
Unknown cycloalkane	7.64	2900	J

ATTACHMENT CC-113

Unknown alkane	7.84	7200	J
Unknown alkane	8.59	6700	J
Unknown alkane	9.41	3400	J
Unknown alkane	10.28	7200	J
Unknown alkane	10.80	19000	J
Unknown alkane	11.73	13000	J
Unknown alkane	12.45	4700	J
Unknown alkane	13.22	2600	J
Unknown alkane	13.99	2700	J
Unknown alkane	14.83	3000	J
Unknown alkane	15.86	2600	J
Unknown alkane	17.15	2900	J

ATTACHMENT CC-114

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

279

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95225

Lab Code: INCHVT Case No.: PA121 SAS No.: SDG No.: WDS1

Matrix: (soil/water) SOIL Lab Sample ID: 282370

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 9 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 01/24/96

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

ATTACHMENT DD

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

MEMORANDUM

MAR 28 1996

TO: Kris Geller
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli GT 3/28/96
Joseph Sanguiliano 3/28/96
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Linda M. Appel LA 3/28/96
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Validation of the December 13-15, 1995 sampling events conducted at **Paperboard Specialties Inc., Paterson.** The analyses were performed by Inchcape Testing Services.

Samples Reviewed

Field ID	Lab ID	Matrix	Collection Date
EDS-1B	282328	Soil	12/15/95
EDS-2B	282330	Soil	12/15/95
EPL-1	282333	Soil	12/13/95
EPL-3	282336	Soil	12/13/95
P1-CS1A	282338	Soil	12/14/95
P1-CS1B	282339	Soil	12/14/95
P1-CS2B	282341	Soil	12/15/95
P2-CS1B	282343	Soil	12/14/95
P2-CS2A	282344	Soil	12/14/95
P2-CS2B	282345	Soil	12/14/95
WDS-1	282365	Soil	12/14/95
279	283370	Soil	12/15/95

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for Volatile Organics, Semivolatile Organics, Pesticides and PCBs. The full laboratory data

ATTACHMENT DD-1

deliverable requirements for the USEPA CLP methods are specified in the Technical Requirements for Site Remediation, N.J.A.C. 7:26 E. Please refer to the detailed data validation report and the target and non-target analyte data summary for additional information. Specific comments are provided below.

GENERAL COMMENTS

The analytical data package was well organized and all required deliverables were present.

VOLATILE ORGANICS

The Volatile Organics analysis was performed according to USEPA SOW Document No. OLM03. Please note the following:

1. The Volatile Organics data for samples 282339, 282343 and 282345 are rejected because the sample analyses exceeded the holding time. Sample 282339 exceeded the holding time by 8 days and samples 282343 and 282345 exceeded the holding time by 14 days. (Please note that the qualitative identifications for the analytes are usable; the quantitative values are not.)

2. A Volatile Organics analysis was not requested for sample 282328.

3. Samples 282333 and 282341 were analyzed at medium level and at dilutions. Sample 282339 was analyzed at medium level. The end-user is alerted that contamination may exist below the elevated detection limits for these samples.

SEMIVOLATILE ORGANICS

The Semivolatile Organics analysis was performed according to USEPA SOW Document No. OLM03 and the data are acceptable. Please note the following :

1. In the Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses, some analytes had unacceptable percent recoveries and/or unacceptable %RPDs. No action is required in this instance.

2. Samples 282328, 282330, 282333, 282339, 282341, 282343 and 282370 were analyzed at dilutions. The end-user is alerted that contamination may exist below the elevated detection limits for these samples. (Please note that samples 282328, 282330, 282336, 282338, 282344, 282365 and 282370 were analyzed according to low level analysis procedure. Samples 282333, 282339, 282341, 282343 and 282345 were analyzed according to the medium level procedure.)

ATTACHMENT DD-2

PESTICIDES and PCBs

The Pesticides/PCBs analysis was performed according to USEPA SOW Document No. OLM03 and the data are acceptable with qualifications. Please note the following :

1. All pesticide data are qualified because the percent recovery for 2,4,5-Trichlorophenol (54%) was greater than 5% for the Florisil Cartridge Performance Check analysis. The current Statement of Work, Document OLM03.0 requires the 2,4,5-Trichlorophenol recovery to be less than 5%.

2. Some of the percent recoveries for the surrogate compounds were not within the QC advisory limits for samples 282343 and 282345. No specific action is required.

3. Some of the percent differences (%D) between the concentrations calculated on each of the two different columns were greater than 25%. Those reported concentrations are quantitatively qualified. Those analytes with a %D between the concentrations calculated on each of the two different columns greater than 100% are qualified both quantitatively and qualitatively.

If you have any questions regarding this review, please do not hesitate to contact this office at 633-0752.

c. William Lowry, BEMQA
Vijayasundaram, BSM

ATTACHMENT DD-3

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc. SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282328	SVOA (1:2)	Fluorene	U	160 J	160 J	qualify	3
		Chrysene	U	140 J	140 J	qualify	3
		30 TICs were reported					
		RT 3.17	230 J	520 JB	520 JB	negate	1
		RT 3.38	3400 J	7800 JB	7800 JB	negate	1
		RT 3.93	770 J	1300 JB	1300 JB	negate	1
		The remaining 27 TICs are acceptable.				qualify	4
	PESTICIDE/PCB	Pesticides or PCBs were not detected.				qualify	5
282330	VOA	Acetone	9 J	6 JB	6 JB	negate	1
		24 TICs were reported.					
		The non-target data are acceptable.				qualify	4
	SVOA (1:4)	Pyrene	U	68 J	68 J	qualify	3
		19 TICs were reported.					
		RT 3.34	3400 J	15000 JB	15000 JB	negate	1
		RT 3.92	770 J	770 JB	770 JB	negate	1
		RT 7.90	170 J	390 JB	390 JB	negate	1
		RT 15.52	280 J	710 JB	710 JB	negate	1
		The remaining 15 TICs are acceptable.				qualify	4
	PESTICIDE/PCB	Pesticides or PCBs were not detected.				qualify	5

ATTACHMENT DD-4

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282333	VOA (1:2)	Target analytes were not detected.					
		30 TICs were reported.					
		The non-target data are acceptable.				qualify	4
	SVOA (1:6.7)	Fluorene	U	6000 J	6000 J	qualify	3
		Phenanthrene	U	8400 J	8400 J	qualify	3
		Bis(2-ethylhexyl)phthalate	2200 J	14000 JB	14000 JB	negate	1
		30 TICs were reported.					
		The non-target data are acceptable.				qualify	4
	PESTICIDE/PCB	Pesticides or PCBs were not detected.				qualify	5

ATTACHMENT DD-5

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282336	VOA	Acetone	6 J	9 JB	9 JB	negate	1
		0 TICs were reported.					
	SVOA	Naphthalene	U	79 J	79 J	qualify	3
		2-Methylnaphthalene	U	100 J	100 J	qualify	3
		Acenaphthylene	U	38 J	38 J	qualify	3
		Acenaphthene	U	35 J	35 J	qualify	3
		Fluorene	U	73 J	73 J	qualify	3
		Phenanthrene	U	470	470		
		Anthracene	U	69 J	69 J	qualify	3
		Di-n-butylphthalate	U	59 J	59 J	qualify	3
		Fluoranthene	U	580	580		
		Pyrene	U	900	900		
		Benzo(a)anthracene	U	470	470		
		Chrysene	U	640	640		
		Benzo(b)fluoranthene	U	450	450		
		Benzo(k)fluoranthene	U	480	480		
		Benzo(a)pyrene	U	620	620		
		Indeno(1,2,3-cd)pyrene	U	230 J	230 J	qualify	3
		Dibenz(a,h)anthracene	U	76 J	76 J	qualify	3
		Benzo(g,h,i)perylene	U	260 J	260 J	qualify	3
		30 TICs were reported.					
		RT 3.42	3400 J	3000 JB	3000 JB	negate	1
		RT 3.94	770 J	1400 JB	1400 JB	negate	1
		RT 9.04	96 J	120 JB	120 JB	negate	1
		RT 15.55	280 J	400 JB	400 JB	negate	1
		The remaining 26 TICs are acceptable.				qualify	4
	PEST/PCB	Aldrin	U	1.2 J	1.2 J	qualify	3,5
		Endosulfan I	U	8.2	8.2 J	qualify	5
		Endrin	U	2.5 J	2.5 J	qualify	3,5,6

ATTACHMENT DD-6

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282338	VOA	Acetone	6 J	6 JB	6 JB	negate	1
		Toluene	U	2 J	2 J	qualify	3
		0 TICs were reported.					
	SVOA	Naphthalene	U	59 J	59 J	qualify	3
		2-Methylnaphthalene	U	56 J	56 J	qualify	3
		Acenaphthylene	U	600	600		
		Acenaphthene	U	22 J	22 J	qualify	3
		Dibenzofuran	U	36 J	36 J	qualify	3
		Fluorene	U	69 J	69 J	qualify	3
		Phenanthrene	U	430	430		
		Anthracene	U	150 J	150 J	qualify	3
		Carbazole	U	52 J	52 J	qualify	3
		Di-n-butylphthalate	U	44 J	44 J	qualify	3
		Fluoranthene	U	1400	1400		
		Pyrene	U	2200	2200		
		Benzo(a)anthracene	U	1400	1400		
		Chrysene	U	1800	1800		
		Benzo(b)fluoranthene	U	2600	2600		
		Benzo(k)fluoranthene	U	2500	2500		
		Benzo(a)pyrene	U	2500	2500		
		Indeno(1,2,3-cd)pyrene	U	1000	1000		
		Dibenz(a,h)anthracene	U	500	500		
		Benzo(g,h,i)perylene	U	900	900		
		30 TICs were reported.					
		RT 3.98	770 J	1200 JB	1200 JB	negate	1
		RT 7.93	170 J	490 JB	490 JB	negate	1
		RT 15.57	280 J	420 J	420 JB	negate	1
		The remaining 27 TICs are acceptable.				qualify	4
	PEST/PCB	Endosulfan I	U	45	45 J	qualify	5
		Endosulfan Sulfate	U	12 J	12 J	qualify	3,5,6
		Endrin Ketone	U	10 J	10 J	qualify	3,5,6

ATTACHMENT DD-7

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15, 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282339	VOA	2-Butanone	650 J	690 JB	—	reject	8
		Benzene	U	1000 J	—	reject	8
		Toluene	U	640 J	—	reject	8
		Ethylbenzene	U	4000	—	reject	8
		Xylene	U	2900	—	reject	8
		30 TICs were reported.					
		The non-target data are aceptable.				reject	8
	SVOA (1:5)	Naphthalene	U	9800 J	9800 J	qualify	3
		2-Methylnaphthalene	U	91000	91000		
		Fluorene	U	9600 J	9600 J	qualify	3
		Phenanthrene	U	26000 J	26000 J	qualify	3
		Pyrene	U	8800 J	8800 J	qualify	3
		Benzo(a)anthracene	U	4400 J	4400 J	qualify	3
		Chrysene	U	9600 J	9600 J	qualify	3
		Benzo(a)pyrene	U	4300 J	4300 J	qualify	3
		30 TICs were reported.					
		The non-target data are acceptable.				qualify	4
	PEST/PCB (1:10)	gamma-BHC	U	11 J	11 J	qualify	3,5,6
		Endosulfan I	U	31 J	31 J	qualify	5,7
		4,4'-DDE	U	100 J	100 J	qualify	5,7
		Endrin	U	39 J	39 J	qualify	3,5,7
		Endosulfan II	U	34 J	34 J	qualify	3,5,6
		Endosulfan Sulfate	U	44 J	44 J	qualify	3,5,7
		Endrin Ketone	U	49	49 J	qualify	5
		alpha-Chlordane	U	28 J	28 J	qualify	5,6
		gamma-Chlordane	U	31 J	31 J	qualify	5,7

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15, 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282341	VOA (1:6.7)	Acetone	U	6200 J	6200 J	qualify	3
		Ethylbenzene	U	180000	180000		
		Xylene	U	3100 J	3100 J	qualify	3
		14 TICs were reported.					
		The non-target data are acceptable.				qualify	4
	SVOA (1:2)	Naphthalene	U	3800 J	3800 J	qualify	3
		2-Methylnaphthalene	U	10000 J	10000 J	qualify	3
		Fluorene	U	5900 J	5900 J	qualify	3
		Phenanthrene	U	18000 J	18000 J	qualify	3
		~~Anthracene~~	U	3300 J	3300 J	qualify	3
		Fluoranthene	U	8800 J	8800 J	qualify	3
		Pyrene	U	16000 J	16000 J	qualify	3
		Benzo(a)anthracene	U	6200 J	6200 J	qualify	3
		Chrysene	U	7700 J	7700 J	qualify	3
		Benzo(b)fluoranthene	U	5500 J	5500 J	qualify	3
		Benzo(a)pyrene	U	3700 J	3700 J	qualify	3
		Indeno(1,2,3-cd)pyrene	U	1800 J	1800 J	qualify	3
		Benzo(g,h,i)perylene	U	2800 J	2800 J	qualify	3
		30 TICs were reported.					
		RT 25.90	23000 J	16000 JB	16000 JB	negate	1
		The remaining 29 TICs are acceptable.				qualify	4
	PEST/PCB (1:10)	Endosulfan I	U	52 J	52 J	qualify	5,6
		4,4'-DDE	U	41 J	41 J	qualify	5,7

ATTACHMENT DD-9

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15, 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282343	VOA	Acetone	9 J	18 JB	—	reject	8
		Benzene	U	10 J	—	reject	8
		Toluene	U	12 J	—	reject	8
		Ethylbenzene	U	19 J	—	reject	8
		Xylene	U	380	—	reject	8
		30 TICs were reported.					
		The non-target data are acceptable.				reject	8
	SVOA (1:2)	2-Methylnaphthalene	U	12000 J	12000 J	qualify	3
		Fluorene	U	1300 J	1300 J	qualify	3
		Phenanthrene	U	3400 J	3400 J	qualify	3
		Bis(2-ethylhexyl)phthalate	2200 J	1600 JB	1600 JB	negate	1
		26 TICs were reported.					
		RT 8.73	8800 J	8900 JB	8900 JB	negate	1
		RT 25.91	23000 J	12000 JB	12000 JB	negate	1
		The remaining 24 TICs are acceptable.				qualify	4
	PEST/PCB	beta-BHC	U	1.4 J	1.4 J	qualify	3,5
		Endosulfan I	U	1.5 J	1.5 J	qualify	3,5
		Endosulfan II	U	2.6 J	2.6 J	qualify	3,5,6
		Endrin Ketone	U	5.5 J	5.5 J	qualify	5,6

ATTACHMENT DD-10

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc. SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282344	VOA	Acetone	6 J	12 JB	12 JB	negate	1
		1 TICs was reported.				qualify	4
	SVOA	Naphthalene	U	160 J	160 J	qualify	3
		2-Methylnaphthalene	U	150 J	150 J	qualify	3
		Acenaphthylene	U	310 J	310 J	qualify	3
		Acenaphthene	U	210 J	210 J	qualify	3
		Dibenzofuran	U	180 J	180 J	qualify	3
		Fluorene	U	300 J	300 J	qualify	3
		Phenanthrene	U	3000	3000		
		Anthracene	U	490	490		
		Carbazole	U	210 J	210 J	qualify	3
		Fluoranthene	U	2600	2600		
		Pyrene	U	2900	2900		
		Benzo(a)anthracene	U	1800	1800		
		Chrysene	U	2000	2000		
		Benzo(b)fluoranthene	U	2100	2100		
		Benzo(k)fluoranthene	U	1400	1400		
		Benzo(a)pyrene	U	1800	1800		
		Indeno(1,2,3-cd)pyrene	U	1000	1000		
		Dibenz(a,h)anthracene	U	580	580		
		Benzo(g,h,i)perylene	U	880	880		
		30 TICs were reported.					
		RT 3.36	4800 J	3900 JB	3900 JB	negate	1
		RT 3.91	780 J	1100 JB	1100 JB	negate	1
		RT 15.54	98 J	680 JB	680 JB	qualify	2
		The remaining 27 TICs are acceptable.				qualify	4
	PEST/PCB	Endosulfan I	U	54 J	54 J	qualify	5,7
		Dieldrin	U	18 J	18 J	qualify	3,5,7
		alpha-Chlordane	U	19 J	19 J	qualify	3,5,7

ATTACHMENT DD-11

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc. SAMPLING DATE: December 13-15, 1995

LAB NAME: Inchcape Testing Services SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282345	VOA	Acetone	9 J	36 JB	—	reject	8
		Xylene	U	50 J	—	reject	8
		30 TICs were reported.					
		The non-target data are acceptable.				reject	8
	SVOA	Fluorene	U	910 J	910 J	qualify	3
		Pyrene	U	550 J	550 J	qualify	3
		Chrysene	U	880 J	880 J	qualify	3
		Bis(2-ethylhexyl)phthalate	2200 J	1700 JB	1700 JB	negate	1
		30 TICs were reported.					
		RT 25.92	23000 J	16000 JB	16000 JB	negate	1
		The remaining 29 TICs are acceptable.				qualify	4
	PEST/PCB	beta-BHC	U	0.98 J	0.98 J	qualify	3,5,7
		Endrin Aldehyde	U	2.2 J	2.2 J	qualify	3,5,7

ATTACHMENT DD-12

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282365	VOA	Acetone	6 J	8 JB	8 JB	negate	1
		0 TICs reported.					
	SVOA	Di-n-butylphthalate	U	22 J	22 J	qualify	3
		Fluoranthene	U	99 J	99 J	qualify	3
		Pyrene	U	92 J	92 J	qualify	3
		Benzo(a)anthracene	U	56 J	56 J	qualify	3
		Chrysene	U	55 J	55 J	qualify	3
		Bis(2-ethylhexyl)phthalate	U	36 J	36 J	qualify	3
		Benzo(b)fluoranthene	U	39 J	39 J	qualify	3
		Benzo(k)fluoranthene	U	51 J	51 J	qualify	3
		Benzo(a)pyrene	U	50 J	50 J	qualify	3
		Indeno(1,2,3-cd)pyrene	U	27 J	27 J	qualify	3
		Benzo(g,h,i)perylene	U	27 J	27 J	qualify	3
		12 TICs were reported.					
		RT 3.62	500 J	530 JB	530 JB	negate	1
		RT 5.96	75 J	97 JB	97 JB	negate	1
		RT 8.70	440 J	560 JB	560 JB	negate	1
		RT 9.90	69 J	88 JB	88 JB	negate	1
		RT 10.68	69 J	80 J	80 JB	negate	1
		RT 15.13	84 J	89 JB	89 JB	negate	1
		RT 16.48	79 J	270 JB	270 JB	qualify	2
		RT 17.09	140 J	150 JB	150 JB	negate	1
		RT 18.86	190 J	170 JB	170 JB	negate	1
		RT 19.36	140 J	140 JB	140 JB	negate	1
		RT 20.50	150 J	160 JB	160 JB	negate	1
		RT 25.89	330 J	230 JB	230 JB	negate	1
	PEST/PCB	Pesticides or PCBs were not detected.					

ATTACHMENT DD-13

TARGET & NON-TARGET ANALYTE DATA SUMMARY

SITE NAME: Paperboard Specialties Inc.

SAMPLING DATE: December 13-15 1995

LAB NAME: Inchcape Testing Services

SAMPLE MATRIX: Soil

LAB ID	FRACTION	ANALYTE	METHOD BLANK CONC ug/Kg	LAB REPORT CONC ug/Kg	QA REPORT CONC ug/Kg	QA DECISIONS	FOOTNOTE
282370	VOA	Acetone	9 J	8 JB	8 JB	negate	1
		20 TICs reported.					
		The non-target data are acceptable.				qualify	4
	SVOA (1:2)	Target analytes were not detected.					
		30 TICs were reported.					
		RT 8.72	440 J	550 JB	550 JB	negate	1
		RT 16.51	79 J	610 JB	610 JB	qualify	2
		RT 17.12	140 J	440 JB	440 JB	negate	1
		The remaining 27 TICs are acceptable.				qualify	4
	PEST/PCB	Pesticides or PCBs were not detected.				qualify	5

ATTACHMENT DD-14

FOOTNOTES:

1. The value reported in the sample is less than or equal to three (3) times the value in the method blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

2. The value reported is greater than three (3) times the value in the method blank/prep blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to the method blank/prep blank contamination. The "B" qualifier alerts the end-user to the presence of this analyte in the method blank/prep blank.

3. The reported concentration is quantitatively qualified because the concentration is below the CRQL.

4. The non-target compound is qualified "J" and considered quantitatively to be an estimated value because relative response factors are not calculated for non-target compounds.

5. The reported Pesticide data are qualified because after the Florisil cleanup procedure, the percent recovery of 2,4,5-Trichlorophenol was greater than 5%. The method requires the percent recovery of 2,4,5-Trichlorophenol to be less than 5%.

6. The reported concentration is quantitatively qualified because the %D between the concentrations calculated for each column is greater than 25% but less than 100%. The lower of the two concentrations is reported.

7. The reported concentration is both qualitatively and quantitatively qualified because the %D between the concentrations calculated for each column is greater than 100%. The lower of the two concentrations is reported.

8. The Volatile Organics data for this sample are rejected due to the laboratory analyzing the sample beyond the holding time.

ATTACHMENT DD-15

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS3A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282331

Sample wt/vol: 30.0 (g/mL) G Lab File ID: P282331DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 7 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	710	U
111-44-4	bis(-2-Chloroethyl)Ether	710	U
95-57-8	2-Chlorophenol	710	U
541-73-1	1,3-Dichlorobenzene	710	U
106-46-7	1,4-Dichlorobenzene	710	U
95-50-1	1,2-Dichlorobenzene	710	U
95-48-7	2-Methylphenol	710	U
108-60-1	2,2'-oxybis(1-Chloropropane)	710	U
106-44-5	4-Methylphenol	710	U
621-64-7	N-Nitroso-di-n-propylamine	710	U
67-72-1	Hexachloroethane	710	U
98-95-3	Nitrobenzene	710	U
78-59-1	Isophorone	710	U
88-75-5	2-Nitrophenol	710	U
105-67-9	2,4-Dimethylphenol	710	U
111-91-1	bis(2-Chloroethoxy)methane	710	U
120-83-2	2,4-Dichlorophenol	710	U
120-82-1	1,2,4-Trichlorobenzene	710	U
91-20-3	Naphthalene	710	U
106-47-8	4-Chloroaniline	710	U
87-68-3	Hexachlorobutadiene	710	U
59-50-7	4-Chloro-3-Methylphenol	710	U
91-57-6	2-Methylnaphthalene	710	U
77-47-4	Hexachlorocyclopentadiene	710	U
88-06-2	2,4,6-Trichlorophenol	710	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	710	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	710	U
208-96-8	Acenaphthylene	710	U
606-20-2	2,6-Dinitrotoluene	710	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	710	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS3A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282331

Sample wt/vol: 30.0 (g/mL) G Lab File ID: P282331DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 7 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	710	U
121-14-2	2,4-Dinitrotoluene	710	U
84-66-2	Diethylphthalate	710	U
7005-72-3	4-Chlorophenyl-phenylether	710	U
86-73-7	Fluorene	710	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-nitrosodiphenylamine (1)	710	U
101-55-3	4-Bromophenyl-phenylether	710	U
118-74-1	Hexachlorobenzene	710	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	130	J
120-12-7	Anthracene	710	U
86-74-8	Carbazole	710	U
84-74-2	Di-n-butylphthalate	710	U
206-44-0	Fluoranthene	160	J
129-00-0	Pyrene	220	J
85-68-7	Butylbenzylphthalate	710	U
91-94-1	3,3'-Dichlorobenzidine	710	U
56-55-3	Benzo(a)anthracene	100	J
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)phthalate	710	U
117-84-0	Di-n-octylphthalate	710	U
205-99-2	Benzo(b)fluoranthene	86	J
207-08-9	Benzo(k)fluoranthene	53	J
50-32-8	Benzo(a)pyrene	140	J
193-39-5	Indeno(1,2,3-cd)pyrene	52	J
53-70-3	Dibenz(a,h)anthracene	710	U
191-24-2	Benzo(g,h,i)perylene	83	J
92-87-5	Benzidine	1800	U
110-86-1	Pyridine	710	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM03.0

ATTACHMENT EE-8

1F

SEMIVOLATILE ORGANICS LYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS3A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282331

Sample wt/vol: 30.0 (g/mL) G Lab File ID: P282331DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 7 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs found: 24

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.15	470	JB
2. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.36	9000	ANJB
3. 3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.91	860	ANJB
4.	UNKNOWN ALIPHATIC COMPOUND	7.90	240	JB
5.	UNKNOWN	9.02	160	JB
6.	UNKNOWN	13.14	180	J
7.	UNKNOWN	13.32	230	J
8.	UNKNOWN ALIPHATIC COMPOUND	13.70	470	J
9.	UNKNOWN ALIPHATIC COMPOUND	14.08	400	J
10.	UNKNOWN ALIPHATIC COMPOUND	14.18	680	J
11.	UNKNOWN	14.38	620	J
12.	UNKNOWN ALIPHATIC COMPOUND	15.25	640	J
13.	UNKNOWN ALIPHATIC COMPOUND	15.97	840	J
14.	UNKNOWN ALIPHATIC COMPOUND	16.14	460	J
15.	UNKNOWN ALIPHATIC COMPOUND	18.01	650	J
16.	UNKNOWN	18.64	710	J
17.	UNKNOWN ALIPHATIC COMPOUND	20.05	1100	J
18.	UNKNOWN POLYCYCLIC HYDROCARB	20.22	2200	J
19.	UNKNOWN ALIPHATIC COMPOUND	20.53	1000	J
20.	UNKNOWN POLYCYCLIC HYDROCARB	20.68	160	J
21.	UNKNOWN POLYCYCLIC HYDROCARB	20.75	1400	J
22.	UNKNOWN POLYCYCLIC HYDROCARB	21.43	300	J
23.	UNKNOWN ALIPHATIC COMPOUND	21.52	370	J
24.	UNKNOWN POLYCYCLIC HYDROCARB	22.00	250	J
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC OLM03.0

ATTACHMENT EE-9

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282334

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282334D2S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.3

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	15000	U
111-44-4	bis(-2-Chloroethyl)Ether	15000	U
95-57-8	2-Chlorophenol	15000	U
541-73-1	1,3-Dichlorobenzene	15000	U
106-46-7	1,4-Dichlorobenzene	15000	U
95-50-1	1,2-Dichlorobenzene	15000	U
95-48-7	2-Methylphenol	15000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	15000	U
106-44-5	4-Methylphenol	15000	U
621-64-7	N-Nitroso-di-n-propylamine	15000	U
67-72-1	Hexachloroethane	15000	U
98-95-3	Nitrobenzene	15000	U
78-59-1	Isophorone	15000	U
88-75-5	2-Nitrophenol	15000	U
105-67-9	2,4-Dimethylphenol	15000	U
111-91-1	bis(2-Chloroethoxy)methane	15000	U
120-83-2	2,4-Dichlorophenol	15000	U
120-82-1	1,2,4-Trichlorobenzene	15000	U
91-20-3	Naphthalene	15000	U
106-47-8	4-Chloroaniline	3400	J
87-68-3	Hexachlorobutadiene	15000	U
59-50-7	4-Chloro-3-Methylphenol	15000	U
91-57-6	2-Methylnaphthalene	15000	U
77-47-4	Hexachlorocyclopentadiene	5100	J
88-06-2	2,4,6-Trichlorophenol	15000	U
95-95-4	2,4,5-Trichlorophenol	15000	U
91-58-7	2-Chloronaphthalene	37000	U
88-74-4	2-Nitroaniline	15000	U
131-11-3	Dimethylphthalate	37000	U
208-96-8	Acenaphthylene	15000	U
606-20-2	2,6-Dinitrotoluene	1200	J
99-09-2	3-Nitroaniline	15000	U
83-32-9	Acenaphthene	37000	U
		8800	J

ATTACHMENT EE-10

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EPL2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282334

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282334D2S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.3

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	37000	U
100-02-7	4-Nitrophenol	37000	U
132-64-9	Dibenzofuran	5600	J
121-14-2	2,4-Dinitrotoluene	15000	U
84-66-2	Diethylphthalate	15000	U
7005-72-3	4-Chlorophenyl-phenylether	15000	U
86-73-7	Fluorene	13000	J
100-01-6	4-Nitroaniline	37000	U
534-52-1	4,6-Dinitro-2-methylphenol	37000	U
86-30-6	N-nitrosodiphenylamine (1)	15000	U
101-55-3	4-Bromophenyl-phenylether	15000	U
118-74-1	Hexachlorobenzene	15000	U
87-86-5	Pentachlorophenol	37000	U
85-01-8	Phenanthrene	100000	
120-12-7	Anthracene	26000	
86-74-8	Carbazole	3000	J
84-74-2	Di-n-butylphthalate	15000	U
206-44-0	Fluoranthene	77000	
129-00-0	Pyrene	91000	
85-68-7	Butylbenzylphthalate	15000	U
91-94-1	3,3'-Dichlorobenzidine	15000	U
56-55-3	Benzo(a)anthracene	37000	
218-01-9	Chrysene	36000	
117-81-7	bis(2-Ethylhexyl)phthalate	15000	U
117-84-0	Di-n-octylphthalate	15000	U
205-99-2	Benzo(b)fluoranthene	22000	Y
207-08-9	Benzo(k)fluoranthene	27000	
50-32-8	Benzo(a)pyrene	34000	
193-39-5	Indeno(1,2,3-cd)pyrene	20000	
53-70-3	Dibenz(a,h)anthracene	9400	J
191-24-2	Benzo(g,h,i)perylene	26000	
92-87-5	Benzidine	37000	U
110-86-1	Pyridine	15000	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT EE-11

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EPL2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282334

Sample wt/vol: 1.1 (g/mL) G Lab File ID: R282334D2S

Level: (low/med) MED Date Received: 12/16/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/19/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.3

GPC Cleanup: (Y/N) Y pH: 7.6

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 90-12-0	NAPHTHALENE, 1-METHYL-	7.56	4600	NJ
2. 575-41-7	NAPHTHALENE, 1,3-DIMETHYL-	8.51	5700	NJ
3.	UNKNOWN ALIPHATIC COMPOUND	8.73	14000	JB
4. 132-65-0	DIBENZOTHIOPHENE	11.68	6300	NJ
5.	UNKNOWN C16H12-PAH	12.54	4400	J
6. 832-71-3	PHENANTHRENE, 3-METHYL-	12.93	16000	J
7. 2531-84-2	PHENANTHRENE, 2-METHYL-	12.99	19000	J
8. 613-12-7	ANTHRACENE, 2-METHYL-	13.06	7600	J
9.	UNKNOWN METHYLPHENANTHRENE W	13.17	26000	JZ
10. 612-94-2	NAPHTHALENE, 2-PHENYL-	13.55	10000	NJ
11.	UNKNOWN DIMETHYLPHENANTHRENE	13.87	4300	J
12.	UNKNOWN DIMETHYLPHENANTHRENE	13.96	4000	J
13.	UNKNOWN DIMETHYLPHENANTHRENE	14.11	6100	J
14.	UNKNOWN	14.18	5200	J
15.	UNKNOWN AROMATIC COMPOUND	14.74	3800	J
16.	UNKNOWN C17H12-PAH	15.40	5100	J
17. 238-84-6	11H-BENZO[A]FLUORENE	15.61	12000	NJ
18. 243-17-4	11H-BENZO[B]FLUORENE	15.75	6800	NJ
19.	UNKNOWN METHYLPYRENE	15.83	7700	J
20. 2381-21-7	PYRENE, 1-METHYL-	16.03	4500	NJ
21.	UNKNOWN C17H12-PAH	16.09	5500	J
22. 239-35-0	BENZO[B]NAPHTHO[2,1-D]THIOPH	16.94	6200	NJ
23. 195-19-7	BENZO[C]PHENANTHRENE	17.01	10000	NJ
24. 92-24-0	NAPHTHACENE	17.70	7200	NJ
25.	UNKNOWN C19H14-PAH	18.32	9000	J
26.	UNKNOWN C19H14-PAH	18.40	5800	J
27.	UNKNOWN C19H14-PAH W/UNKNOWN	18.49	5900	JZ
28.	UNKNOWN C20H14-PAH W/UNKNOWN	18.62	6000	JZ
29. 192-97-2	BENZO[E]PYRENE	20.15	22000	NJ
30.	UNKNOWN	25.96	11000	JB

ATTACHMENT EE-12

ATTACHMENT EE

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282327

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282327S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 6 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(-2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	350	U
91-58-7	2-Chloronaphthalene	880	U
88-74-4	2-Nitroaniline	350	U
131-11-3	Dimethylphthalate	880	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	350	U
83-32-9	Acenaphthene	880	U
		350	U

FORM I SV-1

OLM03.0

ATTACHMENT EE-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282327

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282327S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 6 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/18/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	880	U
534-52-1	4,6-Dinitro-2-methylphenol	880	U
86-30-6	N-nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	880	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	20	J
129-00-0	Pyrene	23	J
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	20	J
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenz(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U
92-87-5	Benzidine	880	U
110-86-1	Pyridine	350	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS1A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282327

Sample wt/vol: 30.2 (g/mL) G Lab File ID: P282327S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 6 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.0

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.17	260	JB
2. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.39	3600	ANJB
3. 3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.93	770	ANJB
4.	UNKNOWN ALIPHATIC COMPOUND	7.93	440	JB
5.	UNKNOWN	9.83	120	J
6.	UNKNOWN ORGANIC ACID ESTER	15.55	89	JB
7.	UNKNOWN ALIPHATIC COMPOUND	16.15	76	J
8.	UNKNOWN ALIPHATIC COMPOUND	17.92	160	JB
9.	UNKNOWN	18.38	84	JB
10.	UNKNOWN ALIPHATIC COMPOUND	19.50	120	J
11.	UNKNOWN	23.88	310	JB
12.				
13.				
14.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS2A

Lab Name: CHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282329

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282329S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 6 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(-2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
~~541-73-1~~	~~1,3-Dichlorobenzene~~	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	880	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	880	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	880	U
83-32-9	Acenaphthene	350	U

ATTACHMENT EE-4

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS2A

Lab Name: ‸ ‴CAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282329

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282329S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 6 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	880	U
534-52-1	4,6-Dinitro-2-methylphenol	880	U
86-30-6	N-nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	880	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	36	J
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenz(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U
92-87-5	Benzidine	880	U
110-86-1	Pyridine	350	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCH Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282329

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282329S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 6 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs found: 14

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.18	320	JB
2. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.42	4000	ANJB
3.	UNKNOWN ALIPHATIC COMPOUND	3.67	280	J
4. 3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.94	1400	ANJB
5.	UNKNOWN ALIPHATIC COMPOUND	7.93	320	JB
6.	UNKNOWN	9.05	130	JB
7.	UNKNOWN	9.83	100	J
8.	UNKNOWN ORGANIC ACID ESTER	15.55	300	JB
9.	UNKNOWN ALIPHATIC COMPOUND	16.16	100	J
10.	UNKNOWN ALIPHATIC COMPOUND	17.91	260	JB
11.	UNKNOWN	18.38	100	JB
12.	UNKNOWN ALIPHATIC COMPOUND	19.51	200	J
13.	UNKNOWN ALIPHATIC COMPOUND	21.13	95	J
14.	UNKNOWN	23.89	310	JB
15.				
16.				
17.				
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ATTACHMENT EE-C

ATTACHMENT FF

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282328

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282328DS

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(-2-Chloroethyl)Ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
108-60-1	2,2'-oxybis(1-Chloropropane)	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-di-n-propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
111-91-1	bis(2-Chloroethoxy)methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	730	U
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-Methylphenol	730	U
91-57-6	2-Methylnaphthalene	730	U
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	730	U
208-96-8	Acenaphthylene	730	U
606-20-2	2,6-Dinitrotoluene	730	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	730	U

ATTACHMENT EF-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282328

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282328DS

Level: (low/m d) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	730	U
121-14-2	2,4-Dinitrotoluene	730	U
84-66-2	Diethylphthalate	730	U
7005-72-3	4-Chlorophenyl-phenylether	730	U
86-73-7	Fluorene	160	J
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-nitrosodiphenylamine (1)	730	U
101-55-3	4-Bromophenyl-phenylether	730	U
118-74-1	Hexachlorobenzene	730	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	730	U
120-12-7	Anthracene	730	U
86-74-8	Carbazole	730	U
84-74-2	Di-n-butylphthalate	730	U
206-44-0	Fluoranthene	730	U
129-00-0	Pyrene	730	U
85-68-7	Butylbenzylphthalate	730	U
91-94-1	3,3'-Dichlorobenzidine	730	U
56-55-3	Benzo(a)anthracene	730	U
218-01-9	Chrysene	140	J
117-81-7	bis(2-Ethylhexyl)phthalate	730	U
117-84-0	Di-n-octylphthalate	730	U
205-99-2	Benzo(b)fluoranthene	730	U
207-08-9	Benzo(k)fluoranthene	730	U
50-32-8	Benzo(a)pyrene	730	U
193-39-5	Indeno(1,2,3-cd)pyrene	730	U
53-70-3	Dibenz(a,h)anthracene	730	U
191-24-2	Benzo(g,h,i)perylene	730	U
92-87-5	Benzidine	1800	U
110-86-1	Pyridine	730	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT FF-2

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282328

Sample wt/vol: 30.3 (g/mL) G Lab File ID: P282328DS

Level: (low/me) LOW Date Received: 12/16/95

% Moisture: 10 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 8.6

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.17	520	JB
2. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.38	7800	ANJB
3. 3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.93	1300	ANJB
4.	UNKNOWN ALIPHATIC COMPOUND	5.44	420	J
5.	UNKNOWN ALIPHATIC COMPOUND	6.49	660	J
6.	UNKNOWN ALIPHATIC COMPOUND	6.55	370	J
7.	UNKNOWN ALIPHATIC COMPOUND	6.62	590	J
8.	UNKNOWN ALIPHATIC COMPOUND	6.79	470	J
9.	UNKNOWN NAPHTHALENE DERIVATI	6.84	480	J
10.	UNKNOWN	7.00	480	J
11.	UNKNOWN	7.04	680	J
12.	UNKNOWN	7.15	660	J
13.	UNKNOWN ALIPHATIC COMPOUND	7.29	1200	J
14.	UNKNOWN ALIPHATIC COMPOUND	7.44	750	J
15.	UNKNOWN	7.52	430	J
16.	UNKNOWN	7.59	480	J
17.	UNKNOWN	7.64	560	J
18.	UNKNOWN	7.69	670	J
19.	UNKNOWN ALIPHATIC COMPOUND	7.75	1400	J
20.	UNKNOWN	7.86	490	J
21.	UNKNOWN ALIPHATIC COMPOUND	8.06	1700	J
22.	UNKNOWN	8.16	680	J
23.	UNKNOWN	8.31	500	J
24.	UNKNOWN C3-ALKYLNAPHTHALENE	8.81	460	J
25.	UNKNOWN	8.92	420	J
26.	UNKNOWN C3-ALKYLNAPHTHALENE	9.21	400	JZ
27.	UNKNOWN	9.25	380	J
28.	UNKNOWN METHYLFLUORENE W/UNK	10.29	950	JZ
29.	UNKNOWNS	10.74	590	JZ
30.	UNKNOWN POLYCYCLIC HYDROCARB	20.75	1600	J

FORM I SV-TIC

OLM03.0

ATTACHMENT FF-3

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS1B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282328

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

ATTACHMENT FF-4

1B
SEMIVOLATILE ORGANICS A' 'IS DATA SHEET

EPA SAMPLE NO.

EDS3B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282332

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282332S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

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
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
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	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

ATTACHMENT FF-5

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS3B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282332

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282332S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	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	360	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	900	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	900	U
120-12-7	Anthracene	67	J
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	20	J
129-00-0	Pyrene	100	J
85-68-7	Butylbenzylphthalate	110	J
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	49	J
117-81-7	bis(2-Ethylhexyl)phthalate	58	J
117-84-0	Di-n-octylphthalate	29	J
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	44	J
50-32-8	Benzo(a)pyrene	57	J
193-39-5	Indeno(1,2,3-cd)pyrene	43	J
53-70-3	Dibenz(a,h)anthracene	31	J
191-24-2	Benzo(g,h,i)perylene	360	U
92-87-5	Benzidine	40	J
110-86-1	Pyridine	900	U
		360	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT FF-6

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDS3B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282332

Sample wt/vol: 30.1 (g/mL) G Lab File ID: P282332S

Level: (low/med) LOW Date Received: 12/16/95

% Moisture: 8 decanted: (Y/N) N Date Extracted: 12/26/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 01/18/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5

Number TICs found: 14

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.18	310	JB
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.43	4000	ANJB
3.		UNKNOWN ALIPHATIC COMPOUND	3.67	310	J
4.	3744-02-3	4-PENTEN-2-ONE, 4-METHYL-	3.94	1600	ANJB
5.		UNKNOWN ALIPHATIC COMPOUND	4.03	93	J
6.		UNKNOWN ALIPHATIC COMPOUND	7.93	410	JB
7.		UNKNOWN	9.05	160	JB
8.		UNKNOWN	9.83	140	J
9.		UNKNOWN ORGANIC ACID ESTER	15.55	860	JB
10.		UNKNOWN ALIPHATIC COMPOUND	16.16	94	J
11.		UNKNOWN ALIPHATIC COMPOUND	17.91	220	JB
12.		UNKNOWN ALIPHATIC COMPOUND	19.51	170	J
13.		UNKNOWN ALIPHATIC COMPOUND	21.14	100	J
14.		UNKNOWN	23.90	240	JB
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I SV-TIC

OLM03.0

ATTACHMENT FF-7

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDS3B

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA121395 SAS No.: SDG No.: EDS1A

Matrix: (soil/water) SOIL Lab Sample ID: 282332

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 8 decanted: (Y/N) N Date Received: 12/16/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/24/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	72	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

ATTACHMENT FF-8

ATTACHMENT GG

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION & ENERGY
TRENTON, NEW JERSEY 08625

DIVISION: PFSR

BUREAU: EMSA

CASE NAME: PA121395

CASE #: —

Note: This is a two sided form. Data Qualifiers on reverse side.

FIELD SAMPLE NUMBERS	LABORATORY SAMPLE NUMBERS	SAMPLE LOCATION	DATE and TIME OF COLLECTION
EDS-1B	226324	*	12/15/95 1430-1435 HRS
EDS-2B	226325	*	12/15/95 1445-1450 HRS
EDS-3B	226326	*	12/15/95 1455-1500 HRS
WDS-1	226327	*	12/14/95 1245-1250 HRS
WDS-2	226328	*	12/15/95 1240-1247 HRS
WDS-3	226329	*	12/15/95 1313-1320 HRS
P1-CS2A	226330	*	12/15/95 1130-1145 HRS
P1-CS2B	226331	*	12/15/95 1155-1210 HRS
P1-CS1A	226332	*	12/14/95 1600-1605 HRS
P1-CS1B	226333	*	12/14/95 1625-1635 HRS
EPL-1	226334	*	12/13/95 1145-1150 HRS
EPL-3	226335	*	12/13/95 1342-1347 HRS
EPL-4	226336	*	12/13/95 1215-1220 HRS
EPL-2B	226337	*	12/13/95 1105-1110 HRS
P2-CS1A	226338	*	12/14/95 1460-1505 HRS
P2-CS1B	226339	*	12/14/95 1530-1545 HRS
P2-CS2A	226340	*	12/14/95 1430-1445 HRS
P2-CS2B	226341	*	12/14/95 1410-1415 HRS
278	226342	*	12/14/95 1640-1655 HRS

LABORATORY NAME: ~~RCM Laboratories, Inc.~~ INDUSTRIAL CORROSION MGMT, INC

LOCATION: 1152 Rt. 10 Randolph, NJ 07869

NJDEPE CERTIFICATION No: 14116 (IF APPLICABLE)

DATE SUBMITTED: 1/23/96

PAULA K. BLAZE
LABORATORY QA OFFICER (PRINT)

Paula Kolenc Blaze
LABORATORY QA OFFICER: (SIGNATURE)

RICHARD S. LEVINE
LABORATORY MANAGER: (PRINT)

Richard S. Levine
LABORATORY MANAGER: (SIGNATURE)

NJDEPE FORM A-1A (9/91)

* INFORMATION NOT SUPPLIED ON DEP-096 FORM

ATTACHMENT GG-1

GENERAL ANALYSIS DATA SHEET

Sample: EDS-18

LABORATORY NAME: ICM
LAB SAMPLE ID No: 226324
SAMPLE MATRIX: SOIL
EXTRACTION METHOD: 418.1 (mod. freon)
ANALYTICAL METHOD #: 418.1 (mod. freon)
PERCENT MOISTURE: (Not Decanted) 11
DATA RELEASE AUTHORIZED BY: [illegible]
DECANTED: YES NO (circle one)

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 12/15/95
DATE EXTRACTED/PREPARED: 01/05/96
DATE ANALYZED: 01/09/96
CONC./DIL/ FACTOR: 5.00
SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	540	U	24

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-2

PPM

GENERAL ANALYSIS DATA SHEET

Sample: EDS-2B

LABORATORY NAME: ICM
LAB SAMPLE ID No: 226325
SAMPLE MATRIX: Soil
EXTRACTION METHOD: 418.1 (mod. freon)
ANALYTICAL METHOD #: 418.1 (mod. freon)
PERCENT MOISTURE: (Not Decanted) 8.6
DATA RELEASE AUTHORIZED BY:
DECANTED: YES NO (circle one)

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 12/15/95
DATE EXTRACTED/PREPARED: 01/05/96
DATE ANALYZED: 01/09/96
CONC./DIL/ FACTOR: 1.00
SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	360	U	24

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-3

GENERAL ANALYSIS DATA SHEET

Sample: EDS - 3B

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226326

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 7.4

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	30	U	24

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-4

GENERAL ANALYSIS DATA SHEET

Sample: EPL-1

LABORATORY NAME: TCM

LAB SAMPLE ID No: 226334

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. Freed)

ANALYTICAL METHOD #: 418.1 (mod. Freed)

PERCENT MOISTURE: (Not Decanted) 20

DATA RELEASE AUTHORIZED BY: [illegible]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 12/21/95

DATE ANALYZED: 12/22/95

CONC./DIL/ FACTOR: 50.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/Kg	METHOD BLANK (UNITS:) mg/Kg	METHOD DETECTION LIMITS
TPHC	3600	U	27

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-5

/

GENERAL ANALYSIS DATA SHEET

Sample: EPL-2B

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226337

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. Freed)

ANALYTICAL METHOD #: 418.1 (mod. Freed)

PERCENT MOISTURE: (Not Decanted) 12

DATA RELEASE AUTHORIZED BY: [illegible]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 12/21/95

DATE ANALYZED: 12/22/95

CONC./DIL/ FACTOR: 25.00

SAMPLE WT/VOL: 2g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	2400	U	24

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-6

GENERAL ANALYSIS DATA SHEET

Sample: EPL-3

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226335

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. Freed)

ANALYTICAL METHOD #: 418.1 (mod. Freed)

PERCENT MOISTURE: (Not Decanted) 18

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 12/21/95

DATE ANALYZED: 12/22/95

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	40	U	27

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-7

GENERAL ANALYSIS DATA SHEET

Sample: EPL - 4

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226 336

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 21

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 12/21/95

DATE ANALYZED: 12/22/95

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	43	U	28

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT G9-8

GENERAL ANALYSIS DATA SHEET

Sample: P1-CS1A

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226332

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 9.8

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	210	U	24

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-9

GENERAL ANALYSIS DATA SHEET

Sample: P1-CS1B

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226333

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 24

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 200.0

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	54000	U	30

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-10

GENERAL ANALYSIS DATA SHEET

Sample: P1-CS2A

LABORATORY NAME: ICM
LAB SAMPLE ID No: 226330
SAMPLE MATRIX: SOIL
EXTRACTION METHOD: 418.1 (mod. freon)
ANALYTICAL METHOD #: 418.1 (mod. freon)
PERCENT MOISTURE: (Not Decanted) 35
DATA RELEASE AUTHORIZED BY:
DECANTED: YES NO (circle one)

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 12/15/95
DATE EXTRACTED/PREPARED: 01/05/96
DATE ANALYZED: 01/09/96
CONC./DIL/ FACTOR: 25.00
SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	3400	U	25

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-11

GENERAL ANALYSIS DATA SHEET

Sample: P1-CS2B

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226331

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. Freed)

ANALYTICAL METHOD #: 418.1 (mod. Freed)

PERCENT MOISTURE: (Not Decanted) 13

DATA RELEASE AUTHORIZED BY: [illegible]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 25.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	10000	U	27

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-12

GENERAL ANALYSIS DATA SHEET

Sample: P2-CS1A

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226338

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. Freed)

ANALYTICAL METHOD #: 418.1 (mod. Freed)

PERCENT MOISTURE: (Not Decanted) 15

DATA RELEASE AUTHORIZED BY: [illegible]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	200	U	25

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-13

GENERAL ANALYSIS DATA SHEET

Sample: P2-CS 1B

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226339

SAMPLE MATRIX: Soil

EXTRACTION METHOD: 418.1 (mod. Freed)

ANALYTICAL METHOD #: 418.1 (mod. Freed)

PERCENT MOISTURE: (Not Decanted) 16

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 25.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	5000	U	27

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-14

GENERAL ANALYSIS DATA SHEET

Sample: P2 - CS2A

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226340

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 12

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	84	U	26

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-15

GENERAL ANALYSIS DATA SHEET

Sample: P2 - CS2B

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226341

SAMPLE MATRIX: Soil

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 3.0

DATA RELEASE AUTHORIZED BY: [signature]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 25.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	8800	U	23

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-16

GENERAL ANALYSIS DATA SHEET

Sample: WDS-1

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226327

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. Grad)

ANALYTICAL METHOD #: 418.1 (mod. Grad)

PERCENT MOISTURE: (Not Decanted) 9.0

DATA RELEASE AUTHORIZED BY: [illegible]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	36	U	24

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-17

GENERAL ANALYSIS DATA SHEET

Sample: WDS-2

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226328

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 8.4

DATA RELEASE AUTHORIZED BY: [illegible]

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	U	U	23

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-18

GENERAL ANALYSIS DATA SHEET

Sample: WDS-3

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226329

SAMPLE MATRIX: SOIL

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 10

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	29	U	25

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-19

GENERAL ANALYSIS DATA SHEET

Sample: 278

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226342

SAMPLE MATRIX: Soil

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 13

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 25.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	3000	U	25

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-2

GENERAL ANALYSIS DATA SHEET

Sample: 279

LABORATORY NAME: ICM

LAB SAMPLE ID No: 226343

SAMPLE MATRIX: Soil

EXTRACTION METHOD: 418.1 (mod. freon)

ANALYTICAL METHOD #: 418.1 (mod. freon)

PERCENT MOISTURE: (Not Decanted) 8.6

DATA RELEASE AUTHORIZED BY:

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 12/15/95

DATE EXTRACTED/PREPARED: 01/05/96

DATE ANALYZED: 01/09/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 21g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
TPHC	350	U	23

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT GG-21