

164SERBSF10,610

164SERBSF10,610

Site Name (Subject): PEELE CO. PESTICIDE DISPOSAL

Site ID (Document ID): NCD986171338

Document Name (DocType): Correspondence (C)

Report Segment: 2

Description: General Correspondence, 1993 - 2004

Date of Document: 5/7/2004

Date Received: 5/12/2004

Box: *Enter SF and # with no spaces* SF10,610

Access Level: PUBLIC

Division: WASTE MANAGEMENT

Section: SUPERFUND

Program (Document Group): SERB (SERB)

Document Category: FACILITY

Print Report for Record

Go to New Blank Record

Go to New Record - (default to last record values)

Delete Record

Peele Pesticide Disposal Site

NCD 986 171 338

Folders

1. General Correspondence file, 1989—1992
2. General Correspondence file, 1993—
3. Maps
4. Photographs
5. Legal Documents
6. Health and Safety Plan: December 1993

Bound Reports

7. Preliminary Assessment: November 1989
8. Screening Site Investigation, Volume I—Text and Appendices A and B: October 1990
9. Screening Site Investigation, Volume II—Appendices C and D: October 1990
10. Phase I Expanded Site Investigation: August 1992
11. Expanded Site Inspection, Volume I—Text and Appendix A: December 1994
12. Expanded Site Inspection, Volume II—Appendix B: December 1994
13. Removal Plan: May 1997
14. Groundwater Remedial Action Plan: March 1998
15. Quarterly Groundwater Monitoring Report: October 1999
16. Semi-Annual Groundwater Monitoring Report: April 2000
17. Semi-Annual Groundwater Monitoring Report: November 2000
18. Proposed Groundwater Monitoring Program Revisions and February 2001 Semi-Annual Groundwater Monitoring Report: March 2001

Three-Ring Binders

(See shelves above filing cabinets)

19. **Final Soil and Groundwater Assessment: May 1990**
20. **Soil Investigation Report: December 1996**



May 7, 2004

Mr. Bruce Nicholson
NCDENR, Division of Waste Management
401 Oberlin Rd
Raleigh, NC 27605

**Subject: Request for Meeting
June 2, 2004
Former Peele Disposal Site (the "Site")
Clayton, North Carolina**

Dear Mr. Nicholson:

As indicated in our February 19, 2004 monitoring report, URS Corporation – North Carolina (URS) is requesting a meeting with the North Carolina Department of Environment and Natural Resources (DENR) on behalf of the former Peele Disposal Site Participating Parties (the "Parties"), and the Town of Clayton.

As you are aware, the Town of Clayton, as the current property owner, intends to convert much of the open space at the now remediated Site into athletic and fire training fields. The current configuration of monitoring wells at the Site however, hinder this projected development. Syngenta Crop Protection, Inc. ("Syngenta"), acting on behalf of the Parties, has been unable to negotiate a modification to the Remedial Action Plan (RAP) that would allow these fields to be constructed. As this is a high priority for the Town of Clayton it has asked to participate in the next meeting for this project. A list of individuals who have committed to be available on **June 2** for a meeting is attached.

Syngenta and the Town of Clayton recognize that DENR cannot close this incident while the Land Use Restriction (LUR) is in place, and while trace pesticide constituents remain at detectable levels. All parties have agreed that natural attenuation is the appropriate remedy for this site. The most recent monitoring report demonstrates that natural attenuation is occurring, but at a rate that makes the time frame to achieve the end goal difficult to project. Therefore, the objective of this meeting will be to determine the level of effort necessary to meet the requirements of the LUR and RAP while the trace pesticide constituents attenuate to below detection levels. Our hope is that an agreement can be reached that will allow the Town of Clayton to utilize its property for these worthwhile civic endeavors.

Below is a tentative agenda for the meeting.

- Introductions / Establish goal of meeting.

Mr. Bruce Nicholson
NCDENR
May 7, 2004
Page 2

- Project Background / Remediation Summary – Conan Fitzgerald (URS)
- Groundwater Characterization – Conan Fitzgerald (URS)
- Groundwater Monitoring Results and Trends– Conan Fitzgerald (URS)
- Land Use Restriction / Proposed Land Use – Conan Fitzgerald (URS)
- Open Discussion – Moderated by URS
- Develop plan satisfactory to all parties; assign action items.

As in the past, URS will coordinate the meeting time and location with Mr. Harry Zinn of DENR. Please contact either Mr. Harold Moats of Syngenta at (336) 632-7714 or me at (919) 461-1260 with any questions or comments. We look forward to meeting with you on this important issue.

Sincerely,



Conan Fitzgerald P.E.
Project Engineer

cc: Honorable Fred Smith, Senator, State of North Carolina
Jody L. McLeod, Mayor, Town of Clayton
Steve Biggs, Manager, Town of Clayton
Harry Zinn, NCDENR
Harold Moats, Syngenta
Howard Grubbs, Womble Carlyle Sandridge & Rice, PLLC
Richard Kane, Poyner & Spruill

ATTENDANCE LIST

North Carolina District 12 (Johnston, Wayne Counties) –

Honorable Fred Smith - Senator

Town of Clayton

Jody L. McLeod - Mayor

Steve Biggs – Town Manager

Former Peele Disposal Site Participating Parties

Harold Moats – Syngenta Crop Protection

Howard Grubbs – Womble, Carlyle, Sandridge, & Rice, PLLC

URS Corporation – North Carolina

Conan Fitzgerald – Project Manager



U.S. Environmental Protection Agency Superfund Information Systems

[Recent Additions](#) | [Contact Us](#) | [Print Version](#) Search:

[EPA Home](#) > [Programs](#) > [Superfund](#) > [Sites](#) > [Superfund Information Systems](#) > [Search CERCLIS](#) > [Search Results](#) > [SCM PROCTOR SILEX](#)

CERCLIS Database

[Archived Sites](#)

[Record of Decision System \(RODS\)](#)

[Five-Year Reviews Online](#)

[Site Assessment Documentation Pilot](#)

[Site Spill Identifier List \(SPIL\)](#)

[Data Element Dictionary \(DED\)](#)

[Order Superfund Products](#)

[Customer Satisfaction Survey](#)

CERCLIS Database

SCM PROCTOR SILEX

Site Information

[Actions](#) | [Aliases](#) | [Contaminants](#) | [Actual Costs](#) | [Operable Units](#) | [Site Info](#) | [RODS](#)
[Site Narrative at Listing](#) | [NPL Fact Sheet](#) | [Five-Year Reviews](#) | [Area Map](#)

Site Name: SCM PROCTOR SILEX

Street: YADKIN RD

City / State / ZIP: SOUTHERN PINES, NC 28387

NPL Status: Not on the NPL

Non-NPL Status: Formal State Deferral

EPA ID: NCD003234549

EPA Region: 04

County: MOORE

Federal Facility Flag: Not a Federal Facility

[Return to Search Results](#)

[Return to Search CERCLIS](#)

[OSWER Home](#) | [Superfund Home](#)

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

URL: <http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm>
This page design was last updated on Thursday, March 18, 2004
Content is dynamically generated by ColdFusion



U.S. Environmental Protection Agency Superfund Information Systems

[Recent Additions](#) | [Contact Us](#) | [Print Version](#) Search:

[EPA Home](#) > [Programs](#) > [Superfund](#) > [Sites](#) > [Superfund Information Systems](#) > [Search CERCLIS](#) > [Search Results](#) > [SCM PROCTOR SILEX](#)

- CERCLIS Database**
- Archived Sites
- Record of Decision System (RODS)
- Five-Year Reviews Online
- Site Assessment Documentation Pilot
- Site Spill Identifier List (SPIL)
- Data Element Dictionary (DED)
- Order Superfund Products
- Customer Satisfaction Survey

CERCLIS Database

SCM PROCTOR SILEX

Actions

[Actions](#) | [Aliases](#) | [Contaminants](#) | [Actual Costs](#) | [Operable Units](#) | [Site Info](#) | [RODS](#)
[Site Narrative at Listing](#) | [NPL Fact Sheet](#) | [Five-Year Reviews](#) | [Area Map](#)

<u>OU</u>	<u>Action Name</u>	<u>Qualifier</u>	<u>Lead</u>	<u>Actual Start</u>	<u>Actual Completion</u>
00	DISCOVERY		F		08/01/1980
00	PRELIMINARY ASSESSMENT	L	S		07/15/1986
00	PRELIMINARY ASSESSMENT	L	S		07/15/1986
00	SITE INSPECTION	H	S		01/25/1990
00	ADMIN/VOLUNTARY COST RECOVERY		FE		08/05/1998
00	STATE DEFERRAL		SD	01/15/1999	01/15/1999

[Return to Search Results](#)

[Return to Search CERCLIS](#)

[OSWER Home](#) | [Superfund Home](#)

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

URL: <http://cfpub.epa.gov/supercpad/cursites/cactinfo.cfm>
 This page design was last updated on Thursday, March 18, 2004
 Content is dynamically generated by ColdFusion

PARKER POE

PARKER POE ADAMS & BERNSTEIN LLP

Attorneys and Counselors at Law

Jeffrey A. Bandini

Associate

Telephone: 919.890.4155

Direct Fax: 919.834.4564

jeffbandini@parkerpoe.com

First Union Capitol Center
150 Fayetteville Street Mall
Suite 1400

Post Office Box 389

Raleigh, NC 27602-0389

Telephone 919.828.0564

Fax 919.834.4564

www.parkerpoe.com

HZ Done! *AD*
July 9, 2003

Via First Class Mail

Robert Gelblum, Esq.
North Carolina Department of Justice
Post Office Box 629
Raleigh, North Carolina 27602

RECEIVED

JUL 10 2003

N.C. ATTORNEY GENERAL
Environmental Division

Re: Peele Pesticide Superfund Site/Town of Clayton

Dear Rob:

As agreed, enclosed please find a certified copy of the Amendment of Restrictive Covenants, by and between North Carolina Railroad Company and the Town of Clayton, recorded July 7, 2003, in Book 2493, Page 447, Johnston County Registry.

Thank you for your assistance in facilitating the execution of this.

Sincerely,

Jeff Bandini
Jeffrey A. Bandini

JAB/cma
Enclosure

CHARLOTTE, NC
COLUMBIA, SC
SPARTANBURG, SC

FILED
JOHNSTON COUNTY
CRAIG OLIVE
REGISTER OF DEEDS

Johnston County, North Carolina
CRAIG OLIVE Register of Deeds

The following certificate(s) of

NANCY D PICKETT

BRENDA SCHNEIDER

notary/notaries public
is/are certified to be correct.

Peggy W. Ingram
Deputy Assistant - Register of Deeds

FILED Jul 07, 2003
AT 03:05:00 am
BOOK 02493
START PAGE 0447
END PAGE 0449
INSTRUMENT # 35394

AMENDMENT OF RESTRICTIVE COVENANTS

Prepared by and return to:

R. Bruce Thompson II, Esq.
Parker Poe Adams & Bernstein L.L.P.
Post Office Box 389
Raleigh, North Carolina 27602-0389

THIS AMENDMENT OF RESTRICTIVE COVENANTS (this "Amendment") is made this the 19th day of June, 2003, between the NORTH CAROLINA RAILROAD COMPANY, a North Carolina corporation ("Grantor"), and the TOWN OF CLAYTON, a North Carolina municipal corporation ("Grantee").

The real property which is the subject of this Amendment has been contaminated with hazardous substances, and is an inactive hazardous substance or waste disposal site for purposes of Section 130A-310 through Section 130A-310.19 of the North Carolina General Statutes ("N.C.G.S."). This Amendment is part of a Remedial Action Plan for said real property that has been approved by the Secretary of the North Carolina Department of Environment and Natural Resources (or its successor in function), or his/her delegate, as authorized by N.C.G.S. 130A-310.3(f).

WITNESSETH:

WHEREAS, all materials known to have been placed in a disposal trench at the property that is the subject of this Amendment were removed and all soils from the sides and bottom of the trench were excavated to remove any residual impact; comprehensive sampling was conducted in the floor, sidewalls, and rim of the trench, as well as surrounding areas, to confirm removal; sampling confirmed the soil was cleaned to levels acceptable to the Inactive Hazardous Sites Branch of the North Carolina Department of Environment and Natural Resources; and the trench and surrounding areas were backfilled with clean native soil, leaving no groundwater or soil contamination in excess of levels safe for the uses approved herein;

WHEREAS, Grantor conveyed to Grantee in that certain Special Warranty Deed of Gift dated February 13, 1998 (the "Deed"), a certain parcel of land containing 5.24 acres, more or less, which is more particularly described in Exhibit A of the Deed (the "Property");

WHEREAS, Grantor conveyed the Property to Grantee subject to certain restrictive covenants contained in Exhibit B of the Deed (the "Restrictive Covenants") to remediate environmental contamination existing on the Property at the time Grantee acquired the Property; and

WHEREAS, Grantor and Grantee desire to modify the Restrictive Covenants as herein set forth.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor and Grantee agree as follows:

1. The Restrictive Covenant contained in paragraph (1) under the heading "Restrictions" in Exhibit B of the Deed is hereby deleted in its entirety and replaced with the following:

(1) Water. No water for human or other animal consumption or irrigation purposes shall be extracted from the Property.

2. The Restrictive Covenant contained in paragraph (2) under the heading "Restrictions" in Exhibit B of the Deed is hereby deleted in its entirety and replaced with the following:

"(2) Use. The Property shall not be put to residential use, including use for hotels, motels or any other form of transient lodging, or to agricultural use, including use for horticulture or silviculture, except the Property may be used as living quarters for fire protection personnel while on duty."

3. The Restrictive Covenant contained in paragraph (3) under the heading "Restrictions" in Exhibit B of the Deed is hereby deleted in its entirety and replaced with the following:

"(3) Excavation. Grantee shall not perform or cause to be performed any excavation on the Property below a depth of four feet (4') from the original grade as depicted on the survey dated March 10, 1997, and titled "Topographic Survey for Town of Clayton, Fire Station Site," prepared by Alsey J. Gilbert, RLS, 331 1/2 E. Main Street, Clayton, NC 27520, without the prior written consent of the Grantor and the North Carolina Department of Environment and Natural Resources."

4. Exhibit B of the Deed is hereby revised to add a new paragraph (4) as follows:

"(4) Duration and Enforcement. The above restrictions are to run with the land and shall be binding on Grantee and its successors and assigns until January 1, 2022, at which time the restrictions shall automatically extend for successive periods of 10 years each unless Grantor, Grantee and the North Carolina Department of Environment and Natural Resources (or their respective successors or assigns) agree to change the restrictions in whole. Grantee shall never bear the burden of demonstrating that the above restrictions are no longer necessary to remediate environmental contamination that existed on the Property as of the date of this deed."

5. Within fifteen (15) days after each anniversary of the effective date of this Amendment, the then-current owner of any part of the Property shall submit a notarized Land Use Restrictions Update to the North Carolina Department of Environment and Natural Resources certifying that the owner is in compliance with the Restrictive Covenants, as amended herein. For each business day of lateness, said owner shall be liable to the North Carolina Department of Environment and Natural Resources for a stipulated penalty of seventy-five dollars (\$75.00) per business day. If the North Carolina Department of Environment and Natural Resources decides to take any additional action in regard to the Property because of a failure by the then-current owner to submit the Land Use Restrictions Update, the North Carolina Department of Environment and Natural Resources shall give Grantee written notice by certified mail of its intention to take action and shall allow the owner a cure period of seven (7) days from Grantee's receipt thereof to submit the Land Use Restrictions Update. If said owner ^{submits} the Land Use Restrictions Update within this cure period, the North Carolina Department of Environment and Natural Resources shall not take action in regard to the Property based on the previous failure to submit the Land Use Restrictions Update.

6. Except as amended and modified by this Amendment, all other terms and conditions of the Deed and Restrictive Covenants shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have respectively executed and delivered this Amendment as of the day and year first above written.

NORTH CAROLINA RAILROAD COMPANY, a North Carolina corporation

By: Scott Saylor
Scott Saylor, President

ATTEST:
Michael L. Weiser
Michael L. Weiser, Secretary
(AFFIX CORPORATE SEAL/STAMP)

TOWN OF CLAYTON, a North Carolina municipal corporation

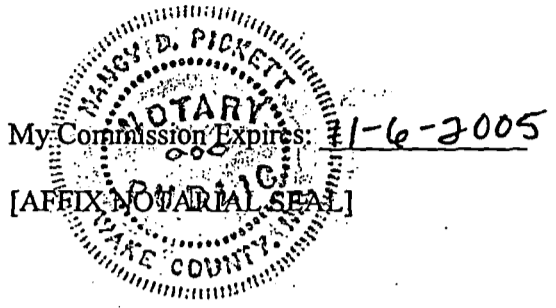
By: Douglas A. McCormac
Douglas A. McCormac, Mayor

ATTEST:
Sherry Scogans
Sherry Scogans, Town Clerk
(AFFIX MUNICIPAL SEAL/STAMP)

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, a Notary Public of the County and State aforesaid, certify that Michael L. Weisel personally appeared before me this day and acknowledged that he is the Secretary of NORTH CAROLINA RAILROAD COMPANY, a North Carolina corporation, and that by authority duly given and as an act of the corporation, the foregoing instrument was signed in its name by its President, sealed with its corporate seal and attested by him as its Secretary. Witness my hand and official stamp or seal, this 19th day of June, 2003.

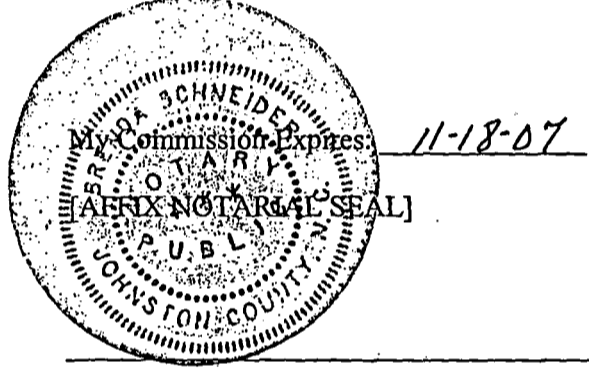
Nancy D. Pickett
Print Name: Nancy D. Pickett
Notary Public



STATE OF NORTH CAROLINA
COUNTY OF JOHNSTON

I, a Notary Public of the County and State aforesaid, certify that Sherry Scoggins personally appeared before me this day and acknowledged that she is Town Clerk of the TOWN OF CLAYTON, NORTH CAROLINA, and that by authority duly given and as an act of the Town of Clayton, North Carolina, the foregoing instrument was signed in its name by its Mayor, sealed with its corporate seal and attested by herself as its Town Clerk. Witness my hand and official stamp or seal, this 20th day of May, 2003.

Brenda Schneider
Print Name: Brenda Schneider
Notary Public



APPROVAL AND CERTIFICATION OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

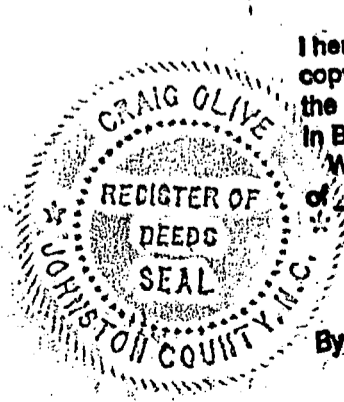
The foregoing Amendment of Restrictive Covenants is hereby approved and certified.

North Carolina Department of Environment and Natural Resources

By: Dee R. Matthews Date: 6-24-03
Printed Name Dee R. Matthews
Title: Director

REGISTER OF DEEDS CERTIFICATION

RAL 222944v9



I hereby certify that this is a true and accurate copy which appears on record in the Office of the Register of Deeds of Johnston County, N.C. In Book 2493 Page 447 Witness my hand seal this the 7 day of July, 2003

Craig Olive
Register of Deeds
By Lesley W. Ingram
Assistant/Deputy of Deeds



March 19, 2003

Mr. Harry Zinn
NCDENR, Division of Waste Management
401 Oberlin Rd
Raleigh, NC 27605

RECEIVE

MAR 20 2003

**Subject: Confirmatory Sampling Results Below 5-Foot Deep
Former Peele Disposal Site
Clayton, North Carolina**

Dear Mr. Zinn:

URS Corporation – North Carolina (URS) appreciates the opportunity to provide this summary of confirmatory soil sampling results for the samples collected during the 1997 site remediation. We understand that North Carolina Department of Environment and Natural Resources (NCDENR) and the Town of Clayton are currently negotiating a land use restriction agreement that will allow the town to redevelop the remainder of the subject property for an appropriate land use. We request that the information provided in this letter be fully considered when finalizing any land use restriction agreement.

The cleanup criteria for this project was established in the April 8, 1997 Removal Plan prepared by Woodward-Clyde Consultants (now URS), and approved by NCDENR. The cleanup criteria for shallow soils (defined as less than 5 feet below grade) were based upon residential risk based standards, while the clean-up criteria for deep soils (greater than 5 feet below grade) used industrial risk based standards. The purpose of this correspondence is to re-present the confirmatory sample data demonstrating that the deep soil results actually meet residential standards.

During the remediation project, a total of 26 confirmatory soil samples were analyzed by a NCDENR certified analytical laboratory. These 26 samples were comprised of soil collected from 98 individual locations across the site. Of the samples collected, a total of seven were collected 5-feet or more below ground surface, and were comprised of 28 individual locations. The locations of the individual sampling points are depicted on the attached figures from the August 25, 1997 Removal Report prepared by Woodward-Clyde Consultants. URS has compiled the results of all soil samples collected from 5-feet or more below ground surface in Table 1. As the table illustrates, only one sample from the 3 to 5-foot range, EFW-C, exceeded the residential cleanup criteria. The area represented by this sample was further excavated and re-sampled as sample ID WF-C. The final result indicates that the soil remaining following additional excavation was below default and NCDENR assigned residential risk based levels.



Mr. Harry Zinn
NCDENR, Division of Waste Management
March 19, 2003
Page 2

Although the Removal Plan made a distinction between shallow and deep soil clean-up criteria, the level of effort of the remediation exceeded this plan making a depth distinction unnecessary. Since the results from deep soil samples meet the residential risk based criteria, this depth distinction no longer exists, and should not be passed on to the land use restriction agreement. Therefore, URS requests on behalf of the Participating Parties of the Former Peele Disposal Site and the Town of Clayton, that no excavation depth limit be included as part of the land use restriction agreement for this site.

If you have any questions regarding this information, please call Mr. Harold Moats of Syngenta Crop Protection, Inc. at (336) 632-7714 or the undersigned at (919) 461-1260.

Sincerely,

URS Corporation – North Carolina

Conan Fitzgerald, PE
Project Manager

Peter W. Glaesman, P.E.
Senior Project Engineer

PWG/CDF:pwg

Attachments

cc: Harold Moats, Syngenta
C. Browning, Hunton & Williams
H. Grubbs, Womble Carlyle Sandridge & Rice
R. Kane, Poyner & Spruill

Table 1
All Confirmatory Results of Sampling Below 5-Foot Deep
Peele Disposal Site, Clayton, North Carolina

PESTICIDE COMPOUNDS by EPA Method 8080	RISK BASED STANDARDS ¹		Deep Wall		Excavation Floor Samples				
	INDUSTRIAL ²	RESIDENTIAL ³	ESD-C	END-C	EFM ¹⁻⁴ -C	EFM ⁵⁻⁸ -C	EFE-C	EFW-C	WF-C
	Date Sampled		5/22/1997	5/23/1997	5/23/1997	5/23/1997	5/23/1997	5/23/1997	6/13/1997
	Sample Depth (From Surface)		8 feet	8 feet	5 to 12 feet	9 to 13 feet	5 to 9 feet	3 to 5 feet	5 to 7 feet
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4,4' - DDD	24	2.70	<0.0051	0.01	<0.0042	<0.0042	0.11	<2.0	<0.0092
4,4' - DDE	17	1.90	<0.0018	<0.0015	<0.0015	<0.00154	<0.0016	<0.72	0.0017
4,4' - DDT	17	1.90	0.0063	<0.0044	<0.0046	0.0059	<0.0049	<2.2	0.023
Aldrin	0.34	0.038	<0.00184	<0.0015	<0.0015	<0.00154	<0.0016	4.8	0.0054
alpha-BHC	0.91	0.10	0.0065	0.0019	<0.0011	<0.00116	<0.0012	2.1	0.015
beta-BHC	3.20	0.35	0.0081	0.0068	0.031	0.013	0.012	<1.1	0.016
delta-BHC	3.20	0.35	0.13	0.0079	0.036	0.022	0.014	<1.6	0.091
Dieldrin	0.62 (superseded 0.36/0.04) ⁴		<0.00092	0.0038	0.0034	0.0013	0.018	<0.36	0.0062
gamma-BHC	4.40	0.49	0.0061	<0.00148	<0.0015	0.0026	<0.0016	<0.72	0.0077
Heptachlor	1.30	0.14	<0.0014	<0.0011	<0.0011	<0.0012	<0.0012	<0.54	<0.00127
Methoxychlor	10000	78	<0.081	<0.065	<0.067	<0.068	<0.072	<32.0	<0.074
Toxaphene	5.20	0.58	<0.11	<0.089	<0.091	<0.093	<0.098	380	0.12
Copper	82000	3100	1.73	1.9	3.3	2	3.79	44.7	12.2
Arsenic	25.3 (superseded 4.6) ⁴		2.12	1.73	2.42	3.12	3.65	8.32	12.9
Semi-Volatiles (8270-BNA)			NA	NA	BQL	BQL	NA	NA	NA

1. EPA Region III Risk-Based Concentrations, R.L. Smith 8/6/96 and NCDEHNR Superfund Section Guidelines for Responsible Party

2. Apply to soils deeper than 5 feet.

3. Apply to soils less than 5 feet deep.

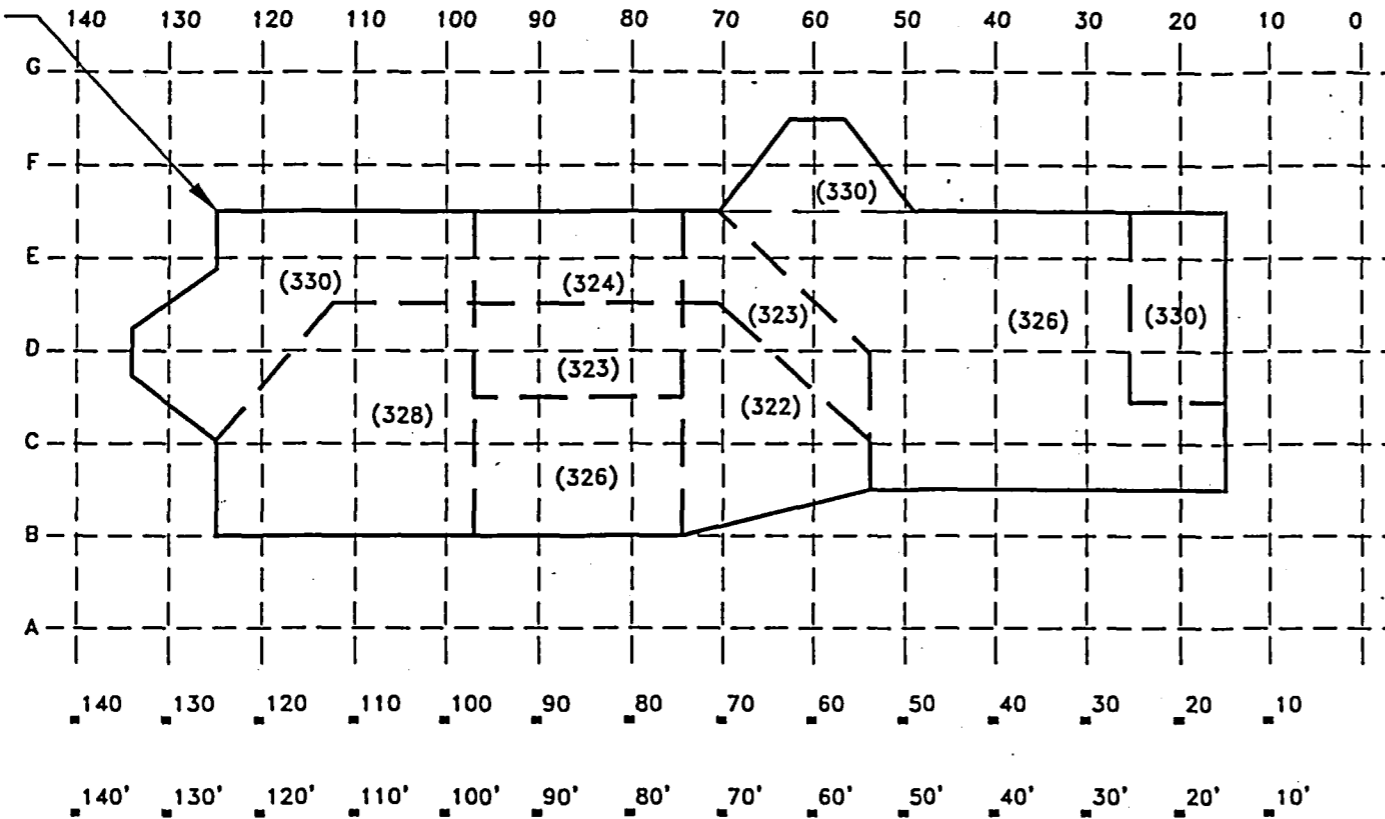
4. Site specific residential risk based concentrations for arsenic and dieldrin provided from NCDENR Toxicologist based on June 3, 1997 project meeting with Mr. Bruce Nicholson.

NA not analyzed

Location and Nomenclature of samples listed above are shown in attached Figures 5 and 6 from Woodward-Clyde August 25, 1997 Removal Report.

EXCAVATION PLAN VIEW

Approximate Limits of Excavation

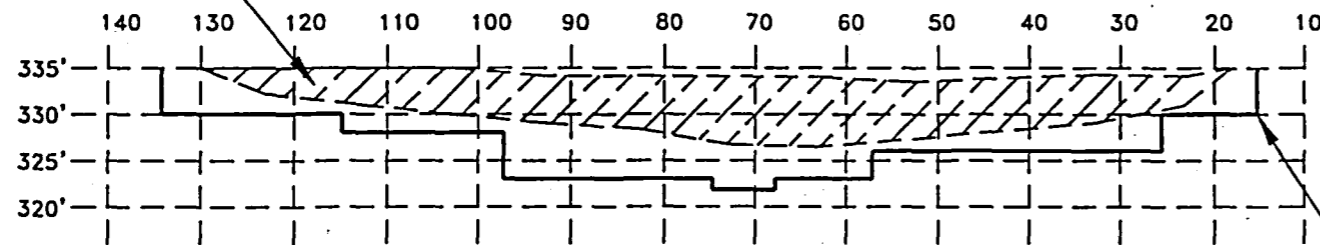


Legend

- (322) Elevation excavated to, as referenced to remote grid reference stations (feet above MSL).
- B ■ B' Surveyed remote grid reference stations staked (E-W) by Aley Gilbert, NC Registered Land Surveyor.
- 10 ■ 10' Surveyed remote grid reference stations staked (N-S) by Aley Gilbert, NC Registered Land Surveyor.

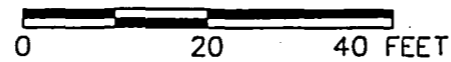
Disposal Trench

CROSS SECTION OF "D" LINE



Approximate Limits of Excavation

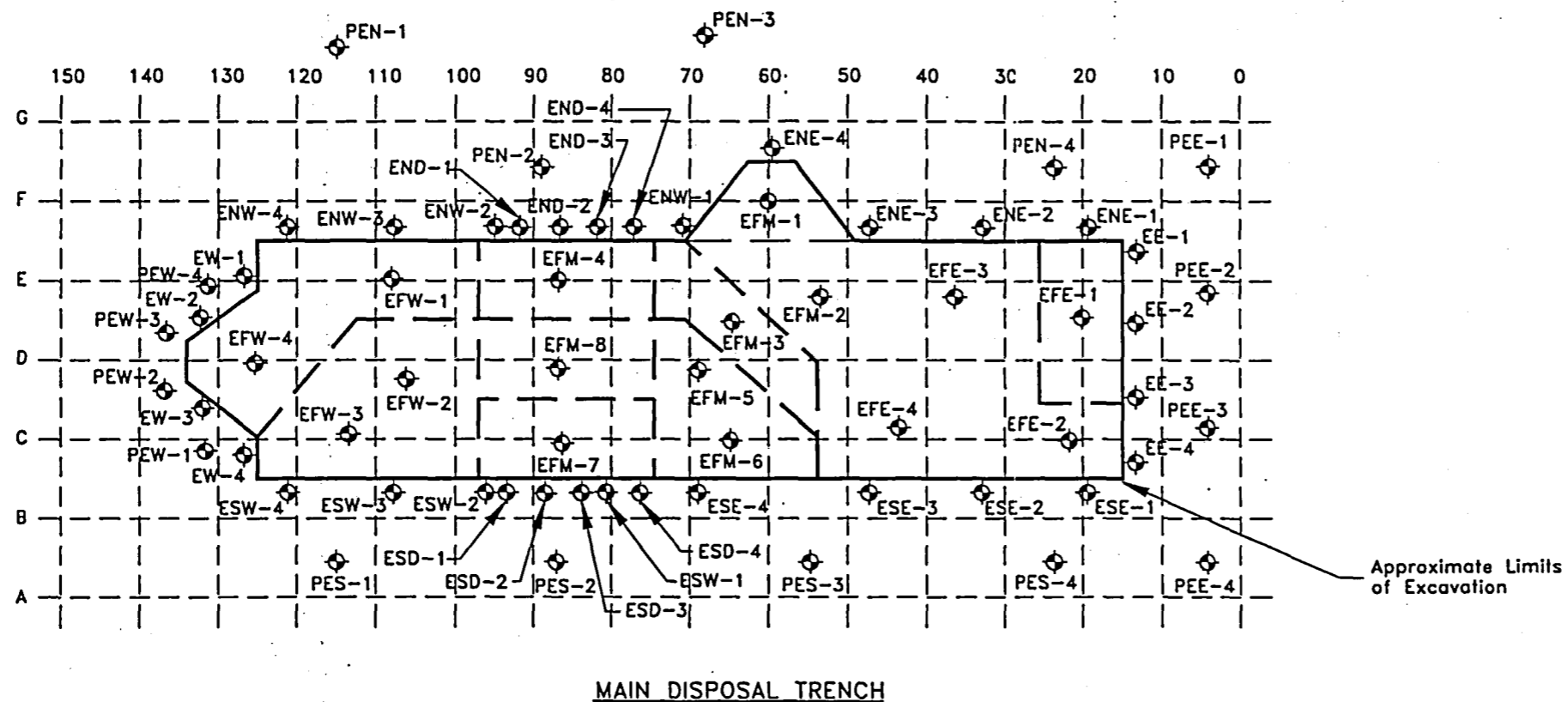
APPROXIMATE SCALE



Location: Raleigh, NC File name: S:\DWG\7E05522\ACTUAL.DWG Last edited: 8/4/97 01:40

PEELE DISPOSAL SITE CLAYTON, NORTH CAROLINA			
Woodward-Clyde Consultants, Inc. Consulting Engineers, Geologists and Environmental Scientists Raleigh, North Carolina			
NOVARTIS CROP PROTECTION, INC. GREENSBORO, NORTH CAROLINA			
SCALE: As Shown	MADE BY: GCM CHECKED BY: CDF	DATE: 7/11/97 DATE: 7/11/97	FILE NO: 7E05522
ACTUAL EXCAVATION			FIGURE 3

EXCAVATION PLAN VIEW



Confirmation Samples

Excavation Walls (2 feet below ground surface)

- North East: ENE-C (composite 1 thru 4)
- North West: ENW-C (composite 1 thru 4)
- South East: ESE-C (composite 1 thru 4)
- South West: ESW-C (composite 1 thru 4)
- East: EE-C (composite 1 thru 4)
- West: EW-C (composite 1 thru 4)

Excavation Walls - Deep (8 feet below ground surface)

- North: END-C¹ (composite 1 thru 4)
- South: ESD-C (composite 1 thru 4)

Excavation Floor

- West End: EFW-C¹ (composite 1 thru 4)
- Middle - North: EFM-NC (composite 1 thru 4)
- Middle - South: EFM-SC¹ (composite 5 thru 8)
- East End: EFE-C (composite 1 thru 4)

Perimeter Excavation (Surface)

- North: PEN-C (composite 1 thru 4)
- South: PES-C (composite 1 thru 4)
- East: PEE-C (composite 1 thru 4)
- West: PEW-C (composite 1 thru 4)

Remote Areas

- Area A: RA-C¹ (composite 1 thru 4)
- Area B: RB-C (composite 1 thru 4)

Perimeter Remote Area (Surface)

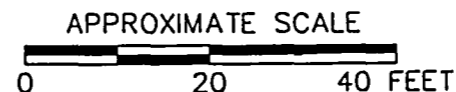
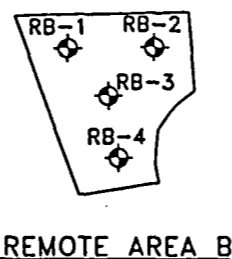
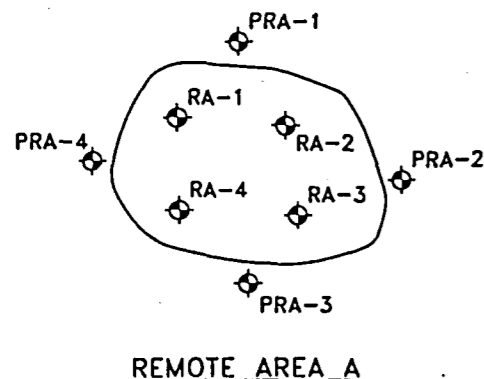
- Area A: PRA-C (composite 1 thru 4)

1 - Indicates samples which were composited in the field and split with NC DEHNR.

Legend

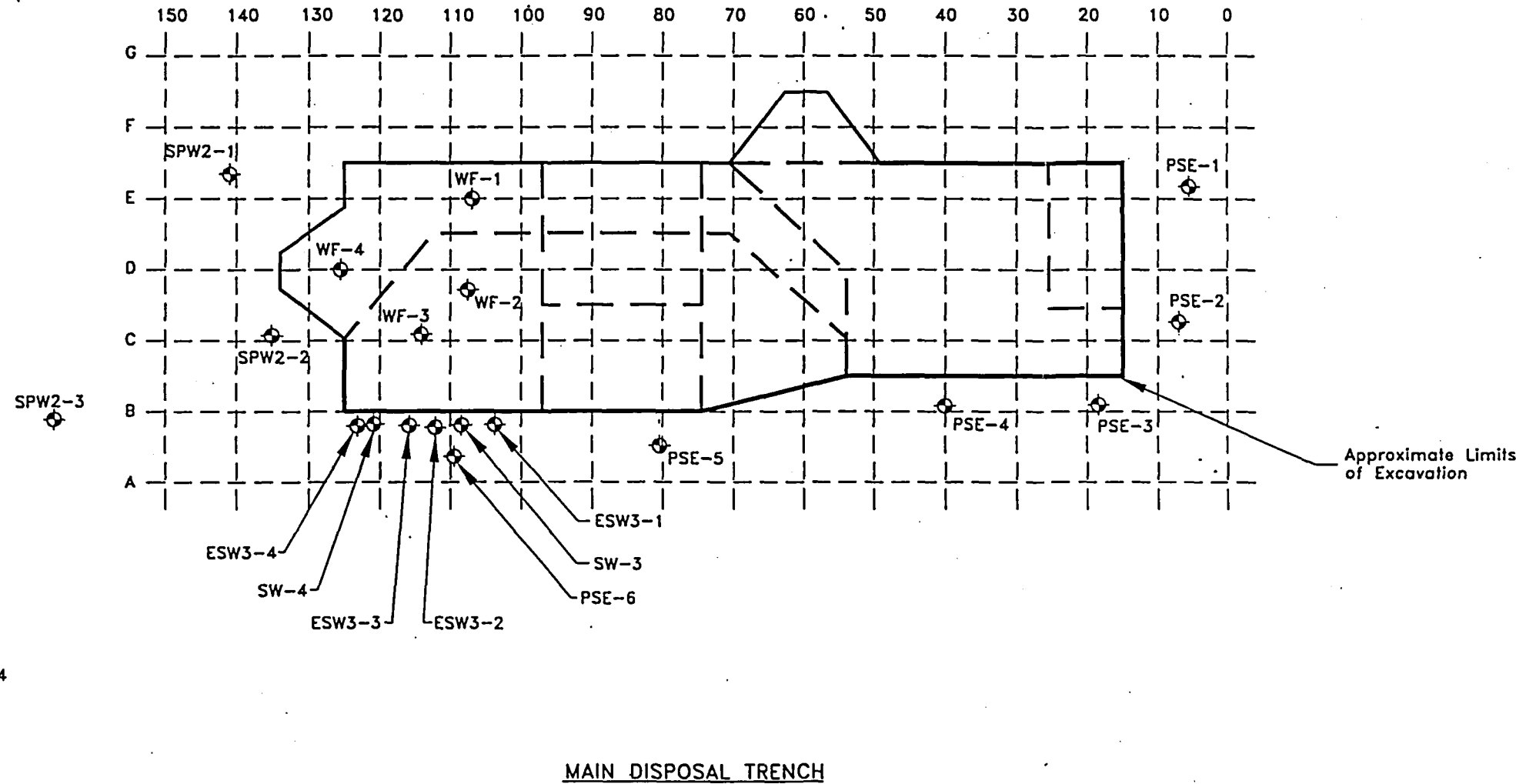
◊ Sampling Node

Note: The location of each of these areas are shown on Figure 2.



PEELE DISPOSAL SITE CLAYTON, NORTH CAROLINA			
Woodward-Clyde Consultants, Inc. Consulting Engineers, Geologists and Environmental Scientists Raleigh, North Carolina			
NOVARTIS CROP PROTECTION, INC. GREENSBORO, NORTH CAROLINA			
SCALE: As Shown	MADE BY: GCM CHECKED BY: CDF	DATE: 7/11/97 DATE: 7/11/97	FILE NO. 7E05522
INITIAL CONFIRMATION SAMPLING			FIGURE 5

EXCAVATION PLAN VIEW



Re-Confirmation Samples

Excavation Floor

Western Floor: WF-C (Composite 1 thru 4)

Excavation Wall

South West Wall: SW-C (Composite 3 and 4)
 South West Wall: ESW3-C (Composite 1 thru 4)

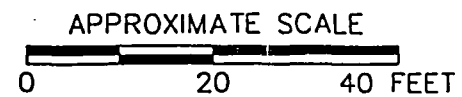
Perimeter Excavation

South and East: PSE-C (Composite 1 thru 6)
 West (and Stockpile C): SPW2-C (Composite 1 thru 6)

Location: Raleigh, NC File name: S:\DVG\7E05522\RECONF.DWG Last edited: 8/4/97 08:23

Legend

◆ Sampling Node



PEELE DISPOSAL SITE CLAYTON, NORTH CAROLINA			
Woodward-Clyde Consultants, Inc. Consulting Engineers, Geologists and Environmental Scientists Raleigh, North Carolina			
NOVARTIS CROP PROTECTION, INC. GREENSBORO, NORTH CAROLINA			
SCALE: As Shown	MADE BY: GCM CHECKED BY: CDF	DATE: 7/11/97 DATE: 7/11/97	FILE NO. 7E05522
RE-CONFIRMATION SAMPLING			FIGURE 6



State of North Carolina

Department of Justice

P. O. BOX 629

RALEIGH

27602-0629

MICHAEL F. EASLEY
ATTORNEY GENERAL

DATE: 8/14/01

FACSIMILE TRANSMITTAL SHEET

TO: Bruce N. / Harry J.

FAX NO: 3-4811

- FROM:
- Judith Robb Bullock, Special Deputy Attorney General
 - Lauren Murphy Clemmons, Assistant Attorney General
 - W. Wallace Finlator, Jr., Assistant Attorney General
 - Robert R. Gelblum, Assistant Attorney General
 - James (Ryke) P. Longest, Jr., Assistant Attorney General
 - William R. Miller, Assistant Attorney General
 - Jay L. Osborne, Assistant Attorney General
 - Nancy E. Scott, Assistant Attorney General
 - Kathleen M. Waylett, Assistant Attorney General

PHONE NO: (919) 716-6600 P.O. Box 629
 FAX NO: (919) 716-6939 Raleigh, NC 27602-0629
 114 West Edenton Street

SUBJECT: Reed

NO. OF PAGES INCLUDING TRANSMITTAL SHEET: 3

COMMENTS: _____





State of North Carolina

ROY COOPER
ATTORNEY GENERAL

Department of Justice
P. O. Box 629
RALEIGH
27602-0629

Reply to:
Robert R. Gelblum
Environmental Division
Telephone: (919) 716-6600
Facsimile: (919) 716-6939
rgelblum@mail.jus.state.nc.us

August 14, 2001

Via Facsimile

T. Richard Kane, Esq.
Poyner & Spruill L.L.P.
100 N. Tryon St., Ste. 4000
Charlotte NC 28202-4010

Jason Kaus, Esq.
Parker Poe Adams & Bernstein L.L.P.
P.O. Box 389
Raleigh NC 27602-0389

Re: Peele Pesticide Site
Clayton, Johnston County

Dear Messrs. Kane & Kaus:

I'm in receipt of the copy Rick sent me of the Amendment of Restrictive Covenant, as Rick knows from the message I left him yesterday afternoon. I heard your return message as well, Rick.

The N.C. Division of Waste Management (DWM) has no problem with the changes set forth in paragraphs 1 and 3 of the Amendment of Restrictive Covenant (i.e., replacement paragraphs (2) and (4)).

However, the Division objects to the fact that whereas the excavation-related restriction, as it was described in Rick's letter to Mr. Kaus dated July 17, 2001, required the approval of DWM for excavations in excess of four feet, the restriction as set forth in the Amendment of Restrictive Covenant gives such approval power to grantor N.C. Railroad Co.

Also, though apparently Harry Zinn expressed assent in principle to the four-feet-below-original-grade concept for the excavation restriction articulated in Rick's July 17th letter, my clients are now concerned about using the grade-as-of-February 13, 1998 baseline embodied in the Amendment of Restrictive Covenant. My clients would accept use of that date, or any past or future

date (or an event whose occurrence is not subject to interpretation), as long as the restriction also contains a reference to a measurement, as of the date or event in question, satisfactory to my clients of where grade lay as of that date or event.

Yours truly,



Robert R. Gelblum
Assistant Attorney General

c: Bruce Nicholson
Harry Zinn

**NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT**



**MICHAEL F. EASLEY, GOVERNOR
William G. Ross Jr., SECRETARY
WILLIAM L. MEYER, DIRECTOR**

April 3, 2001

Mr. Peter Glaesman P.E.
URS Greiner Woodward-Clyde
3109 Poplarwood Court Suite 301
Raleigh, North Carolina 27604-1043

**RE: Monitoring Well Modifications
Peele Pesticide Site
Clayton, North Carolina**

Dear Mr. Glaesman:

This letter is in reply to a request by the town of Clayton to modify and/or abandon several of the monitoring wells at the Peele Pesticide Disposal site in conjunction with cut and fill actions and land use plans at the site as requested by the Town of Clayton.

The North Carolina Division of Waste Management (Div.) has reviewed the data supplied in the February 2001 Semi-Annual Groundwater Monitoring Report submitted on March 12, 2001 as well as previous reports and discussions with you in order to come to the following decisions:

- We concur with the abandonment of MW 3, based on the low levels of contamination and the established downward trending of these levels.
- We concur with the continued monitoring of MW 1, MW 6 and MW 7 on a semi annual basis for the existing approved parameters.
- The existence of MW 2 and MW 2D (due to fairly consistent downward flow gradient between them established since 1999) shall be maintained and modified to be housed in subterranean vaults approximately six (6) inches to one (1) foot below ground level. MW 2 and MW 2D shall be sampled prior to vaulting for the existing approved parameters and then no less frequently than bi-annually for the same parameters.

- If MW 2 and MW 2-D are to be sampled on a bi-annual basis rather than a semi annual basis, an additional monitoring well shall be installed approximately 100 feet north of MW 1. This well shall be used to demonstrate the flow direction of the groundwater because the existing monitoring wells MW 1, MW 6, and MW 7 do not have significant enough spatial variation to be able to do this.

If you have any questions, please contact me at (919) 733-2801 ext 313.

Sincerely,



Harry Zinn
Environmental Engineer
Special Remediation Branch
NC Superfund Section

cc. Bruce Nicholson
Mr. Harold Moats
Novartis Crop Protection, Inc.
410 Swing Road
Greensboro, North Carolina 27419



April 3, 2001

Mr. Bruce Nicholson
North Carolina Department of Environment and Natural Resources (NCDENR)
Division of Waste Management, Superfund Section
401 Oberlin Road
Raleigh, North Carolina 27605

**Subject: Groundwater Monitoring Program Revisions
Former Peele Disposal Site
Clayton, North Carolina**

Dear Mr. Nicholson:

I spoke to Mr. Harry Zinn on March 30, 2001 regarding changes to the groundwater monitoring program that we discussed during our meeting with you on February 22, 2001, and subsequently proposed in our March 12, 2001 letter for the subject site. We understand that you are in agreement with abandoning MW-3, and we appreciate your understanding the rationale for eliminating this upgradient well. However, we strongly disagree with NCDENR's position with regard to keeping MW-2D in the monitoring program, and adding an additional permanent piezometer. We see no basis in good science to continue monitoring MW-2D. By utilizing MW-2, which is located adjacent to the source removal area, and the three downgradient wells, we have a conservative and comprehensive monitoring program. The reasons for implementing the program as proposed are outlined in the following paragraphs.

I informed Mr. Harold Moats of your current position and other than being very disappointed with your position, he asked me to provide further support for our proposal, and is requesting your consideration before your letter is released, if possible. He requested that NCDENR consider the previous efforts implemented at this site included total cooperation without any challenge to the agency's requirements concerning the soil remediation and the groundwater monitoring program to date. We have striven to satisfy the environmental and human health concerns and provide a Brownsfield type program for the benefit of the Town of Clayton. The Peele Respondents have taken every additional step requested by the Department during this remediation project with the understanding that a reasonable groundwater monitoring program would be accepted by NCDENR. The goal of the monitoring is to confirm that the slight residual impact is attenuating while meeting applicable protective requirements. The Respondents simply desire to confirm that the nearly one million dollars spent removing the source has successfully addressed the minor impact to groundwater and achieves the objectives of the Consent Order. The monitoring conducted to date has demonstrated substantial progress toward that goal, as discussed in the following paragraphs.

URS Corporation - Maryland
3109 Poplarwood Court, Suite 301
Raleigh, NC 27604-1044
Tel: 919.850.9511
Fax: 919.790.0217

Mr. Bruce Nicholson
NCDENR
April 3, 2001
Page 2

Eliminating MW-2D from the Monitoring Program

To date we have documented the following significant reductions in groundwater at MW-2D. First, beta-BHC is no longer detectable. Second, alpha-BHC has been reduced to less than one half its maximum concentration, and was only detected one time in the past three monitoring events in 2000 and 2001 at less than a tenth of a part-per-billion. Third, Lindane has been reduced to less than one-third its maximum concentration and is now at approximately one-tenth of a part-per-billion. The current concentrations of constituents in MW-2D are below the federal maximum contaminant levels (MCLs). In most states, water from MW-2D would qualify as potable.

All of these improvements are occurring despite the slight vertical gradient from MW-2 to MW-2D, and these improvements can only continue with the concentrations in MW-2 dropping in the manner we have observed:

- alpha-BHC at less than one-fifth its maximum concentration (now 0.77 ug/L),
- beta-BHC at less than one-half its maximum concentration (now 0.81 ug/L),
- delta-BHC at less than one-third its maximum concentration (now 0.32 ug/L), and
- Lindane at less than one-sixth its maximum concentration (now 1.2 ug/L).

With the proposed monitoring program capable of detecting any increase at MW-2, there is no justification for measuring the concentrations at MW-2D while they attenuate.

We have agreed to sample MW-2, which requires the excavation of a section of the children's practice field. An additional excavation to access MW-2D would be another separate disturbance requiring further field restoration to the Town's recreation facility. This Site presents no environmental or human health risk. Therefore, we request that the agency approve the abandonment of MW-2D, and the continued monitoring of MW-2 to assure there is no increase in the shallow groundwater concentrations that could result in subsequent impact to a deeper zone.

Groundwater Gradient

We would like to propose to an alternative approach to maintaining confidence in the ground water flow direction. We understand your concern with previous fluctuations, and based on the monitoring data to date, we offer an approach that incorporates the site conditions into the monitoring of the groundwater table.

Mr. Bruce Nicholson
NCDENR
April 3, 2001
Page 3

With regard to the need for an additional peizometer point to track the groundwater gradient on an annual basis, we present this approach for your consideration. All rounds of monitoring have demonstrated a gradient that primarily slopes toward the north and toward one of three downgradient monitoring wells. Two of the three wells were installed in locations specifically requested by DENR. In only one event, during the last four years of monitoring, did the gradient become so flat, that MW-1, MW-6, and MW-7 were not definitively downgradient wells. However, this situation occurred during a very dry year when the water table elevation at MW-1 was 5 feet below its average elevation. A reoccurrence of this extremely low water table situation can be readily identified and a water level measurement can be taken at MW-2 if necessary to obtain the desired triangulation for determining the gradient. **We propose implementing the monitoring program as described in our March 12, 2001 letter, with a trigger to check the water level in MW-2, if it is not already included in the event.** An appropriate trigger would be a water table elevation in MW-1 of 3 feet or more below the average of elevation of 318.7 feet MSL.

Mr. Moats stated he was looking forward to meeting with the Town of Clayton officials and expressing how the cooperative efforts of DENR and the Peele Respondents have made this recreational area possible this year. However, expanding the proposed monitoring program and requiring additional disruption to the Town's future recreation facility with the sampling of MW-2D does not reflect a cooperative effort, or a responsible use of environmental funds. We trust you will consider this additional information in your approval of a groundwater monitoring program for this site.

Please call Mr. Moats at (336) 632-7714 or Mr. Glaesman at (919) 850-9511 to discuss this subject.

Sincerely,



Peter W. Glaesman, P.E.
Senior Project Manager

PWG:law

cc: Harold Moats, Syngenta
File

FAX TRANSMITTAL**From Peter Glaesman****URS**

DATE: February 20, 2001

PAGE 1 OF: 6

3109 POPLARWOOD COURT
SUITE 301
RALEIGH, NORTH CAROLINA 27604-1043
TEL: (919) 850-9511 FAX: (919) 790-0217

TO: Harry Zinn, NCDENR Superfund Sec.

FAX NO: 733-4811

FIRM: See above

SUBJECT: Former Peele Site, Clayton, NC

CC: Harold Moats, Syngenta, Inc.
336-632-7897

MEMO:

A site map showing the most recent groundwater contours, and summary tables of the analytical and field parameters are attached.

Considerations for

- Waste material and surrounding/underlying soils were over excavated to achieve pesticide soil cleanup levels that are below residential risk-based concentrations in all final confirmatory samples (not just the soils less than 5-feet in depth).
- Groundwater modeling predicts that COCs in groundwater will never reach the property boundary above the method quantitation limit of 0.5 parts-per-billion, and 6 sampling events over the last 3 years demonstrate they have not even migrated to the nearby sentinel wells (<100' from the former source area).
- As proposed in the Decision Chart (Fig. 4 of the approved Remedial Action Plan), the monitoring data fully supports the groundwater model:
 - The is no detectable migration at the downgradient sentinel wells,
 - There is observable degradation occurring at MW-2 and MW-2D.
- The Town of Clayton is proceeding with development of the property as a recreational area, as approved by NCDENR. Significant additional soil fill will be placed to level the slope over the south side of the property.
- Several of the monitoring wells are located in areas that pose a physical risk to children using the recreational fields.

We look forward to meeting with you and Bruce Nicholson on Thursday (2/21/01) at 10 AM.

Peter Glaesman

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
 September 1998- February 2001
 Former Peele Disposal Site
 Clayton, North Carolina

*East to
 Southeast*

Well	Well Depth (a) (ft)	TOC Elev. (b) (ft)	Depth to Groundwater (ft)	Groundwater Elevation (b) (ft)	Depth to Groundwater (ft)	Groundwater Elevation (b) (ft)	Depth to Groundwater (ft)	Groundwater Elevation (b) (ft)
			22-Mar-99		1-Sep-99		27-Sep-99	
MW-1	31.0	338.42	19.60	318.82 ⁻²⁴	24.69	313.73 ⁺¹¹	21.60	316.82 ⁻²⁹
MW-2	30.0	335.70	16.64	319.06	22.08	313.62	18.59	317.11
MW-2D	60.0	336.24	17.15	319.09 [↑]	22.65	313.59 [↓]	19.65	316.59 [↗]
MW-3	32.0	334.40	14.75	319.65	20.89	313.51	12.95	321.45
MW-6	25.0	338.96	20.05	318.91 ⁻¹⁵	25.40	313.56 ⁻⁰⁶	22.11	316.85 ⁻²⁶
MW-7	26.0	336.92	17.94	318.98 ⁻⁰⁸	23.22	313.70 ⁻⁰⁸	19.80	317.12 ⁻⁰¹

Well	Well Depth (a) (ft)	TOC Elev. (b) (ft)	Depth to Groundwater (ft)	Groundwater Elevation (b) (ft)	Depth to Groundwater (ft)	Groundwater Elevation (b) (ft)	Depth to Groundwater (ft)	Groundwater Elevation (b) (ft)
			1-Mar-00		27-Sep-00		5-Feb-01	
MW-1	31.0	338.42	15.10	323.32 ⁻⁸⁸	17.41	321.01 ⁻⁷	22.52	315.90 ⁻¹⁵
MW-2	30.0	335.70	11.50	324.20	13.99	321.71	19.65	316.05
MW-2D	60.0	336.24	12.15	324.09 [↑]	14.32	321.92 [↑]	20.22	316.02 [↗]
MW-3	32.0	334.40	9.15	325.25	7.94	326.46	18.26	316.14
MW-6	25.0	338.96	15.06	323.90 ⁻³	17.81	321.15 ⁻⁵⁶	23.20	315.76 ⁻²⁹
MW-7	26.0	336.92	13.45	323.47 ⁻⁷³	15.53	321.39 ⁻²²	20.53	316.39 ⁺²⁹

NOTES:

1. All measurements in feet.
2. NA - Not Available
3. a - Measured from ground surface
4. b - Elevation in feet above mean sea level (ref. Environmental Investigations, 8/95)

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
Pesticides by SW-846 Method 8080
Former Peele Disposal Site
Clayton, North Carolina

0022 2.1 .02 +21.5

Monitoring Wells	Sampling Event	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Endrin aldehyde	gamma-BHC (Lindane)
CRQL		0.05	0.05	0.05	0.1	0.1	0.05
MW-1							
	4/21/97	<0.034	<0.068	<0.100	<0.023	<0.10	<0.043
	9/18/97	<0.032	<0.065	<0.097	<0.022	<0.10	<0.043
	9/16/98	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/12/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/1/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/1/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/27/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	2/5/01	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
MW-2							
	4/21/97	3.3	0.92	0.73	0.07	<0.10	4.8
	9/18/97	4.7	1.6	<0.92	<0.20	<0.10	6.7
duplicate	9/18/97	5.2	1.8	0.96	<0.21	<0.10	7.5
	9/16/98	1.2	<1.0	<1.0	<2.0	<0.10	1.8
	3/22/99	2.0	1.1	0.60	<1.0	<1.0	3.0
duplicate	3/22/99	2.1	1.2	<1.0	<2.0	<2.0	2.8
	9/1/99	1.0	0.59	0.53	<0.50	<0.50	1.3
	3/1/00	0.57	0.60	0.36	<0.50	<0.50	0.60
duplicate	3/1/00	0.56	0.75	0.47	<0.50	<0.50	0.81
	9/27/00	0.61	1.00	0.25	<0.40	<0.40	1.1
duplicate	9/27/00	0.69	1.10	0.39	<0.50	<0.50	1.3
	2/5/01	0.69	0.75	0.31	<0.20	<0.20	1.1
duplicate	2/5/01	0.77	0.81	0.32	<0.20	<0.20	1.2
MW-2D							
	7/8/97	0.12	<0.060	<0.090	<0.02	<0.10	0.22
	9/18/97	0.21	0.65	<0.093	<0.021	<0.10	0.38
	9/16/98	0.11	0.06	<0.050	<0.10	<0.10	0.23
duplicate	9/16/98	0.14	0.06	<0.050	<0.10	<0.10	0.26
	3/22/99	0.10	0.05	<0.050	<0.10	<0.10	0.19
	9/8/99	0.12	<0.050	<0.050	<0.10	<0.10	0.23
	3/2/2000	<0.050	<0.050	<0.050	<0.10	<0.10	0.09
	9/28/00	0.074	<0.050	<0.050	<0.10	<0.10	0.16
	2/5/01	<0.050	<0.050	<0.050	<0.10	<0.10	0.11
MW-3							
	4/21/97	<0.033	<0.065	<0.097	0.08	<0.10	<0.043
duplicate	4/21/97	<0.034	<0.065	<0.100	<0.022	<0.10	<0.043
	9/18/97	<0.034	<0.068	<0.100	0.10	<0.10	<0.043
	9/16/98	<0.050	0.13	<0.050	0.25	<0.10	<0.050
	3/22/99	<0.050	0.12	<0.050	0.35	<0.10	<0.050
	9/1/99	<0.050	<0.05	<0.050	0.11	<0.10	<0.050
duplicate	9/1/99	<0.050	0.06	<0.050	0.14	<0.10	<0.050
	3/2/2000	<0.050	0.11	<0.050	0.32	<0.10	<0.050
	9/27/00	<0.10	0.16	<0.10	0.50	<0.20	<0.10
	2/5/01	<0.050	0.12	<0.050	0.34	<0.10	<0.050
MW-6							
	12/30/97	<0.030	<0.60	<0.090	<0.02	<0.10	<0.040
	9/17/98	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/12/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
9/1/99 and 9/8/99 insufficient water in well to purge and sample.							
	3/1/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/28/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	2/6/01	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
MW-7							
	1/22/98	<0.031	<0.61	<0.092	<0.02	<0.10	<0.041
	9/16/98	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/23/99	<0.050	<0.050	<0.050	<0.10	0.47	<0.050
	9/8/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/1/2000 TH	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/27/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	2/6/01	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050

LEGEND:

¹ Subpart of the following March 2000 samples were delayed: MW-2D, MW-3, and MW-7. As a result of the delay the temperature of the samples exceeded the 4 degree C criteria for preservation.

² Also as a result of the delay, the extraction for MW-7 was completed on the eighth day following sample collection, which exceeds the extraction holding time criteria of seven days.

NA - Indicates compound not included in analysis.

NOTES:

- All results are reported in µg/L.
- All compounds reported above practical quantitation limits in one or more wells are summarized here with the exception of a single detection of endrin ketone at 0.48 micrograms per liter in a sample collected from MW-3 on 9-27-00. All laboratory analytical data are provided in Appendix B.
- CRQL is the Contract Required Quantitation Limit for EPA CLP approved laboratories. The CRQL meets or exceeds the Practical Quantitation Limit or PQL for EPA SW-846 methodologies. According to Section .202 of the NCAC 2L standard, the PQL serves as the standard for compounds which do not have an established standard, or where the established standard is less than the PQL. As a result, the CRQL or PQL is the applicable standard for all of the reported compounds.

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
Pesticides by SW-846 Method 8080
Former Peele Disposal Site
Clayton, North Carolina

0022 2.1 .02

Monitoring Wells	Sampling Event	alpha-BHC	Beta-BHC	delta-BHC	Dieldrin	Endrin sidebyde	gamma-BHC (Lindane)
CRQL		0.05	0.05	0.05	0.1	0.1	0.05
MW-1							
	4/21/97	<0.034	<0.068	<0.100	<0.023	<0.10	<0.043
	9/18/97	<0.032	<0.065	<0.097	<0.022	<0.10	<0.043
	9/16/98	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/12/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/1/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/1/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/27/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	2/5/01	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
MW-2							
	4/21/97	3.3	0.92	0.73	0.07	<0.10	4.8
	9/18/97	4.7	1.6	0.92	<0.20	<0.10	6.7
duplicate	9/18/97	5.2	1.8	0.96	<0.21	<0.10	7.5
	9/16/98	1.2	<1.0	<1.0	<2.0	<0.10	1.8
	3/22/99	2.0	1.1	0.60	<1.0	<1.0	3.0
duplicate	3/22/99	2.1	1.2	<1.0	<2.0	<2.0	2.8
	9/1/99	1.0	0.59	0.33	<0.50	<0.50	1.3
	3/1/00	0.37	0.60	0.36	<0.50	<0.50	0.60
duplicate	3/1/00	0.56	0.75	0.47	<0.50	<0.50	0.81
	9/27/00	0.61	1.00	0.35	<0.40	<0.40	1.1
duplicate	9/27/00	0.69	1.10	0.39	<0.50	<0.50	1.3
	2/5/01	0.69	0.75	0.31	<0.20	<0.20	1.1
duplicate	2/5/01	0.77	0.81	0.32	<0.20	<0.20	1.2
MW-2D							
	7/8/97	0.12	<0.060	<0.090	<0.02	<0.10	0.22
	9/18/97	0.21	0.65	<0.093	<0.021	<0.10	0.38
	9/16/98	0.11	0.06	<0.050	<0.10	<0.10	0.23
duplicate	9/16/98	0.14	0.06	<0.050	<0.10	<0.10	0.26
	3/22/99	0.10	0.05	<0.050	<0.10	<0.10	0.19
	9/8/99	0.12	<0.050	<0.050	<0.10	<0.10	0.23
	3/2/2000 ^T	<0.050	<0.050	<0.050	<0.10	<0.10	0.09
	9/28/00	0.074	<0.050	<0.050	<0.10	<0.10	0.16
	2/5/01	<0.050	<0.050	<0.050	<0.10	<0.10	0.11
MW-3							
	4/21/97	<0.033	<0.065	<0.097	0.08	<0.10	<0.043
duplicate	4/21/97	<0.034	<0.065	<0.100	<0.022	<0.10	<0.043
	9/18/97	<0.034	<0.068	<0.100	0.10	<0.10	<0.043
	9/16/98	<0.050	0.13	<0.050	0.25	<0.10	<0.050
	3/22/99	<0.050	0.12	<0.050	0.35	<0.10	<0.050
	9/1/99	<0.050	<0.05	<0.050	0.11	<0.10	<0.050
duplicate	9/1/99	<0.050	0.06	<0.050	0.14	<0.10	<0.050
	3/2/2000 ^T	<0.050	0.11	<0.050	0.32	<0.10	<0.050
	9/27/00	<0.10	0.16	<0.10	0.50	<0.20	<0.10
	2/5/01	<0.050	0.12	<0.050	0.34	<0.10	<0.050
MW-6							
	12/30/97	<0.030	<0.60	<0.090	<0.02	<0.10	<0.040
	9/17/98	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/12/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
9/1/99 and 9/8/99 Insufficient water in well to purge and sample.							
	3/1/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/28/00	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	2/6/01	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
MW-7							
	1/22/98	<0.031	<0.61	<0.092	<0.02	<0.10	<0.041
	9/16/98	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/23/99	<0.050	<0.050	<0.050	<0.10	0.47	<0.050
	9/8/99	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	3/1/2000 TH	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050
	9/27/00	<0.050	<0.050	>0.050	<0.10	<0.10	<0.050
	2/6/01	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050

LEGEND:

¹ Shipment of the following March 2000 samples were delayed: MW-2D, MW-3, and MW-7. As a result of the delay the temperature of the samples exceeded the 4 degree C criteria for preservation.

² Also as a result of the delay, the extraction for MW-7 was completed on the eighth day following sample collection, which exceeds the extraction holding time criteria of seven days.

NA - Indicates compound not included in analysis.

NOTES:

- All results are reported in µg/L.
- All compounds reported above practical quantitation limits in one or more wells are summarized here with the exception of a single detection of endrin ketone at 0.48 micrograms per liter in a sample collected from MW-3 on 9-27-00. All laboratory analytical data are provided in Appendix B.
- CRQL is the Contract Required Quantitation Limit for EPA CLP approved laboratories. The CRQL meets or exceeds the Practical Quantitation Limit or PQL for EPA SW-846 methodologies. According to Section .202 of the NCAC 2L standard, the PQL serves as the standard for compounds which do not have an established standard, or where the established standard is less than the PQL. As a result, the CRQL or PQL is the applicable standard for all of the reported compounds.

TABLE 3
FIELD PARAMETERS
Former Peele Disposal Site
Clayton, North Carolina

Well #	Date	Temp. (C)	Specific Conductivity (mS/m)	pH (standard units)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
MW-1	2/5/01	17.5	2.5	4.69	2.98	10.90
MW-2	2/5/01	17.3	6.2	4.15	6.15	8.52
MW-2D	2/5/01	16.8	4.8	5.73	6.37	9.7
MW-3	2/5/01	16.8	1.8	4.55	4.93	5.1
MW-6	2/6/01	16.1	2.9	4.42	2.99	9.3
MW-7	2/6/01	15.9	2.9	5.10	5.21	7.3

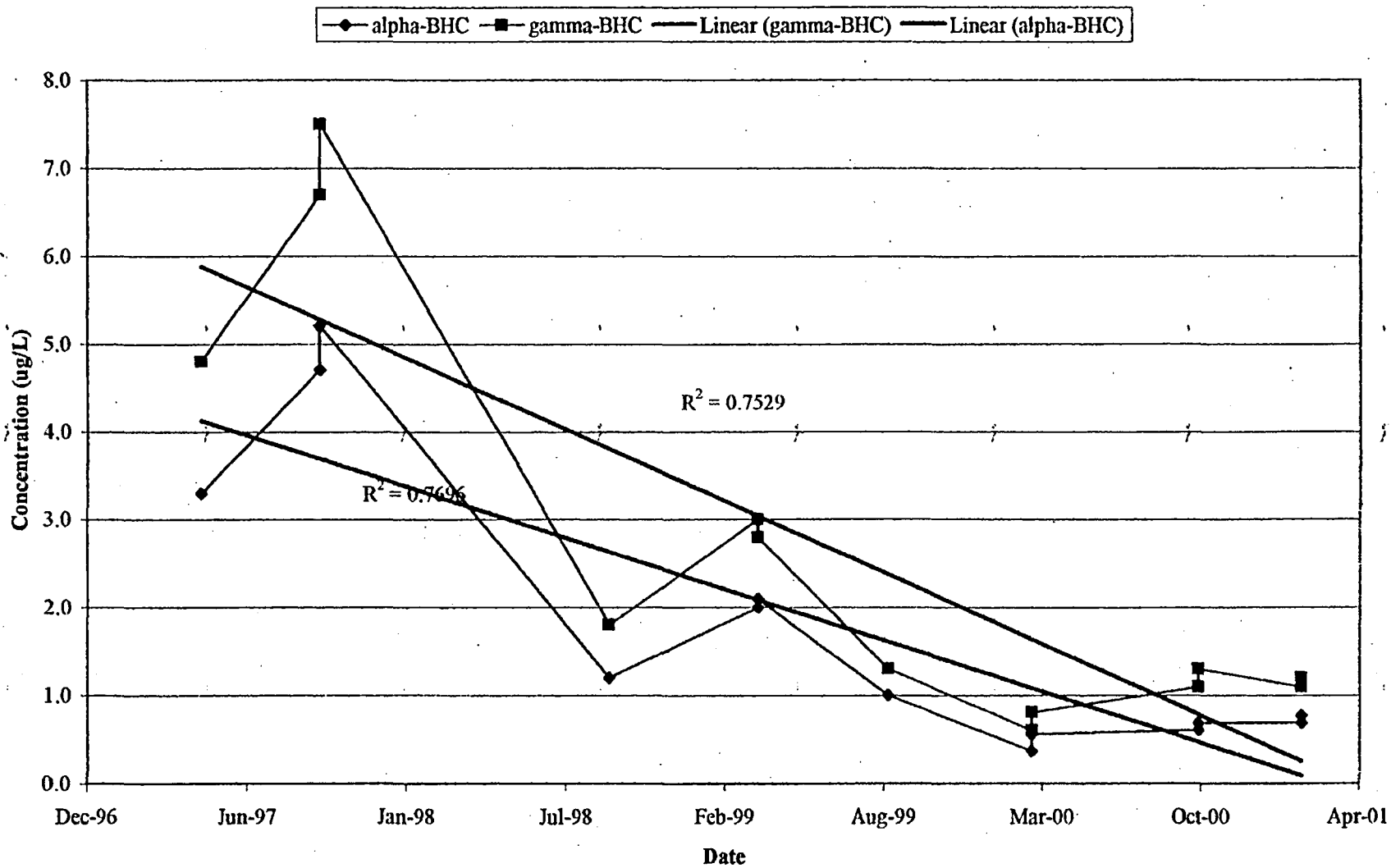
TABLE 4
NATURAL ATTENUATION PARAMETERS
Former Peele Disposal Site
Clayton, North Carolina

Well #	Date Sampled	Nitrate-N (mg/l)	Total Kjeldahl Nitrogen-N (mg/l)	Ammonia-N (mg/l)	Sulfate (mg/l)	Sulfite (mg/l)	Alkalinity (mg/l)	Chloride (mg/l)	Ferrous Iron 2+ (mg/l)
MW-1	9/16/98	0.08	<0.20	<0.030	<5.0	<1.0	<1.0	17	<0.10
	3/12/99	0.08	<0.20	<0.030	<5.0	<5.0	<1.0	4.0	<0.10
	9/1/99	0.11	<0.20	<0.030	<5.0	<5.0	<1.0	3.9	<0.10
	3/1/00	0.22	<0.20	<0.030	<5.0	<5.0	<1.0	4.3	<0.10
	9/27/00	0.16	<0.20	<0.030	<5.0	<5.0	1.7	4.6	<0.10
	2/5/01	<0.050	<0.20	<0.030	<5.0	<5.0	<1.0	4.6	<0.10
MW-2 duplicate	9/16/98	0.15	<0.20	<0.030	<5.0	<1.0	<1.0	5.2	<0.10
	3/22/99	0.17	<0.20	<0.030	<5.0	<1.0	<1.0	14	<0.10
	9/1/99	0.13	<0.20	<0.030	<5.0	<5.0	<1.0	17	<0.10
	3/1/00	0.34	<0.20	0.031	<5.0	<5.0	<1.0	17	<0.10
	3/1/00	0.36	<0.20	<0.030	<5.0	<5.0	<1.0	17	<0.10
	9/27/00	0.27	<0.20	<0.030	<5.0	<5.0	<1.0	14	<0.10
	9/27/00	0.27	<0.20	<0.030	<5.0	<5.0	<1.0	14	<0.10
	2/5/01	0.15	<0.20	<0.030	<5.0	<5.0	<1.0	15	<0.10
duplicate	2/5/01	0.16	<0.20	<0.030	<5.0	<5.0	<1.0	16	<0.10
MW-2D	9/16/98	0.07	<0.20	<0.030	12.0	<1.0	24	3.7	<0.10
	3/22/99	0.07	0.25	<0.030	5.8	<1.0	22	2.7	<0.10
	9/8/99	<0.050	<0.20	<0.030	<5.0	<5.0	19	2.7	<0.10
	3/2/00	<0.050	0.36	<0.030	<5.0	<5.0 ^H	19	2.3	NA
	9/28/00	0.072	<0.20	<0.030	<5.0	<5.0	19	2.3	<0.10
	2/5/01	<0.050	<0.20	<0.030	<5.0	<5.0	18	2.4	<0.10

NOTES:

NA - Indicates compound not included in analysis.

FIGURE 4
Historic Data Plot with Trendline for MW-2






N.C. HIGHWAY 42

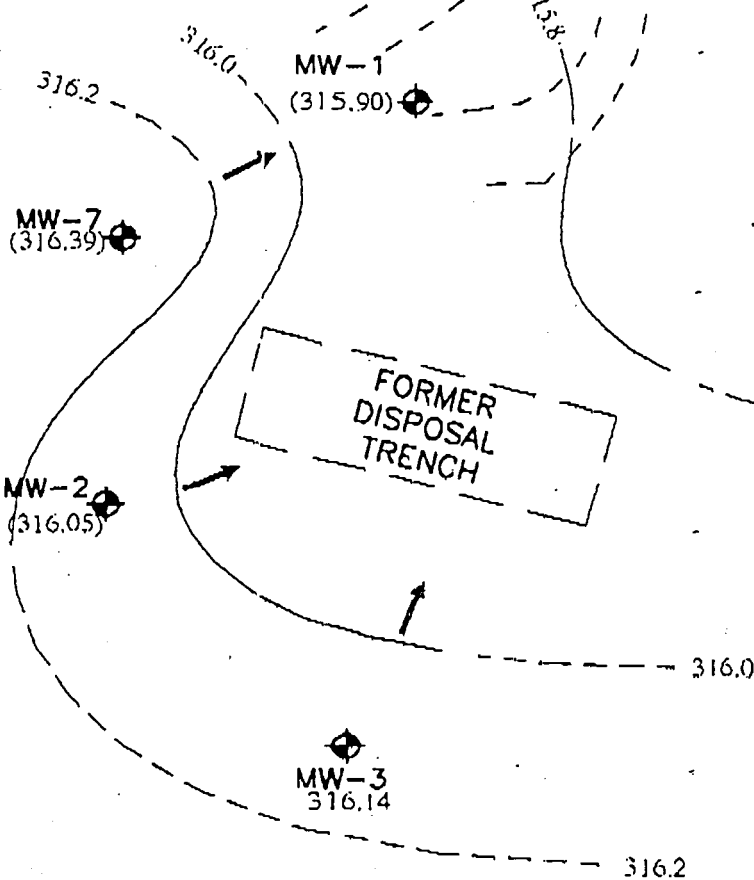
EDGE OF PAVEMENT

R.O.W.

**NORTH CAROLINA
RAILROAD COMPANY
PROPERTY**

LEGEND:

-  MW-1 EXISTING GROUNDWATER MONITORING WELL
-  321.5 GROUNDWATER CONTOUR LINE (REFERENCED TO MSL IN FEET)
-  APPROXIMATE DIRECTION OF GROUNDWATER FLOW



**CATERPILLAR, INC.
PROPERTY**

APPROXIMATE SCALE



FORMER PEELE DISPOSAL SITE
CLAYTON, NORTH CAROLINA

URS Corporation
Consulting Engineers, Geologists
and Environmental Scientists
Raleigh, North Carolina

**GROUNDWATER CONTOUR
MAP, FEBRUARY 5, 2001**

FILE NO.
7E05522

SYNGENTA CROP PROTECTION, INC.
GREENSBORO, NORTH CAROLINA

FIG. NO.
2

SCALE: AS SHOWN	DRN BY: CDP	DATE: 2/14/01
	CHECKED BY: PWG	DATE: 2/16/01

1
18.5

18.9
06

7
0
14.0

20
19.0

14.6
0
3

0
13.7

13.7
7

13.6
6

0.2
13.6

10
16.8

16.9
8
6

13.5
03

17.2
7

01
23.3

17.1
2

23.9
76
20.53

22.5

23.9
06
23.21

21.4
3

0
4

20
20
24.2
19.65

25.25
18.28
3

N.C. HIGHWAY 42

EDGE OF PAVEMENT

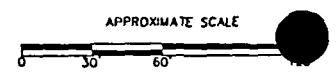
R.O.W.



APPROX. PROPERTY LINE
(MARKED NO TRESPASSING)

LEGEND:

- MW-1 EXISTING GROUNDWATER MONITORING
- 322.4 GROUNDWATER CONTOUR LINE (REFERENCED TO MSL IN FEET)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW



NORTH CAROLINA RAILROAD COMPANY
PROPERTY

CATERPILLAR, INC
PROPERTY

DAMAGED FENCE

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA A

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA B



MW-2

MW-1

MW-3

MW-4

DATE			REVISION		
PEELE DISPOSAL SITE CLAYTON, NORTH CAROLINA					
Woodward-Clyde Consultants, Inc. Consulting Engineers, Geologists and Environmental Scientists Raleigh, North Carolina					
NOVARTIS CROP PROTECTION, INC. GREENSBORO, NORTH CAROLINA					
SCALE:	MADE BY: RWB	DATE: 10/13/97	FILE		
AS SHOWN	CHECKED BY: PWG	DATE: 10/13/97			
GROUNDWATER ELEV. (FT.) 10/14/97					

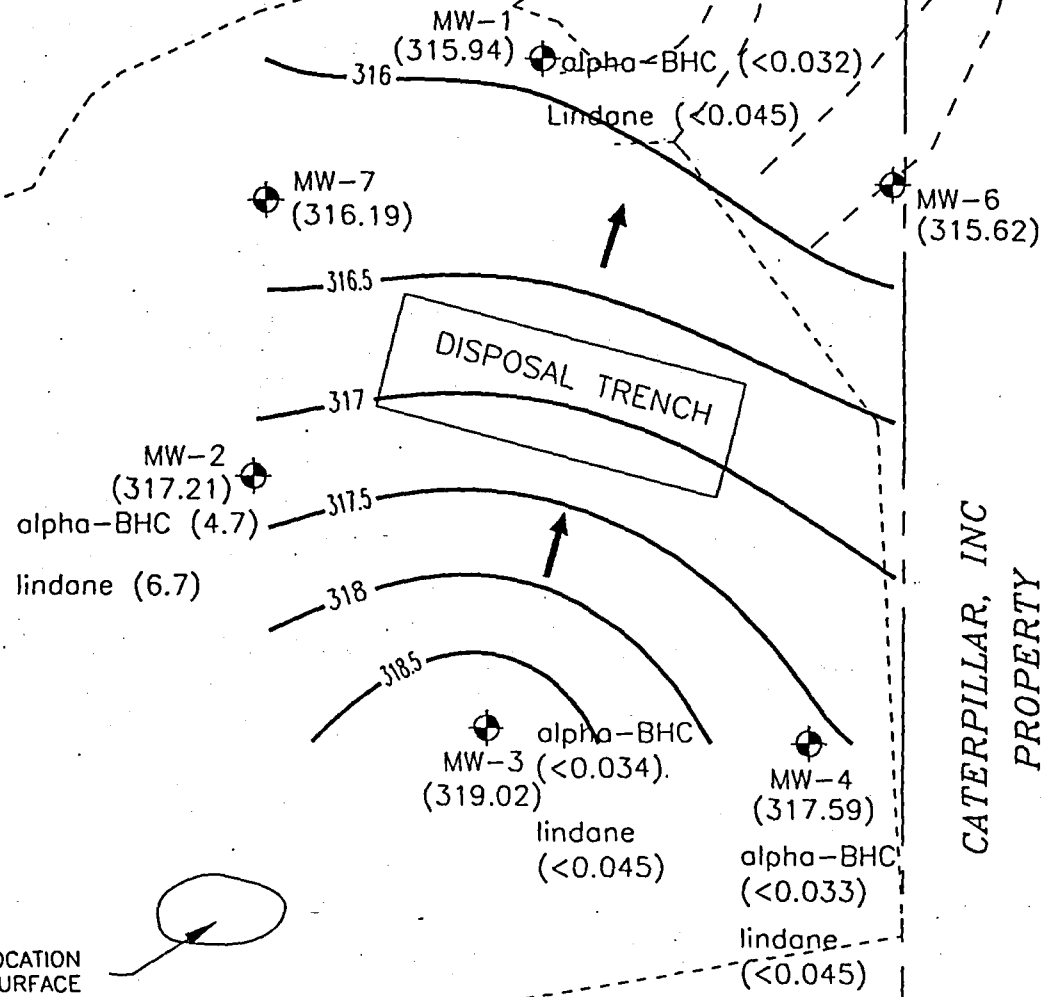
ROLINA RAILROAD COMPANY
PROPERTY

CATERPILLAR, INC
PROPERTY

MAGED FENCE →

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA A

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA B



12-03-97

DATE

SCALE:
A

AA05114

NC Department of Environment,
Health, & Natural Resources
Solid Waste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St.
Raleigh, North Carolina 27611-8047

Site Number NEO 986 171 33E Sample ID Number/Name 020784

Name of Site Peele Pest. Dump Collected By Harry Zmin ID# _____

Site Location Clayton NC Date Collected 3-1-00 Time 13:45

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental Concentrate

- Ground Water (1) Solid (5) *mw*
- Surface Water (2) Liquid (6) **RECEIVED**
- Soil (3) Sludge (7) **MAR 20 2000**
- Other (4) Other (8) **SUPERFUND SITE**

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
arsenic	_____
barium	_____
cadmium	_____
chromium	_____
lead	_____
mercury	_____
selenium	_____
silver	_____

Organic Chemistry		Inorganic Chemistry		Organic Compounds	
Parameter	Results (mg/l)	Parameter	Results(mg/l)(mg/kg)	Organic Compounds	Results(mg/l)
<input type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> antimony	_____	<input type="checkbox"/> benzene	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	SEE ATTACHED SHEETS	<input type="checkbox"/> arsenic	_____	<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> 2,4-D	_____	<input type="checkbox"/> barium	_____	<input type="checkbox"/> chlordan	_____
<input type="checkbox"/> 2,4,5-TP(Silvex)	_____	<input type="checkbox"/> beryllium	_____	<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chlordan	_____	<input type="checkbox"/> cadmium	_____	<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> heptachlor	_____	<input type="checkbox"/> chloride	_____	<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> hexachlorobenzene	_____	<input type="checkbox"/> chromium	_____	<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> hexachlorobutadiene	_____	<input type="checkbox"/> cobalt	_____	<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> endrin	_____	<input type="checkbox"/> copper	_____	<input type="checkbox"/> cresol	_____
<input type="checkbox"/> lindane	_____	<input type="checkbox"/> fluoride	_____	<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> methoxychlor	_____	<input type="checkbox"/> iron	_____	<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> toxaphene	_____	<input type="checkbox"/> lead	_____	<input type="checkbox"/> 1,1-dichloroethylene	_____
<input checked="" type="checkbox"/> Pest.	SEE ATTACHED SHEET(S)	<input type="checkbox"/> manganese	_____	<input type="checkbox"/> 2,4-dichloroethylene	_____
	_____	<input type="checkbox"/> mercury	_____	<input type="checkbox"/> heptachlor	_____
	_____	<input type="checkbox"/> nickel	_____	<input type="checkbox"/> hexachlorobenzene	_____
	_____	<input type="checkbox"/> nitrate	_____	<input type="checkbox"/> hexachlorobutadiene	_____
	_____	<input type="checkbox"/> selenium	_____	<input type="checkbox"/> hexachloroethane	_____
	_____	<input type="checkbox"/> silver	_____	<input type="checkbox"/> methyl ethyl ketone	_____
	_____	<input type="checkbox"/> sulfates	_____	<input type="checkbox"/> nitrobenzene	_____
	_____	<input type="checkbox"/> thallium	_____	<input type="checkbox"/> pentachlorophenol	_____
	_____	<input type="checkbox"/> vanadium	_____	<input type="checkbox"/> pyridine	_____
	_____	<input type="checkbox"/> zinc	_____	<input type="checkbox"/> tetrachloroethylene	_____
	_____	<input type="checkbox"/> pH	_____	<input type="checkbox"/> trichloroethylene	_____
	_____	<input type="checkbox"/> conductivity	_____	<input type="checkbox"/> 2,4,5-trichlorophenol	_____
	_____	<input type="checkbox"/> TDS	_____	<input type="checkbox"/> 2,4,6-trichlorophenol	_____
	_____	<input type="checkbox"/> flash point	_____	<input type="checkbox"/> vinyl chloride	_____
	_____		_____	<input type="checkbox"/> endrin	_____
	_____		_____	<input type="checkbox"/> lindane	_____
	_____		_____	<input type="checkbox"/> methoxychlor	_____
	_____		_____	<input type="checkbox"/> toxaphene	_____
	_____		_____	<input type="checkbox"/> 2,4-D	_____

FOR LAB USE ONLY

Date Received 3-1-00 TZ

Date Extracted BNA 3-2-00 KCM
Pest 3-6-00 VBO

Date Analyzed BNA
Pest 3-6-00 VP 3800

Reported By John Z Neal

Date Reported MAR 14 2000

Lab Number 000899

AA05115

NC Department of Environment,
Health, & Natural Resources
Solid Waste Management Division

SAMPLE ANALYSIS REQUEST

State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St.
Raleigh, North Carolina 27611-8047

Site Number NCO 986 171 338 Sample ID Number/Name 020785
Name of Site Peale Pest Pump Collected By H Zina ID# _____
Site Location Clayton NC Date Collected 3-1-00 Time 1325

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental	Concentrate	Comments
<input checked="" type="checkbox"/> Ground Water (1)	<input type="checkbox"/> Solid (5)	<u>mW-6</u>
<input type="checkbox"/> Surface Water (2)	<input checked="" type="checkbox"/> Liquid (6)	
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	

TCLP Compounds

Inorganic Compounds	Results(mg/l)
<input type="checkbox"/> arsenic	_____
<input type="checkbox"/> barium	_____
<input type="checkbox"/> cadmium	_____
<input type="checkbox"/> chromium	_____
<input type="checkbox"/> lead	_____
<input type="checkbox"/> mercury	_____
<input type="checkbox"/> selenium	_____
<input type="checkbox"/> silver	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry	Results (mg/l)
Parameter P&T:GC/MS	_____
<input checked="" type="checkbox"/> Acid:B/N Ext. SEE ATTACHED SHEET(S)	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP(Silvex)	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input checked="" type="checkbox"/> <u>Pest</u> SEE ATTACHED SHEET(S)	_____
_____	_____
_____	_____

Inorganic Chemistry	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> antimony	_____	_____
<input type="checkbox"/> arsenic	_____	_____
<input type="checkbox"/> barium	_____	_____
<input type="checkbox"/> beryllium	_____	_____
<input type="checkbox"/> cadmium	_____	_____
<input type="checkbox"/> chloride	_____	_____
<input type="checkbox"/> chromium	_____	_____
<input type="checkbox"/> cobalt	_____	_____
<input type="checkbox"/> copper	_____	_____
<input type="checkbox"/> fluoride	_____	_____
<input type="checkbox"/> iron	_____	_____
<input type="checkbox"/> lead	_____	_____
<input type="checkbox"/> manganese	_____	_____
<input type="checkbox"/> mercury	_____	_____
<input type="checkbox"/> nickel	_____	_____
<input type="checkbox"/> nitrate	_____	_____
<input type="checkbox"/> selenium	_____	_____
<input type="checkbox"/> silver	_____	_____
<input type="checkbox"/> sulfates	_____	_____
<input type="checkbox"/> thallium	_____	_____
<input type="checkbox"/> vanadium	_____	_____
<input type="checkbox"/> zinc	_____	_____
<input type="checkbox"/> pH	_____	_____
<input type="checkbox"/> conductivity	_____	_____
<input type="checkbox"/> TDS	_____	_____
<input type="checkbox"/> flash point	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dichloroethylene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

FOR LAB USE ONLY

Date Received 3-1-00 Tg
BNA 3-2-00 dm
Date Extracted Pest 3-6-00 VP
BNA
Date Analyzed Pest 3-6-00 VP 3:8:00
80
Reported By _____
Date Reported **MAR 14 2000**
000900
Lab Number _____

NCDEHNR
Division of Waste Management
 Superfund Section
 Hazardous Waste Section
 Solid Waste Section

Organics Lab:
Inorganics Lab:

CHAIN OF CUSTODY RECORD

Project Name: <u>Peele Post</u>	Sampled By: <u>HARRY ZINN</u>
Site ID # (NCD#): _____	Sampler ID: _____
Location: <u>Clayton NC</u>	Telephone: <u>(919) 733 2801</u>
Address: _____	Date Sampled: <u>3-1-00</u>
	Time Sampled: _____
Sample Types: Soil _____ Water <input checked="" type="checkbox"/> Waste _____ Other _____	
Remarks: _____ _____ _____	
Field Sample Numbers <u>020784 020785</u> _____ _____	
Relinquished By: <u>[Signature]</u> (Signature)	Date: <u>3-1-00</u> Time: <u>15:20</u>
Received By: <u>Nancy Jones</u> (Signature)	Date: <u>3-1-00</u> Time: <u>3:20</u>
Relinquished By: _____ (Signature)	Date: _____ Time: _____
Received By: _____ (Signature)	Date: _____ Time: _____
Relinquished By: _____ (Signature)	Date: _____ Time: _____
Received By: _____ (Signature)	Date: _____ Time: _____
Results Reported: <u>[Signature]</u> (Signature)	Date: <u>MAR 14 2000</u> Time: _____

North Carolina State Laboratory of Public Health
N.C. Department of Health and Human Services
P.O. Box 28047 - 306 N. Wilmington St. - Raleigh, NC 27611-8047
(919) 733-7308

Pesticide Analysis Report

Name: Peel Pesticide Dump
Address: Clayton, N C

Telephone:

County: ~~Wayne~~

Report To: Harry Zinn

Collected By: H ZINN

Address: CERCLA
401 Oberlin Rd
Raleigh, NC

Telephone:
Date Collected: 03/01/2000
Analysis Desired: PESTICIDE, BN/A

Courier:

Analysis Method: NC Method 508.
Liquid-Liquid Extraction, Gas
Chromatography, Electron Capture
Detector.
1998

Analyte	Minimum Detection Limit	Results
Alachlor	<0.0001 mg/l	None Detected mg/l
Bifenthrin	<0.0010 mg/l	None Detected mg/l
Chlordane	<0.0002 mg/l	None Detected mg/l
Chlorpyrifos	<0.0001 mg/l	None Detected mg/l
Cypermethrin	<0.0010 mg/l	None Detected mg/l
Diazinon	<0.0001 mg/l	None Detected mg/l
Dieldrin	<0.0001 mg/l	None Detected mg/l
Endrin	<0.0001 mg/l	None Detected mg/l
Fenvalerate	<0.0010 mg/l	None Detected mg/l
Heptachlor	<0.0001 mg/l	None Detected mg/l
Heptachlor Epoxide	<0.0001 mg/l	None Detected mg/l
Lindane	<0.0002 mg/l	None Detected mg/l
Methoxychlor	<0.0010 mg/l	None Detected mg/l
Permethrin	<0.0010 mg/l	None Detected mg/l
Toxaphene	<0.0020 mg/l	None Detected mg/l

Comments:

Date Received: 03/01/2000

Laboratory No. AA05115

Reported By: 

Date Completed: 03/14/2000

Reference #: 000900

John L. Neal, Supervisor
Environmental Organic Chemistry

Date Reported: **MAR 14 2000**

Login Batch: 00030011

North Carolina State Laboratory of Public Health
N.C. Department of Health and Human Services
P.O. Box 28047 - 306 N. Wilmington St. - Raleigh, NC 27611-8047
(919) 733-7308

Pesticide Analysis Report

Name: Peel Pesticide Dump

Telephone:

Address:

County: ~~Wake~~

Clayton, N C

Zip:

Report To: Harry Zinn

Collected By: H ZINN

Address: CERCLA
401 Oberlin Rd
Raleigh, NC

Telephone:
Date Collected: 03/01/2000
Analysis Desired: PESTICIDE, BN/A

Courier:

Analysis Method: NC Method 508.
Liquid-Liquid Extraction, Gas
Chromatography, Electron Capture
Detector.
1998

Analyte	Minimum Detection Limit	Results
Alachlor	<0.0001 mg/l	None Detected mg/l
Bifenthrin	<0.0010 mg/l	None Detected mg/l
Chlordane	<0.0002 mg/l	None Detected mg/l
Chlorpyrifos	<0.0001 mg/l	None Detected mg/l
Cypermethrin	<0.0010 mg/l	None Detected mg/l
Diazinon	<0.0001 mg/l	None Detected mg/l
Dieldrin	<0.0001 mg/l	None Detected mg/l
Endrin	<0.0001 mg/l	None Detected mg/l
Fenvalerate	<0.0010 mg/l	None Detected mg/l
Heptachlor	<0.0001 mg/l	None Detected mg/l
Heptachlor Epoxide	<0.0001 mg/l	None Detected mg/l
Lindane	<0.0002 mg/l	None Detected mg/l
Methoxychlor	<0.0010 mg/l	None Detected mg/l
Permethrin	<0.0010 mg/l	None Detected mg/l
Toxaphene	<0.0020 mg/l	None Detected mg/l

Comments:

Date Received: 03/01/2000 Laboratory No. AA05114

Reported By: *John L. Neal*

Date Completed: 03/14/2000 Reference #: 000899

John L. Neal, Supervisor
Environmental Organic Chemistry

Date Reported: **MAR 14 2000** Login Batch: 00030011

1

STATE LABORATORY OF PUBLIC HEALTH

P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	000849	000900				
	FIELD #	020784	020785				
COMPOUND	TYPE	(1)	(1)	()	()	()	()
	UNITS	μg/l μg/kg	μg/l μg/kg	μg/l μg/kg	μg/l μg/kg	μg/l μg/kg	μg/l μg/kg
N-nitrosodimethylamine	10/330	U	U				
bis(2-chloroethyl)ether							
2-chlorophenol							
phenol							
1,3-dichlorobenzene							
1,4-dichlorobenzene							
1,2-dichlorobenzene							
bis(2-chloroisopropyl)ether							
hexachloroethane							
N-nitroso-di-n-propylamine							
nitrobenzene							
isophorone							
2-nitrophenol							
2,4-dimethylphenol							
bis(2-chloroethoxy)methane							
2,4-dichlorophenol							
1,2,4-trichlorobenzene							
naphthalene							
hexachlorobutadiene							
4-chloro-m-cresol							
hexachlorocyclopentadiene							
2,4,6-trichlorophenol							
2-chloronaphthalene							
acenaphthylene							
dimethyl phthalate							
2,6-dinitrotoluene							
acenaphthene							
2,4-dinitrophenol	50/1650						
2,4-dinitrotoluene	10/330						
4-nitrophenol	50/1650						
fluorene	10/330						
4-chlorophenylphenylether							
diethyl phthalate							
4,6-dinitro-o-cresol	50/1650						
diphenylamine	10/330						
azobenzene							
4-bromophenylphenylether							
hexachlorobenzene							
pentachlorophenol	50/1650						
phenanthrene	10/330						
anthracene							
dibutyl phthalate							
fluoranthene							

MDL
H₂O/501L

- J - Estimated value.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
- NA - Not analyzed.
- 1/ - Tentative identification.
- 2/ - On NRDC List of Priority Pollutants.

STATE LABORATORY OF PUBLIC HEALTH
P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611
ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	000899	000900				
	FIELD #	020784	020785				
COMPOUND	TYPE	(1)	(1)	()	()	()	()
	UNITS	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg
pyrene	10/330						
benzidine	50/1650						
butyl benzyl phthalate	10/330						
benz(a)anthracene							
chrysene	↓						
3,3-dichlorobenzidine	50/1650						
bis(2-ethylhexyl)phthalate	10/330						
di-n-octyl phthalate	10/330						
benzo(b)fluoranthene	50/1650						
benzo(k)fluoranthene							
benzo(a)pyrene	↓						
indeno(1,2,3-cd)pyrene							
dibenzo(a,h)anthracene	↓						
benzo(g,h,i)perylene							
aniline	50/1650						
benzoic acid	↓						
benzyl alcohol							
4-chloroaniline	↓						
dibenzofuran	10/330						
2-methylnaphthalene	↓						
2-methylphenol	↓						
4-methylphenol	↓						
2-nitroaniline	50/1650						
3-nitroaniline	↓						
4-nitroaniline	↓						
2,4,5-trichlorophenol	↓		✓	✓			

MDL
H₂O/SOIL

J - Estimated value.
 K - Actual value is known to be less than value given.
 L - Actual value is known to be greater than value given.
 U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
 NA - Not analyzed.
 1/ - Tentative identification.
 2/ - On NROC List of Priority Pollutants.

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF WASTE MANAGEMENT

March 14, 2000

Mr. Peter Glaesman P.E.
URS Greiner Woodward-Clyde
3109 Poplarwood Court Suite 301
Raleigh, North Carolina 27604-1043

RE: March 2000 Quarterly Groundwater Monitoring Samples
Peele Pesticide Site
Clayton, North Carolina

Dear Mr. Glaesman:

According to our telephone conversation on 3/9/2000, some of the samples collected for the March 2000 quarterly sampling event for the Peele Pesticide Disposal site were detained by Federal Express and returned to your office. During this time the temperature of the samples rose to 12 degrees Celsius which is in excess of the 4 degrees Celsius as per EPA Standard Operating Procedure and Quality Assurance Manual, Appendix A. Immediately after you received the samples they were iced down again and resent to the laboratory.

The samples involved were collected from Monitoring Wells #2D, #3, and #7. These samples were originally shipped on Friday, March 3rd, returned to your office on Tuesday, March 7th, and reshipped on Wednesday, March 8th.

The results of these samples are important to determining the overall status of the Natural Attenuation of the contaminants remaining in the groundwater at the site, however, they are not the most crucial. From the flow pattern observed during the sampling event, these wells are located up gradient of the former trench and would be considered background.

Please analyze these samples without exceeding the holding times and flag the results to indicate that the samples were not maintained at 4 degrees Celsius.

If you have any questions, please contact me at (919) 733-2801 ext 313.

Sincerely,



Harry Zinn
Environmental Engineer
Special Remediation Branch
NC Superfund Section

cc. Bruce Nicholson
Mr. Harold Moats



1646 MAIL SERVICE CENTER, RALEIGH, NORTH CAROLINA 27699-1646
401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER - 50% RECYCLED/10% POST-CONSUMER PAPER



JAMES B. HUNT JR.
GOVERNOR

BILL HOLMAN
SECRETARY

WILLIAM L. MEYER
DIRECTOR

CLAYTON PARKS & RECREATION

P.O. BOX 879 • 340 MCCULLERS STREET • CLAYTON, NC • 27520
553-1550 • FAX: 553-1521

Larry Bailey - Director
553-5777

Rocky Mazzeo - Athletic Director
553-1551

Susan Jenkins - Program Director
553-1555

Fax

To: Harry Zinn From: Larry Bailey

Fax: _____ Pages: cover + 1

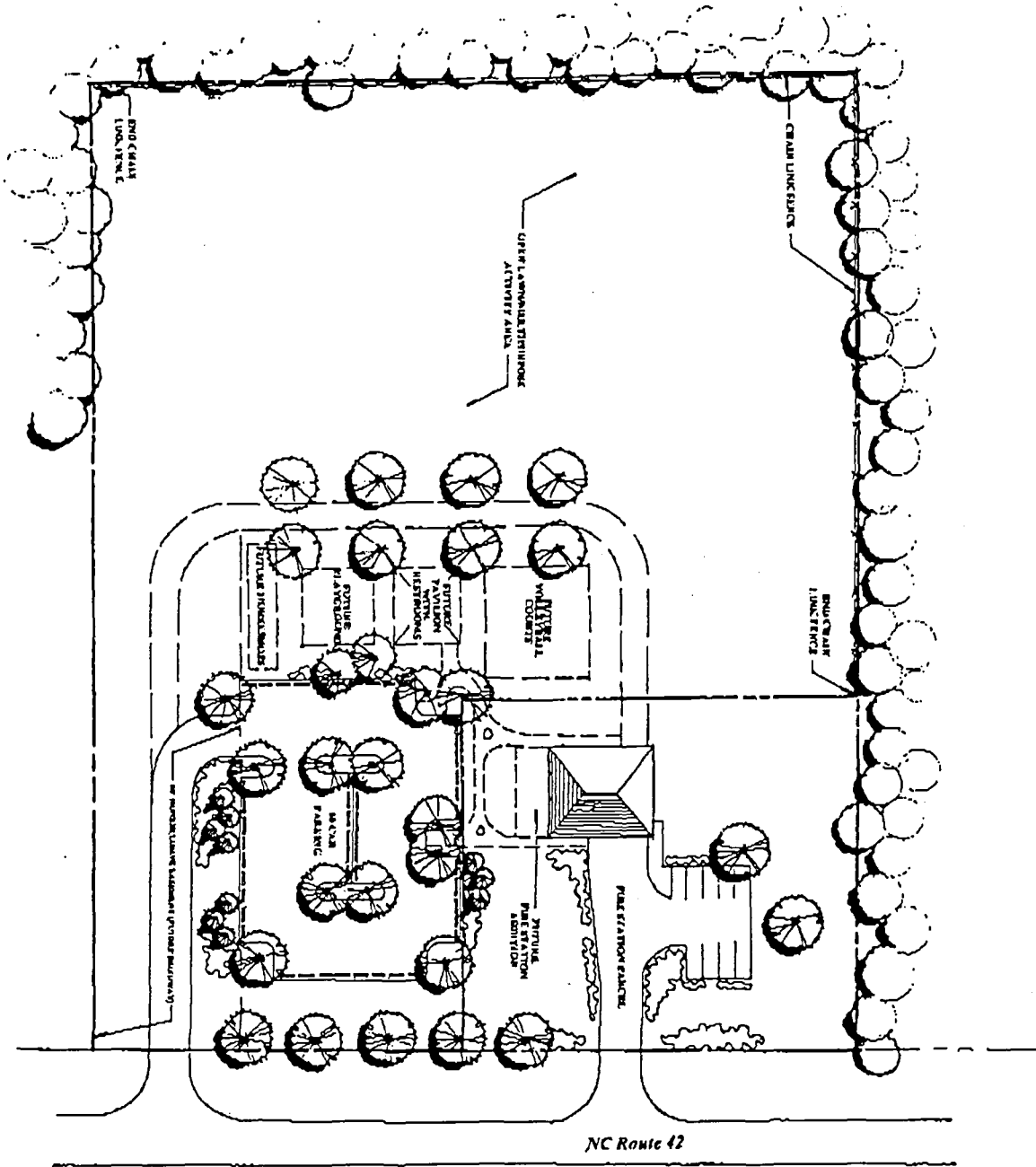
Phone: _____ Date: _____

Re: _____

Harry,

Thanks for your assistance with this. As I stated this is a sketch of how we would like to use the site. Please call me if you have any questions.

Thanks,
Larry Bailey



DATE	1/14/00
PROJECT	CLAYTON PARK & RECREATION
DRAWN BY	[Signature]
CHECKED BY	[Signature]
SCALE	AS SHOWN
10571	

SCHEMATIC DESIGN
 CLAYTON FIRE STATION PARK

Kimley-Horn
 and Associates
 1011 South Street
 Raleigh, NC 27601
 (919) 843-8300

RECEIVED

URS Greiner Woodward Clyde

A Division of URS Corporation

MAY 18 1009

SU

3109 Poplarwood Court, Suite 301
Raleigh, NC 27604
Tel: 919.850.9511
Fax: 919.790.0217
Offices Worldwide

May 14, 1999

Mr. Harry Zinn
NCDENR, Division of Waste Management
401 Oberlin Rd
Raleigh, NC 27605

**Subject: Response to Comments Regarding
March 1999 Monitoring Report for
Former Peele Disposal Site
Clayton, North Carolina**

Dear Mr. Nicholson:

The following response is provided to your May 3, 1999 comments letter pertaining to the March 1999 Monitoring Report for the Former Peele Disposal Site in Clayton North Carolina.

1. *Please indicate what problems were encountered at MW-7? Did the turbidity stabilize at a level significantly higher than 10 NTUs or did the well purge dry?* On March 12, after failing to meet the target turbidity of 10 NTUs, the well was eventually purged dry. During the next sampling attempt on March 22 the flow rate was reduced to prevent purging the well dry. Although the well did not purge dry, the turbidity again exceeded the 10 NTU threshold, and the well was not sampled.

During the third sampling attempt of MW-7 (March 23), turbidity decreased to 9 NTUs and remained relatively constant after 1.5 gallons of water was purged. Three well volumes of water were purged from MW-7 before sample collection was initiated. Turbidity readings were collected before, during, and after the first bottle was filled. The turbidity reading after the first bottle was filled was 13 NTUs. Therefore, no backup sample bottle was filled. The single container was successfully analyzed.

2. *Why is the time of sampling for MW-1 shown at 14:00 on the Well Development/Sampling Log and the last parameter check shown as 15:30, and on the sample Report of Results form the sample time is shown as 14:45?* As shown on the sampling log, purging at MW-1 on March 12 began at 09:15 with a speed controlled submersible pump and was discontinued at 10:15 as the turbidity remained above 40 NTUs. Purging was later continued at this well using a peristaltic pump. At approximately 14:00 the turbidity at this well seemed to be approaching 10 NTUs, and preparations were made to begin sampling. However, it was not until 90 minutes later at 15:30 that the turbidity was sufficiently stable below 10 NTUs to allow sampling to commence. This was accurately reflected on the chain of custody and

laboratory report. However, due to an oversight the 14:00 sampling time was not corrected on the "Sampling Data" portion of the sampling log form.

At no time was any sampling information from MW-1 associated with the time 14:45. You will note that the groundwater sample from MW-7 was collected at 14:45 on March 23, 1999.


3. *Do you have any explanation for the increase in the levels of beta-BHC and Dieldrin in MW-3 for the last two sampling events?* A review of the recent groundwater analysis history of MW-3 reveals that the largest increase occurred between sampling events in September of 1997 and September of 1998, the latter of which was the first sampling event under the Groundwater Remedial Action Plan. In September 1998, a new laboratory was selected for groundwater analysis in order to meet the Contract Required Quantitation Limit (CRQL) specified in the Groundwater Remedial Action Plan. Data collected from the two monitoring events following the laboratory change is well within the range of seasonal fluctuations and is, in general, relatively consistent. We will continue to monitor this well to assess if any significant trend develops in the future.
4. *Please attach explanations when detection limits vary significantly between samples.* Pursuant to this request, explanations will be included in the future. In this case, please note that the sample result for MW-2 was diluted 10 fold to accurately quantify the constituents of concern. The dilution increased the quantitation limit for those compounds which have never been detected in this well. However, since the diluted quantitation limit did not affect the results for the constituents of concern (alpha and gamma BHC), lower detection limits for undetected constituents were not pursued.

If you have any questions regarding this information, please call Mr. Harold Moats of Novartis Crop Protection, Inc. at (336) 632-7714 or either of the undersigned at (919) 850-9511.

Sincerely,



Conan D. Fitzgerald
Assistant Project Engineer



Peter W. Glaesman, P.E.
Senior Project Manager

CDF/PWG:daw

Attachments

cc: Harold Moats, Novartis Crop Protection

SCHEDULE OF REMEDIAL ACTION PLAN
Former Peele Disposal Site, INC.
 Project Number: 7E05522 - 6

DRAFT
SUBJECT TO REVISIONS

	Weeks of																			
	2/16	2/23	3/2	3/9	3/16	3/23	3/30	4/6	4/13	4/20	4/27	5/4	5/11	5/18	5/25	6/1	6/8	6/15	6/22	6/29
Site Visit & Meeting with NCDENR	2/17																			
Submit Remedial Action Plan to NCDENR *						3/27														
NCDENR Review & Comments to Remedial Action Plan								4/10												
Submit Revised Remedial Action Plan										4/24										
Sample Groundwater Wells under Remedial Action Plan																				
Begin Construction of Clayton Fire Station																				

* Remedial Action Plan to include Risk Assessment, Remedial Alternative Feasibility Study, Groundwater Model, and Proposed Monitoring Schedule

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
Pesticides by SW-846 method 8080
Former Peele Disposal Site
Clayton, North Carolina

Monitoring Wells	Sampling Event	alpha-BHC	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	gamma-BHC (Lindane)	4,4'-DDT
NCAC 2L Standard		NE	NE	NE	NE	NE	0.2	NE
MW-1	12/16/94	0.26	0.23	0.24	<0.1	<0.5	0.38	0.23
	4/21/97	<0.034	<0.068	<0.100	<0.023	<0.045	<0.045	<0.14
	9/18/97	<0.032	<0.065	<0.097	<0.022	<0.043	<0.043	<0.13
MW-2	12/16/94	0.21	0.3	0.06	<0.1	<0.5	0.7	<0.1
	4/21/97	3.3	0.92	0.73	0.073	<0.043	4.8	<0.13
	9/18/97	4.7	1.6	<0.92	<0.20	<0.041	6.7	<1.2
	duplicate 9/18/97	5.2	1.8	0.96	<0.21	<0.042	7.5	<1.3
MW-2D	7/8/97	0.12	<0.060	<0.090	<0.02	<0.04	0.22	<0.12
	9/18/97	0.21	0.65	<0.093	<0.021	<0.041	0.38	<0.12
MW-3	12/16/94	<0.05	0.08	<0.05	<0.1	<0.5	0.11	0.16
	4/21/97	<0.033	<0.065	<0.097	0.078	<0.043	<0.043	<0.13
	duplicate 4/21/97	<0.034	<0.065	<0.100	<0.022	<0.044	<0.045	<0.13
	9/18/97	<0.034	<0.068	<0.100	0.098	<0.045	<0.045	<0.14
MW-4	12/16/94	<0.05	<0.05	<0.05	<0.1	<0.5	<0.05	<0.1
	4/21/97	<0.033	<0.065	<0.097	<0.022	<0.043	<0.043	<0.13
	9/18/97	<0.033	<0.065	<0.098	<0.022	<0.043	<0.043	<0.13
MW-5D	7/8/97	0.080	<0.060	<0.090	<0.02	<0.04	0.16	<0.12
	duplicate 7/8/97	0.088	<0.060	<0.090	<0.02	<0.04	0.16	<0.12
	9/18/97	0.16	<0.068	<0.100	<0.023	<0.045	0.28	<0.14
MW-6	12/30/97	<0.030	<0.60	<0.090	<0.02	<0.040	<0.040	<0.12
MW-7	1/22/98	<0.031	<0.61	<0.092	<0.02	<0.041	<0.041	<0.12
MW-9	4/21/97	<0.030	0.097	<0.092	<0.021	<0.041	<0.041	<0.12
	9/18/97	<0.032	0.20	<0.097	0.17	<0.043	<0.043	<0.13

Notes:

All results are reported in µg/L.

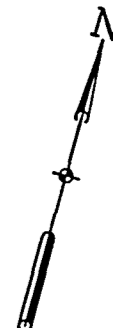
All compounds reported above practical quantitation limits in one or more wells are summarized.

NE Indicates that a groundwater standard has not been established by 15A NCAC 2L.

Reported results which exceed the applicable standard are presented in bold.

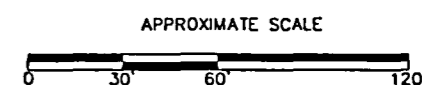
N.C. HIGHWAY 42
EDGE OF PAVEMENT

R.O.W.



LEGEND:

- MW-1 EXISTING GROUNDWATER MONITORING WELL
- 322.4 GROUNDWATER CONTOUR LINE (REFERENCED TO MSL IN FEET)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW



DATE	REVISION	DRWN/CHKD
PEELE DISPOSAL SITE CLAYTON, NORTH CAROLINA		
Woodward-Clyde Consultants, Inc. Consulting Engineers, Geologists and Environmental Scientists Raleigh, North Carolina		
NOVARTIS CROP PROTECTION, INC. GREENSBORO, NORTH CAROLINA		
SCALE: AS SHOWN	MADE BY: GCM CHECKED BY: PWG	DATE: 12/4/97 DATE: 12/4/97
GROUNDWATER ELEV (FT.) 1/21/98		FILE NO. 7E05522 FIGURE 9

NORTH CAROLINA RAILROAD COMPANY
PROPERTY

CATERPILLAR, INC
PROPERTY

DISPOSAL TRENCH

DAMAGED FENCE

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA A

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA B

MW-1 (319.92)
MW-7 (320.47)
MW-6 (319.66)

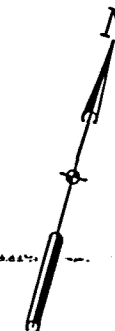
MW-2 (320.93)
MW-3 (323.70)
MW-4 (325.90)

Location: Raleigh, NC File Name: S:\DWG\7E05522\CW012298.DWG Last edited 2/5/98

N.C. HIGHWAY 42
EDGE OF PAVEMENT

R.O.W.

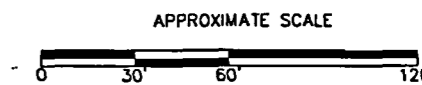
APPROX. PROPERTY LINE
(MARKED NO TRESPASSING)



NORTH CAROLINA RAILROAD COMPANY
PROPERTY

LEGEND:

- MW-1 EXISTING GROUNDWATER MONITORING WELL
- 322.4 GROUNDWATER CONTOUR LINE (REFERENCED TO MSL IN FEET)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW



Location: Raleigh, NC File Name: S:\DWG\7E05522\GW120397.DWG Last edited 12/4/97 @ 9:00

DAMAGED FENCE

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA A

APPROXIMATE LOCATION
OF REMOTE SURFACE
DISPOSAL AREA B

MW-7
(316.19)

MW-1
(315.94) alpha-BHC (<0.032)
Lindane (<0.045)

MW-6
(315.62)

DISPOSAL TRENCH

MW-2
(317.21) alpha-BHC (4.7)
lindane (6.7)

MW-3
(319.02) alpha-BHC (<0.034)
lindane (<0.045)

MW-4
(317.59) alpha-BHC (<0.033)
lindane (<0.045)

CATERPILLAR, INC
PROPERTY

DATE	REVISION	DRWN/CHKD
PEELE DISPOSAL SITE CLAYTON, NORTH CAROLINA		
Woodward-Clyde Consultants, Inc. Consulting Engineers, Geologists and Environmental Scientists Raleigh, North Carolina		
NOVARTIS CROP PROTECTION, INC. GREENSBORO, NORTH CAROLINA		
SCALE: AS SHOWN	MADE BY: GCM CHECKED BY: PWG	DATE: 12/4/97 DATE: 12/4/97
GROUNDWATER ELEV. (FT.) 12/03/97		FILE NO. 7E05522 FIGURE 9



JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

May 3, 1999

Mr. Peter Glaesman P.E.
URS Greiner Woodward-Clyde
3109 Poplarwood Court Suite 301
Raleigh, North Carolina 27604-1043

RE: Comments Regarding Quarterly Groundwater Monitoring Report
March 1999
Peele Pesticide Site
Clayton, North Carolina

Dear Mr. Glaesman:

The following are our comments regarding the Quarterly Groundwater Monitoring Report submitted on April 27, 1999 for the Peele Pesticides Site.

1. Please indicate what problems were encountered at MW-7? Did the turbidity stabilize at a level significantly higher than 10 NTU's or did the well purge dry?
2. Why is the time of sampling for MW-1 shown as 14:00 on the Well Development/Sampling Log and the last parameter check shown as 15:30, and on the sample Report of Results form the sample time is shown as 14:45?
3. Do you have any explanation for the increase in the levels of beta-BHC and Dieldrin in MW-3 for the last two sampling events?
4. Please attach explanations when detection limits vary significantly between samples.

Please reply to these questions in a letter that we can attach to the Quarterly Groundwater Monitoring Report. If you have any questions, please contact me at (919) 733-2801 ext 313.

Sincerely,

Harry Zinn
Environmental Engineer
Special Remediation Branch
NC Superfund

Sectioncc: Bruce Nicholson

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF WASTE MANAGEMENT



JAMES B. HUNT JR.
GOVERNOR

WAYNE MCDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

August 6, 1998

Mr. Peter Glaesman P.E.
Woodward-Clyde Consultants, Inc.
3109 Poplarwood Court Suite 120
Raleigh, North Carolina 27604-1043

RE: Groundwater Remedial Action Plan Comments
Peele Pesticide Site
Clayton, North Carolina

Dear Mr. Glaesman:

After reviewing the Groundwater Remedial Action Plan dated March 27, 1998, along with the revisions dated July 29, 1998, the North Carolina Superfund Section accepts the revised Groundwater Remedial Action Plan for the Peele Disposal Site, Clayton, North Carolina.

If you have any questions, please contact me at (919) 733-2801 ext 313.

Sincerely,

Harry Zinn
Environmental Engineer
Special Remediation Branch
NC Superfund Section

cc: Bruce Nicholson

FAX COVER SHEET

Project No.: 7ED5522

Date: 6-30-98

SEND FAX TO:

Fax No.: 733-4810

Attention: Harry Zinn

Company: NC DENR

FAX SENT FROM: Peter Glaesman

Woodward-Clyde



3109 Poplarwood Court
Suite 301
Raleigh, North Carolina 27604
(919) 850-9511 (tele)
(919) 790-0217 (fax)

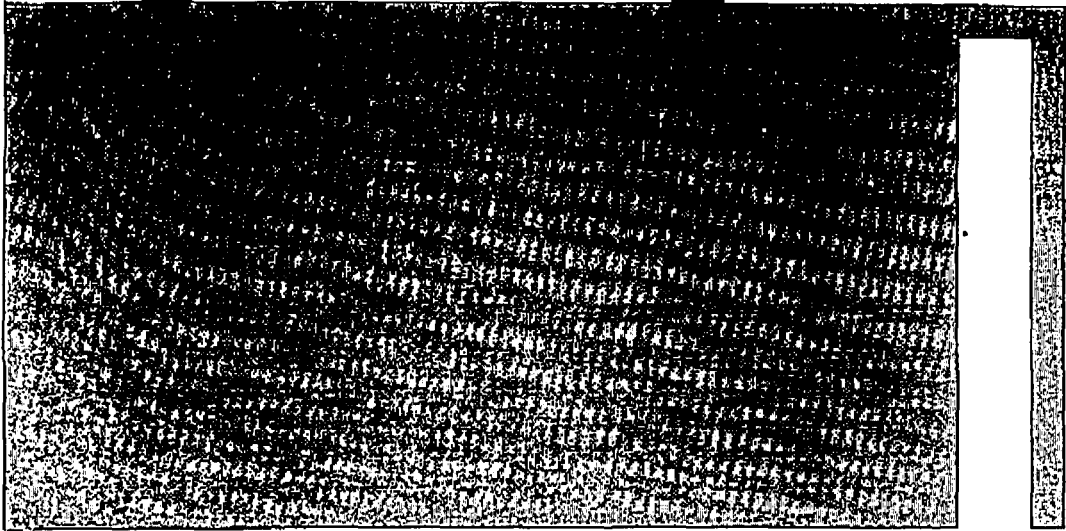
NOTES:

Harry, references showing ranges of hydraulic conductivities around the Silty Sand, fine to coarse grained material present in the potential down gradient areas of MW-1 (GP4), MW-6 and MW-7.

The silty sand ^(zone 1) described @ these three northern areas is different than the zone 2 (Gravel & Sand) described @ MW-2D and MW-5D near the trench.

Call me when you have had a chance to review.
Total pages being sent: 5

Thanks,
[Signature]



R. Allan Freeze

Department of Geological Sciences
University of British Columbia
Vancouver, British Columbia

John A. Cherry

Department of Earth Sciences
University of Waterloo
Waterloo, Ontario

GROUNDWATER

Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632

ree conductance
ll, so petroleum
28) is substituted

(2.29)

that will lead to
nder a hydraulic
larcy is approxi-

ed for hydraulic
l in terms of Eq.

th regard to this
ficient. However,
rded this formal
ature of measure-
ent can influence
.28). The effect is
still makes good
ave been carried
surement are very
dependent on the
rather than con-

tivity and perme-
logical materials.
(.969) review. The
aulic conductivity
eters that take on
perty implies that
in be very useful.
alue probably has

us common units
an be converted to
ersion from ft² to

Table 2.2 Range of Values of Hydraulic Conductivity and Permeability

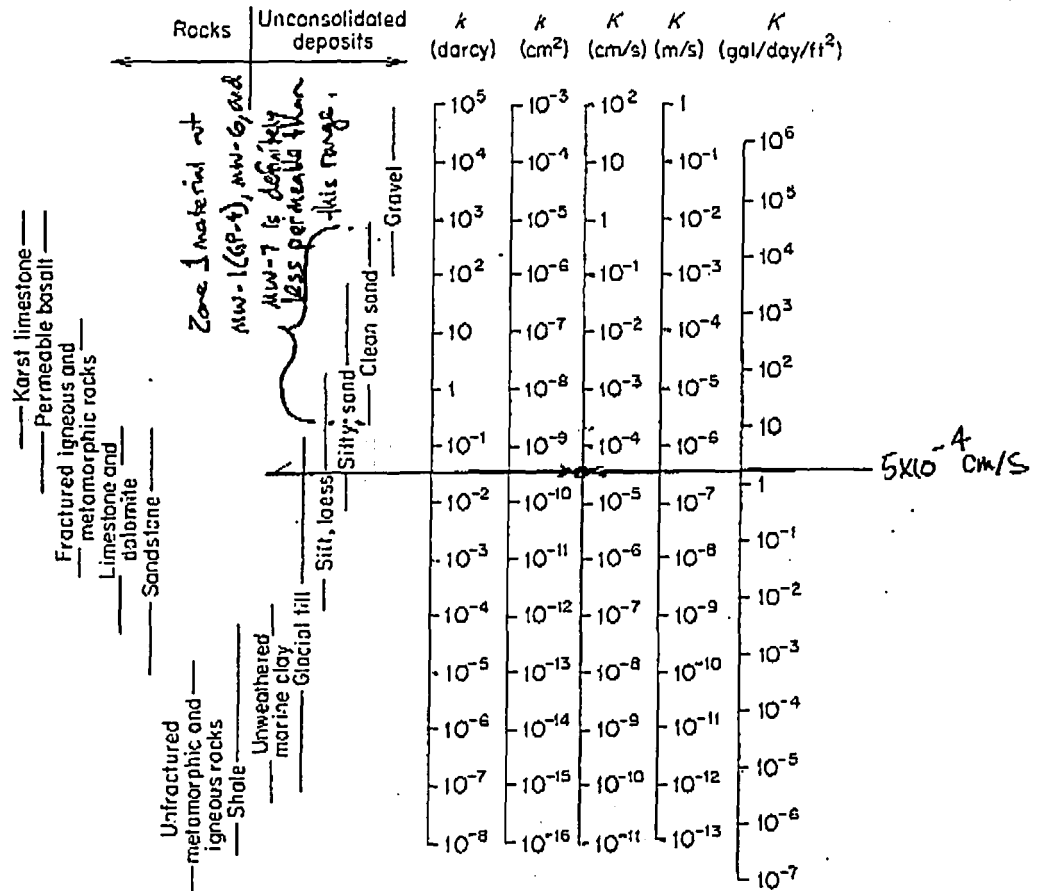


Table 2.3 Conversion Factors for Permeability and Hydraulic Conductivity Units

	Permeability, k*			Hydraulic conductivity, K		
	cm ²	ft ²	darcy	m/s	ft/s	U.S. gal/day/ft ²
cm ²	1	1.08 × 10 ⁻³	1.01 × 10 ⁸	9.80 × 10 ²	3.22 × 10 ³	1.85 × 10 ⁹
ft ²	9.29 × 10 ²	1	9.42 × 10 ¹⁰	9.11 × 10 ⁵	2.99 × 10 ⁶	1.71 × 10 ¹²
darcy	9.87 × 10 ⁻⁹	1.06 × 10 ⁻¹¹	1	9.66 × 10 ⁻⁶	3.17 × 10 ⁻⁵	1.82 × 10 ¹
m/s	1.02 × 10 ⁻³	1.10 × 10 ⁻⁶	1.04 × 10 ⁵	1	3.28	2.12 × 10 ⁶
ft/s	3.11 × 10 ⁻⁴	3.35 × 10 ⁻⁷	3.15 × 10 ⁴	3.05 × 10 ⁻¹	1	6.46 × 10 ⁵
U.S. gal/day/ft ²	5.42 × 10 ⁻¹⁰	5.83 × 10 ⁻¹³	5.49 × 10 ⁻²	4.72 × 10 ⁻⁷	1.55 × 10 ⁻⁶	1

*To obtain k in ft², multiply k in cm² by 1.08 × 10⁻³.

Applied Hydrogeology

C. W. FETTER, JR.
University of Wisconsin—Oshkosh

Charles E. Merrill Publishing Company
A Bell & Howell Company
Columbus Toronto London Sydney

4.3 HYDRAULIC CONDUCTIVITY OF EARTH MATERIALS

sample, so that the finer material can fill the voids between larger fragments.

3. Coarser samples show a greater decrease in permeability with an increase in standard deviation than fine samples.
4. Unimodal (one dominant size) samples have a greater permeability than bimodal (two dominant sizes) samples. This is again a result of poorer sorting of the sediment sizes, as the bimodal distribution indicates.

TABLE 4.4. Ranges of intrinsic permeabilities and conductivities for unconsolidated sediments

Material	Intrinsic Permeability (darcys)	Conductivity (cm/sec)
Clay	$10^{-6} - 10^{-3}$	$10^{-9} - 10^{-6}$
Silt, sandy silts, clayey sands, till	$10^{-3} - 10^{-1}$	$10^{-6} - 10^{-4}$
Silty sands, fine sands	$10^{-2} - 1$	$10^{-5} - 10^{-3}$
Well-sorted sands, glacial outwash	$1 - 10^2$	$10^{-3} - 10^{-1}$
Well-sorted gravel	$10 - 10^3$	$10^{-2} - 1$

5×10^{-4} cm/s
 Boring log description
 @ GP-4 is within this descriptive range

4.3.4 PERMEABILITY OF ROCKS

The intrinsic permeability of rocks is due to primary openings formed with the rock and secondary openings created after the rock was formed. The size of openings, the degree of interconnection, and the amount of open space are all significant.

Clastic sedimentary rocks have primary permeability characteristics similar to unconsolidated sediments. However, diagenesis can reduce the size of the throats which connect adjacent pores through cementation and compaction. This could reduce permeability substantially without a large impact on primary porosity. Primary permeability may also be due to sedimentary structures, such as bedding planes.

Crystalline rocks, whether of igneous, metamorphic, or chemical origin, typically have a low primary permeability, in addition to a low porosity. The intergrown crystal structure contains very few openings, so fluids cannot pass through as readily. The exceptions to this are volcanic rocks, which can have a high primary porosity. If the openings are large and well connected, then high permeability may also be present.

Secondary permeability can develop in rocks through fracturing. The increase in permeability is initially due to the number and size of the fracture openings. As water moves through the fractures, minerals may be dissolved from the rock and the fracture enlarged. This increases the permeabil-

Federal
Trip Notification & Authorization

Prepared by: Harry Zinn

Today's Date: 11-24-97

*Use Black Ink or Typewriter only-Staff to fill out first 2 blocks only.

Site Trip

Date of Trip: 11-24-97 till Feb 24, 1998

If trip date changed or cancelled note below:

Trip Date Changed To: _____ Cancelled: _____

NCD#: 054 417 308

Site Name: Peck Pesticide Site

City: Clayton

County: ~~Wade~~ Johnston

Reason for Trip: Oversight

Name of Hotel (Overnight Trip): _____ Hotel Telephone Number: () _____ - _____

Authorized by: _____

Industrial Hygienist

Project Team Leader: Harry Zinn

Assistants: _____, _____, _____

Attach To Notification Form: 1 copy each: Preliminary Assessment Form (First page only)
Submit to the Industrial Hygienist Site Map
PA Transmittal Letter

(Please list appropriate County Health Department contact person to call to advise of trip)

Environmental Supervisor or Health Director to call: Mr. Leon Powell Title: Env. Health Supervisor

(Note if Dr., M.P., etc.)

Telephone Number: (919) 989-5180

Notes: Health Department Official Contacted: Mr. Leon Powell

Back Up Letter Required: Yes _____ No

Notified Mr. Powell on 11-24-97 (DBL)

Note: Signed original to Data Manager

CHAIN OF CUSTODY RECORD

Project Name: <u>Peele Pesticide</u>	Sampled By: <u>H Zinn</u>
Site ID # (NCD#) <u>986-171-338</u>	Sampler ID _____
Location: <u>Clayton, NC</u>	Telephone: <u>(919) 733 2801 ext 313</u>
Address: _____	Date Sampled: <u>7-8-97</u>
	Time Sampled: _____
Sample Types: Soil _____ Water <input checked="" type="checkbox"/> Waste _____ Other _____	
Remarks: <u>MW 5 D MW 2 D</u>	
Field Sample Numbers <u>020238 020239</u>	
Relinquished By: <u>[Signature]</u> (Signature)	Date: <u>7-9-97</u> Time: <u>10:25</u>
Received By: <u>Vicki Painter</u> (Signature)	Date: <u>7-9-97</u> Time: <u>10:25</u>
Relinquished By: _____ (Signature)	Date: _____ Time: _____
Received By: _____ (Signature)	Date: _____ Time: _____
Relinquished By: _____ (Signature)	Date: _____ Time: _____
Received By: _____ (Signature)	Date: _____ Time: _____
Results Reported: <u>[Signature]</u> (Signature)	Date: <u>7/24/97</u> Time: _____

SAMPLE ANALYSIS REQUEST

Site Number NCD 986-171-338 Field Sample Number 020239

Name of Site Peels Pesticide Site Location Clyton NC

Collected By H Zinn ID# _____ Date Collected 7-8-97 Time 5:00

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental	Concentrate	Comments
<input checked="" type="checkbox"/> Ground water (1)	<input type="checkbox"/> Solid (5)	<u>mw 2 D</u>
<input type="checkbox"/> Surface water (2)	<input checked="" type="checkbox"/> Liquid (6)	
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	

TCLP Compounds

Inorganic Compounds	Results(mg/l)
Arsenic	_____
Barium	_____
Cadmium	_____
Chromium	_____
Lead	_____
Mercury	_____
Selenium	_____
Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry		Organic Compounds	
Parameter	Results(mg/l)	Parameter	Results(mg/l) (mg/kg)	Organic Compounds	Results(mg/l)
_____ P&T:GC/MS	_____	_____ Arsenic	_____	_____ benzene	_____
_____ Acid:B/N Ext.	_____	_____ Barium	_____	_____ carbon tetrachloride	_____
_____ MTBE	_____	_____ Cadmium	_____	_____ chlordane	_____
<input checked="" type="checkbox"/> <u>Pesticide</u>	_____	_____ Chloride	_____	_____ chlorobenzene	_____
<u>LINDANE</u>	<u>0.0002 ppm</u>	_____ Chromium	_____	_____ chloroform	_____
<u>ALPHA BHC TRACE DETECTED</u>	_____	_____ Copper	_____	_____ o-cresol	_____
<u>ENDRIN</u>	<u><0.0001 ppm</u>	_____ Fluoride	_____	_____ m-cresol	_____
<u>Methoxychlor</u>	<u><0.001 ppm</u>	_____ Iron	_____	_____ p-cresol	_____
<u>TOXAPHENE</u>	<u><0.002 ppm</u>	_____ Lead	_____	_____ cresol	_____
<u>CHLORDANE</u>	<u><0.0002 ppm</u>	_____ Manganese	_____	_____ 1,4-dichlorobenzene	_____
<u>Heptachlor</u>	<u><0.0001 ppm</u>	_____ Mercury	_____	_____ 1,2-dichloroethane	_____
<u>Heptachlor Epoxide</u>	<u><0.0001 ppm</u>	_____ Nitrate	_____	_____ 1,1-dichloroethylene	_____
<u>DIELDRIN</u>	<u><0.0001 ppm</u>	_____ Selenium	_____	_____ 2,4-dinitrotoluene	_____
_____ Radiochemistry	_____	_____ Silver	_____	_____ heptachlor	_____
_____ Parameter	_____ Results (PCI/l)	_____ Sulfates	_____	_____ hexachlorobenzene	_____
_____ Gross Alpha	_____	_____ Zinc	_____	_____ hexachlorobutadiene	_____
_____ Gross Beta	_____	_____ pH	_____	_____ hexachloroethane	_____
_____ Microbiology	_____	_____ Conductivity	_____	_____ methyl ethyl ketone	_____
_____ Parameter	_____ Results (Col/100ml)	_____ TDS	_____	_____ nitrobenzene	_____
_____	_____	_____ TOC	_____	_____ pentachlorophenol	_____
_____	_____	_____	_____	_____ pyridine	_____
_____	_____	_____	_____	_____ tetrachloroethylene	_____
_____	_____	_____	_____	_____ trichloroethylene	_____
_____	_____	_____	_____	_____ 2,4,5-trichlorophenol	_____
_____	_____	_____	_____	_____ 2,4,6-trichlorophenol	_____
_____	_____	_____	_____	_____ vinyl chloride	_____
_____	_____	_____	_____	_____ endrin	_____
_____	_____	_____	_____	_____ lindane	_____
_____	_____	_____	_____	_____ methoxychlor	_____
_____	_____	_____	_____	_____ toxaphene	_____
_____	_____	_____	_____	_____ 2,4-D	_____
_____	_____	_____	_____	_____ 2,4,5-TP (Silvex)	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Date Received 7-9-97VP Reported by _____

Date Extracted 7-11-97VP Date Reported _____

Date Analyzed 7-15-97VP Lab Number 972729

Purpose: Enforcement and compliance with the N.C. Solid and Hazardous Waste Management Rules.

Preparation: A sample analyses request form must be completed for each type of evaluation requested (e.g., inorganic, organic, microbiology, radiochemistry). For sampling conditions which require more than one (1) container (i.e., ground or surface water) a sample label must be affixed to one of the containers. The collector must then write the site and sample number on the duplicate container.

Do not submit an analysis request form without any parameters indicated.

Equivalent measurements: ppm = $\mu\text{g/ml}$ = mg/l = $\mu\text{g/g}$ = mg/kg
ppb = $\mu\text{g/l}$ = $\mu\text{g/1000g}$ = $\mu\text{g/kg}$

DEFINITIONS/INSTRUCTIONS

Site Number - A unique twelve-digit site/location identifier (i.e., the EPA identification number).

Field Sample Number - A unique six-digit sample identifier which is pre-printed on the sample label.

Name of Site - Name of facility, landfill, etc.

Site Location - City and county.

Collected By - Name and staff identification number of collector.

Date and Time Collected - Self-explanatory.

Environmental - A sample of a naturally occurring substance such as ground water, surface water, or soils which may be contaminated.

Concentrate - A sample of a waste, including but not limited to, sludges, resins, treatment effluents, or drummed wastes.

Comments - Lists details regarding sample or sample point (e.g., sample location, well number, phase separation, and/or odors).

Inorganic Chemistry - Check (✓) the desired parameters to be analyzed. If not listed, enter the element/compound in the space provided.

Organic Chemistry - Check (✓) the desired parameters to be analyzed. If not listed, enter the element/compound in the space provided.

TCLP Compounds - Check (✓) the desired parameters to be analyzed. If not listed, enter the element/compound in the space provided. TCLP can only be performed on solid or semi-solid samples. For totals of the inorganic parameters, check (✓) the corresponding parameter under Inorganic Chemistry.

Microbiology and Radiochemistry - Contact the Raleigh office prior to sampling either of these.

Distribution:

1. Send or deliver the original to the State Laboratory of Public Health.
2. The Lab then sends a copy (with results) to the Solid Waste Management Division.
3. The Solid Waste Management Division sends a copy to the field person or collector.

Disposition: This form may be destroyed in accordance with the Environmental Health, Solid and Hazardous Waste Section of the Records Disposition Schedule as published by the North Carolina Division of Archives and History

Additional forms may be ordered from: Solid Waste Management Division
Hazardous Waste Section
P.O. Box 27687
Raleigh, NC 27611

Site Number NCD 986 171 338 Field Sample Number 020238

Name of Site Peele Pesticide Site Location Clayton NC

Collected By H Zinn ID# _____ Date Collected 7-8-97 Time 11:30 am

Agency: _____ Hazardous Waste _____ Solid Waste _____ Superfund

TCLP Compounds

Sample Type		Comments
Environmental	Concentrate	
<input checked="" type="checkbox"/> Ground water (1)	_____ Solid (5)	<u>MW 50 -</u>
_____ Surface water (2)	<input checked="" type="checkbox"/> Liquid (6)	_____
_____ Soil (3)	_____ Sludge (7)	_____
_____ Other (4)	_____ Other (8)	_____

Inorganic Compounds	Results(mg/l)
Arsenic	_____
Barium	_____
Cadmium	_____
Chromium	_____
Lead	_____
Mercury	_____
Selenium	_____
Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
_____ P&T:GC/MS	_____	_____ Arsenic	_____
_____ Acid:B/N Ext.	_____	_____ Barium	_____
_____ MTBE	_____	_____ Cadmium	_____
<input checked="" type="checkbox"/> <u>Pesticide</u>	_____	_____ Chloride	_____
<u>LINDANE</u>	<u>0.0002 ppm</u>	_____ Chromium	_____
<u>ALPHA BHC</u>	<u>TRACE DETECTED</u>	_____ Copper	_____
<u>ENDRIN</u>	<u><0.0001 ppm</u>	_____ Fluoride	_____
<u>Methoxychlor</u>	<u><0.001 ppm</u>	_____ Iron	_____
<u>TOXAPHENE</u>	<u><0.002 ppm</u>	_____ Lead	_____
<u>Chlordane</u>	<u><0.0002 ppm</u>	_____ Manganese	_____
<u>Heptachlor</u>	<u><0.0001 ppm</u>	_____ Mercury	_____
<u>Heptachlor Epoxide</u>	<u><0.0001 ppm</u>	_____ Nitrate	_____
<u>DIELDRIN</u>	<u><0.0001 ppm</u>	_____ Selenium	_____
_____	_____	_____ Silver	_____
_____	_____	_____ Sulfates	_____
_____	_____	_____ Zinc	_____
Radiochemistry		_____ pH	_____
		_____ Conductivity	_____
		_____ TDS	_____
		_____ TOC	_____
		_____	_____
		_____	_____
		_____	_____
		_____	_____
Microbiology		_____	_____
		_____	_____
		_____	_____
Parameter	Results (Col/100ml)	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Organic Compounds	Results(mg/l)
_____ benzene	_____
_____ carbon tetrachloride	_____
_____ chlordane	_____
_____ chlorobenzene	_____
_____ chloroform	_____
_____ o-cresol	_____
_____ m-cresol	_____
_____ p-cresol	_____
_____ cresol	_____
_____ 1,4-dichlorobenzene	_____
_____ 1,2-dichloroethane	_____
_____ 1,1-dichloroethylene	_____
_____ 2,4-dinitrotoluene	_____
_____ heptachlor	_____
_____ hexachlorobenzene	_____
_____ hexachlorobutadiene	_____
_____ hexachloroethane	_____
_____ methyl ethyl ketone	_____
_____ nitrobenzene	_____
_____ pentachlorophenol	_____
_____ pyridine	_____
_____ tetrachloroethylene	_____
_____ trichloroethylene	_____
_____ 2,4,5-trichlorophenol	_____
_____ 2,4,6-trichlorophenol	_____
_____ vinyl chloride	_____
_____ endrin	_____
_____ lindane	_____
_____ methoxychlor	_____
_____ toxaphene	_____
_____ 2,4-D	_____
_____ 2,4,5-TP (Silvex)	_____

Date Received 7-9-97VP Reported by John L. Neal

Date Extracted 7-11-97VP Date Reported 7-24-97

Date Analyzed 7-15-97VP Lab Number 972728

Purpose: Enforcement and compliance with the N.C. Solid and Hazardous Waste Management Rules.

Preparation: A sample analyses request form must be completed for each type of evaluation requested (e.g., inorganic, organic, microbiology, radiochemistry). For sampling conditions which require more than one (1) container (i.e., ground or surface water) a sample label must be affixed to one of the containers. The collector must then write the site and sample number on the duplicate container.

Do not submit an analysis request form without any parameters indicated.

Equivalent measurements: ppm = $\mu\text{g/ml}$ = mg/l = $\mu\text{g/g}$ = mg/kg
 ppb = $\mu\text{g/l}$ = $\mu\text{g/1000g}$ = $\mu\text{g/kg}$

DEFINITIONS/INSTRUCTIONS

Site Number - A unique twelve-digit site/location identifier (i.e., the EPA identification number).

Field Sample Number - A unique six-digit sample identifier which is pre-printed on the sample label.

Name of Site - Name of facility, landfill, etc.

Site Location - City and county.

Collected By - Name and staff identification number of collector.

Date and Time Collected - Self-explanatory.

Environmental - A sample of a naturally occurring substance such as ground water, surface water, or soils which may be contaminated.

Concentrate - A sample of a waste, including but not limited to, sludges, resins, treatment effluents, or drummed wastes.

Comments - Lists details regarding sample or sample point (e.g., sample location, well number, phase separation, and/or odors).

Inorganic Chemistry - Check (✓) the desired parameters to be analyzed. If not listed, enter the element/compound in the space provided.

Organic Chemistry - Check (✓) the desired parameters to be analyzed. If not listed, enter the element/compound in the space provided.

TCLP Compounds - Check (✓) the desired parameters to be analyzed. If not listed, enter the element/compound in the space provided. TCLP can only be performed on solid or semi-solid samples. For totals of the inorganic parameters, check (✓) the corresponding parameter under Inorganic Chemistry.

Microbiology and Radiochemistry - Contact the Raleigh office prior to sampling either of these.

Distribution:

1. Send or deliver the original to the State Laboratory of Public Health.
2. The Lab then sends a copy (with results) to the Solid Waste Management Division.
3. The Solid Waste Management Division sends a copy to the field person or collector.

Disposition: This form may be destroyed in accordance with the Environmental Health, Solid and Hazardous Waste Section of the Records Disposition Schedule as published by the North Carolina Division of Archives and History

Additional forms may be ordered from: Solid Waste Management Division
Hazardous Waste Section
P.O. Box 27687
Raleigh, NC 27611

NCDENR
Division of Waste Management
 Superfund Section
 Hazardous Waste Section
 Solid Waste Section

CHAIN OF CUSTODY RECORD

Project Name: <u>Peele Pesticide</u>	Sampled By: <u>H2</u>
Site ID # (NCD#) <u>986 171 338</u>	Sampler ID _____
Location: <u>Clayton</u>	Telephone: <u>(919) 733 2</u>
Address: _____	Date Sampled: _____
	Time Sampled: _____
Sample Types: Soil <input checked="" type="checkbox"/> Water _____ Waste <input checked="" type="checkbox"/>	
Remarks: <u>017199 + 017200 soils</u>	
<u>017201 WASTE PILE</u>	
Field Sample Numbers <u>017199</u> <u>017200</u> <u>017201</u>	
Relinquished By: <u>[Signature]</u> <u>11:50</u> Date: <u>5-23-97</u>	
(Signature)	
Received By: <u>Jayce Dawn</u> Date: <u>5-23-97</u>	
(Signature)	
Relinquished By: _____ Date: _____	
(Signature)	
Received By: _____ Date: _____	
(Signature)	
Relinquished By: _____ Date: _____	
(Signature)	
Received By: _____ Date: _____	
(Signature)	
Results Reported: _____ Date: _____	
(Signature)	

SAMPLE ANALYSIS REQUEST

Site Number NCD 986171338 Field Sample Number 017199

Name of Site Peele Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected _____ Time _____

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

<u>Environmental</u>	<u>Concentrate</u>	<u>Comments</u>
<input type="checkbox"/> Ground water (1)	<input type="checkbox"/> Solid (5)	<u>RA-C</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)	
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	

TCLP Compounds

<u>Inorganic Compounds</u>	<u>Results(mg/l)</u>
<input checked="" type="checkbox"/> Arsenic	<u>40.03</u>
<input type="checkbox"/> Barium	
<input type="checkbox"/> Cadmium	
<input type="checkbox"/> Chromium	
<input type="checkbox"/> Lead	
<input type="checkbox"/> Mercury	
<input type="checkbox"/> Selenium	
<input type="checkbox"/> Silver	
<input checked="" type="checkbox"/> Copper	<u>0.12</u>

<u>Organic Chemistry</u>		<u>Inorganic Chemistry</u>	
<u>Parameter</u>	<u>Results(mg/l)</u>	<u>Parameter</u>	<u>Results(mg/l)(mg/kg)</u>
<input type="checkbox"/> P&T:GC/MS		<input checked="" type="checkbox"/> Arsenic	<u>4</u>
<input type="checkbox"/> Acid:B/N Ext.		<input type="checkbox"/> Barium	
<input type="checkbox"/> MTBE		<input type="checkbox"/> Cadmium	
		<input type="checkbox"/> Chloride	
		<input type="checkbox"/> Chromium	
		<input checked="" type="checkbox"/> Copper	<u>300</u>
		<input type="checkbox"/> Fluoride	
		<input type="checkbox"/> Iron	
		<input type="checkbox"/> Lead	
		<input type="checkbox"/> Manganese	
		<input type="checkbox"/> Mercury	
		<input type="checkbox"/> Nitrate	
		<input type="checkbox"/> Selenium	
		<input type="checkbox"/> Silver	
		<input type="checkbox"/> Sulfates	
		<input type="checkbox"/> Zinc	
		<input type="checkbox"/> pH	
		<input type="checkbox"/> Conductivity	
		<input type="checkbox"/> TDS	
		<input type="checkbox"/> TOC	

<u>Organic Compounds</u>	<u>Results(mg/l)</u>
<input type="checkbox"/> benzene	
<input type="checkbox"/> carbon tetrachloride	
<input type="checkbox"/> chlordane	
<input type="checkbox"/> chlorobenzene	
<input type="checkbox"/> chloroform	
<input type="checkbox"/> o-cresol	
<input type="checkbox"/> m-cresol	
<input type="checkbox"/> p-cresol	
<input type="checkbox"/> cresol	
<input type="checkbox"/> 1,4-dichlorobenzene	
<input type="checkbox"/> 1,2-dichloroethane	
<input type="checkbox"/> 1,1-dichloroethylene	
<input type="checkbox"/> 2,4-dinitrotoluene	
<input type="checkbox"/> heptachlor	
<input type="checkbox"/> hexachlorobenzene	
<input type="checkbox"/> hexachlorobutadiene	
<input type="checkbox"/> hexachloroethane	
<input type="checkbox"/> methyl ethyl ketone	
<input type="checkbox"/> nitrobenzene	
<input type="checkbox"/> pentachlorophenol	
<input type="checkbox"/> pyridine	
<input type="checkbox"/> tetrachloroethylene	
<input type="checkbox"/> trichloroethylene	
<input type="checkbox"/> 2,4,5-trichlorophenol	
<input type="checkbox"/> 2,4,6-trichlorophenol	
<input type="checkbox"/> vinyl chloride	
<input type="checkbox"/> endrin	
<input type="checkbox"/> lindane	
<input type="checkbox"/> methoxychlor	
<input type="checkbox"/> toxaphene	
<input type="checkbox"/> 2,4-D	
<input type="checkbox"/> 2,4,5-TP (Silvex)	

Date Received _____ Reported by _____

Date Extracted _____ Date Reported 06/20/97

Date Analyzed _____ Lab Number _____

Site Number NCD 986171338 Field Sample Number 017201

Name of Site Peel Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-23-97 Time _____

Agency: Hazardous Waste Solid Waste Superfund

Sample Type		Comments
Environmental	Concentrate	
<input type="checkbox"/> Ground water (1)	<input checked="" type="checkbox"/> Solid (5)	<u>EFW-C</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)	<u>"WASTE PILE"</u>
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	_____
<input checked="" type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	_____

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
<input checked="" type="checkbox"/> Arsenic	<u>40.02</u>
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____
<input checked="" type="checkbox"/> Copper	<u>0.20</u>
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u>3</u>
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> Barium	_____
<input type="checkbox"/> MTBE	_____	<input type="checkbox"/> Cadmium	_____
_____	_____	<input type="checkbox"/> Chloride	_____
_____	_____	<input type="checkbox"/> Chromium	_____
_____	_____	<input checked="" type="checkbox"/> Copper	<u>20</u>
_____	_____	<input type="checkbox"/> Fluoride	_____
_____	_____	<input type="checkbox"/> Iron	_____
_____	_____	<input type="checkbox"/> Lead	_____
_____	_____	<input type="checkbox"/> Manganese	_____
_____	_____	<input type="checkbox"/> Mercury	_____
_____	_____	<input type="checkbox"/> Nitrate	_____
_____	_____	<input type="checkbox"/> Selenium	_____
_____	_____	<input type="checkbox"/> Silver	_____
_____	_____	<input type="checkbox"/> Sulfates	_____
_____	_____	<input type="checkbox"/> Zinc	_____
_____	_____	<input type="checkbox"/> pH	_____
_____	_____	<input type="checkbox"/> Conductivity	_____
_____	_____	<input type="checkbox"/> TDS	_____
_____	_____	<input type="checkbox"/> TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____
_____	_____
_____	_____

Date Received _____ Reported by _____

Date Extracted _____ Date Reported 007203 MAY 27 97

Date Analyzed _____ Lab Number _____

SAMPLE ANALYSIS REQUEST

Site Number NCD 986 171338 Field Sample Number 017200

Name of Site Peele Pesticide Site Location Clayton

Collected By H2 ID# _____ Date Collected 5-18-97 Time _____

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental

Concentrate

Comments

Ground water (1) Solid (5) BACELL

Surface water (2) Liquid (6) Method 6000/2000

Soil (3) Sludge (7)

Other (4) Other (8)

TCLP Compounds

Inorganic Compounds

Results(mg/l)

<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u>23</u>
<input type="checkbox"/> Acid:B/N Ext.	_____	<input checked="" type="checkbox"/> Barium	<u>50</u>
<input type="checkbox"/> MTBE	_____	<input checked="" type="checkbox"/> Cadmium	<u>25</u>
_____	_____	<input checked="" type="checkbox"/> Chloride	_____
_____	_____	<input checked="" type="checkbox"/> Chromium	<u>15</u>
_____	_____	<input checked="" type="checkbox"/> Copper	<u>26</u>
_____	_____	<input type="checkbox"/> Fluoride	_____
_____	_____	<input type="checkbox"/> Iron	_____
_____	_____	<input checked="" type="checkbox"/> Lead	<u>17</u>
_____	_____	<input type="checkbox"/> Manganese	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<u><0.09</u>
_____	_____	<input type="checkbox"/> Nitrate	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<u><1</u>
_____	_____	<input checked="" type="checkbox"/> Silver	<u><5</u>
_____	_____	<input type="checkbox"/> Sulfates	_____
_____	_____	<input type="checkbox"/> Zinc	_____
_____	_____	<input type="checkbox"/> pH	_____
_____	_____	<input type="checkbox"/> Conductivity	_____
_____	_____	<input type="checkbox"/> TDS	_____
_____	_____	<input type="checkbox"/> TOC	_____

Radiochemistry	
Parameter	Results (PCI/l)
<input type="checkbox"/> Gross Alpha	_____
<input type="checkbox"/> Gross Beta	_____

Microbiology	
Parameter	Results (Col/100ml)
_____	_____
_____	_____

Organic Compounds

Results(mg/l)

<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

Date Received _____ Reported by _____

Date Extracted _____ Date Reported _____

Date Analyzed _____ Lab Number _____

007209 MAY 27 97

NCDEHNR
Division of Waste Management
 Superfund Section
 Hazardous Waste Section
 Solid Waste Section

Organics Lab:
Inorganics Lab: _____

CHAIN OF CUSTODY RECORD

Project Name: <u>Peeler Pest.</u>	Sampled By: <u>HZ</u>
Site ID # (NCD#) <u>986171 338</u>	Sampler ID _____
Location: <u>Clayton</u>	Telephone: <u>(719) 733 2801 ext 313</u>
Address: _____	Date Sampled: _____
	Time Sampled: _____
Sample Types: Soil <input checked="" type="checkbox"/> Water _____ Waste <input checked="" type="checkbox"/> Other _____	
Remarks: <u>020182, 83, 84, 85 Soils</u> <u>020186, 87, 88 WASTE PILE</u>	
Field Sample Numbers <u>020182</u> <u>020183</u> <u>020184</u> <u>020185</u> <u>020186</u> <u>020187</u> <u>020188</u>	
Relinquished By: <u>[Signature]</u> <u>11:50</u> Date: <u>5-23-97</u> Time: <u>11:50</u>	
(Signature)	
Received By: <u>[Signature]</u> Date: <u>5-23-97</u> Time: <u>11:50</u>	
(Signature)	
Relinquished By: _____ Date: _____ Time: _____	
(Signature)	
Received By: _____ Date: _____ Time: _____	
(Signature)	
Relinquished By: _____ Date: _____ Time: _____	
(Signature)	
Received By: _____ Date: _____ Time: _____	
(Signature)	
Results Reported: <u>[Signature]</u> Date: <u>6/09/97</u> Time: _____	
(Signature)	

Site Number NCD 986 171 338 Field Sample Number 020182

Name of Site Peele Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-18-96 Time 1600

Agency: Hazardous Waste Solid Waste Superfund

Sample Type		Comments
Environmental	Concentrate	
<input type="checkbox"/> Ground water (1)	<input checked="" type="checkbox"/> Solid (5)	<u>RA-C</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)	
<input checked="" type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
___ Arsenic	_____
___ Barium	_____
___ Cadmium	_____
___ Chromium	_____
___ Lead	_____
___ Mercury	_____
___ Selenium	_____
___ Silver	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
___ P&T:GC/MS	_____	___ Arsenic	_____
___ Acid:B/N Ext.	_____	___ Barium	_____
___ MTBE	_____	___ Cadmium	_____
___ TOTAL + TCLP	_____	___ Chloride	_____
___ PESTICIDES	_____	___ Chromium	_____
___	_____	___ Copper	_____
___	_____	___ Fluoride	_____
___	_____	___ Iron	_____
___	_____	___ Lead	_____
___	_____	___ Manganese	_____
___	_____	___ Mercury	_____
___	_____	___ Nitrate	_____
___	_____	___ Selenium	_____
___	_____	___ Silver	_____
___	_____	___ Sulfates	_____
___	_____	___ Zinc	_____
___	_____	___ pH	_____
___	_____	___ Conductivity	_____
___	_____	___ TDS	_____
___	_____	___ TOC	_____

Organic Compounds	Results(mg/l)
___ benzene	_____
___ carbon tetrachloride	_____
___ chlordane	_____
___ chlorobenzene	_____
___ chloroform	_____
___ o-cresol	_____
___ m-cresol	_____
___ p-cresol	_____
___ cresol	_____
___ 1,4-dichlorobenzene	_____
___ 1,2-dichloroethane	_____
___ 1,1-dichloroethylene	_____
___ 2,4-dinitrotoluene	_____
___ heptachlor	_____
___ hexachlorobenzene	_____
___ hexachlorobutadiene	_____
___ hexachloroethane	_____
___ methyl ethyl ketone	_____
___ nitrobenzene	_____
___ pentachlorophenol	_____
___ pyridine	_____
___ tetrachloroethylene	_____
___ trichloroethylene	_____
___ 2,4,5-trichlorophenol	_____
___ 2,4,6-trichlorophenol	_____
___ vinyl chloride	_____
___ endrin	_____
___ lindane	_____
___ methoxychlor	_____
___ toxaphene	_____
___ 2,4-D	_____
___ 2,4,5-TP (Silvex)	_____

Date Received 5-23-97VP Reported by J. P. Neal

Date Extracted 5-23-97VP Date Reported 6/09/97

Date Analyzed 5-30-97VP Lab Number 972020

DHS 3191 (Revised 2/91) PEST 5-27-97VP

972020-972026

Site Number NCD 986171338 Field Sample Number 020183

Name of Site Peele Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-18-97 Time _____

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

<u>Environmental</u>	<u>Concentrate</u>	<u>Comments</u>
<input type="checkbox"/> Ground water (1)	<input checked="" type="checkbox"/> Solid (5)	<u>Backfill</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)	_____
<input checked="" type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	_____
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	_____

TCLP Compounds

Inorganic Compounds	Results(mg/l)
<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> Barium	_____
<input type="checkbox"/> MTBE	_____	<input type="checkbox"/> Cadmium	_____
<u>TOTAL + TCLP</u>	_____	<input type="checkbox"/> Chloride	_____
<u>PESTICIDES</u>	_____	<input type="checkbox"/> Chromium	_____
_____	_____	<input type="checkbox"/> Copper	_____
_____	_____	<input type="checkbox"/> Fluoride	_____
_____	_____	<input type="checkbox"/> Iron	_____
_____	_____	<input type="checkbox"/> Lead	_____
_____	_____	<input type="checkbox"/> Manganese	_____
_____	_____	<input type="checkbox"/> Mercury	_____
_____	_____	<input type="checkbox"/> Nitrate	_____
_____	_____	<input type="checkbox"/> Selenium	_____
_____	_____	<input type="checkbox"/> Silver	_____
_____	_____	<input type="checkbox"/> Sulfates	_____
_____	_____	<input type="checkbox"/> Zinc	_____
_____	_____	<input type="checkbox"/> pH	_____
_____	_____	<input type="checkbox"/> Conductivity	_____
_____	_____	<input type="checkbox"/> TDS	_____
_____	_____	<input type="checkbox"/> TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____
_____	_____
_____	_____

Date Received 5-23-97VP Reported by _____

PEST
Date Extracted 5-23-97VP Date Reported _____

PEST
Date Analyzed 5-27-97VP Lab Number 972021

Site Number NCD 986171338 Field Sample Number 020184

Name of Site Peele Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-22 Time 15:03

Agency: Hazardous Waste Solid Waste Superfund

Sample Type			Comments
Environmental	Concentrate		
<input type="checkbox"/> Ground water (1)	<input checked="" type="checkbox"/> Solid (5)		<u>EFM-5C</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)		
<input checked="" type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)		
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)		

TCLP Compounds

Inorganic Compounds	Results(mg/l)
<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> Barium	_____
<input type="checkbox"/> MTBE	_____	<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> TOTAL + TCLP	_____	<input type="checkbox"/> Chloride	_____
<input type="checkbox"/> PESTICIDES	_____	<input type="checkbox"/> Chromium	_____
	_____	<input type="checkbox"/> Copper	_____
	_____	<input type="checkbox"/> Fluoride	_____
	_____	<input type="checkbox"/> Iron	_____
	_____	<input type="checkbox"/> Lead	_____
	_____	<input type="checkbox"/> Manganese	_____
	_____	<input type="checkbox"/> Mercury	_____
	_____	<input type="checkbox"/> Nitrate	_____
	_____	<input type="checkbox"/> Selenium	_____
	_____	<input type="checkbox"/> Silver	_____
	_____	<input type="checkbox"/> Sulfates	_____
	_____	<input type="checkbox"/> Zinc	_____
	_____	<input type="checkbox"/> pH	_____
	_____	<input type="checkbox"/> Conductivity	_____
	_____	<input type="checkbox"/> TDS	_____
	_____	<input type="checkbox"/> TOC	_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____

Radiochemistry	
Parameter	Results (PCI/I)
<input type="checkbox"/> Gross Alpha	_____
<input type="checkbox"/> Gross Beta	_____

Microbiology	
Parameter	Results (Col/100ml)

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

Date Received 5-23-97VP Reported by _____
 Date Extracted ^{PEST} 5-23-97VP Date Reported _____
 Date Analyzed ^{PEST} 5-27-97VP Lab Number 972022

SAMPLE ANALYSIS REQUEST

Site Number NCD 986171338 Field Sample Number 020186

Name of Site Peel Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-20-97 Time 10:15

Agency: Hazardous Waste Solid Waste Superfund

Sample Type		Comments
Environmental	Concentrate	
<input type="checkbox"/> Ground water (1)	<input checked="" type="checkbox"/> Solid (5)	<u>SPA-4C</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)	<u>"WASTE PILE"</u>
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	
<input checked="" type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> Barium	_____
<input type="checkbox"/> MTBE	_____	<input type="checkbox"/> Cadmium	_____
<input checked="" type="checkbox"/> TCLP Pest. 8080	_____	<input type="checkbox"/> Chloride	_____
_____	_____	<input type="checkbox"/> Chromium	_____
_____	_____	<input type="checkbox"/> Copper	_____
_____	_____	<input type="checkbox"/> Fluoride	_____
_____	_____	<input type="checkbox"/> Iron	_____
_____	_____	<input type="checkbox"/> Lead	_____
_____	_____	<input type="checkbox"/> Manganese	_____
_____	_____	<input type="checkbox"/> Mercury	_____
_____	_____	<input type="checkbox"/> Nitrate	_____
_____	_____	<input type="checkbox"/> Selenium	_____
_____	_____	<input type="checkbox"/> Silver	_____
_____	_____	<input type="checkbox"/> Sulfates	_____
_____	_____	<input type="checkbox"/> Zinc	_____
_____	_____	<input type="checkbox"/> pH	_____
_____	_____	<input type="checkbox"/> Conductivity	_____
_____	_____	<input type="checkbox"/> TDS	_____
_____	_____	<input type="checkbox"/> TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Radiochemistry	
Parameter	Results (PCI/l)
<input type="checkbox"/> Gross Alpha	_____
<input type="checkbox"/> Gross Beta	_____

Microbiology	
Parameter	Results (Col/100ml)
_____	_____
_____	_____

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

Date Received 5-23-97VP Reported by PEST
 Date Extracted 5-23-97VP Date Reported _____
 Date Analyzed 5-30-97VP Lab Number 972024
 DHIS 3191 (Revised 2/91) PEST 5-27-97VP

Site Number NCD 986171338 Field Sample Number 020187

Name of Site Peele Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-20-97 Time 11:20

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental Concentrate Comments

Ground water (1) Solid (5) SPA-2-C

Surface water (2) Liquid (6) "WASTE PILE"

Soil (3) Sludge (7) _____

Other (4) Other (8) _____

TCLP Compounds

Inorganic Compounds **Results(mg/l)**

<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> Barium	_____
<input type="checkbox"/> MTBE	_____	<input type="checkbox"/> Cadmium	_____
<input checked="" type="checkbox"/> TCLP Pest. 8080	_____	<input type="checkbox"/> Chloride	_____
	_____	<input type="checkbox"/> Chromium	_____
	_____	<input type="checkbox"/> Copper	_____
	_____	<input type="checkbox"/> Fluoride	_____
	_____	<input type="checkbox"/> Iron	_____
	_____	<input type="checkbox"/> Lead	_____
	_____	<input type="checkbox"/> Manganese	_____
	_____	<input type="checkbox"/> Mercury	_____
	_____	<input type="checkbox"/> Nitrate	_____
	_____	<input type="checkbox"/> Selenium	_____
	_____	<input type="checkbox"/> Silver	_____
Radiochemistry		<input type="checkbox"/> Sulfates	_____
		<input type="checkbox"/> Zinc	_____
Parameter	Results (PCI/l)	<input type="checkbox"/> pH	_____
<input type="checkbox"/> Gross Alpha	_____	<input type="checkbox"/> Conductivity	_____
<input type="checkbox"/> Gross Beta	_____	<input type="checkbox"/> TDS	_____
		<input type="checkbox"/> TOC	_____
Microbiology			_____

Parameter	Results (Col/100ml)		_____

Organic Compounds **Results(mg/l)**

<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

Date Received 5-23-97-VP Reported by _____

Date Extracted PEST 5-23-97VP Date Reported _____

Date Analyzed TCLP-PEST 5-30-97VP Lab Number 972025

Site Number NCD 986171338 Field Sample Number 020188

Name of Site Pelee Pesticide Site Location Clayton

Collected By HZ ID# _____ Date Collected 5-22-97 Time 12:53

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

Environmental	Concentrate	Comments
<input type="checkbox"/> Ground water (1)	<input checked="" type="checkbox"/> Solid (5)	<u>SPE-SPC-3C</u>
<input type="checkbox"/> Surface water (2)	<input type="checkbox"/> Liquid (6)	<u>" WASTE PILE "</u>
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	_____
<input checked="" type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	_____

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Acid:B/N Ext.	_____	<input type="checkbox"/> Barium	_____
<input type="checkbox"/> MTBE	_____	<input type="checkbox"/> Cadmium	_____
<u>TCLP Pestic. 8080</u>	_____	<input type="checkbox"/> Chloride	_____
	_____	<input type="checkbox"/> Chromium	_____
	_____	<input type="checkbox"/> Copper	_____
	_____	<input type="checkbox"/> Fluoride	_____
	_____	<input type="checkbox"/> Iron	_____
	_____	<input type="checkbox"/> Lead	_____
	_____	<input type="checkbox"/> Manganese	_____
	_____	<input type="checkbox"/> Mercury	_____
	_____	<input type="checkbox"/> Nitrate	_____
	_____	<input type="checkbox"/> Selenium	_____
	_____	<input type="checkbox"/> Silver	_____
	_____	<input type="checkbox"/> Sulfates	_____
	_____	<input type="checkbox"/> Zinc	_____
	_____	<input type="checkbox"/> pH	_____
	_____	<input type="checkbox"/> Conductivity	_____
	_____	<input type="checkbox"/> TDS	_____
	_____	<input type="checkbox"/> TOC	_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

Date Received 5-23-97VP Reported by _____

Date Extracted 5-23-97VP Date Reported _____

Date Analyzed 5-30-97VP Lab Number **972026**

TOTALS-PESTICIDES

DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES

Division of Laboratory Services

Environmental Organic Chemistry Branch

SOILS

G C REPORT SHEET

COMPANY: PEELE PESTICIDE, CLAYTON

DATE OF ANALYSIS: 5-27-97VP + 5-28-97

TRACE 222 ECD 30% OV-1 @ 185°C + TREMATIC 9001 ECD
MEGABORE COLUMN
140°C to 265°C

PPM - PESTICIDES IN SOIL

SAMPLE #	ALPHA BHC	LINDANE	ALDRIN	DIELDRIN	DDE	DDD	DDT		
RA-C 972020 (SOIL)		<0.10ppm	<0.10ppm	0.17ppm		0.15ppm	0.65ppm		
B-KH11 972021 (SOIL)	<0.10ppm	<0.10ppm	<0.10ppm	<0.10ppm		<0.10ppm	<0.10ppm		
KFM-SC 972022 (SOIL)	<0.10ppm	<0.10ppm	<0.10ppm	<0.10ppm		<0.10ppm	<0.10ppm		
ENO-C 972023 (SOIL)		<0.10ppm (0.005ppm)	<0.10ppm	(0.012ppm) <0.10ppm		(0.010ppm) <0.10ppm	(0.012ppm) <0.10ppm		

TCLP-PESTICIDES
 (EXTRACTED: 5-30-97) H₂O
 (MS08)

G C REPORT SHEET

6-3-97

COMPANY: PEELE PESTICIDE, CLAYTON

DATE OF ANALYSIS: 5-30-97 + JUNE 2, 1997 JP

PESTICIDE/TCLP-TREMATIC 9001 ECD MEGA BARE COLUMN
 TRACOR 222 ECD-3700V/ @185°C

(ppm) **TCLP-PESTICIDES-H₂O**

SAMPLE #	ALPHA BHC	LINDANE	ALDRIN	DIELDRIN	DDE	DDD	DDT		
972020 RA-C TCLP-PEST-H ₂ O SPA-4C		0.00008		0.0003		0.0005	0.0006		
972024 TCLP-PEST-H ₂ O SPA-2C		0.4000	0.0680	0.0078		0.0050	0.0103		
972025 TCLP-PEST-H ₂ O SPA-3C		0.2800	0.0734	0.0042		0.0021	0.0123		
972026 TCLP-PEST-H ₂ O		0.1150	0.0101	0.0138		0.0040	0.0070		

May 6, 1997

RECEIVED

MAY 09 1997

SUPERFUND SECTION

Mr. Bruce Nicholson, Head
Special Remediation Branch
NC Department of Environment,
Health and Natural Resources
401 Oberlin Road
Raleigh, North Carolina 27611

**Subject: Revised Removal Plan Submittal with Final Comments
Peele Disposal Site
Clayton, North Carolina**

Dear Bruce:

We appreciate your timely response on the revised Removal Plan for the subject site. I received comments from Mr. Zinn of your department this morning. Per Mr. Zinn's request we have enclosed loose pages for your incorporation into the document submitted yesterday, May 1, 1997. These pages address the following comments:

Section 3.1.1: The following sentence has been deleted: "In general, these goals have been adopted by NCDEHNR from the residential concentration of EPA Region III Risk-Based Concentration table developed by R.L. Smith (8/9/96)."

Section 4.2: The last paragraph has been revised to indicate the collection of two composite samples from the areas where the stockpiles resided

Section 4.4: A second sample set will be collected only if the initial samples are deemed by NCDEHNR representatives not to represent the full quantity of material to be borrowed.

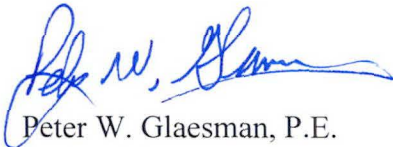
Section 4.6: If groundwater sampling results indicate a soil remediation goal protective of groundwater is applicable, composite excavation floor and deep sidewall samples will be analyzed for TCLP extractable pesticides (full list) using SW-846 method 1311/8080.

Mr. Harold Moats
Novartis Crop Protection, Inc.
May 6, 1997
Page 2

Section 5: The reference to the month of May has been capitalized.

We understand that with these revisions the Removal Plan is approved for implementation. As discussed, we are scheduled to begin mobilizing personnel and equipment into the field on Monday, May 5, 1997. If you have any questions please contact Mr. Harold Moats at (910) 632-7714, or Mr. Peter Glaesman at (919) 850-9511.

Sincerely,



Peter W. Glaesman, P.E.
Project Manager

PWG:pwg

enclosure

cc: (with 5/2/97 comments incorporated)
H. Moats, Novartis Crop Protection, Inc.
C. Browning, Hunton & Williams
H. Grubbs, Womble Carlyle
R. Kane, Poyner & Spruill

3.1 EXCAVATION CLEANUP GOALS

Cleanup goals for the excavation activities have been developed from the NCDEHNR *Guidelines for Responsible Party Voluntary Site Remedial Action* (Guidelines), dated October 1996. The Guidelines establish two soil remediation goals; one being health-based and the second being a groundwater protection goal. Health-based goals have been developed for this Removal Plan as described in Section 3.1.1. The application of groundwater protection goals will be dependent on the findings of groundwater sampling to be conducted as part of this Removal Plan, as described in Section 3.1.2. Attainment of these soil cleanup goals will be documented with confirmation soil samples collected from the sidewalls and floors of the excavations as described in Section 4.1.

3.1.1 Health Based Soil Remediation Goals

Fill material in the main trench area will be excavated until native soil is reached in the floors and sidewalls. Shallow soils, down to 5-feet below existing ground surface, will be excavated until confirmation sampling demonstrates that remaining compounds of concern are below the health-based soil remediation goals presented in Table C-1 of the Guidelines and summarized on Table 2. Because this Site is being developed as a fire station (deemed non-residential), soils deeper than 5-feet below existing ground surface will be excavated to the depths (elevations) described in Section 2.2.2. These depths have been selected based on a comparison of the 1996 trench sampling results (see Section 1.2) with the industrial health-based soil remediation goals presented in the EPA Region III Risk-Based Concentration table. A summary of these soil remediation goals for the compounds of concern are provided as Table 2. The need for further excavation will be evaluated once confirmation sampling results have been received, and comparisons with the industrial health-based, and groundwater protection-based soil remediation goals have been made.

The more stringent goals adopted for residential soils were selected for soils less than 5-feet deep because utility excavations and other surface soil disturbances do not generally involve soils that are deeper than 5-feet.

3.1.2 Groundwater Protection Soil Remediation Goals

According to the Guidelines, applicability of the soil remediation goals for the protection of groundwater is dependent on the following issues:

1. Is groundwater impacted by the hazardous substance, as demonstrated by sampling?
2. Has it been demonstrated that all on-site disposals and releases of hazardous substances occurred prior to 1980?
3. If the groundwater is contaminated, is it being actively remediated?

Sampling to assess the presence of groundwater impact is being conducted as part of this removal action. Existing records, including facility operation dates and aerial photography clearly demonstrate that all on-site disposals and releases of hazardous substances occurred prior to 1980. Active remediation of groundwater will be dependent on results groundwater sampling.

If groundwater protection soil remediation goals are deemed to be applicable, toxicity characteristic leaching procedure (TCLP) extraction results from the excavation floor samples (see Section 4.1) will be compared to North Carolina's NCAC 15A, Subchapter 2L, Groundwater Standards, and the need for further excavating of any "hot spots" will be determined.

3.2 TREATMENT GOALS

Soil and waste material excavated for off-Site disposal will be tested for TCLP concentrations of pesticides to determine the appropriate treatment/disposal methods. Materials will either be disposed of in a Subtitle C lined landfill, or incinerated. The selected facilities will be permitted RCRA TSD facilities. Testing will be performed on the soil and waste material stockpiles as described in Section 4.6. Material which meets the allowable goal for the five pesticides with established regulatory TCLP concentrations, as well as five additional compound concentrations calculated for this Removal Plan, will be transported off-Site for RCRA Subtitle C lined landfill disposal. The regulatory and selected TCLP pesticide concentrations are summarized on Table 3, along with the associated Waste Code, where applicable. The five additional compound concentrations were selected and the TCLP concentrations were established by NCDEHNR.

the face of the sidewalls, either shallow (approximately 2-feet below ground surface) or deep (approximately 8-feet below ground surface), as shown on Figure 4. Confirmation sampling from the floor of the excavation will include four individual samples from each selected floor area, and one representative composite sample comprised of the individual samples. The individual samples will be collected from nodes which are evenly spaced across the floor of the excavation, and each of the benched areas in the excavation floor.

Confirmation samples will also be collected from surface soils around the perimeter of the main excavation. One composite sample comprised of soil from four sampling nodes will be collected from each of the four sides of the excavation. The samples will be collected at the completion of excavation activities, and after removing surface soil which may have been impacted by excavation and stockpiling operations.

4.2 WASTE DETERMINATION AND CHARACTERIZATION

The soil and waste material will be sampled to make determination of the appropriate type of hazardous waste treatment/disposal facilities (i.e., lined landfill or incineration), and to provide characterization data to the selected facilities for acceptance. The waste determination samples and the characterization samples will be analyzed as described in Section 4.6.

For waste determination, a composite sample will be prepared for each 100 cubic yards of stockpiled material. In general, stockpiles will be constructed with 1:1 side slopes to an approximate height of 8-feet and a width of 30-feet at the base. The length of the stockpiles will continue as needed. The 100 cubic yard segments will be approximately 15-feet wide each. As discussed in the Guidelines, each composite sample will be comprised of six individual sampling nodes. The nodes will include one shallow (2-feet) and one deep (6-feet) plug of soil, from three randomly spaced soil borings. Based on the estimated volume of soil to be excavated during these removal activities, approximately 1,100 cubic yards from the main disposal trench and negligible quantities from the remote surface disposal areas, a total of 11 composite samples are anticipated for waste determination.

The characterization sampling will consist of single composite samples which are representative of the total soil and waste material being sent to each treatment/disposal facility.

After the stockpiles have been removed, two composite samples will be collected from the area where the stockpiles resided to confirm that the underlying soils have not been impacted. Each composite sample will be comprised of soil from four individual sampling nodes spaced evenly across the areas. One sample will be collected from the area under Stockpile "A", and one sample will be collected from the area under Stockpile "B".

4.3 GROUNDWATER SAMPLING

Groundwater sampling was conducted on April 21, 1997 in accordance with the April 8, 1997 issue of this Removal Plan and the April 18, 1997 Woodward-Clyde letter responding to NCDEHNR comments of April 15, 1997. Sampling activities were conducted in accordance with the following plan.

The five existing groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-9) located at the Site will be sampled to assess whether groundwater has been impacted by the disposal activities previously conducted on this property. The sampling will be conducted as described below, and in accordance with the USEPA Region IV Environmental Investigation Standard Operating Procedures/Quality Assurance Manual (EISOP/QAM), dated May 1996.

Groundwater from the monitoring wells will be sampled using the following procedure:

1. Groundwater levels will be measured in all wells prior to the start of sampling activities.
2. Monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-9 will be manually purged using low flow groundwater sampling techniques as described in Appendix E. Field parameters including temperature, pH, and specific conductivity will be monitored during purging as a check for stabilizing groundwater conditions. Monitoring wells will be purged a minimum of three casing volumes of water, or until these parameters stabilize. If the parameters have not stabilized after purging five casing volumes, this will be noted in the field log book and the sample collected. In addition, the turbidity of the groundwater will be measured and recorded at the time of sampling. A turbidity of 10 Nephelometric Turbidity Units (NTUs) will be targeted.

Groundwater samples will be collected in clean laboratory supplied sample containers and labeled and logged onto a sample chain-of-custody. The samples will then be placed on ice in an insulated cooler and delivered via overnight shipping service to the laboratory for analysis.

4.4 BACKFILL MATERIAL APPROVAL

Selection and approval of the backfill material will be based on one composite (BA-C) and one grab sample (BA-G) collected from the proposed borrow area. The samples will be collected from the near surface soils (less than 12-inches deep). A second sample set will be collected only if the initial samples are deemed by NCDEHNR representatives not to represent the full quantity of material to be borrowed.

4.5 QUALITY ASSURANCE AND CONTROL

Field procedures followed to maintain quality assurance and control for sampling activities conducted for this project are described in the following subsections. Laboratory procedures are outlined in the current Quality Assurance Manual for the NCDEHNR certified subcontract laboratory used for this project.

4.5.1 Sample Documentation and Labeling

The purpose of sample management is to create a "cradle to grave", legally defensible, traceable and documented chain-of-custody (COC) for samples from the time of collection in the field

through shipment, receipt by the laboratory, and final receipt of analytical data by Woodward-Clyde. A permanent copy of the COC forms for samples submitted for off-Site commercial laboratory analyses will be maintained by the laboratory as part of the data package, and by Woodward-Clyde or the participating parties in the project files.

4.5.1.1 Field Documentation

A logbook will be maintained in the field by the Woodward-Clyde sampler. A bound field logbook will be used by Woodward-Clyde to record all pertinent field data collection activities or observations made. Documentation in this field logbook will be sufficient to reconstruct the sampling situation without relying on the memory of the field team members. Entries into the field logbook will include, but are not necessary limited to the following information:

- Project name
- Date and time
- Sample location
- Sample number
- Sample depth
- Media type
- PID readings
- Sampling personnel present
- Type of health and safety clothing/equipment used
- Analyses requested
- Time of sample collection
- Sample preservation
- Field observations, to include soil description (if relative)
- Weather conditions
- Depth to water
- Other project-specific information

Field sketches will be made in the field logbooks, when appropriate, with reference points tied to existing structures in the area (i.e., trees, fence posts, buildings).

Field logbooks will be identified by a project-specific number (i.e., Logbook #1 for Project Number 7E05522) and stored in the field project files when not in use. At the completion of the field activities, the logbooks will be maintained in a central project file.

4.5.6.3 Matrix Spike Samples

A matrix spike sample is a sample with a known concentration of contaminants. Spiked samples measure negative bias due to sample handling or analytical procedures. Matrix spike and matrix spike duplicate samples will be analyzed according to laboratory method procedure requirements.

4.6 LABORATORY ANALYTICAL METHODS

The analytical methods to be used for the various samples collected throughout these activities are:

- Confirmation samples to be analyzed on a 72-hour turn-around-time (TAT):
 - composite excavation sidewall samples (8-main trench) will be analyzed for total pesticides using SW-846 method 8080, and copper and arsenic using SW-846 method 6010,
 - composite excavation floor samples (6-main trench, 2-remote areas) will be analyzed for total pesticides using SW-846 method 8080, and copper and arsenic using SW-846 method 6010,
 - composite excavation perimeter surface samples (4-main trench, 1-remote Area A) will be analyzed for total pesticides using SW-846 method 8080, and copper and arsenic using SW-846 method 6010,
 - composite surface sample following removal of stockpile area (1) will be analyzed for total pesticides using SW-846 method 8080, and copper and arsenic using SW-846 method 6010,
 - if groundwater sampling results indicate a soil remediation goal protective of groundwater is applicable, composite excavation floor and deep sidewall samples will be analyzed for TCLP extractable pesticides (full list) using SW-846 method 1311/8080, and
 - individual sample analyses will be performed, if it is deemed necessary following receipt of composite results.
- Waste determination samples to be analyzed on a 72-hour TAT:
 - composite stockpile samples (approximately 11) will be analyzed for TCLP extractable pesticides (full list) using SW-846 method 1311/8080.
- Waste characterization samples to be analyzed on a 72-hour TAT:
 - composite stockpile samples (2) will be analyzed for toxicity, reactivity, ignitability, and corrosivity using SW-846 methods: 1311, 8151, 8080, 6010, 7470, 7.3.3.2, 7.3.4.2, 1010, and 9040.
- Groundwater samples to be analyzed on a one-week TAT:

An accelerated schedule has been developed for this project. This schedule for the work plan has been developed to be protective of human health and the environment, while providing the city of Clayton with requested milestones in the project, and maximizing efficiencies in mobilization, and equipment costs. The Dewatering Work Plan provides the planned timeline for this work plan which is significantly reduced from the time allowances in the Consent Order. The planned schedule allowed a two week review period by NCDEHNR for the initial Removal Plan submitted. Comment on this revised Removal Plan is anticipated by May 2, 1997.

NCDEHNR
Division of Waste Management
 Superfund Section
 Hazardous Waste Section
 Solid Waste Section

Organics Lab: _____
Inorganics Lab:

CHAIN OF CUSTODY RECORD

Project Name: <u>Peele Pesticide</u>	Sampled By: <u>HJZ</u>
Site ID # (NCD#) <u>986 171 338</u>	Sampler ID _____
Location: <u>Clyton</u>	Telephone: () <u>733 2801</u>
Address: _____	Date Sampled: <u>4-21-87</u>
	Time Sampled: _____
Sample Types: Soil _____ Water <input checked="" type="checkbox"/> Waste _____ Other _____	
Remarks: <u>mw1 mw2 mw3 mw4 mw9</u>	
Field Sample Numbers <u>017143 017144 017145 017146 017147</u>	
Relinquished By: <u>[Signature]</u>	Date: <u>4-22-87</u> Time: <u>14:00</u>
(Signature)	
Received By: <u>[Signature]</u>	Date: <u>4</u> Time: <u>14:00</u>
(Signature)	
Relinquished By: _____	Date: _____ Time: _____
(Signature)	
Received By: _____	Date: _____ Time: _____
(Signature)	
Relinquished By: _____	Date: _____ Time: _____
(Signature)	
Received By: _____	Date: _____ Time: _____
(Signature)	
Results Reported: _____	Date: _____ Time: _____
(Signature)	

Site Number _____ Field Sample Number 017143
 Name of Site Peele Pesticide Site Site Location Clayton
 Collected By Harri Zinn ID# _____ Date Collected 4-21-97 Time 10:30

Agency: _____ Hazardous Waste _____ Solid Waste _____ Superfund

Sample Type		Comments
<u>Environmental</u>	<u>Concentrate</u>	
<input checked="" type="checkbox"/> Ground water (1)	_____ Solid (5)	<u>M W I</u>
_____ Surface water (2)	<input checked="" type="checkbox"/> Liquid (6)	_____
_____ Soil (3)	_____ Sludge (7)	_____
_____ Other (4)	_____ Other (8)	_____

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chromium	_____
_____ Lead	_____
_____ Mercury	_____
_____ Selenium	_____
_____ Silver	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l) (mg/kg)
_____ P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u><0.01</u>
_____ Acid:B/N Ext.	_____	<input checked="" type="checkbox"/> Barium	<u><0.1</u>
_____ MTBE	_____	<input checked="" type="checkbox"/> Cadmium	<u><0.005</u>
_____	_____	Chloride	_____
_____	_____	<input checked="" type="checkbox"/> Chromium	<u>0.01</u>
_____	_____	Copper	_____
_____	_____	Fluoride	_____
_____	_____	Iron	_____
_____	_____	<input checked="" type="checkbox"/> Lead	<u><0.005</u>
_____	_____	Manganese	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<u><0.0005</u>
_____	_____	Nitrate	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<u><0.005</u>
_____	_____	<input checked="" type="checkbox"/> Silver	<u><0.05</u>
_____	_____	Sulfates	_____
_____	_____	Zinc	_____
_____	_____	pH	_____
_____	_____	Conductivity	_____
_____	_____	TDS	_____
_____	_____	TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____

Organic Compounds	Results(mg/l)
_____ benzene	_____
_____ carbon tetrachloride	_____
_____ chlordane	_____
_____ chlorobenzene	_____
_____ chloroform	_____
_____ o-cresol	_____
_____ m-cresol	_____
_____ p-cresol	_____
_____ cresol	_____
_____ 1,4-dichlorobenzene	_____
_____ 1,2-dichloroethane	_____
_____ 1,1-dichloroethylene	_____
_____ 2,4-dinitrotoluene	_____
_____ heptachlor	_____
_____ hexachlorobenzene	_____
_____ hexachlorobutadiene	_____
_____ hexachloroethane	_____
_____ methyl ethyl ketone	_____
_____ nitrobenzene	_____
_____ pentachlorophenol	_____
_____ pyridine	_____
_____ tetrachloroethylene	_____
_____ trichloroethylene	_____
_____ 2,4,5-trichlorophenol	_____
_____ 2,4,6-trichlorophenol	_____
_____ vinyl chloride	_____
_____ endrin	_____
_____ lindane	_____
_____ methoxychlor	_____
_____ toxaphene	_____
_____ 2,4-D	_____
_____ 2,4,5-TP (Silvex)	_____
_____	_____
_____	_____

Date Received _____ Reported by _____
 Date Extracted _____ Date Reported _____
 Date Analyzed _____ Lab Number 005402 APR 22 97
 D11S 3191 (Revised 2/91)

Site Number _____ Field Sample Number 017144

Name of Site Peele Pesticide Site Site Location Clayton

Collected By Harry Zinn ID# _____ Date Collected 4-21-97 Time 11:50

Agency: _____ Hazardous Waste _____ Solid Waste Superfund

Sample Type

<u>Environmental</u>	<u>Concentrate</u>	<u>Comments</u>
<input checked="" type="checkbox"/> Ground water (1)	<input type="checkbox"/> Solid (5)	<u>MW 2</u>
<input type="checkbox"/> Surface water (2)	<input checked="" type="checkbox"/> Liquid (6)	
<input type="checkbox"/> Soil (3)	<input type="checkbox"/> Sludge (7)	
<input type="checkbox"/> Other (4)	<input type="checkbox"/> Other (8)	

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
<input type="checkbox"/> Arsenic	_____
<input type="checkbox"/> Barium	_____
<input type="checkbox"/> Cadmium	_____
<input type="checkbox"/> Chromium	_____
<input type="checkbox"/> Lead	_____
<input type="checkbox"/> Mercury	_____
<input type="checkbox"/> Selenium	_____
<input type="checkbox"/> Silver	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
<input type="checkbox"/> P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u><0.01</u>
<input type="checkbox"/> Acid:B/N Ext.	_____	<input checked="" type="checkbox"/> Barium	<u><0.01</u>
<input type="checkbox"/> MTBE	_____	<input checked="" type="checkbox"/> Cadmium	<u><0.005</u>
	_____	<input type="checkbox"/> Chloride	_____
	_____	<input checked="" type="checkbox"/> Chromium	<u><0.01</u>
	_____	<input type="checkbox"/> Copper	_____
	_____	<input type="checkbox"/> Fluoride	_____
	_____	<input type="checkbox"/> Iron	_____
	_____	<input checked="" type="checkbox"/> Lead	<u><0.005</u>
	_____	<input type="checkbox"/> Manganese	_____
	_____	<input checked="" type="checkbox"/> Mercury	<u><0.0005</u>
	_____	<input type="checkbox"/> Nitrate	_____
	_____	<input checked="" type="checkbox"/> Selenium	<u><0.005</u>
	_____	<input checked="" type="checkbox"/> Silver	<u><0.05</u>
	_____	<input type="checkbox"/> Sulfates	_____
	_____	<input type="checkbox"/> Zinc	_____
	_____	<input type="checkbox"/> pH	_____
	_____	<input type="checkbox"/> Conductivity	_____
	_____	<input type="checkbox"/> TDS	_____
	_____	<input type="checkbox"/> TOC	_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____
	_____		_____

Radiochemistry	
Parameter	Results (PCI/l)
<input type="checkbox"/> Gross Alpha	_____
<input type="checkbox"/> Gross Beta	_____

Microbiology	
Parameter	Results (Col/100ml)

Organic Compounds	Results(mg/l)
<input type="checkbox"/> benzene	_____
<input type="checkbox"/> carbon tetrachloride	_____
<input type="checkbox"/> chlordane	_____
<input type="checkbox"/> chlorobenzene	_____
<input type="checkbox"/> chloroform	_____
<input type="checkbox"/> o-cresol	_____
<input type="checkbox"/> m-cresol	_____
<input type="checkbox"/> p-cresol	_____
<input type="checkbox"/> cresol	_____
<input type="checkbox"/> 1,4-dichlorobenzene	_____
<input type="checkbox"/> 1,2-dichloroethane	_____
<input type="checkbox"/> 1,1-dichloroethylene	_____
<input type="checkbox"/> 2,4-dinitrotoluene	_____
<input type="checkbox"/> heptachlor	_____
<input type="checkbox"/> hexachlorobenzene	_____
<input type="checkbox"/> hexachlorobutadiene	_____
<input type="checkbox"/> hexachloroethane	_____
<input type="checkbox"/> methyl ethyl ketone	_____
<input type="checkbox"/> nitrobenzene	_____
<input type="checkbox"/> pentachlorophenol	_____
<input type="checkbox"/> pyridine	_____
<input type="checkbox"/> tetrachloroethylene	_____
<input type="checkbox"/> trichloroethylene	_____
<input type="checkbox"/> 2,4,5-trichlorophenol	_____
<input type="checkbox"/> 2,4,6-trichlorophenol	_____
<input type="checkbox"/> vinyl chloride	_____
<input type="checkbox"/> endrin	_____
<input type="checkbox"/> lindane	_____
<input type="checkbox"/> methoxychlor	_____
<input type="checkbox"/> toxaphene	_____
<input type="checkbox"/> 2,4-D	_____
<input type="checkbox"/> 2,4,5-TP (Silvex)	_____

Date Received _____ Reported by _____

Date Extracted _____ Date Reported _____

Date Analyzed _____ Lab Number _____

005493 APR 22 1997

Site Number _____ Field Sample Number 017145
 Name of Site Peele Pesticide Site Site Location Clayton
 Collected By Harry Zinn ID# _____ Date Collected 4-21-97 Time 16:30

Agency: _____ Hazardous Waste _____ Solid Waste _____ Superfund

Sample Type
Environmental **Concentrate** **Comments**
 Ground water (1) _____ Solid (5) MW3
 _____ Surface water (2) Liquid (6) _____
 _____ Soil (3) _____ Sludge (7) _____
 _____ Other (4) _____ Other (8) _____

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chromium	_____
_____ Lead	_____
_____ Mercury	_____
_____ Selenium	_____
_____ Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l) <small>(mg/kg)</small>
_____ P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u><0.01</u>
_____ Acid:B/N Ext.	_____	<input checked="" type="checkbox"/> Barium	<u><0.1</u>
_____ MTBE	_____	<input checked="" type="checkbox"/> Cadmium	<u><0.005</u>
_____	_____	_____ Chloride	_____
_____	_____	<input checked="" type="checkbox"/> Chromium	<u><0.01</u>
_____	_____	_____ Copper	_____
_____	_____	_____ Fluoride	_____
_____	_____	_____ Iron	_____
_____	_____	<input checked="" type="checkbox"/> Lead	<u><0.005</u>
_____	_____	_____ Manganese	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<u><0.0005</u>
_____	_____	_____ Nitrate	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<u><0.005</u>
_____	_____	<input checked="" type="checkbox"/> Silver	<u><0.05</u>
_____	_____	_____ Sulfates	_____
_____	_____	_____ Zinc	_____
_____	_____	_____ pH	_____
_____	_____	_____ Conductivity	_____
_____	_____	_____ TDS	_____
_____	_____	_____ TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Radiochemistry	
Parameter	Results (PCI/l)
_____ Gross Alpha	_____
_____ Gross Beta	_____

Microbiology	
Parameter	Results (Col/100ml)
_____	_____
_____	_____

Organic Compounds	Results(mg/l)
_____ benzene	_____
_____ carbon tetrachloride	_____
_____ chlordane	_____
_____ chlorobenzene	_____
_____ chloroform	_____
_____ o-cresol	_____
_____ m-cresol	_____
_____ p-cresol	_____
_____ cresol	_____
_____ 1,4-dichlorobenzene	_____
_____ 1,2-dichloroethane	_____
_____ 1,1-dichloroethylene	_____
_____ 2,4-dinitrotoluene	_____
_____ heptachlor	_____
_____ hexachlorobenzene	_____
_____ hexachlorobutadiene	_____
_____ hexachloroethane	_____
_____ methyl ethyl ketone	_____
_____ nitrobenzene	_____
_____ pentachlorophenol	_____
_____ pyridine	_____
_____ tetrachloroethylene	_____
_____ trichloroethylene	_____
_____ 2,4,5-trichlorophenol	_____
_____ 2,4,6-trichlorophenol	_____
_____ vinyl chloride	_____
_____ endrin	_____
_____ lindane	_____
_____ methoxychlor	_____
_____ toxaphenc	_____
_____ 2,4-D	_____
_____ 2,4,5-TP (Silvex)	_____

Date Received _____ Reported by _____
 Date Extracted _____ Date Reported _____
 Date Analyzed _____ Lab Number 005494 APR 2297
 IHS 3191 (Revised 2/91)

SAMPLE ANALYSIS REQUEST

Site Number _____ Field Sample Number 017146

Name of Site Peele Pesticide Site Site Location Clayton

Collected By HARRY ZINN ID# _____ Date Collected 4-21-97 Time 15:30

Agency: _____ Hazardous Waste _____ Solid Waste Superfund

Sample Type

Environmental	Concentrate	Comments
<input checked="" type="checkbox"/> Ground water (1)	_____ Solid (5)	<u>MW 4</u>
_____ Surface water (2)	<input checked="" type="checkbox"/> Liquid (6)	_____
_____ Soil (3)	_____ Sludge (7)	_____
_____ Other (4)	_____ Other (8)	_____

TCLP Compounds

Inorganic Compounds	Results(mg/l)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chromium	_____
_____ Lead	_____
_____ Mercury	_____
_____ Selenium	_____
_____ Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l) <u>(mg/kg)</u>
_____ P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u><0.01</u>
_____ Acid:B/N Ext.	_____	<input checked="" type="checkbox"/> Barium	<u><0.1</u>
_____ MTBE	_____	<input checked="" type="checkbox"/> Cadmium	<u><0.005</u>
_____	_____	_____ Chloride	_____
_____	_____	<input checked="" type="checkbox"/> Chromium	<u><0.01</u>
_____	_____	_____ Copper	_____
_____	_____	_____ Fluoride	_____
_____	_____	_____ Iron	_____
_____	_____	<input checked="" type="checkbox"/> Lead	<u><0.005</u>
_____	_____	_____ Manganese	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<u><0.0005</u>
_____	_____	_____ Nitrate	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<u><0.005</u>
_____	_____	<input checked="" type="checkbox"/> Silver	<u><0.05</u>
Radiochemistry		_____ Sulfates	_____
Parameter	Results (PCi/l)	_____ Zinc	_____
_____ Gross Alpha	_____	_____ pH	_____
_____ Gross Beta	_____	_____ Conductivity	_____
Microbiology		_____ TDS	_____
Parameter	Results (Col/100ml)	_____ TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____

Organic Compounds	Results(mg/l)
_____ benzene	_____
_____ carbon tetrachloride	_____
_____ chlordane	_____
_____ chlorobenzene	_____
_____ chloroform	_____
_____ o-cresol	_____
_____ m-cresol	_____
_____ p-cresol	_____
_____ cresol	_____
_____ 1,4-dichlorobenzene	_____
_____ 1,2-dichloroethane	_____
_____ 1,1-dichloroethylene	_____
_____ 2,4-dinitrotoluene	_____
_____ heptachlor	_____
_____ hexachlorobenzene	_____
_____ hexachlorobutadiene	_____
_____ hexachloroethane	_____
_____ methyl ethyl ketone	_____
_____ nitrobenzene	_____
_____ pentachlorophenol	_____
_____ pyridine	_____
_____ tetrachloroethylene	_____
_____ trichloroethylene	_____
_____ 2,4,5-trichlorophenol	_____
_____ 2,4,6-trichlorophenol	_____
_____ vinyl chloride	_____
_____ endrin	_____
_____ lindane	_____
_____ methoxychlor	_____
_____ toxaphene	_____
_____ 2,4-D	_____
_____ 2,4,5-TP (Silvex)	_____
_____	_____
_____	_____

Date Received _____ Reported by _____

Date Extracted _____ Date Reported _____

005495 APR 22 97

Date Analyzed _____ Lab Number _____

Site Number _____ Field Sample Number 017147
 Name of Site Peele Pesticide Site Site Location Clayton
 Collected By Harry Zinn ID# _____ Date Collected 4-21-97 Time 12:30

Agency: _____ Hazardous Waste _____ Solid Waste _____ Superfund

Sample Type
 Environmental Concentrate Comments
 Ground water (1) _____ Solid (5) MW 9
 _____ Surface water (2) Liquid (6) _____
 _____ Soil (3) _____ Sludge (7) _____
 _____ Other (4) _____ Other (8) _____

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chromium	_____
_____ Lead	_____
_____ Mercury	_____
_____ Selenium	_____
_____ Silver	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l) (mg/kg)
_____ P&T:GC/MS	_____	<input checked="" type="checkbox"/> Arsenic	<u><0.01</u>
_____ Acid:B/N Ext.	_____	<input checked="" type="checkbox"/> Barium	<u><0.1</u>
_____ MTBE	_____	<input checked="" type="checkbox"/> Cadmium	<u><0.005</u>
_____	_____	_____ Chloride	_____
_____	_____	<input checked="" type="checkbox"/> Chromium	<u><0.01</u>
_____	_____	_____ Copper	_____
_____	_____	_____ Fluoride	_____
_____	_____	_____ Iron	_____
_____	_____	<input checked="" type="checkbox"/> Lead	<u><0.005</u>
_____	_____	_____ Manganese	_____
_____	_____	<input checked="" type="checkbox"/> Mercury	<u><0.0005</u>
_____	_____	_____ Nitrate	_____
_____	_____	<input checked="" type="checkbox"/> Selenium	<u><0.005</u>
_____	_____	<input checked="" type="checkbox"/> Silver	<u><0.005</u>
_____	_____	_____ Sulfates	_____
_____	_____	_____ Zinc	_____
_____	_____	_____ pH	_____
_____	_____	_____ Conductivity	_____
_____	_____	_____ TDS	_____
_____	_____	_____ TOC	_____

Radiochemistry	
Parameter	Results (PCI/l)
_____ Gross Alpha	_____
_____ Gross Beta	_____

Microbiology	
Parameter	Results (Col/100ml)
_____	_____
_____	_____

Organic Compounds	Results(mg/l)
_____ benzene	_____
_____ carbon tetrachloride	_____
_____ chlordane	_____
_____ chlorobenzene	_____
_____ chloroform	_____
_____ o-cresol	_____
_____ m-cresol	_____
_____ p-cresol	_____
_____ cresol	_____
_____ 1,4-dichlorobenzene	_____
_____ 1,2-dichloroethane	_____
_____ 1,1-dichloroethylene	_____
_____ 2,4-dinitrotoluene	_____
_____ heptachlor	_____
_____ hexachlorobenzene	_____
_____ hexachlorobutadiene	_____
_____ hexachloroethane	_____
_____ methyl ethyl ketone	_____
_____ nitrobenzene	_____
_____ pentachlorophenol	_____
_____ pyridine	_____
_____ tetrachloroethylene	_____
_____ trichloroethylene	_____
_____ 2,4,5-trichlorophenol	_____
_____ 2,4,6-trichlorophenol	_____
_____ vinyl chloride	_____
_____ endrin	_____
_____ lindane	_____
_____ methoxychlor	_____
_____ toxaphene	_____
_____ 2,4-D	_____
_____ 2,4,5-TP (Silvex)	_____

Date Received _____ Reported by _____
 Date Extracted _____ Date Reported _____
 Date Analyzed _____ Lab Number 005496 APR 22 97
 DIIS 3191 (Revised 2/91)

NCDEHNR
Division of Waste Management
 Superfund Section
 Hazardous Waste Section
 Solid Waste Section

Organics Lab:
Inorganics Lab: _____

CHAIN OF CUSTODY RECORD

Project Name: <u>Peele Pesticide</u>	Sampled By: <u>HJZ</u>
Site ID # (NCD#) <u>986 171 338</u>	Sampler ID _____
Location: <u>Clayton</u>	Telephone: (____) <u>733 2801</u>
Address: _____	Date Sampled: <u>4-21-97</u>
	Time Sampled: _____
Sample Types: Soil _____ Water <input checked="" type="checkbox"/> Waste _____ Other _____	
Remarks: <u>mw1 mw2 mw3 mw4 mw9</u>	
Field Sample Numbers <u>020125 020126 020127 020128 020129</u>	
Relinquished By: <u>[Signature]</u> (Signature)	Date: <u>4-22-97</u> Time: <u>14:05</u>
Received By: <u>William C. [Signature]</u> (Signature)	Date: <u>4-22-97</u> Time: <u>1405</u>
Relinquished By: _____ (Signature)	Date: _____ Time: _____
Received By: _____ (Signature)	Date: _____ Time: _____
Relinquished By: _____ (Signature)	Date: _____ Time: _____
Received By: _____ (Signature)	Date: _____ Time: _____
Results Reported: <u>[Signature]</u> (Signature)	Date: <u>6/09/97</u> Time: _____

Site Number _____ Field Sample Number 020125
Name of Site Peele Pesticide Site Site Location Clayton
Collected By HARRY ZINN ID# _____ Date Collected 4-21-97 Time 10:30

Agency: _____ Hazardous Waste _____ Solid Waste Superfund

Sample Type
Environmental Concentrate Comments
 Ground water (1) _____ Solid (5) MW1
_____ Surface water (2) Liquid (6) _____
_____ Soil (3) _____ Sludge (7) _____
_____ Other (4) _____ Other (8) _____

TCLP Compounds	
Inorganic Compounds	Results(mg/l)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chromium	_____
_____ Lead	_____
_____ Mercury	_____
_____ Selenium	_____
_____ Silver	_____
_____	_____
_____	_____
_____	_____

Organic Chemistry		Inorganic Chemistry	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)
_____ P&T:GC/MS	_____	_____ Arsenic	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	_____ Barium	_____
_____ MTBE	_____	_____ Cadmium	_____
<input checked="" type="checkbox"/> Pesticide	_____	_____ Chloride	_____
_____ ENDRIN	<u><0.0001</u>	_____ Chromium	_____
_____ LINDANE	<u><0.0002*</u>	_____ Fluoride	_____
_____ METHOXYCHLOR	<u><0.001</u>	_____ Iron	_____
_____ TOXAPHENE	<u><0.002</u>	_____ Lead	_____
_____ CHLORDANE	<u><0.0002</u>	_____ Manganese	_____
_____ HEPTACHLOR	<u><0.0001</u>	_____ Mercury	_____
_____ HEPTACHLOR EPOXIDE	<u><0.0001</u>	_____ Nitrate	_____
_____ DIELDRIN	<u><0.0001</u>	_____ Selenium	_____
*(TRACE AMOUNT DETECTED)		_____ Silver	_____
Radiochemistry		_____ Sulfates	_____
Parameter	Results (PCi/l)	_____ Zinc	_____
_____ Gross Alpha	_____	_____ pH	_____
_____ Gross Beta	_____	_____ Conductivity	_____
Microbiology		_____ TDS	_____
Parameter	Results (Col/100ml)	_____ TOC	_____
_____	_____	_____	_____
_____	_____	_____	_____

Organic Compounds	Results(mg/l)
_____ benzene	_____
_____ carbon tetrachloride	_____
_____ chlordane	_____
_____ chlorobenzene	_____
_____ chloroform	_____
_____ o-cresol	_____
_____ m-cresol	_____
_____ p-cresol	_____
_____ cresol	_____
_____ 1,4-dichlorobenzene	_____
_____ 1,2-dichloroethane	_____
_____ 1,1-dichloroethylene	_____
_____ 2,4-dinitrotoluene	_____
_____ heptachlor	_____
_____ hexachlorobenzene	_____
_____ hexachlorobutadiene	_____
_____ hexachloroethane	_____
_____ methyl ethyl ketone	_____
_____ nitrobenzene	_____
_____ pentachlorophenol	_____
_____ pyridine	_____
_____ tetrachloroethylene	_____
_____ trichloroethylene	_____
_____ 2,4,5-trichlorophenol	_____
_____ 2,4,6-trichlorophenol	_____
_____ vinyl chloride	_____
_____ endrin	_____
_____ lindane	_____
_____ methoxychlor	_____
_____ toxaphene	_____
_____ 2,4-D	_____
_____ 2,4,5-TP (Silvex)	_____

Date Received 4/22/97 JPM, WG Reported by JPM
Date Extracted 4/23/97 JPM, WG Date Reported 6/09/97
Date Analyzed BNA5-79780 Lab Number 971539
PEST 4-23-97 VP #971539 - 971543

RECEIVED
JUN 12 1997
SUPERFUND SECTION

Site Number _____ Field Sample Number 020126

Name of Site Peeler Pesticide Site Site Location Clayton

Collected By Harry Zivni ID# _____ Date Collected 4-21-97 Time 11:50

Agency: _____ Hazardous Waste _____ Solid Waste Superfund

Sample Type

<u>Environmental</u>	<u>Concentrate</u>	<u>Comments</u>
<input checked="" type="checkbox"/> Ground water (1)	____ Solid (5)	<u>MW 2</u>
____ Surface water (2)	____ Liquid (6)	
____ Soil (3)	____ Sludge (7)	
____ Other (4)	____ Other (8)	

TCLP Compounds

Inorganic Compounds	Results(mg/l)
____ Arsenic	_____
____ Barium	_____
____ Cadmium	_____
____ Chromium	_____
____ Lead	_____
____ Mercury	_____
____ Selenium	_____
____ Silver	_____

Organic Chemistry		Inorganic Chemistry		Organic Compounds	
Parameter	Results(mg/l)	Parameter	Results(mg/l)(mg/kg)		Results(mg/l)
____ P&T:GC/MS	_____	____ Arsenic	_____	____ benzene	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	____ Barium	_____	____ carbon tetrachloride	_____
____ MTBE	_____	____ Cadmium	_____	____ chlordane	_____
<input checked="" type="checkbox"/> Pesticide	_____	____ Chloride	_____	____ chlorobenzene	_____
____ <u>ENDRIN</u>	<u><0.0001 ppm</u>	____ Chromium	_____	____ chloroform	_____
____ <u>LINDANE</u>	<u>0.0015 ppm</u>	____ Fluoride	_____	____ o-cresol	_____
____ <u>Methoxychlor</u>	<u><0.001 ppm</u>	____ Iron	_____	____ m-cresol	_____
____ <u>TOXAPHENE</u>	<u>0.023 ppm</u>	____ Lead	_____	____ p-cresol	_____
____ <u>Chlordane</u>	<u><0.0002 ppm</u>	____ Manganese	_____	____ cresol	_____
____ <u>HEPTACHLOR</u>	<u><0.0001 ppm</u>	____ Mercury	_____	____ 1,4-dichlorobenzene	_____
____ <u>Heptachlor Epoxide</u>	<u><0.0001 ppm</u>	____ Nitrate	_____	____ 1,2-dichloroethane	_____
____ <u>DIELDRIIN</u>	<u><0.0001 ppm</u>	____ Selenium	_____	____ 1,1-dichloroethylene	_____
* Artifacts present, possible weathering		____ Silver	_____	____ 2,4-dinitrotoluene	_____
** Trace possible		____ Sulfates	_____	____ heptachlor	_____
Radiochemistry		____ Zinc	_____	____ hexachlorobenzene	_____
____ Gross Alpha	Results (PCI/l)	____ pH	_____	____ hexachlorobutadiene	_____
____ Gross Beta	_____	____ Conductivity	_____	____ hexachloroethane	_____
Microbiology		____ TDS	_____	____ methyl ethyl ketone	_____
____ Parameter	Results (Col/100ml)	____ TOC	_____	____ nitrobenzene	_____
____	_____			____ pentachlorophenol	_____
____	_____			____ pyridine	_____
____	_____			____ tetrachloroethylene	_____
____	_____			____ trichloroethylene	_____
____	_____			____ 2,4,5-trichlorophenol	_____
____	_____			____ 2,4,6-trichlorophenol	_____
____	_____			____ vinyl chloride	_____
____	_____			____ endrin	_____
____	_____			____ lindane	_____
____	_____			____ methoxychlor	_____
____	_____			____ toxaphene	_____
____	_____			____ 2,4-D	_____
____	_____			____ 2,4,5-TP (Silvex)	_____

Date Received 4/22/97 9 PM, W81 Reported by _____

Date Extracted 4/23/97 9 PM, W81 Date Reported _____
PEST 4-23-97VP

Date Analyzed BUA57-9780 Lab Number 971540
DHS 3191 (Revised 2/91) PEST 4-24-97VP

Site Number _____ Field Sample Number 020127
Name of Site Peele Pesticide Site Site Location Clayton
Collected By Harry Zivon ID# _____ Date Collected 4-21-97 Time 16:30

Agency: _____ Hazardous Waste _____ Solid Waste Superfund

Sample Type

Environmental Concentrate _____ Comments _____

Ground water (1) _____ Solid (5) MW3

_____ Surface water (2) ~~Liquid (6)~~ _____

_____ Soil (3) _____ Sludge (7) _____

_____ Other (4) _____ Other (8) _____

TCLP Compounds

Inorganic Compounds Results(mg/l)

____ Arsenic _____
____ Barium _____
____ Cadmium _____
____ Chromium _____
____ Lead _____
____ Mercury _____
____ Selenium _____
____ Silver _____

Organic Chemistry

Inorganic Chemistry

Parameter	Results(mg/l)
_____ P&T:GC/MS	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____
_____ MTBE	_____
<input checked="" type="checkbox"/> Pesticide	_____
<u>ENDRIN <0.0001 ppm</u>	
<u>LINDANE <0.0002 *</u>	
<u>METHOXYCHLOR <0.001 ppm</u>	
<u>TOXAPHENE <0.002 ppm *</u>	
<u>CHLORDANE <0.0002 ppm</u>	
<u>HEPTACHLOR <0.0001 ppm</u>	
<u>Heptachlor Epoxide <0.0001 ppm</u>	
<u>DIELDRIN <0.0001 *</u>	

Parameter	Results(mg/l)(mg/kg)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chloride	_____
_____ Chromium	_____
_____ Copper	_____
_____ Fluoride	_____
_____ Iron	_____
_____ Lead	_____
_____ Manganese	_____
_____ Mercury	_____
_____ Nitrate	_____
_____ Selenium	_____
_____ Silver	_____
_____ Sulfates	_____
_____ Zinc	_____
_____ pH	_____
_____ Conductivity	_____
_____ TDS	_____
_____ TOC	_____

Organic Compounds Results(mg/l)

_____ benzene _____
_____ carbon tetrachloride _____
_____ chlordane _____
_____ chlorobenzene _____
_____ chloroform _____
_____ o-cresol _____
_____ m-cresol _____
_____ p-cresol _____
_____ cresol _____
_____ 1,4-dichlorobenzene _____
_____ 1,2-dichloroethane _____
_____ 1,1-dichloroethylene _____
_____ 2,4-dinitrotoluene _____
_____ heptachlor _____
_____ hexachlorobenzene _____
_____ hexachlorobutadiene _____
_____ hexachloroethane _____
_____ methyl ethyl ketone _____
_____ nitrobenzene _____
_____ pentachlorophenol _____
_____ pyridine _____
_____ tetrachloroethylene _____
_____ trichloroethylene _____
_____ 2,4,5-trichlorophenol _____
_____ 2,4,6-trichlorophenol _____
_____ vinyl chloride _____
_____ endrin _____
_____ lindane _____
_____ methoxychlor _____
_____ toxaphene _____
_____ 2,4-D _____
_____ 2,4,5-TP (Silvex) _____

* Trace possible.

Radiochemistry

Parameter	Results (PCI/l)
_____ Gross Alpha	_____
_____ Gross Beta	_____

Microbiology

Parameter	Results (Col/100ml)
_____	_____
_____	_____

Date Received 4/22/97 Am, WJ Reported by _____

Date Extracted ^{BNA} 4/23/97 Am, WJ Date Reported _____

PEST 4-23-97VP

Date Analyzed BNA5-7-97BO Lab Number 971541

SAMPLE ANALYSIS REQUEST

Site Number _____ Field Sample Number 020128

Name of Site Peele Pesticide Site Site Location Clayton

Collected By HARRY ZIUN ID# _____ Date Collected 4-21-97 Time AA 15:30

Agency: Hazardous Waste Solid Waste Superfund

Sample Type

<u>Environmental</u>	<u>Concentrate</u>	<u>Comments</u>
<input checked="" type="checkbox"/> Ground water (1)	<u> </u> Solid (5)	<u>MW 4</u>
<u> </u> Surface water (2)	<u> </u> Liquid (6)	<u> </u>
<u> </u> Soil (3)	<u> </u> Sludge (7)	<u> </u>
<u> </u> Other (4)	<u> </u> Other (8)	<u> </u>

TCLP Compounds

Inorganic Compounds	Results(mg/l)
<u> </u> Arsenic	<u> </u>
<u> </u> Barium	<u> </u>
<u> </u> Cadmium	<u> </u>
<u> </u> Chromium	<u> </u>
<u> </u> Lead	<u> </u>
<u> </u> Mercury	<u> </u>
<u> </u> Selenium	<u> </u>
<u> </u> Silver	<u> </u>

Organic Chemistry

Parameter	Results(mg/l)
<u> </u> P&T:GC/MS	<u> </u>
<input checked="" type="checkbox"/> Acid:B/N Ext.	<u> </u>
<u> </u> MTBE	<u> </u>
<input checked="" type="checkbox"/> Pesticide	<u> </u>
<u> </u> ENDRIN	<u><0.0001 ppm</u>
<u> </u> LINDANE	<u><0.0002 ppm</u>
<u> </u> METHOXYCHLOR	<u><0.001 ppm</u>
<u> </u> TOXAPHENE	<u><0.002 ppm</u>
<u> </u> CHLORDANE	<u><0.0002 ppm</u>
<u> </u> HEPTACHLOR	<u><0.0001 ppm</u>
<u> </u> HEPTACHLOR EPOXIDE	<u><0.0001 ppm</u>
<u> </u> DIELDRIN	<u><0.0001 ppm</u>

Inorganic Chemistry

Parameter	Results(mg/l)(mg/kg)
<u> </u> Arsenic	<u> </u>
<u> </u> Barium	<u> </u>
<u> </u> Cadmium	<u> </u>
<u> </u> Chloride	<u> </u>
<u> </u> Chromium	<u> </u>
<u> </u> Copper	<u> </u>
<u> </u> Fluoride	<u> </u>
<u> </u> Iron	<u> </u>
<u> </u> Lead	<u> </u>
<u> </u> Manganese	<u> </u>
<u> </u> Mercury	<u> </u>
<u> </u> Nitrate	<u> </u>
<u> </u> Selenium	<u> </u>
<u> </u> Silver	<u> </u>
<u> </u> Sulfates	<u> </u>
<u> </u> Zinc	<u> </u>
<u> </u> pH	<u> </u>
<u> </u> Conductivity	<u> </u>
<u> </u> TDS	<u> </u>
<u> </u> TOC	<u> </u>

Organic Compounds

Organic Compounds	Results(mg/l)
<u> </u> benzene	<u> </u>
<u> </u> carbon tetrachloride	<u> </u>
<u> </u> chlordane	<u> </u>
<u> </u> chlorobenzene	<u> </u>
<u> </u> chloroform	<u> </u>
<u> </u> o-cresol	<u> </u>
<u> </u> m-cresol	<u> </u>
<u> </u> p-cresol	<u> </u>
<u> </u> cresol	<u> </u>
<u> </u> 1,4-dichlorobenzene	<u> </u>
<u> </u> 1,2-dichloroethane	<u> </u>
<u> </u> 1,1-dichloroethylene	<u> </u>
<u> </u> 2,4-dinitrotoluene	<u> </u>
<u> </u> heptachlor	<u> </u>
<u> </u> hexachlorobenzene	<u> </u>
<u> </u> hexachlorobutadiene	<u> </u>
<u> </u> hexachloroethane	<u> </u>
<u> </u> methyl ethyl ketone	<u> </u>
<u> </u> nitrobenzene	<u> </u>
<u> </u> pentachlorophenol	<u> </u>
<u> </u> pyridine	<u> </u>
<u> </u> tetrachloroethylene	<u> </u>
<u> </u> trichloroethylene	<u> </u>
<u> </u> 2,4,5-trichlorophenol	<u> </u>
<u> </u> 2,4,6-trichlorophenol	<u> </u>
<u> </u> vinyl chloride	<u> </u>
<u> </u> endrin	<u> </u>
<u> </u> lindane	<u> </u>
<u> </u> methoxychlor	<u> </u>
<u> </u> toxaphene	<u> </u>
<u> </u> 2,4-D	<u> </u>
<u> </u> 2,4,5-TP (Silvex)	<u> </u>

Date Received 4/22/97 JM, WZ Reported by _____

Date Extracted ^{BW} 4/23/97 JM, WZ Date Reported _____
PST 4-23-97 VP

Date Analyzed BW 5-7-97 BID Lab Number 971542
PST 4-24-97 VP

Site Number _____ Field Sample Number 020129

Name of Site Peele Pesticide Site Site Location Clayton

Collected By HARRY ZINN ID# _____ Date Collected 4-21-97 Time 12:30

Agency: _____ Hazardous Waste _____ Solid Waste Superfund

Sample Type

<u>Environmental</u>	<u>Concentrate</u>	<u>Comments</u>
<input checked="" type="checkbox"/> Ground water (1)	_____ Solid (5)	<u>MW 9</u>
_____ Surface water (2)	_____ Liquid (6)	_____
_____ Soil (3)	_____ Sludge (7)	_____
_____ Other (4)	_____ Other (8)	_____

TCLP Compounds

Inorganic Compounds	Results(mg/l)
_____ Arsenic	_____
_____ Barium	_____
_____ Cadmium	_____
_____ Chromium	_____
_____ Lead	_____
_____ Mercury	_____
_____ Selenium	_____
_____ Silver	_____

Organic Chemistry		Inorganic Chemistry		Organic Compounds	
Parameter	Results(mg/l)	Parameter	Results(mg/l) (mg/kg)		Results(mg/l)
_____ P&T:GC/MS	_____	_____ Arsenic	_____	_____ benzene	_____
<input checked="" type="checkbox"/> Acid:B/N Ext.	_____	_____ Barium	_____	_____ carbon tetrachloride	_____
_____ MTBE	_____	_____ Cadmium	_____	_____ chlordane	_____
<input checked="" type="checkbox"/> Pesticide	_____	_____ Chloride	_____	_____ chlorobenzene	_____
_____ <u>ENDRIN</u>	<u><0.0001 ppm</u>	_____ Chromium	_____	_____ chloroform	_____
_____ <u>LINDANE</u>	<u><0.0002 ppm</u> *	_____ Copper	_____	_____ o-cresol	_____
_____ <u>METHOXYCHLOR</u>	<u><0.001 ppm</u>	_____ Fluoride	_____	_____ m-cresol	_____
_____ <u>TOXAPHENE</u>	<u><0.002 ppm</u> *	_____ Iron	_____	_____ p-cresol	_____
_____ <u>CHLORDANE</u>	<u><0.0002 ppm</u>	_____ Lead	_____	_____ cresol	_____
_____ <u>HEPTACHLOR</u>	<u><0.0001 ppm</u>	_____ Manganese	_____	_____ 1,4-dichlorobenzene	_____
_____ <u>HEPTACHLOR Epoxide</u>	<u><0.0001 ppm</u>	_____ Mercury	_____	_____ 1,2-dichloroethane	_____
_____ <u>DIELDRI</u>	<u><0.0001 ppm</u> *	_____ Nitrate	_____	_____ 1,1-dichloroethylene	_____
* Trace possible		_____ Selenium	_____	_____ 2,4-dinitrotoluene	_____
_____		_____ Silver	_____	_____ heptachlor	_____
_____		_____ Sulfates	_____	_____ hexachlorobenzene	_____
_____		_____ Zinc	_____	_____ hexachlorobutadiene	_____
_____		_____ pH	_____	_____ hexachloroethane	_____
_____		_____ Conductivity	_____	_____ methyl ethyl ketone	_____
_____		_____ TDS	_____	_____ nitrobenzene	_____
_____		_____ TOC	_____	_____ pentachlorophenol	_____
_____				_____ pyridine	_____
_____				_____ tetrachloroethylene	_____
_____				_____ trichloroethylene	_____
_____				_____ 2,4,5-trichlorophenol	_____
_____				_____ 2,4,6-trichlorophenol	_____
_____				_____ vinyl chloride	_____
_____				_____ endrin	_____
_____				_____ lindane	_____
_____				_____ methoxychlor	_____
_____				_____ toxaphene	_____
_____				_____ 2,4-D	_____
_____				_____ 2,4,5-TP (Silvex)	_____

Date Received 4/22/97 PM, W/21 Reported by _____

Date Extracted 4/23/97 AM, W/21 Date Reported _____
 ANA
 PEST 4-23-97 VP

Date Analyzed 4-24-97 Lab Number 971543

DIIS 3191 (Revised 2/91) 4-24-97VP

NOTED TO
MAY 15 1997
402 E. 5TH ST.
CLAYTON, N.C. 27009
BUTCH LAWLER
1000

Clayton News Star

Volume 85, Number 15

Clayton, North Carolina

Tuesday, April 15, 1997

50 cents

RECEIVED

APR 24 1997

SUPERFUND SECTION

Certified haulers to remove contaminated soil from site

By MARGARET RITCHIE
Editor

Certified haulers will be taking contaminated soil from the pesticide site on N.C. 42 West, destined to become the location for Clayton's new satellite fire station in the near future.

Peter Glaesman, on-site manager for Woodward-Clyde, the firm in charge of preparing the site clean-up plan appeared before the Town Council on April 3 at a special meeting to discuss the plan.

Also present at the meeting were

Butch Lawler of Triangle Environmental Inc., Howard Moats of Ciba Geigy and Bruce Nicholson and Harry Zinn, representatives of the state Department of Environment, Health and Natural Resources/Superfund Section.

Glaesman said that the site was a disposal area for W.R. Peele and has a trench that is about 100 feet long by 30 feet wide, which contains household trash as well as agricultural pesticides.

He said there was another area that contained arsenic, but this soil was removed by the state under an emer-

gency procedure.

He said the state then sought and was awarded a summary judgment against the responsible parties for the cost of the clean-up.

Interim Town Manager Skip Browder said that after the site was reported to the state by Peele, discussions began on how the site would be cleaned up. He said a cooperative agreement was reached among the parties, and the town agreed to offer assistance through its engineering firm — Triangle Environmental Inc. — to determine the extent of the contamination.

In return for this assistance, Browder said, North Carolina Railroad, owner of the site, pledged five acres to the town for the new fire station.

Browder noted that once the site is cleaned up to the satisfaction of the state, N. C. Railroad will convey 5.2 acres to the town. He said an 80-foot strip along the side property line eventually will become a right-of-way in order for the railroad to have access to the property in the rear.

Glaesman said the first step in cleaning up the trench would be a de-watering process. He stated that

a small area would be excavated and a sump pump installed. Any water in the soil would be removed and filtered.

A stockpile area would be established for all soil coming out of the trench. Large steel pans on the site will be used to wash off any contaminated soil from the equipment being used.

Once the materials are excavated, he said, soil tests will be made to ensure that all contaminated soil has been removed.

See Waste, page 2A

Waste

Continued from page 1A

Clean soil will be put back into the trench, possibly some of the dirt from cutting the road into the site. Glaesman said there are five monitoring wells on the site to measure the impact on ground water in the area.

He estimated that the excavation would take about one or two weeks.

Samples of the stockpiles would be taken to determine where the soil should be sent for storage, depending on the level of contamination. The contaminated soil will be transported off-site by certified haulers, he said. Transportation times will be

coordinated with the town and appropriate officials, including the Public Works Department, to avoid having trucks on the highways during heavy traffic and times that school buses will be on the roads.

Glaesman said most of the clean-up activities will take place in May and June and be completed by July. Mayor Doug McCormac said the people involved seem to have things under control. "Different people have different timetables," he said. "But we can get started on the fire station."

The town hopes to begin construction of the new station this summer.

BRUCE,
F-I-E.
Butch

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



April 1, 1997

Mr. Harold Moats
Technical Manager
Corporate Environmental Protection
Novartis
P.O. Box 18300
Greensboro, NC 27419-8300

Via facsimile
910-632-7897

Subj: Peele Pesticide Disposal Site
Comments on Consent Order Work Product - Dewatering Plan

Dear Mr. Moats:

Upon review of the Dewatering Plan dated March 24, 1997, the NC Superfund Section has the following comments which need to be addressed:

1. Page 2-1 Section 2.3 and Figure 2. The Section believes that the project trailer location could be improved. From Figure 2 it is clear that the trailer is too close to Stockpile A -- to get to the trailer from the entrance road requires traversing areas very near the trench and Stockpile A. We would prefer that the trailer be placed near the entrance to the damaged fence, perhaps even outside it along the road. This allows for establishing control over the site's point of entry as well as having the trailer clearly outside of the exclusion zone.
2. Page 2-3 Section 2.6. To prevent puncture or other liner breach we believe that it is appropriate to line the bermed area with 30-mil HDPE rather than the 6-mil proposed in the plan.

I provided these comments to your contractor, Mr. Glaesman, during our meeting on March 26, 1997. The Section approves the Dewatering Plan contingent on the above changes. However, this approval of the Dewatering Plan is not an approval of the Health and Safety Plan contained in the Dewatering Plan. Adherence to appropriate rules and regulations in that regard remains your responsibility. If you have any questions, you may call me at (919)733-2801, ext. 353.

Respectfully yours,

A handwritten signature in black ink, appearing to read 'Bruce Nicholson', written over a horizontal line.

Bruce Nicholson, Head
Special Remediation Branch

cc: Harry Zinn
Robert Gelblum

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



FAX TRANSMITTAL RECORD

DATE: 4-1-97

TO: Harold Moats

FROM: Bruce Nicholson, Superfund Section

RE: Peele Dewatering Plan Comments

Number of pages (including cover) 2

Comments: _____

Confirm receipt of document(s):

_____, Superfund Section

(919) 733-2801, ext. ✓ 353

SF/slb(C:WPWIN60WPDOCSISFISF-FAX.FRM)

P.O. Box 27687,
Raleigh, North Carolina 27611-7687
Voice 919-733-4996



FAX 919-715-3605
An Equal Opportunity Affirmative Action Employer
50% recycled/10% post-consumer paper

**** Transmit Conf. Report ****

Apr 1 '97 14:36

NC SUPERFUND SECTION —> 89106327897	
No.	0002
Mode	NORMAL
Time	0'46"
Pages	2 Page(s)
Result	O K

HUNTON & WILLIAMS

P. O. Box 109

RALEIGH, NORTH CAROLINA 27602

TELEPHONE (919) 899-3000

FACSIMILE (919) 833-6352

(919) 899-3096

ATLANTA, GEORGIA
BRUSSELS, BELGIUM
CHARLOTTE, NORTH CAROLINA
HONG KONG
KNOXVILLE, TENNESSEE
MCLEAN, VIRGINIANEW YORK, NEW YORK
NORFOLK, VIRGINIA
RICHMOND, VIRGINIA
WARSAW, POLAND
WASHINGTON, D.C.

F. Hill Allen, IV

DIRECT DIAL: (919) 899-3407

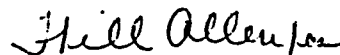
May 15, 1996

The Honorable David W. Daniel
Clerk, United States District Court
Eastern District of North Carolina
Federal Building - 310 New Bern Avenue
Post Office Box 25670
Raleigh, North Carolina 27611**State of North Carolina v. W.R. Peele, Sr. Trust, et al.**
Civil Action No. 5:94-25-CV-BR2

Dear Mr. Daniel:

The majority of the defendants in this matter and third-party defendant Ciba Geigy were unable to come to an agreement with the State of North Carolina concerning a proposed discovery plan. Accordingly, enclosed for filing please find the discovery plan proposed by the defendants and third-party Ciba Geigy. We understand that the State has filed (or will file) a separate proposed discovery plan.

Yours sincerely,



F. Hill Allen, IV

FHA/bjs
Enclosurecc: All Counsel of Record
Mr. Bill Peele, Jr.

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION
CIVIL ACTION NO. 5:94-25-CV-BR2

STATE OF NORTH CAROLINA,
ex rel. Jonathan B. Howes,
Secretary, North Carolina
Department of Environment,
Health and Natural Resources,
and Michael F. Easley,
Attorney General

Plaintiff,

v.

W.R. PEELE, SR. TRUST,
W.R. PEELE COMPANY, INC.,
ESTATE OF W.R. PEELE, SR.,
MADELINE S. PEELE,
NORTH CAROLINA
RAILROAD COMPANY, J.W. YORK

Defendants and Third-
Party Plaintiffs,

v.

CIBA-GEIGY CORPORATION

Third-Party Defendant

RULE 26(F) REPORT

1. Pursuant to Fed. R. Civ. P. 26(f), a meeting was held on May 1, 1996 at the offices of Hunton & Williams in Raleigh and was attended by Robert Gelblum for Plaintiff State of North Carolina and the following Defendants: Rick Kane (for North Carolina Railroad Company); Herman Wolff (for J.W. York); Hill Allen (for W.R. Peele, Sr. Trust and Estate of W.R. Peele); Amos

Dawson (for Mrs. Madeline Peele); Howard Grubbs (for Third Party Defendant Ciba-Geigy); and Bill Peele (pro se).

3. Discovery Plan. The parties jointly propose to the court the following discovery plan:

a. Discovery will be needed on the following subjects:

- (1) Allocation of responsibility among defendants and third-party defendants;
- (2) The State's damages, consistency of response costs with the National Contingency Plan, and the scope of the required remediation;
- (3) Defendants' ability to pay damages;
- (4) Liability of third party defendants Ciba-Geigy and Bill Peele, Jr.

e. All non-expert discovery commenced in time to be completed on or before March 1, 1997.

f. Maximum of 50 interrogatories by each party to any other party.

g. Maximum of 50 requests for admission by each party to any party.

h. Maximum of 15 depositions by each party.

i. Each deposition limited to maximum of 8 hours per day unless extended by agreement of parties.

j. Reports from retained experts under Rule 26(a)(2) due as follows:

- (1) Initial expert report(s) due April 1, 1997.
- (2) Rebuttal reports due May 1, 1997.

- (3) Depositions of experts to commence on or after May 15, 1997, and expert depositions to conclude on or before June 30, 1997.
- k. Supplementations under Rule 26(e) and as required by Local Rule 23.07 shall be due by April 1, 1997.
4. Other items.
- a. The parties do not request a conference with the Court before entry of the scheduling order.
- b. The parties request a pretrial conference at a time to be determined by the Court following the close of fact discovery.
- c. The parties should be allowed until January 31, 1997 to join additional parties and to amend the pleadings.
- d. All potentially dispositive motions should be filed on or before July 30, 1997.
- e. Settlement cannot be evaluated prior to close of factual discovery. Settlement may be enhanced by use of a mediated settlement conference not later than April 25, 1997.
- f. Final list of witnesses and exhibits under Rule 26(a)(3) should be due as determined appropriate by the Court.
- g. The case is expected to take approximately two (2) weeks.

Date: _____

By:

Robert R. Gelblum
Attorney for Plaintiff
Assistant Attorney General
N.C. Dept. of Justice
Post Office Box 629
Raleigh, NC 27602
(919) 733-8352

By:

L. Neal Ellis Jr
L. Neal Ellis, Jr.
N.C. State Bar No. 12719
Christopher G. Browning, Jr.
N.C. State Bar No. 13436
Matthew P. McGuire
N.C. State Bar No. 20048
Attorneys for the
W.R. Peele, Sr. Trust
HUNTON & WILLIAMS
Post Office Box 109
Raleigh, NC 27602
(919) 899-3000

By:

T. Richard Kane
N.C. State Bar No. 17076
Laurie Gengo
N.C. State Bar No. 16442
Attorney for North Carolina
Railroad Company
POYNER & SPRUILL
P.O. Box 10096
Raleigh, NC 27605-0096
(919) 783-6400

By:

Amos C. Dawson, III
N.C. State Bar No. 6584
Kellie Dugan

Date: _____

By: _____

Robert R. Gelblum
Attorney for Plaintiff
Assistant Attorney General
N.C. Dept. of Justice
Post Office Box 629
Raleigh, NC 27602
(919) 733-8352

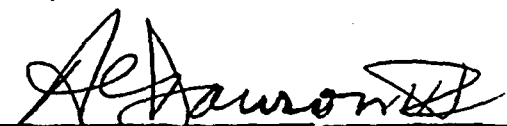
By: _____

L. Neal Ellis, Jr.
N.C. State Bar No. 12719
Christopher G. Browning, Jr.
N.C. State Bar No. 13436
Matthew P. McGuire
N.C. State Bar No. 20048
Attorneys for the
W.R. Peele, Sr. Trust
HUNTON & WILLIAMS
Post Office Box 109
Raleigh, NC 27602
(919) 899-3000

By: _____

T. Richard Kane
N.C. State Bar No. 17076
Laurie Gengo
N.C. State Bar No. 16442
Attorney for North Carolina
Railroad Company
POYNER & SPRUILL
P.O. Box 10096
Raleigh, NC 27605-0096
(919) 783-6400

By: _____


Amos C. Dawson, III
N.C. State Bar No. 6584
Kellie Dugan



State of North Carolina

Department of Justice
P. O. BOX 629
RALEIGH
27602-0629

Reply to Robert R. Gelblum
Environmental Division
(919) 733-8352
Fax - (919) 733-9909
gelblumrr@wastenot.ehnr.state.nc.us

MICHAEL F. EASLEY
ATTORNEY GENERAL

May 13, 1996

The Honorable David W. Daniel, Clerk
United States District Court for the
Eastern District of North Carolina
310 New Bern Avenue
P.O. Box 25670
Raleigh, North Carolina 27611

Re: State of N.C. v. W.R. Peele, Sr. Trust, et al.,
No. 5:94-25-CV-BR2

Dear Mr. Daniel:

Please find enclosed for filing in this matter the proposed Rule 26(f) Discovery Plan of Plaintiff the State of North Carolina and Third-Party Defendant W.R. Peele, Jr. Its filing was necessitated by the parties' inability to agree on a joint plan.

Please also find enclosed a Contribution Protection Agreement entered into between W.R. Peele, Jr. and the State, and know that Mr. Peele is making efforts to effect the cleanup of the site at issue in this case.

Yours truly,

Robert R. Gelblum
Assistant Attorney General

Enclosures

c: All Counsel of Record and W.R. Peele, Jr.



IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION
CIVIL ACTION NO. 5:94-25-CV-BR2

STATE OF NORTH CAROLINA,
ex rel. Jonathan B. Howes, Secretary,
North Carolina Department of Environment,
Health and Natural Resources, and
Michael F. Easley, Attorney General

Plaintiff,

v.

W.R. PEELE, SR. TRUST,
W.R. PEELE COMPANY, INC.,
ESTATE OF W.R. PEELE, SR.,
MADELINE S. PEELE,
NORTH CAROLINA RAILROAD
COMPANY, J.W. YORK

Defendants and Third-
Party Plaintiffs,

v.

CIBA-GIEGY CORPORATION, W.R.
PEELE, JR.

Third-Party Defendants.

FILED

MAY 13 1996

DAVID W. DANIEL, CLERK
U.S. DISTRICT COURT
E. DIST. NO. CAR.

RULE 26(f) REPORT

1. Pursuant to Fed. R. Civ. P. 26(f), a meeting was held on May 1, 1996 at the offices of Hunton & Williams in Raleigh and was attended by Robert Gelblum for Plaintiff State of North Carolina and the following Defendants: W.R. Peele, Jr. (*pro se*); Rick Kane (for North Carolina Railroad Company); Herman Wolff (for J.W. York); Hill Allen (for W.R. Peele, Sr. Trust and Estate of W.R. Peele, Sr.); Amos Dawson (for Mrs. Madeline Peele); and Howard

Grubbs (for Third-Party Defendant Ciba-Geigy).

The parties could not agree on a joint report; therefore, the State and W.R. Peele, Jr., in accordance with Local Rule 23.07(c), file this separate Rule 26(f) report using the format of Form 35).

2. Not applicable pursuant to Local Rule 23.07.
3. Discovery Plan. The State and W.R. Peele, Jr. propose to the Court the following discovery plan:
 - a. Discovery will or may be needed on the following subjects:
 - (1) Defendants' assets, finances and insurance;
 - (2) Involvement of Wachovia Bank in the W.R. Peele Co., Inc.;
 - (3) The State's damages and recoverability of its response costs;
 - (4) Allocation of responsibility among defendants;
 - (5) Liability of Ciba-Geigy.
 - b. All non-expert discovery commenced in time to be completed by August 15, 1996.
 - c. Maximum of 20 interrogatories by each party to any other party. Responses due 20 days after service.
 - d. Maximum of 20 requests for admission by each party to another party. Responses due 20 days after service.
 - e. Maximum of 5 depositions by each party.
 - f. Each deposition limited to maximum of 8 hours per day unless extended by agreement of parties.

g. Reports from retained experts under Rule 26(a) (2) due as follows:

(1) Initial expert report(s) due September 1, 1996.

(2) Rebuttal reports due October 1, 1996.

Depositions of experts to commence on or after October 15, 1996 and to conclude on or before November 30, 1996.

h. Supplementations under Rule 26(e) due by November 15, 1996.

4. Other items.

a. The parties do not request a conference with the Court before entry of the scheduling order.

b. The parties request a pretrial conference at a time to be determined by the Court following the close of non-expert discovery.

c. The parties should be allowed until July 15, 1996 to join additional parties and to amend the pleadings.

d. All potentially dispositive motions should be filed on or before December 20, 1996.

e. Settlement can be evaluated at any time, and may be enhanced by use of a mediated settlement conference.

f. Final list of witnesses and exhibits under Rule 26(a)(3) should be due from all parties by January 10, 1997.

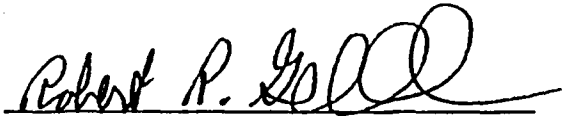
g. Parties should have seven (7) days after service of final lists of witnesses and exhibits to list objections under Rule 26(a)(3).

h. The case should be ready for trial by January 31, 1997 and is expected to take


approximately one (1) week.

i. The State and W.R. Peele, Jr. pray the Court reconsider its Order filed March 19, 1996 and order a separate trial regarding the liability of third-party defendants and the allocation of damages among all defendants.

Date: May 13, 1996



Robert R. Gelblum
N.C. State Bar No. 14461
Attorney for State of N.C.
Assistant Attorney General
N.C. Dept. of Justice
Post Office Box 629
Raleigh, N.C. 27602-0629
(919) 733-8352

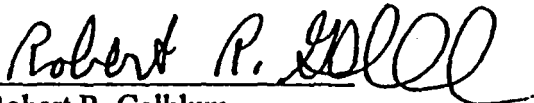


W.R. Peele, Jr.
2049 Dove Lane
Clayton, N.C. 27520
(919) 550-4286

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing RULE 26(f) REPORT of the State of North Carolina and W.R. Peele, Jr. has been duly served upon all parties of record by depositing said copies in a depository of the United States Postal Service, first-class, postage prepaid, addressed as shown below.

This 13th day of May, 1996.


Robert R. Gelblum
Assistant Attorney General

Amos Dawson, III, Esq.
Post Office Drawer 19764
Raleigh, North Carolina 27619
Attorney for Madeline S. Peele and W.R. Peele Co., Inc.

Christopher G. Browning, Jr., Esq.
Post Office Box 109
Raleigh, North Carolina 27602
Attorneys for W.R. Peele, Sr. Trust

T. Richard Kane, Esq.
Post Office Box 10096
Raleigh, North Carolina 27602
Attorney for N.C. Railroad Co.

Herman Wolff, Esq.
Post Office Drawer 12137
Raleigh, North Carolina 27605
Attorney for J.W. York

W.R. Peele, Jr.
2049 Dove Lane
Clayton, North Carolina 27520

Howard Grubbs, Esq.
Post Office Drawer 84
Winston-Salem, North Carolina 27102
Attorney for Ciba-Geigy Corporation

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
RALEIGH DIVISION

NO. 5:94-25-CV-BR2

STATE OF NORTH CAROLINA, *ex rel.*)
Jonathan B. Howes, Secretary North)
Carolina Department of Environment,)
Health and Natural Resources, and)
Michael F. Easley, Attorney General,)

Plaintiff)

v.)

W.R. PEELE, SR. TRUST, W.R. PEELE)
COMPANY, INCORPORATED, ESTATE OF)
W.R. PEELE, SR., MADELINE S. PEELE,)
NORTH CAROLINA RAILROAD COMPANY,)
J.W. YORK,)

Defendants)
and Third-)
Party Plaintiffs)

v.)

W.R. PEELE, JR.,)
Third-Party)
Defendant)

CONTRIBUTION PROTECTION AGREEMENT

The undersigned parties to this Agreement, William R. Peele, Jr., (hereinafter "Peele"), and the State of North Carolina, (hereinafter "State") hereby consent and agree to the following:

WHEREAS W.R. Peele Company, Inc., operated an agricultural chemical distributorship and W.R. Peele, Sr., owned undeveloped land in Johnston County, North Carolina, near the intersection of U.S. Route 70 and N.C. Highway 42 (hereinafter "the Site");

WHEREAS hazardous substances and chemicals, including pesticides, fungicides, herbicides, and other chemicals were disposed of at and around the Site;

WHEREAS because of his concern for public health and the environment, and in spite of potential adverse financial consequences for himself, Peele notified the State of the disposal practices of W.R. Peele Company, Inc. at and around the site that had occurred during the 1950's and 1960's while he was a child working for his father's business;

WHEREAS following notification by Peele, the State investigated the Site and found surface disposal areas and trench disposal areas contaminated with hazardous substances and chemicals, including pesticides, fungicides, herbicides, and other chemicals. Groundwater in the area of the site is suspected of being contaminated by the hazardous substances and chemicals disposed of at the Site;

WHEREAS the contamination at the Site may pose a threat to the environment and to human health and there is a potential that the contamination could migrate to other areas near the site;

WHEREAS the contamination at the Site has given rise to litigation by the State against potentially responsible parties, including the Peele Trust of which Peele is a beneficiary;

WHEREAS the parties to this Agreement desire to resolve the matter of Peele's potential liability which may arise from the conditions at and near the Site;

WHEREAS the State believes that the resolution and settlement of Peele's potential liability will further its goals and the goals of the federal government of environmental protection and will encourage other citizens to act responsibly and to report the existence of contamination and hazardous substances which pose a potential threat to the environment or to human health; and

WHEREAS this settlement is pursued by both parties in the good faith belief that it is in the best interest of the citizens of the State of North Carolina;

NOW, THEREFORE, Peele covenants and agrees to continue cooperating with the State of North Carolina to provide information to assist with the assessment and remediation of the contamination at the Site, and to provide truthful testimony to assist the State in the prosecution of the current action entitled State of North Carolina v. W.R. Peele, Senior Trust, et al., No. 5: 94-25-CV-BR2, filed in the United States District Court for the Eastern District of North Carolina, Raleigh Division. In consideration of Peele's invaluable assistance to and cooperation with the State, and his obligation to continue such cooperation, the State hereby releases and discharges Peele from any and all liability which he may have under federal statutes, state statutes, and the common law and extends, to the full extent possible under applicable law, the contribution protection afforded under CERCLA § 9613(f)(2). The State further releases and discharges Peele from any liability for costs incurred or to be incurred by the State of North Carolina and, to the extent it may do so, by the United States, or any other person or entity at the Site related to any assessment, remediation, response actions, investigation, clean up, and monitoring, at or near the Site, now and in the future.

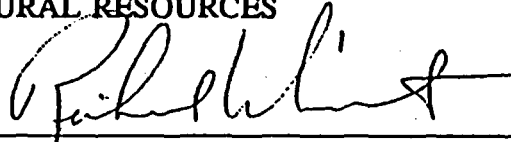
It is acknowledged by the parties that this Agreement is not a guarantee against subsequent actions for contribution that may arise regarding matters outside the scope of this settlement, nor is this Agreement in any way a promise by the State to hold harmless, defend and/or indemnify Peele.

This the 16th day of October, 1994.



W.R. PEELE, JR.

STATE OF NORTH CAROLINA,
DEPARTMENT OF ENVIRONMENT, HEALTH AND
NATURAL RESOURCES

BY: 

Richard Whisnant, General Counsel

59142

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



May 9, 1996

Ms. Madeline Peele, Clayton, NC
Mr. Bill Peele, Jr., Clayton, NC
Ms. Pat Darley, Cordele, GA

Ms. Shirley P. Middlebrooks, Macon, GA
Mr. J.W. York, Raleigh, NC
Mr. Scott Saylor, Raleigh, NC

Re: Peele Pesticide Disposal Site
Clayton, Johnston County, NC

Dear Fellow Parties in the Peele Case:

As you may know, I am the technical project lead for the NC Superfund Section on the Peele Site. My attorney in the case, Robert Gelblum, having come back from a discovery planning meeting, has made me aware that various lawyers in the case are preparing for a long drawn out discovery process. My thought that immediately comes to mind is, "why has it come to this?" Surely it makes better sense to spend a small amount of money on additional assessment of the site, at least to the point where costs of the cleanup action can be determined. Spending money on extensive discovery at this point is premature (almost frivolous, if you will forgive me) given that the cost of cleanup is unknown. An assessment may well show that cleanup would cost less than continued litigation, especially with a lengthy and costly discovery process.

Regarding the assessment of the site, after listening to the ideas of Bill Peele Jr., the State is willing to have an interim removal of the trench materials serve as a majority of the unfinished assessment of the site. This has 3 main advantages: 1) it is bound to be more cost effective to remove the soils rather than "study them to death" in place; 2) it eliminates continued leaking of contaminants to the ground water which reduces future liability for everyone; and 3) it determines with certainty the amount of contaminated and uncontaminated soils in the trench and thus the costs to dispose of them. It is Bill Peele, Jr.'s belief that only a small portion of the trench soil is contaminate with pesticides and that most of the trench contains household trash. A removal/assessment may then show that only a small portion of the trench soil requires extensive treatment before disposal.

I, like you (albeit the opposite side), am a client of an attorney who is conducting the litigation in this case. Speaking as a client in this regard, I have the sense that the client parties have gotten separated by attorneys to the point of intractability.* Although this can sometimes be in the clients' best interests, all too often in hazardous waste litigation, it can cost clients a large legal expense and can prevent a simple settlement of the case to the benefit of everyone.

*Not to knock attorneys too hard, for occasionally they do perform some useful functions--mine has provided me with an article on revised IRS rules which now make pre-cleanup site assessments potentially tax deductible. I have attached a copy for your review.

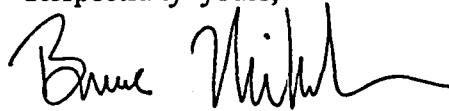
Parties in the Peele Case

5-9-96

Page 2

Is it possible that we, as the clients in this case, can come together and open a dialog for a cost effective solution that would save everyone further legal expense? I have done so in some measure with Bill Peele, Jr. who has provided useful ideas as to how to complete the assessment of the site in a cost-effective manner for everyone's benefit. I hope to do so with you too. I invite you as individuals to call me at (919)733-2801, ext. 353 to discuss this matter. Maybe we can share some information which might make a difference.

Respectfully yours,

A handwritten signature in black ink, appearing to read "Bruce Nicholson", with a long horizontal flourish extending to the right.

Bruce Nicholson, Head
Special Remediation Branch
Superfund Section

attachment

cc: Jack Butler, Chief, Superfund Section
Rob Gelblum, Asst. Atty. General
Lee Roy Martin, Wachovia Bank

April

Time for a Tax Tip

Pre-Cleanup Costs Are Now Deductible Business Expenses

By Tom Harrison and Tom Bartell

WITH INCOME taxes at the forefront of everyone's mind this month, environmental practitioners may want to alert corporate clients to a recent ruling by the Internal Revenue Service. Reversing an earlier position, the IRS recently determined that costs incurred by a company prior to an environmental cleanup are deductible business expenses under Internal Revenue Code Sec. 162. (Under IRC Sec. 162, "ordinary" business expenses are usually deductible.) This new Technical Advice Memorandum, which was issued on Jan. 17 but has not yet been released formally, is significant because the theories underlying the ruling allow a business that pays to restore its property to its original clean condition to take a tax deduction for

Tom Harrison is a partner in the Environmental and Land Use Department of the Hartford, Conn., office of Day, Berry & Howard. Tom Bartell is an associate in the firm's Tax Department. Telephone: (860) 275-0480.

cleanup and pre-cleanup costs in the year in which the money was spent.

The predecessor of the company discussed in the ruling acquired clean land and eventually used it for industrial waste disposal. (Neither the predecessor nor the company is specifically identified in the IRS ruling.) The company donated the land to a county for use as a recreational park. The company took a charitable contribution deduction for the fair market value of the donated land. (The deduction was not an issue and was not reviewed by the IRS in the letter ruling.) When the county later learned that the property was contaminated, the county ceased all development activity and conveyed the land back to the company for one dollar. Testing by state and federal agencies revealed the presence of hazardous substances, and the property was designated as a Superfund site. The company entered into a consent order with EPA to conduct a

Tax Tip

remedial investigation/feasibility study (RI/FS). The land is currently unoccupied and free of buildings. The property has stood idle since its reacquisition by the company.

In the tax year at issue, the company claimed a deduction for three types of pre-cleanup costs: (1) costs for environmental studies required by the consent order, (2) legal fees and (3) consulting fees. The costs for environmental studies were expenses paid to an engineering firm for the performance of the RI/FS. No expenses have been incurred, to date, for actual cleanup. Legal fees consisted of payments for negotiations with EPA, drafting the consent order and for activities associated with the company's contract with the engineering firm that performed the RI/FS. Consulting expenses consisted of amounts paid to three consulting firms for developing community relations programs, meetings with congressional representatives and the media and attendance at hearings. Consulting fees were also paid for the analysis of work by the engineering firm performing the RI/FS, for the development of a preliminary strategy for remedial alternatives and for a review of documents concerning site conditions and proposed cleanup strategy.

What Sort of Write-Off?

Normally, costs for improvements that increase the value of property, create or enhance an asset or produce a long-term benefit are chargeable as capital expenditures, for which no deduction is allowed. (Such costs are deductible through longer-term methods, such as depreciation, amortization or depletion.) Here, however, the company took the deduction under Rev. Rul. 94-38, 1994-1 C.B. 35, in which the IRS had allowed a taxpayer to deduct costs incurred in cleaning up land and treating groundwater that the taxpayer had contaminated with hazardous waste from its business. In Rev. Rul. 94-38, the IRS determined that the

taxpayer's remedial action did not result in an improvement that increased the value of the property, since the taxpayer had simply restored the land to the condition it was in prior to contamination by the taxpayer's operations.

Despite the seeming analogy to Rev. Rul. 94-38, the IRS initially denied the deduction in the instant situation. The IRS found that the break in the company's ownership of the land took the property outside of the earlier revenue ruling. (Remember that the company had donated the land to a county; the land was re-conveyed to the company after pollution was found.) On reversal, however, the IRS noted that the deduction allowed by Rev. Rul. 94-38 does apply to a different set of facts — where a taxpayer acquires clean property that becomes contaminated during the taxpayer's ownership, and the taxpayer incurs costs restoring the property to its prior condition. The IRS found, however, that the theory underlying the earlier revenue ruling applies to the instant case. Pursuant to Rev. Rul. 94-38, the IRS will determine whether costs are a business expense deduction allowable in the same year as the expenses have been incurred by determining whether a taxpayer had restored the value of the property to its condition before the contamination.

In this case, because the same taxpayer both contaminated the property and incurred pre-cleanup costs, the IRS found that the interim break in ownership, by itself, did not operate to disallow the immediate business deduction allowable under IRC Sec. 162. The amounts expended by the company for environmental impact studies and legal and consulting fees were found to be ordinary and necessary business expenses, because they did not create or enhance an asset or produce a long-term benefit. (Expenditures that will produce benefits in future years are capital in nature, and, therefore, will generally not result in a current deduction.)

Conclusion

This ruling has no precedential value for purposes of negotiations

EnviroMoves

Raoul D. Kennedy has joined Morrison & Foerster, LLP in San Francisco as a partner. Telephone: (415) 677-7000. His complex civil litigation practice focuses on environmental coverage, product liability, intellectual property, antitrust, legal malpractice and insurance defense issues. He was previously with Crosby, Heafey, Roach & May in Oakland, Calif.

• • •

Bradley M. Marten and Rodney L. Brown Jr. have opened Marten & Brown, LLP, an environmental and litigation firm in Seattle. Telephone: (206) 292-6300. Both lawyers were formerly partners of Morrison & Foerster, which has closed its Seattle office. The new firm has six attorneys.

• • •

Paul M. Samson has become NCR Corporation's environmental attorney. He is responsible for all of NCR's environmental and health and safety matters. Telephone: (513) 445-2908. NCR, formerly AT&T Global Information Solutions, is located in Dayton, Ohio. Before joining the corporation, Mr. Samson, a member of the *Environmental Compliance* board of editors, was special counsel with Damon & Morey, LLP in Buffalo, N.Y.

• • •

"EnviroMoves" is a monthly column that identifies recent environmental appointments — in government as well as in the private sector. Please send announcements to:

Lori Tripoli, Co-Editor
Environmental Compliance & Litigation Strategy

345 Park Avenue South, Suite 800
New York, N.Y. 10010

Please include the appointee's full name, title, firm or company name and telephone number, as well as his or her previous position and affiliation. The copy deadline for each issue is the 20th of the preceding month.

with the IRS by another taxpayer. However, environmental practitioners should nevertheless take note of the IRS position — because the principles underlying the ruling may well be applicable to other corporate tax situations. ■



MICHAEL F. EASLEY
ATTORNEY GENERAL

State of North Carolina

Department of Justice
P. O. BOX 629
RALEIGH
27602-0629

Reply to Robert R. Gelblum
Environmental Division
(919) 733-8352
Fax - (919) 733-9909

May 6, 1996

1-Page Fax to Peele Site Litigation Attys. & Bill Peele, Jr.

Dear Fellow Toilers in the Peele Vineyard:

It was good to see you all ("hear" in the case of Rick) at the Rule 26(f) Discovery Planning meeting on May 1. This letter articulates thoughts I had in the wake of the meeting and wanted to communicate. They are thoughts which perhaps should have occurred to me during the meeting; the fact that they did not is perhaps indicative of how folks fail to see the "forest for the trees."

The point I can't help wanting to make is this: Even if Bill Peele's plan to remediate the site using the minimal resources available to him doesn't work out, doesn't it make real good financial sense for all defendants to at least share funding of enough additional site assessment to identify cleanup options and their costs, before embarking upon the extensive discovery discussed at the planning meeting? As most of you have heard me say, such an assessment just might reveal that cleanup also might be cheaper than continued litigation. And the State would be just as willing to agree that the conduct of such an assessment would entail no admission of liability as it was when this idea was under negotiation last fall.

As was discussed regarding Bill Peele's idea, I suppose it would not be advisable to seek an extension of the deadline for filing the Discovery Plan without knowing better whether the idea presented in this letter can come to fruition, but the State is just as prepared as it was last fall to seek a stay of discovery pending completion of the assessment discussed herein. Also, perhaps you would agree to an extension of the deadline, Howard, for responding to the discovery you told us at the planning meeting you had already mailed out.

Please let me know your responses to this proposal.

Yours truly,

A handwritten signature in cursive script that reads "Rob Gelblum".

Robert R. Gelblum
Assistant Attorney General



WOMBLE CARLYLE SANDRIDGE & RICE

A PROFESSIONAL LIMITED LIABILITY COMPANY

1600 BB&T FINANCIAL CENTER
200 WEST SECOND STREET
WINSTON-SALEM, NORTH CAROLINA 27101

APR 18 1996

R. HOWARD GRUBBS
(910) 721-3537
FAX (910) 733-8351

INTERNET:
H_GRUBBS@WCSR.COM

MAILING ADDRESS
POST OFFICE DRAWER 84
WINSTON-SALEM, NORTH CAROLINA 27102
TELEPHONE (910) 721-3600
FACSIMILE (910) 721-3660

OTHER OFFICES:
ATLANTA, GA
CHARLOTTE, NC
RALEIGH, NC

April 15, 1996

The Honorable David W. Daniel, Clerk
United States District Court for the
Eastern District of North Carolina
310 New Bern Avenue
P. O. Box 25670
Raleigh, N.C. 27611

Re: State of North Carolina, ex rel., et al. vs. W. R. Peele, Sr. Trust, et al., vs. Third-Party
Defendant, Ciba-Geigy Corporation
Civil Action No. 5:94-25-CV-BR2

Dear Mr. Daniel:

We are enclosing for filing in the above-captioned matter an original and two copies of Ciba-Geigy Corporation's Answer to Third-Party Complaint. Please return a file-stamped copy of the Answer to us in the self-addressed, stamped envelope so provided.

Thank you for your assistance in this matter. By a copy of this letter, we are serving a copy of our Answer on all counsel of record.

Very truly yours,


R. Howard Grubbs

RHG:mfe
Enclosures
cc: All Counsel of Record

IN THE UNITED STATES DISTRICT COURT
 FOR THE EASTERN DISTRICT OF NORTH CAROLINA
 WESTERN DIVISION
 CIVIL ACTION NO. 5:94-25-CV-BR2

STATE OF NORTH CAROLINA,)
ex rel., JONATHAN B. HOWES,)
 SECRETARY, NORTH CAROLINA)
 DEPARTMENT OF ENVIRONMENT,)
 HEALTH AND NATURAL RESOURCES,)
 and MICHAEL F. EASLEY,)
 ATTORNEY GENERAL,)

Plaintiff,)

vs.)

W. R. PEELE, SR. TRUST, W. R.)
 PEELE COMPANY, INC., ESTATE OF)
 W. R. PEELE, SR., MADELINE S.)
 PEELE, NORTH CAROLINA)
 RAILROAD COMPANY, J. W. YORK,)

Defendants and Third-)
 Party Plaintiffs,)

vs.)

CIBA-GEIGY CORPORATION,)

Third-Party Defendant.)

CIBA-GEIGY CORPORATION'S
ANSWER TO THIRD-PARTY
COMPLAINT

Defendant Ciba-Geigy Corporation ("Ciba") answers the Third-Party Complaint of defendants and third-party plaintiffs W. R. Peele, Sr. Trust, W. R. Peele Company, Inc., Estate of W. R. Peele, Sr., Madeline S. Peele, North Carolina Railroad Company, and J. W. York, as follows:

FIRST DEFENSE

1.-5. Ciba is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraphs 1-5 of the Third-Party Complaint.

6. Ciba admits the allegations of the first sentence of Paragraph 6 of the Third-Party Complaint. Ciba further admits it is the successor in interest of the Geigy Company, Inc. Except as expressly admitted, the remaining allegations of the Paragraph 6 of the Third-Party Complaint are denied.

7. Ciba admits that third-party plaintiffs have alleged jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1367(a) and CERCLA §§ 107 and 113, 42 U.S.C. §§ 9607 and 9613, which speak for themselves. Ciba is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 7 of the Third-Party Complaint.

8. Ciba admits that third-party plaintiffs have alleged 28 U.S.C. § 1391(b) and 42 U.S.C. § 9613(b), which speak for themselves. Ciba is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 8 of the Third-Party Complaint.

9. Ciba admits that Plaintiff State of North Carolina has made certain allegations in its Complaint with regard to the incurrence of response costs, which speak for themselves. Ciba is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 9 of the Third-Party Complaint.

10. Ciba is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 10 of the Third-Party Complaint.

11. Ciba admits the allegations of Paragraph 11 of the Third-Party Complaint.

(As to First Claim for Relief)

12. Ciba incorporates by reference its responses to Paragraphs 1-11 of the Third-Party Complaint as if fully set forth herein. Except as expressly admitted, the allegations of Paragraphs 1-11 are denied.

13.-16.The allegations of Paragraphs 13-16 of the Third-Party Complaint are denied.

17. Ciba admits that third-party plaintiffs have alleged CERCLA § 113, 42 U.S.C. § 9613, which speaks for itself. Except as expressly admitted, the remaining allegations of Paragraph 17 of the Third-Party Complaint are denied.

18.-19.The allegations of Paragraphs 18 and 19 of the Third-Party Complaint are denied.

(As to Second Claim for Relief)

20. Ciba incorporates by reference its responses to Paragraphs 1-19 of the Third-Party Complaint as if fully set forth herein. Except as expressly admitted, the allegations of Paragraphs 1-19 are denied.

21. Ciba is without knowledge or information sufficient to form a belief as to the truth of the allegations of the first sentence of Paragraph 21 of the Third-Party Complaint. The remaining allegations of Paragraph 21 of the Third-Party Complaint are denied.

22. Ciba admits that third-party plaintiffs have alleged 42 U.S.C. § 9613(g)(2), which speaks for itself. Ciba is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 22 of the Third-Party Complaint.

23. The allegations of Paragraph 23 of the Third-Party Complaint are denied.

(As to Third-Party Plaintiff's Prayer)

24. Ciba denies that third-party plaintiffs are entitled to any of the relief prayed for in any part of the Third-Party Complaint.

SECOND DEFENSE

The allegations contained in the Third-Party Complaint fail to state a claim upon which relief may be granted against Ciba.

THIRD DEFENSE

All of the claims in the Third-Party Complaint are barred by the equitable doctrines of laches and waiver in that the third-party plaintiffs failed to commence this action against Ciba within a reasonable time.

FOURTH DEFENSE

Pursuant to Section 9607(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3), Ciba ("Ciba" for purposes of this defense, includes its predecessors in interest) should not be liable to third-party plaintiffs because (a) any release or threat of release at the Peele Pesticide Site and any damages resulting therefrom were caused solely by the acts or omissions of unrelated third-parties who are not and were not employees or agents of Ciba and with whom Ciba had no contractual relationship; (b) at all times, Ciba exercised due care with respect to the hazardous substances at issue in this action, taking into consideration the characteristics of such hazardous substances in light of all relevant facts and circumstances; and (c) Ciba took precautions against foreseeable acts or omissions of all such unrelated third-parties and the consequences that could foreseeably result from such acts or omissions.

FIFTH DEFENSE

The imposition of liability upon Ciba for a site which it or its predecessors did not own or operate or at which it did not dispose or arrange for disposal of hazardous substances, violates the due process clause of the United States Constitution.

WHEREFORE, Ciba prays that the Court:

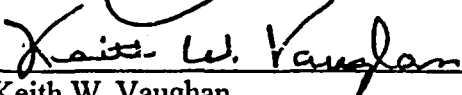
1. Dismiss third-party plaintiffs' Third-Party Complaint and the third-party plaintiffs have and recover nothing of Ciba;

2. Tax the costs of this action against third-party plaintiffs; and
3. Grant such other and further relief as the Court deems just and proper.

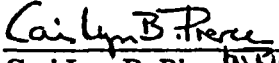
This the 15th day of April, 1996.



R. Howard Grubbs
N.C. State Bar No. 8129



Keith W. Vaughan
N.C. State Bar No. 6895



Cari Lyn B. Pierce
N.C. State Bar No. 19818

Attorneys for Defendant Ciba-Geigy Corporation

OF COUNSEL:

WOMBLE CARLYLE SANDRIDGE & RICE, P.L.L.C.
Post Office Drawer 84
Winston-Salem, North Carolina 27102
Telephone: (910) 721-3537

CERTIFICATE OF SERVICE

The undersigned hereby certifies that he is an attorney at law licensed to practice in the State of North Carolina, is attorney for Third-Party Defendant Ciba-Geigy Corporation, and is a person of such age and discretion as to be competent to serve process.

That on April 15, 1996, he served a copy of the attached **Ciba-Geigy Corporation's Answer to Third-Party Complaint** by placing said copy in a postpaid envelope and addressed to the persons hereinafter named, at the places and addresses stated below, which are the last known addresses, and by depositing said envelope and its contents in the United States Mail at Winston-Salem, North Carolina.

Addresses:

Robert R. Gelblum
Assistant Attorney General
N.C. Department of Justice
Post Office Box 629
Raleigh, North Carolina 27602

L. Neal Ellis, Jr.
Christopher Grafflin Browning, Jr.
Jeffrey F. Cherry
Matthew Patrick McGuire
Hunton & Williams
P. O. Box 109
Raleigh, North Carolina 27602

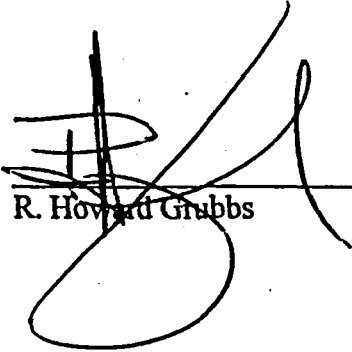
Amos C. Dawson, III, Esquire
Sean Callinicos
Maupin, Taylor, Ellis & Adams
P. O. Drawer 19764
Raleigh, North Carolina 27619-9764

Laurie B. Gengo
Terry Richard Kane
Poyner & Spruill
P. O. Box 10096
Raleigh, North Carolina 27605-0096

H. Spencer Barrow
Attorney at Law
P. O. Box 2131
Raleigh, North Carolina 27602

Walter Brock, Jr.
Young, Moore, Henderson & Alvis
P. O. Box 31627
Raleigh, North Carolina 27622

Herman Wolff, Jr.
P. O. Drawer 12137
Raleigh, North Carolina 27605



R. Howard Grubbs

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION
CIVIL ACTION NO. 5:94-25-CV-BR2

FD
FEB 27 '96

CLERK
COURT

STATE OF NORTH CAROLINA,)
<u>ex rel.</u> Jonathan B. Howes,)
Secretary, North Carolina)
Department of Environment,)
Health and Natural Resources,)
and Michael F. Easley,)
Attorney General)
 Plaintiff,)
 v.)
 W.R. PEELE, SR. TRUST,)
W.R. PEELE COMPANY, INC.,)
ESTATE OF W.R. PEELE, SR.,)
MADLINE S. PEELE,)
NORTH CAROLINA)
RAILROAD COMPANY, J.W. YORK)
 Defendants and Third-)
Party Plaintiffs,)
 v.)
 CIBA-GEIGY CORPORATION)
 Third-Party Defendant)

THIRD PARTY COMPLAINT

Defendants and Third-Party Plaintiffs W.R. Peele Sr. Trust, North Carolina Railroad Company, Madeline S. Peele, W.R. Peele Company, Inc. and J.W. York, complaining of the acts of Third-Party Defendant Ciba-Geigy Corporation, allege and state that:

1. Third-Party Plaintiff W.R. Peele Sr. Trust is an inter vivos trust created pursuant to a Trust Agreement dated August 29, 1957.

2. Third-Party Plaintiff North Carolina Railroad Company is a corporation organized and existing under the laws of the State of North Carolina with its principal place of business in Raleigh, North Carolina.

3. Third-Party Plaintiff Madeline S. Peele is a citizen and resident of North Carolina.

4. Third-Party Plaintiff J.W. York is a citizen and resident of North Carolina.

5. Third-Party Plaintiff W.R. Peele Company, Inc. was formerly organized under the laws of and did business in the State of North Carolina.

6. Third-Party Defendant Ciba-Geigy Corporation is a corporation organized and existing under the laws of the State of New York and is doing business in North Carolina. Ciba-Geigy Corporation is the successor-in-interest of Geigy Chemical Company and Geigy Company, Inc.

7. This Court has jurisdiction over this third-party complaint pursuant to 28 U.S.C. § 1331 & 1367(a) and 42 U.S.C. § 9607 & 9613 in that this cause of action arises under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.

8. Venue is proper in this district pursuant to 28 U.S.C. § 1391(b) and 42 U.S.C. § 9613(b).

9. In its Complaint in this action (attached hereto), Plaintiff State of North Carolina alleges it has incurred response costs in connection with the release of hazardous substances from a disposal site (hereinafter "the Peele Pesticide

Site") located in Johnston County, North Carolina. North Carolina Railroad Company is the current owner of record of the Site.

10. The Peele Pesticide Site is a "facility" as that term is defined by CERCLA, 42 U.S.C. § 9601(9).

11. Ciba-Geigy Corporation is a "person" as that term is defined by CERCLA, 42 U.S.C. § 9601(21).

FIRST CLAIM FOR RELIEF

12. Third-Party Plaintiffs incorporate and reallege paragraphs one through eleven of this Third-Party Complaint as if set forth in this First Claim For Relief.

13. Upon information and belief, Geigy Chemical Company and/or Geigy Company, Inc. owned and/or operated a pesticide manufacturing facility in Clayton, North Carolina from 1949 until the Fall of 1951. This facility was located near the intersection of Highway 42 and Highway 70.

14. Upon information and belief, during its ownership and/or operation of this pesticide manufacturing facility, Geigy Chemical Company and/or Geigy Company, Inc. caused waste pesticides it had generated to be disposed at or upon the Peele Pesticide Site.

15. Upon information and belief, the waste pesticides Geigy Chemical Company and/or Geigy Company, Inc. dumped at the Peele Pesticide Site contained one or more "hazardous substances" as that term is defined by CERCLA, 42 U.S.C. § 9601(14).

16. Pursuant to 42 U.S.C. § 9607, Ciba-Geigy Corporation is responsible for the release of hazardous substances into the environment at the Peele Pesticide Site.

17. CERCLA, 42 U.S.C. § 9613, permits any person who is potentially responsible for response costs under CERCLA to bring an action for contribution against any other person who may be potentially liable for response costs.

18. To the extent Third-Party Plaintiffs are liable for any response costs in connection with the Peele Pesticide Site, which each Third-Party Plaintiff has denied, Third-Party Plaintiffs are entitled to contribution from Ciba-Geigy Corporation pursuant to 42 U.S.C. § 9613(f).

19. If Third-Party Plaintiffs are found liable in this action, which each Third-Party Plaintiff has denied, Third-Party Plaintiffs are entitled to common law contribution and indemnity from Ciba-Geigy Corporation.

SECOND CLAIM FOR RELIEF

20. Third-Party Plaintiffs incorporate and reallege paragraphs one through nineteen of this Third-Party Complaint as if set forth in this Second Claim For Relief.

21. Response costs have been and will be incurred in the future in connection with the release or threatened release of hazardous substances at the Peele Pesticide Site. An actual, substantial and justiciable controversy exists between Third-Party Plaintiffs and Ciba-Geigy Corporation regarding Ciba-Geigy Corporation's liability for those response costs. Absent a

judicial declaration setting forth the parties' rights and obligations with respect to these costs, a multiplicity of actions may result.

22. CERCLA, 42 U.S.C. § 9613(g)(2), empowers this Court to enter a declaratory judgment on liability for response costs or damages that will be binding on any subsequent action or actions with respect to these future response costs.

23. This Court may, and Third-Party Plaintiffs pray that it should, declare the liability of Ciba-Geigy Corporation for future response costs in connection with the Peele Pesticide Site, pursuant to the Declaratory Judgment Act, 28 U.S.C. § 2201.

WHEREFORE, Third-Party Plaintiffs pray this Court that:

1. The Court enter a judgment in favor of Third-Party Plaintiffs and against Ciba-Geigy Corporation pursuant to Third-Party Plaintiffs' First Claim for Relief;
2. The Court enter a declaratory judgment that Ciba-Geigy Corporation is liable for future costs of response resulting from the release or threatened release of hazardous substances onto or from the Peele Pesticide Site; and
3. The Court grant such other relief as the Court may deem just and proper.

This the 26th day of March, 1996.

By: Matthew P. McGuire

L. Neal Ellis, Jr.
N.C. State Bar No. 12719
Christopher G. Browning, Jr.
N.C. State Bar No. 13436
Matthew P. McGuire
N.C. State Bar No. 20048
Attorneys for the
W.R. Peele, Sr. Trust
HUNTON & WILLIAMS
Post Office Box 109
Raleigh, NC 27602
(919) 899-3000

By: T. Richard Kane

T. Richard Kane
N.C. State Bar No. 17076
Attorney for North Carolina
Railroad Company
POYNER & SPRUILL
P.O. Box 10096
Raleigh, NC 27605-0096
(919) 783-6400

By: Amos C. Dawson, III

Amos C. Dawson, III
N.C. State Bar No. 6584
Kellie Dugan
N.C. State Bar No. 21668
Attorneys for Madeline S.
Peele and W.R. Peele Co, Inc.
MAUPIN, TAYLOR, ELLIS & ADAMS
Post Office Box 19764
Raleigh, NC 27619-9764
(919) 981-4000

By: Herman Wolff, Jr.

Herman Wolff, Jr.
N.C. State Bar No. 4811
Attorney for J.W. York
WOLFF & MARTIN
P.O. Drawer 12137
Raleigh, NC 27605
(919) 821-5900

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION

NO. 5:94-CV-25-BR-2

FILED

MAR 20 1995
MAR 19 1995
DAVID W. DANIEL, CLERK
U.S. DISTRICT COURT,
E. DIST. NO. CAR.

STATE OF NORTH CAROLINA,)
ex rel. Jonathan B. Howes,)
Secretary, North Carolina)
Department of Environment,)
Health and Natural Resources,)
and Michael F. Easley,)
Attorney General,)
Plaintiff)

v.)

W. R. PEELE, SR. TRUST,)
W. R. PEELE COMPANY, INC.,)
ESTATE OF W. R. PEELE, SR.,)
MADELINE S. PEELE, NORTH)
CAROLINA RAILROAD COMPANY,)
and J. W. YORK,)
Defendants)

O R D E R

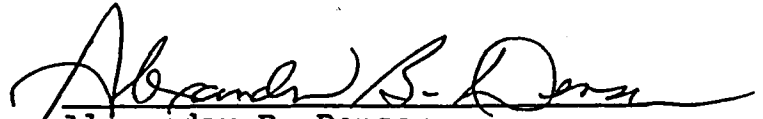
THIS CAUSE is now before the court on the motion of defendants W. R. Peele, Sr. Trust, North Carolina Railroad Company, Madeline S. Peele, W. R. Peele Company, Inc. and J. W. York for enlargement of time in which to conduct a Rule 26(f) meeting of the parties and to file the discovery plan in this case pending the court's ruling on the motion by these same defendants for leave to file a Third-Party Complaint against Ciba-Geigy Corporation. Plaintiff opposes the motion.

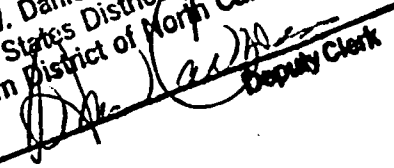
The Motion for Enlargement of Time IS ALLOWED. The court was delayed by the press of other matters in ruling on the motion for leave to file the Third-Party Complaint; however, that ruling has been made this date and the court anticipates that the Third-Party

Complaint will be filed immediately.

Counsel are directed to conduct their Rule 26(f) meeting as soon as practicable but no later than 10 days following filing of responsive pleading by Third-Party Defendant Ciba-Geigy Corporation. A Scheduling Order will be entered thereafter.

SO ORDERED, this the 19th day of March, 1996.


Alexander B. Denson
United States Magistrate Judge

I certify the foregoing to be a true and correct
copy of the original.
David W. Daniel, Clerk
United States District Court
Eastern District of North Carolina
By  Deputy Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION

NO. 5:94-CV-25-BR-2

FILED
MAR 19 1995
DAVID W. DANIEL, CLERK
U.S. DISTRICT COURT.
E. DIST. NO. CAR.

STATE OF NORTH CAROLINA,)
ex rel. Jonathan B. Howes,)
Secretary, North Carolina)
Department of Environment,)
Health and Natural Resources,)
and Michael F. Easley,)
Attorney General,)
Plaintiff)

v.)

W. R. PEELE, SR. TRUST,)
W. R. PEELE COMPANY, INC.,)
ESTATE OF W. R. PEELE, SR.,)
MADELINE S. PEELE, NORTH)
CAROLINA RAILROAD COMPANY,)
and J. W. YORK,)
Defendants)

O R D E R

THIS CAUSE is now before the court on the motion of defendants W. R. Peele, Sr. Trust, North Carolina Railroad Company, Madeline S. Peele, W. R. Peele Company, Inc. and J. W. York for leave to file a third-party complaint against Ciba-Geigy Corporation. For the reasons explained below, the motion is allowed.

This action was brought by the State of North Carolina to recover costs incurred in a clean-up of environmental contaminants under CERCLA¹ of a tract of real property referred to as the Peele Pesticide Site, in or near Clayton, N. C. On February 1, 1995 the court granted the State's summary judgment motion as to CERCLA

¹Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq.

liability of all current defendants jointly and severally with damages to be determined in subsequent proceedings. Thereafter W. R. Peele Company, Inc. ("Company") filed a motion for revision of the February 1 Order claiming that Ciba-Geigy is responsible for the contamination because the chemicals were dumped for it and at its direction. The motion for revision was denied on a finding: that the Company did not dispute that it was at least in part responsible, that the defendants had been found jointly and severally liable, and that the addition of another culpable defendant would not change the result as to the defendant Company.

In the February 1 Order, the court specifically noted: "However, this ruling does not preclude a party from seeking leave to add Geigy as a party." Perhaps viewing that observation of the court as an invitation, defendants filed the motion now under consideration. Plaintiff opposes the motion or, in the alternative, moves to sever from this action any claim so filed.

Plaintiff opposes the motion on several contentions: 1) that the State's claim for damages should not be delayed by actions among defendants for contribution; 2) that the impleader without severance would work a hardship on the State or be prejudicial to it; and 3) that there are serious questions about the merits of the proposed cross-claim.

As all parties recognize, a motion to file a third party complaint pursuant to Rule 14(a), Fed.R.Civ.P., lies in the discretion of the court. Noland Co. v. Graver Tank & Mfg. Co., 301 F.2d 43, 50 (4th Cir. 1962). "The primary purpose of any procedure

authorizing the impleader of third parties is to promote judicial efficiency by eliminating 'circuitry of actions'." Federal Practice and Procedure, Civil 2d, C. Wright, A. Miller and M. Kane, Ch. 4, § 1442 at p. 289 (hereinafter "Federal Practice and Procedure"). Thus, in exercising its discretion, the court should allow the motion to implead "if it will avoid circuitry of action and eliminate duplication of suits based on closely related matters." Federal Practice and Procedure, § 1443, p. 300. However, impleader should be denied "when it will delay or disadvantage the existing action and the third-party claim obviously lacks merit." Id., p. 301. (emphasis added).

The defendants claim that the chemicals dumped by the individual defendants were done when they were employees of Ciba-Geigy and thus were done at its direction. Thus, they claim a right of indemnity, or at least contribution, from Ciba-Geigy. If this motion is denied, defendants will have to bring a separate action against Ciba-Geigy. Accordingly it is clear that allowing the impleader would "eliminate duplication of suits based on closely related matters" and thus "avoid circuitry of action." Indeed, this is exactly the type of case for which impleader was designed. See United States v. New Castle County, 642 F. Supp. 1270 (D. Del. 1986).

Plaintiff claims that if the impleader is allowed, its action would be delayed; however, that does not appear likely. First, the discovery phase of this case has not even begun and a Scheduling Order has not been entered. The case cannot be ready for trial

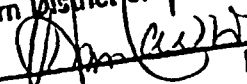
quickly. Next, so far as the court knows, plaintiff has not yet completed its clean-up operations and it will likely not be able to present its case on damages until this has been completed. Moreover, while it may be true that the equities sometimes compel haste in compensating the entity that has incurred substantial expense in a clean-up, those exigencies are not so great when the cleaner is a State, with considerable resources. The court is also impressed with defendants' point that the case is much more likely to settle if all the "PRP's" (Potentially Responsible Parties) are in the action.

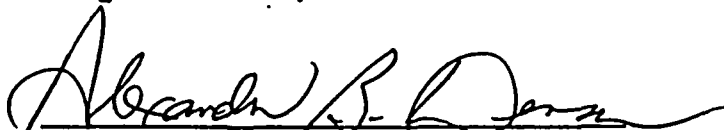
The court sees no prejudice to the plaintiff by allowing the impleader. The plaintiff may "get into the fray" among the defendants or remain aloof from it, at its option.

Lastly, the court cannot say that the action against Ciba-Geigy obviously lacks merit. Defendants have apparently accumulated considerable evidence tending to show that Ciba-Geigy caused or contributed to the contamination of the Peele Pesticide Site, as outlined in their memoranda on this motion.

Accordingly, the defendants' Motion for Leave to File a Third-Party Complaint against Ciba-Geigy Corporation IS ALLOWED. Plaintiff's alternative motion to sever such claim IS DENIED. Defendants are allowed until April 3, 1996 in which to file their Third-Party Complaint.

SO ORDERED, this the 19th day of March, 1996.

I certify the foregoing to be a true and correct copy of the original.
David W. Daniel, Clerk
United States District Court
Eastern District of North Carolina
By  Deputy Clerk


Alexander B. Denson
United States Magistrate Judge

December 30, 1994

To: Peele Pesticide Disposal Site File

From: Bruce Nicholson, Environmental Engineer *BN*
Superfund Section

Subj: Telecon with Donald Tolley, Manufacturing Systems Engineer
Caterpillar Inc., Clayton, NC, (919)550-1347.

I spoke with Mr. Tolley about usage of the downstream pond by Caterpillar employees as a fishery. He provided the following information:

- Caterpillar employees are not currently using the pond for fishing as per the recommendation by Dr. Rudo of the Environmental Epidemiology Section.
- Caterpillar would like to resume use of the pond as a fishery and has conducted a risk assessment which was recently sent to Dr. Rudo for review. Dr. Rudo has not completed this review. Mr. Tolley said he would send me a copy of this risk assessment as well.
- Prior to Dr. Rudo's consumption advisory, the pond was widely used for sport fishing for bass and crappie. Mr. Tolley was a regular user of the pond (about once a week which was probably the most regular user in the plant). He said he released all of his catches back to the pond. Caterpillar has taken an E-mail survey of its employees and found that there was light usage for actual consumption of the fish. Although there were no actual poundage figures taken in the survey, Mr. Tolley estimates that poundage for consumption was greater than 1 but less than 100 pounds annually. Most of this would be crappie.
- As Caterpillar does not own the southern side of the pond, it cannot restrict access to it completely. Mr. Tolley said however, that Caterpillar Security has observed very few other individuals fishing that side of the pond. Occasionally one or two individuals on a summer weekend would fish it but not regularly.

bin\tel\peelee4

December 30, 1994

To: Peele Pesticide Disposal Site File

From: Bruce Nicholson, Environmental Engineer *BN*
Superfund Section

Subj: Telecon with Wayne Jones, Fisheries Biologist, Johnston
County, NC Wildlife Resources Commission, (919)443-3536.

I spoke with Mr. Jones about Fishing in the Neuse River between Clayton and Smithfield. Mr. Jones indicated the following:

- This section of the Neuse River is heavily fished for numerous species including largemouth bass, striped bass, catfish, many species of sunfish, crappie, chain pickerel, and bowfin.
- He did not have an exact poundage estimate, but he was certain that it was well over 1,000 pounds annually.

bin\tel\peelee3

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2
LI USING ENGINEER'S SCALE (1/60)

SITE NAME: Peele Pesticide Disposal Site CERCLIS #: NCD 986 171 338

AKA: _____ SSID: _____

ADDRESS: Highway 42

CITY: Clayton STATE: NC ZIP CODE: _____

SITE REFERENCE POINT: Center of Pesticide Trench

USGS QUAD MAP NAME: Clayton TOWNSHIP: _____ N/S RANGE: _____ E/W

SCALE: 1:24,000 MAP DATE: 1964 SECTION: _____ 1/4 _____ 1/4 _____ 1/4

MAP DATUM: (1927) 1983 (CIRCLE ONE) MERIDIAN: _____
(PR 1973)

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy):

LONGITUDE: 78° 22' 30" LATITUDE: 35° 37' 30"

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

LONGITUDE: 78° 25' 00" LATITUDE: 35° 37' 30"

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 177

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

$A \times 0.3304 = \underline{58.5}''$

C) EXPRESS IN MINUTES AND SECONDS (1' = 60"): 0' 58.5"

D) ADD TO STARTING LATITUDE: 35° 37' 30.00" + 0' 58.5" =

SITE LATITUDE: 35° 38' 28.5"

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 157

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

$A \times 0.3304 = \underline{51.9}''$

C) EXPRESS IN MINUTES AND SECONDS (1' = 60"): 0' 51.9"

D) ADD TO STARTING LONGITUDE: 78° 25' 00.00" + 0' 51.9" =

SITE LONGITUDE: 78° 25' 51.9"

INVESTIGATOR: Bruce Mihel DATE: 12/28/94

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

111

1000 111 111 111

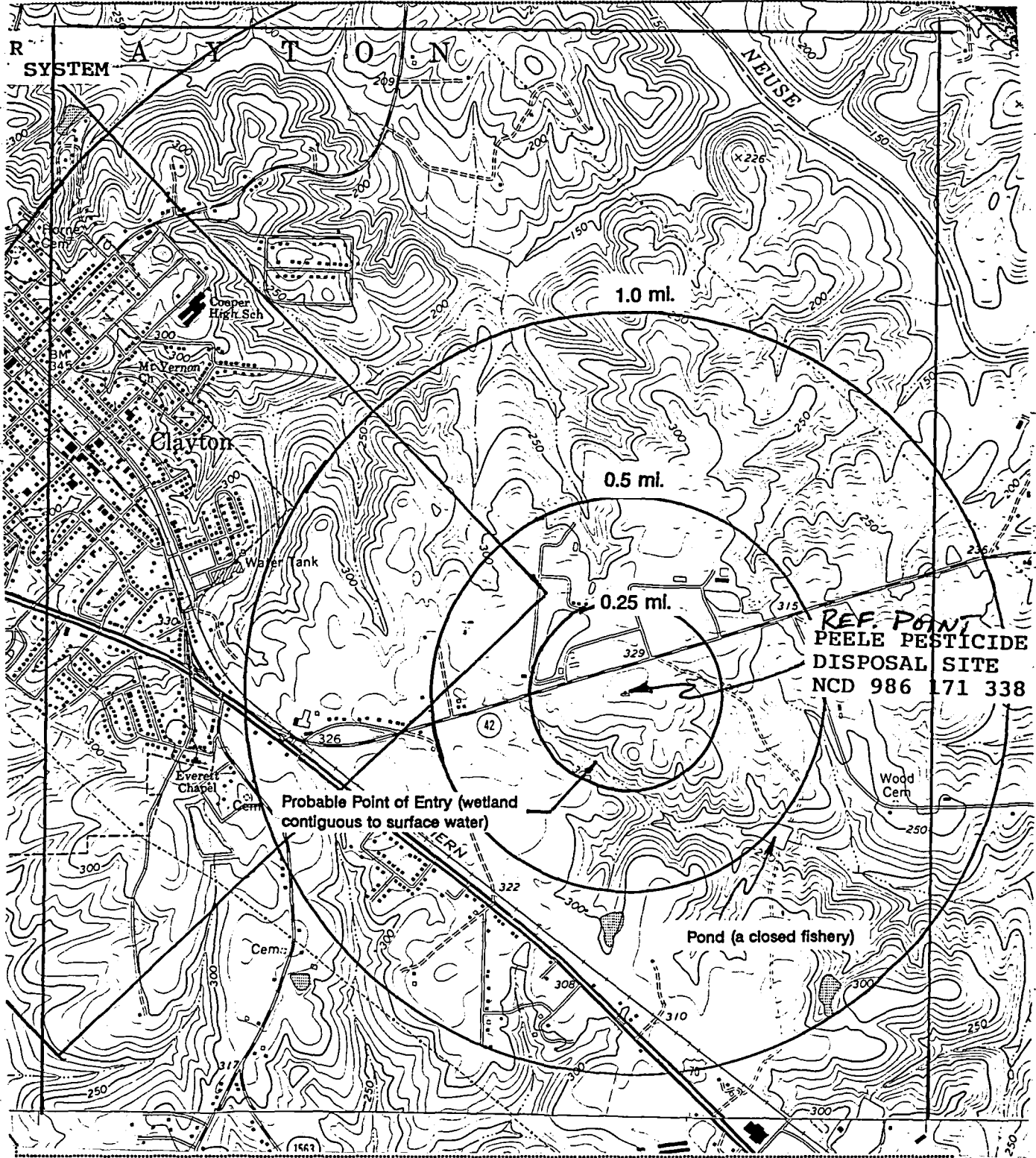
1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

1000 111 111 111

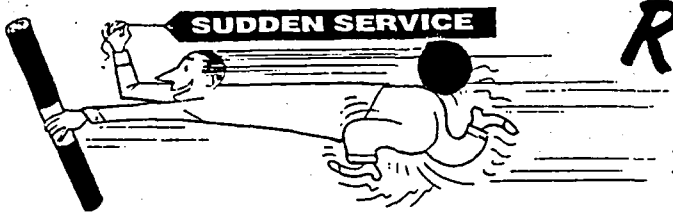


TOPOGRAPHIC MAP QUADRANGLE NAME: Clayton

SCALE: 1:24,000

COORDINATES OF LOWER RIGHT-HAND CORNER OF 2.5-MINUTE GRID:

LATITUDE: 35° 37' 30" LONGITUDE: 78° 25' 00"



Raleigh Blue Printers

A Division of Accent Reprographics, Inc.

313 W. Martin Street • Raleigh, NC 27601

(919) 832-2841

SOLD TO: NC Superfund Section SHIP TO: Att: Regina Hilliard

Account # 733 2801 P.O.# _____ Date: 12-19-94

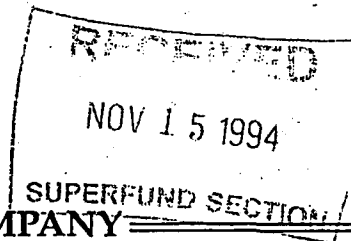
QUANTITY			PRODUCT #	DESCRIPTION	DEPT. CODE	UNIT PRICE	EXTENDED PRICE
ORDERED	SHIPPED	B/O					
	8			USGS Maps	5	3-	
				Pesticide Disposal Site FOR PA/SI Program			

RALEIGH BLUE PRINTERS
IS NOW A DIVISION OF
ACCENT REPROGRAPHICS

Dept. Codes: Blueprints=B Specs=SP Xerox=X Shacoh=SH Color Copies=CC Plots=P Supplies=S

Shipped Via: RU Received By: Bum Nish

Freight Charge: _____ This is not an invoice. Invoice will be mailed.



NORTH CAROLINA RAILROAD COMPANY

234 Fayetteville Street Mall
Suite 600
P.O. Box 2248
Raleigh, NC 27602
(919) 829-7355
Fax (919) 829-7356

Scott M. Saylor
General Counsel

November 10, 1994

Mr. Bruce Nicholson
N. C. Department of Environment,
Health & Natural Resources
401 Oberlin Road
Raleigh, NC 27605-1350

Re: Peele Site, Johnston County
~~DEHNR v. Estate of W. R. Peele, et al.~~

Dear Mr. Nicholson:

This will confirm that representatives of Environmental Investigations, Inc. are authorized by the North Carolina Railroad Company to have access to the Peele site at any time.

Apparently, DEHNR changed the locks on the fence gate(s) and only DEHNR has keys for access. Please provide a set of keys to Environmental Investigations at your earliest convenience.

Any work performed or actions taken by NCRR or its contractors should not be construed as any admission of liability or responsibility on our part. This communication and any other communication to DEHNR by NCRR in this matter are made in the context of settlement discussions only.

Sincerely,

North Carolina Railroad
Company

By: Scott M. Saylor
Scott M. Saylor

cc: Mr. Greg Lathan, Environmental Investigations
Robert R. Gelblum, Esq., Assist. Attorney General
Richard T. Kane, Esq.

September 22, 1994

To: **Peele Pesticide Disposal File**

From: Bruce Nicholson *BN*
Chemical Engineer
Superfund Section

Subj: Telecon with Mr. Lee Smith, Director of Public Works, Town of Clayton, (919)553-1530.

I spoke with Mr. Smith to obtain the current status of the Clayton Water system. Mr. Smith provided me with the following information:

- Clayton no longer uses any wells for their water supply. All water is now purchased from the Johnston County system which obtains water from the Smithfield intake on the Neuse River.
- The wells are no longer in service nor are they maintained for emergency service. Power to the pumps has been disconnected, and they cannot be used, even on a standby basis. The town hopes to properly abandon the wells when they have the funding to do so.
- The Clayton system serves an estimated population of 6,000 (although this figure does not include employees at local industries served by the system). The 1990 census figure for Clayton population is 5,147.
- There are are only two significant areas outside the town limits which are served by the town water system. One of these is the industrial area east of the town on Highway 70. Companies served include Novo Nordisk, Miles Laboratories, Pharmacia, C&K Componenets, and NatVar. Mr. Smith stated that the total number of employees at these companies would probably be between 500 and 1,000. The other significant area outside city limits is down Highway 42 past the Peele Pesticide Site. This area includes Caterpillar Inc. and the Glen Laurel Subdivision. Caterpillar Inc. is on Highway 42 bordering the Peele site. The Glen Laurel Subdivision is located on SR 1902 off of Highway 42 (and east of the site). This subdivision is a year or two old and has 600 units planned although far fewer are there today.
- Foxridge Subdivision is located slightly further east on Highway 42 and is not served by the Clayton system. As previously determined, and confirmed by Mr. Smith, Foxridge Subdivision is served by individual private wells.

bin\tel\peelee1

30 August 1994

TO: File

FROM: Jack Butler *AMB*

SUBJECT: **Peele Pesticide Disposal Site**
NCD986171338
Coastal Chemical
NCD054417308
Clayton, Johnston County

Mr. Robert Walton, Division of Environmental Management, Groundwater Section, contacted our office on 30 August 1994 concerning Leeway Service Station near the subject sites. Mr. Walton was recontacted on 1 September 1994 and informed that in addition to the Peele Pesticide Disposal Site, the operation that generated the wastes at Peele Pesticide is called Coastal Chemical in our files. The Coastal Chemical site is across the road from Leeway Service Station which Mr. Walton is working on. Mr. Walton intends to conduct sampling at both Leeway Service Station and the Coastal Chemical Site and agreed to inform our office of his results.

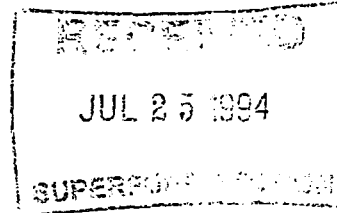
JB/dk/2

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Epidemiology

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary



July 21, 1994



MEMORANDUM

TO: Jack Butler
Superfund Section

FROM: Kenneth Rudo, Ph.D., Toxicologist *KWR*
Environmental Epidemiology Section

SUBJECT: Fish Consumption Advisory
Caterpillar Company Pond

Based on the fish fillet sample results from the Caterpillar Company pond, the Environmental Epidemiology Section (EES) would like to put forward the following comments. Levels of DDE in bass and catfish fillets in this pond exceed our recommended limit of 10 ppb. This value is based on a 1×10^{-6} carcinogenic risk. As a result, EES would not recommend further fish consumption from this pond as continued consumption over many years may pose a slightly increased lifetime cancer risk. It was also evident that the control catfish sample exhibited elevated DDE levels. This is not unexpected as this compound as well as DDT and DDD are quite ubiquitous in our environment due to the extensive use in the past of these chemicals and their long half-lives. Indeed, in many people, measurable levels of these compounds are routinely detected. However, consuming fish from the pond constitutes a different exposure scenario when compared to store-bought fish fillets. After discussions with your section and the Caterpillar Company folks, it is evident that employees and others fishing from this pond do so quite frequently and may be eating several meals a week from fish caught in the pond. This rate of consumption in all probability exceeds the frequency of eating store-bought catfish. The increased exposure results in a higher level of chemical ingestion, and thus, raises a possible cancer risk to a level exceeding that which EES considers to be safe. We would also recommend continued fish sampling over the next two to three years (every six months) so that any changes in fillet levels can be monitored.

If you have any further questions, please feel free to contact me at 733-3410.

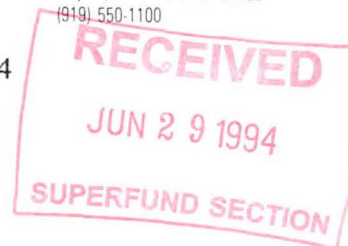
KR:lp



Building Construction
Products Division
Caterpillar Inc.

2500 N.C. 42 East
P.O. Box 999
Clayton, North Carolina 27520
(919) 550-1100

June 28, 1994



Mr. Jack Butler
NC Superfund Section
Post Office Box 27687
Raleigh, NC 27611

Dear Mr. Butler:

As we discussed, I am enclosing the results of the analysis performed on fish from the pond, located on our property and extending to the Norfolk Southern property adjacent to Caterpillar. The analysis was done by Webb Technical Group, Inc., in Raleigh. Six fish were analyzed, three bass and three catfish. In the original testing, which you already have the results, bream were analyzed. In this analysis the fish were weighed and measured before and after filleting. Analysis was only performed on the fillets. Webb Technical group purchased two fish samples, trout fillet and catfish nuggets, to use as "blanks" in our analysis.

As you can see, the levels of DDE in the fish analyzed from our pond, were less than those of the catfish sample bought from the store. The levels of DDD and DDT in the fish from our pond were Below Quantitation Limits (BQL). We would expect that the levels of DDE detected would not be expected to cause any health concerns. I have copied this letter, along with the results to Dr. Ken Rudo of the Environmental Epidemiology Section. Hopefully Dr. Rudo will be able to provide further review of any toxicological significance.

Caterpillar shut off access to our side of the pond upon receiving the letter from Bruce Nicholson, dated March 29, 1994, and memorandum from Dr. Rudo (dated March 24, 1994). We eagerly await your response to this letter, as we would like to reopen the pond as soon as possible, providing that this analysis has shown that there are no environmental or health concerns.

Please feel free to contact Ms. Sandra Holden, at 550-1588, or me, at 550-1347, if you have any further questions.

Sincerely,

Donald R. Tolley
Manufacturing & Systems Engineer

cc: Dr. Ken Rudo

WEBB TECHNICAL GROUP, INC.

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919)787-9171/(800) 548-7687. Fax (919)781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Fish Analysis
 NO. OF SAMPLES: (8)
 COLLECTED ON: 5/19/94; 10:00 AM
 WTG LOG NUMBER: 94-05-924
 METHOD: EPA 8080 (SW-846)

RECEIVED FROM: G. Flynt
 DATE RECEIVED: 05/20/94
 DATE EXTRACTED: 06/08/94
 DATE ANALYZED: 06/10/94

PESTICIDES/PCB's

WTG #	SAMPLE ID	DDE ug/kg	DDD ug/kg	DDT ug/kg
01A	Bass #1	14.7	BQL	BQL
02A	Bass #2	14.1	BQL	BQL
03A	Bass #3 (Duplicate)	21.0 16.6	BQL BQL	BQL BQL
04A	Catfish #1	15.0	BQL	BQL
05A	Catfish #2 (Duplicate)	23.0 16.0	BQL BQL	BQL BQL
06A	Catfish #3	13.5	BQL	BQL
07A	Control Trout Fillet	8.4	BQL	BQL
08A	Control Catfish Nuggets	28.3	21.4	BQL

BQL = Below Quantitation Limit: DDE = 4.0 ug/kg
 DDD = 11.0 ug/kg
 DDT = 12.0 ug/kg

Comments: _____
 CERTIFIED BY: *[Signature]* REPORT DATE: June 16, 1994

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



June 2, 1994

MEMORANDUM

TO: Dr. John Freeman, Chief
Environmental Epidemiology Section

FROM: Jack Butler, PE, Head *JMB*
Remediation Branch

SUBJECT: Peele Pesticide Disposal Site
NCD986171338
Clayton, Johnston County

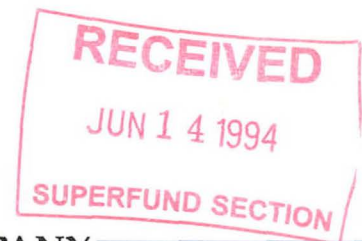
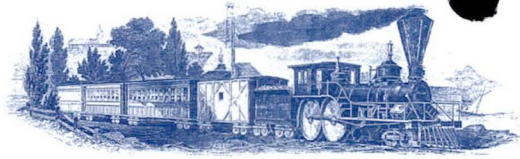
As I have discussed with Dr. Ken Rudo of your staff, this memo is for the purpose of transmitting additional sampling data related to the Peele Pesticide Site in Clayton, NC. This data is the result of follow-up sampling that was performed after the Expanded Site Inspection (ESI). Data from the ESI was forwarded to your office by Bruce Nicholson and Pat DeRosa on March 1, 1994. You may recall that this site is a pesticide disposal trench on which the State fenced off the site and removed arsenic and methoxychlor wastes from the land surface in 1990. DDT, DDE, DDD are still present in high concentrations in the trench on site.

The attached data are water, sediment, and fish tissue samples taken from a pond downstream of the site on neighboring property, part of which is owned by Caterpillar Corporation. Based on recommendations from Dr. Ken Rudo, after his review of data sent on March 1, 1994, this pond has been posted by Caterpillar Corporation; however, there are reports that local residents continue fishing in the pond from the bank not owned by Caterpillar. The North Carolina Superfund Section is presently in the process of identifying the other owners involved and will insure that all involved parties are notified of your recommendations. Please advise us as to the most appropriate course of action, if any, in an epidemiological sense.

If you have any questions, please contact me at 733-2801.

Attachment

cc: Dr. Ken Rudo



NORTH CAROLINA RAILROAD COMPANY

234 Fayetteville Street Mall
Suite 600
P.O. Box 2248
Raleigh, NC 27602
(919) 829-7355
Fax (919) 829-7356

May 27, 1994



Scott M. Saylor
General Counsel

Ms. Pat DeRosa
N. C. DEHNR
Superfund Section
P. O. Box 27687
Raleigh, NC 27611

Re: Pond Sediment and Testing

Dear Ms. DeRosa:


As a follow up to my letter of May 11, 1994, I understand this morning from Caterpillar that Norfolk Southern has taken steps to discourage fishing in the pond pending completion of your testing.

The Caterpillar site pond does not adjoin NCRP property, as shown on the attached marked map from Caterpillar I received this week. Therefore, any further correspondence or requests from the State should be directed to Norfolk Southern or other parties. I explained to Bruce Nicholson that Norfolk Southern should be contacted directly when he called about the pond, but he apparently ignored this request. I told him then that I was unaware of any fishing pond on or near NCRP property in the vicinity he described.

Also, I note that the letter of March 30, 1994 was directed to the NCRP's former address from two years ago. Please correct your records to reflect our address as shown above. Our post office box did not change. (The incorrect street address is the reason we did not receive Bruce Nicholson's letter until late April.)

Please advise if we can be of any further assistance with regard to the Caterpillar pond site.

Sincerely,



Scott M. Saylor

Attachment

cc: Richard T. Kane, Poyner & Spruill
A. Gayle Jordan, Norfolk Southern Corporation
Law Department
Three Commercial Place
Norfolk, VA 23510

CATERPILLAR

Building Construction
Products Division
Caterpillar Inc.

2530 N.C. 48 East
P.O. Box 388
Clayton, North Carolina 27520
(919) 550-1108

TELECOPIER COVER PAGE

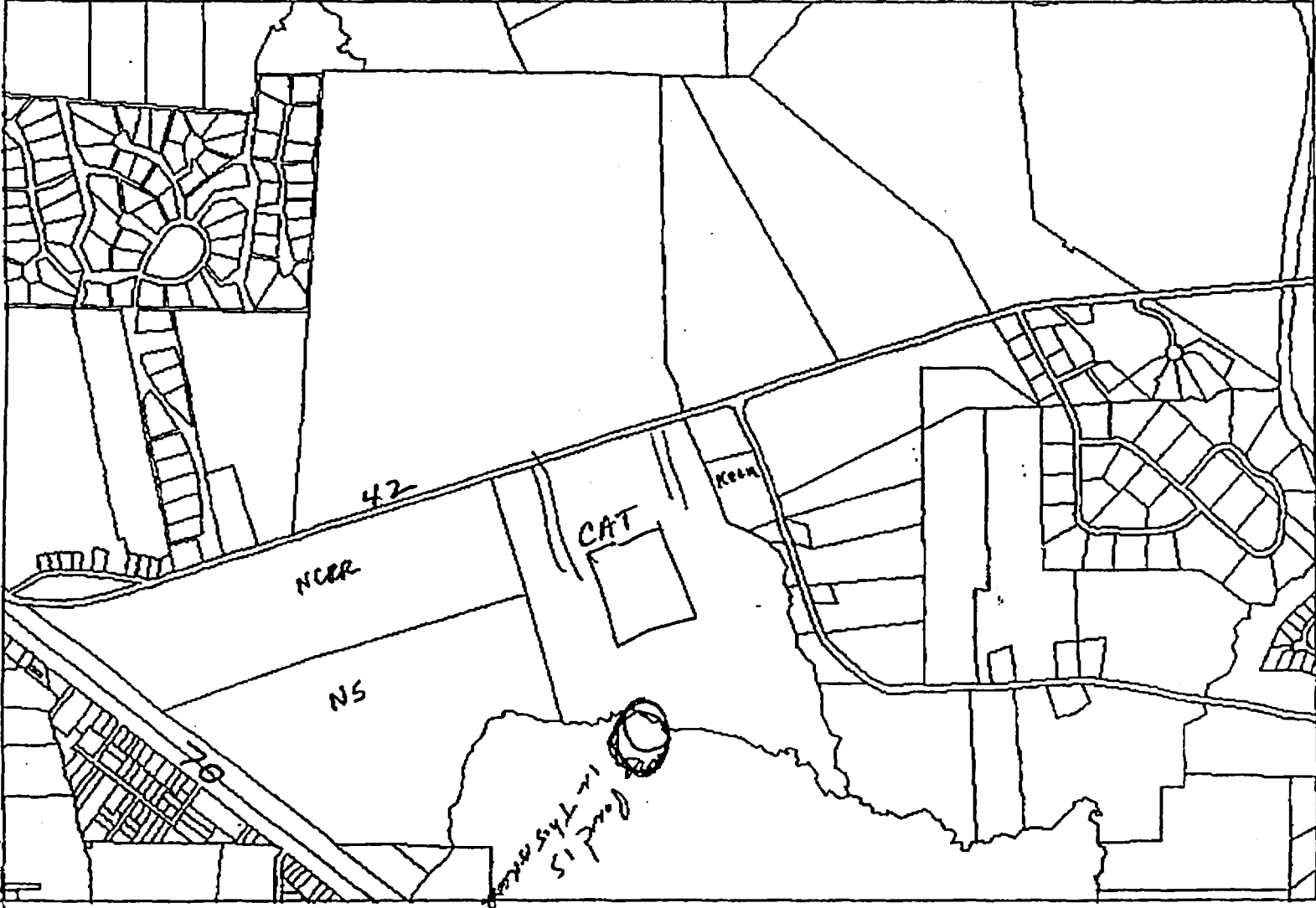
TO - NAME: Scott Sailor
CO/DEPT: _____
FAX NO: 919-829-7356

FROM: Don Tolley
TEL. NO: 550-1347
DATE: 5/25/94

Hope This helps
Don

NUMBER OF PAGES INCLUDING COVER: 2
FROM TELECOPIER: 919-550-1108
OR 7-25-1-1108. IF YOU HAVE RECEPTION
PROBLEMS, PLEASE CALL 919-550-1347
AND ASK FOR Don Tolley.

JOHNSTON COUNTY TAX MAP



WEBB TECHNICAL GROUP, INC.

4325 Pleasant Valley Road, Suite 110
Raleigh, North Carolina 27612
(919)787-9171/(800) 548-7687. Fax (919)781-5283

QC REPORT

CLIENT: CATERPILLAR, INC.

SAMPLE OF: Fish Analysis

WTG LOG NUMBER: 94-05-924

NUMBER SAMPLES: (8)

RECEIVED FROM: G. Flynt

DATE RECEIVED: 05/20/94

	HEPTACHLOR ug/kg	ALDRIN ug/kg	DIELDRIN ug/kg	ENDRIN ug/kg	DDT ug/kg
MS: Trout	108	102	233	220	222
% Recovery	135%	128%	117%	110%	111%
MS: Catfish	74.7	60.1	133	129	166
% Recovery	93%	75%	67%	65%	83%

NOTE: Lindane recovery not calculable due to coelution with Beta-BHC; qualitatively, recovery appears acceptable.

Comments: _____

CERTIFIED BY: [Signature]

REPORT DATE: June 16, 1994

FAX TRANSMITTAL

NORTH CAROLINA RAILROAD COMPANY

234 Fayetteville Street Mall, Suite 600
Post Office Box 2248
Raleigh, North Carolina 27602

Phone: (919) 829-7355
Fax: (919)829-7356

Receiver's FAX # - _____

TO: Mr. Jack Butler, Superfund

FROM: Caroline Allman per Scott Saylor

DATE: 5/13/94 Total # of pages (not including cover sheet) 1

- | | |
|--|--|
| <input type="checkbox"/> Please call | <input type="checkbox"/> I will contact you later |
| <input type="checkbox"/> No reply necessary | <input checked="" type="checkbox"/> For your information |
| <input type="checkbox"/> For your review & comment | <input type="checkbox"/> As we discussed |

Message:

The information contained in this facsimile message is proprietary and confidential information intended only for the use of the individual or entity named as recipient. If the reader is not the intended recipient, be hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the address above via the U.S. Postal Service.



NORTH CAROLINA RAILROAD COMPANY

234 Fayetteville Street Mall
Suite 600
P.O. Box 2248
Raleigh, NC 27602
(919) 829-7355
Fax (919) 829-7356

Scott M. Saylor
General Counsel

May 11, 1994

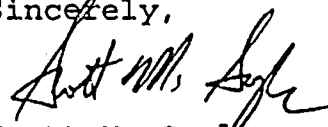
Mr. Bruce Nicholson
c/o Mr. Jack Butler
Superfund Section
NC Department of Environment, Health
and Natural Resources
P. O. Box 27687
Raleigh, North Carolina 27611-7687

Dear Mr. Butler:

This is in response to Bruce Nicholson's letter of March 30, 1994. We did not receive this letter in our office until April 21, 1994, due to an incorrect address (please correct your records to the address shown above).

Our records do not show any pond on this parcel. However, by copy of this letter, we are requesting that Norfolk Southern check their records for any pond location information and respond to your letter directly. Also, please recall that NCRR currently does not have any vested possessory rights to the property, and therefore we can assume no responsibility for control of access to the pond.

Sincerely,


Scott M. Saylor
General Counsel

SMS/lam
020

cc: A. Gayle Jordan, Norfolk Southern Corporation
William G. Ross, Jr., Esq.
T. Richard Kane, Esq.

CATERPILLAR

Building Construction
Products Division
Caterpillar Inc.

2550 N.E. 47 Ave
P.O. Box 355
Cary, North Carolina 27520
(919) 553-1100

TELECOPIER COVER PAGE

TO - NAME: Jack Butler
CO/DEPT: NC DEHNR - Superfund Sect.
FAX NO: 733-4811

FROM: Sandra Holden
TEL. NO: 550-1588
DATE: 5/13/94

NUMBER OF PAGES INCLUDING COVER: 4
FROM TELECOPIER: 919-550-1108
OR 7-25-1-1108. IF YOU HAVE RECEPTION
PROBLEMS, PLEASE CALL 919-550-_____
AND ASK FOR _____

**WEBB
TECHNICAL
GROUP, INC.**

May 11, 1994

Ms. Karen Bakker
O'Brien & Gere Engineers, Inc.
PO Box 80308
Raleigh, NC 27623

Dear Ms. Bakker:

Per your memo dated May 2, 1994, the information you requested is as follows:

1. The methodology used for collecting the fish samples was fishing using a rod and reel. Fifteen (15) bream samples and one crappie sample were collected. An attempt was made to collect a bass sample and a catfish sample, but was unsuccessful.
2. The fish sample was prepared by grinding nine small to medium (3"- 8") whole fish and compositing them as one sample. (Including the crappie)
3. EPA 8080, modified for a fish matrix, was the methodology used to analyze the fish sample.
4. The detection limit for DDE was 4 ppb.
5. The extraction method used was as follows:

Five grams of the fish composite were extracted with acetonitrile; Webb developed this extraction procedure based on the experience of our pesticide Chemist - Dr. Robert Moseman.

6. Blanks and laboratory control samples spiked into reagent water were used as QA/QC samples. A matrix spike was analyzed on one of the other (pond sediment) samples but not on the fish.
7. The fish size ranged from 3" to 8", and the sampling was performed (during a pouring rain) on 3/31/94. Due to the stability of DDT and its metabolites (DDE) there should not be a methodology holding time requirement.

If you have any questions, please contact me at 787-9171. We look forward to working with you in the future.

Sincerely,

Gregg Flynt

Gregg Flynt
Account Manager

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919) 787-6171/(800) 548-7687 · FAX (919) 781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Fish
3/31/94; 1:00 PM
 WTG LOG NUMBER: 94-04-019-04A
 EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up; D. Hardin
 DATE RECEIVED: 04/01/94
 DATE EXTRACTED: 04/04/94
 DATE ANALYZED: 04/06/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION LIMIT UG/KG</u>	<u>RESULT UG/KG</u>
ALPHA-BHC	0.03	BQL
BETA-BHC	0.06	BQL
DELTA-BHC	0.09	BQL
GAMMA-BHC (LINDANE)	0.04	BQL
HEPTACHLOR	0.03	BQL
ALDRIN	0.04	BQL
HEPTACHLOR EPOXIDE	0.10	BQL
ENDOSULFAN I	0.14	BQL
DIELDRIN	0.02	BQL
4,4'-DDE	0.04	75
ENDRIN	0.06	BQL
ENDOSULFAN II	0.04	BQL
4,4'-DDD	0.11	BQL
ENDOSULFAN SULFATE	0.20	BQL
4,4'-DDT	0.12	BQL
ENDRIN ALDEHYDE	0.23	BQL
METHOXYCHLOR	0.50	BQL
CHLORDANE	0.14	BQL
TOKAPHENE	1.00	BQL
PCB-1016	0.65	BQL
PCB-1221	1.30	BQL
PCB-1232	0.65	BQL
PCB-1242	0.65	BQL
PCB-1248	0.65	BQL
PCB-1254	0.65	BQL
PCB-1260	0.65	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: Henry C. Flynt

REPORT DATE: April 8, 1994

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919) 787-9171/(800) 548-7687 · FAX (919) 781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Sediment - Creekside
3/31/94; 1:00 PM
 WTG LOG NUMBER: 94-04-019-01A
 EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up: D. Hardin
 DATE RECEIVED: 04/01/94
 DATE EXTRACTED: 04/04/94
 DATE ANALYZED: 04/06/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u>		<u>RESULT</u>
	<u>LIMIT</u>	<u>UG/L</u>	
ALPHA-BHC	0.03		BQL
BETA-BHC	0.06		BQL
DELTA-BHC	0.09		BQL
GAMMA-BHC (LINDANE)	0.04		BQL
HEPTACHLOR	0.03		BQL
ALDRIN	0.04		BQL
HEPTACHLOR EPOXIDE	0.10		BQL
ENDOSULFAN I	0.14		BQL
DIELDRIN	0.02		BQL
4,4'-DDE	0.04		6.2
ENDRIN	0.06		BQL
ENDOSULFAN II	0.04		BQL
4,4'-DDD	0.11		2.2
ENDOSULFAN SULFATE	0.20		BQL
4,4'-DDT	0.12		4.5
ENDRIN ALDEHYDE	0.23		BQL
METHOXYCHLOR	0.50		BQL
CHLORDANE	0.14		BQL
TOXAPHENE	1.00		BQL
PCB-1016	0.65		BQL
PCB-1221	1.30		BQL
PCB-1232	0.65		BQL
PCB-1242	0.65		BQL
PCB-1248	0.65		BQL
PCB-1254	0.65		BQL
PCB-1260	0.65		BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: Joey C. Filant REPORT DATE: April 8, 1994

Jack

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919) 787-9171/(800) 548-7687 · FAX (919) 781-5283

RECEIVED
 MAY 16 1994
 SUPERFUND SECTION

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Fish
3/31/94; 1:00 PM
 WTG LOG NUMBER: 94-04-019-04A
 EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up; D. Hardin
 DATE RECEIVED: 04/01/94
 DATE EXTRACTED: 04/04/94
 DATE ANALYZED: 04/06/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u>		<u>RESULT</u>
	<u>LIMIT</u>	<u>UG/KG</u>	
ALPHA-BHC	0.03		BQL
BETA-BHC	0.06		BQL
DELTA-BHC	0.09		BQL
GAMMA-BHC (LINDANE)	0.04		BQL
HEPTACHLOR	0.03		BQL
ALDRIN	0.04		BQL
HEPTACHLOR EPOXIDE	0.10		BQL
ENDOSULFAN I	0.14		BQL
DIELDRIN	0.02		BQL
4,4'-DDE	0.04		75
ENDRIN	0.06		BQL
ENDOSULFAN II	0.04		BQL
4,4'-DDD	0.11		BQL
ENDOSULFAN SULFATE	0.20		BQL
4,4'-DDT	0.12		BQL
ENDRIN ALDEHYDE	0.23		BQL
METHOXYCHLOR	0.50		BQL
CHLORDANE	0.14		BQL
TOXAPHENE	1.00		BQL
PCB-1016	0.65		BQL
PCB-1221	1.30		BQL
PCB-1232	0.65		BQL
PCB-1242	0.65		BQL
PCB-1248	0.65		BQL
PCB-1254	0.65		BQL
PCB-1260	0.65		BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: *Greg C. Flynt*

REPORT DATE: April 8, 1994

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919) 787-9171/(800) 548-7687 · FAX (919) 781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Sediment - Creekside
3/31/94; 1:00 PM
 WTG LOG NUMBER: 94-04-019-01A
 EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up: D. Hardin
 DATE RECEIVED: 04/01/94
 DATE EXTRACTED: 04/04/94
 DATE ANALYZED: 04/06/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION LIMIT UG/L</u>	<u>RESULT UG/L</u>
ALPHA-BHC	0.03	BQL
BETA-BHC	0.06	BQL
DELTA-BHC	0.09	BQL
GAMMA-BHC (LINDANE)	0.04	BQL
HEPTACHLOR	0.03	BQL
ALDRIN	0.04	BQL
HEPTACHLOR EPOXIDE	0.10	BQL
ENDOSULFAN I	0.14	BQL
DIELDRIN	0.02	BQL
4,4'-DDE	0.04	6.2
ENDRIN	0.06	BQL
ENDOSULFAN II	0.04	BQL
4,4'-DDD	0.11	2.2
ENDOSULFAN SULFATE	0.20	BQL
4,4'-DDT	0.12	4.5
ENDRIN ALDEHYDE	0.23	BQL
METHOXYCHLOR	0.50	BQL
CHLORDANE	0.14	BQL
TOXAPHENE	1.00	BQL
PCB-1016	0.65	BQL
PCB-1221	1.30	BQL
PCB-1232	0.65	BQL
PCB-1242	0.65	BQL
PCB-1248	0.65	BQL
PCB-1254	0.65	BQL
PCB-1260	0.65	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: Avery C. Ford

REPORT DATE: April 8, 1994

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919) 787-9171/(800) 548-7687 · FAX (919) 781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Sediment - Dam Spillway
3/31/94; 1:00 PM
 WTG LOG NUMBER: 94-04-019-02A
 EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up: D. Hardin
 DATE RECEIVED: 04/01/94
 DATE EXTRACTED: 04/04/94
 DATE ANALYZED: 04/06/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION LIMIT UG/L</u>	<u>RESULT UG/L</u>
ALPHA-BHC	0.03	BQL
BETA-BHC	0.06	BQL
DELTA-BHC	0.09	BQL
GAMMA-BHC (LINDANE)	0.04	BQL
HEPTACHLOR	0.03	BQL
ALDRIN	0.04	BQL
HEPTACHLOR EPOXIDE	0.10	BQL
ENDOSULFAN I	0.14	BQL
DIELDRIN	0.02	BQL
4,4'-DDE	0.04	BQL
ENDRIN	0.06	BQL
ENDOSULFAN II	0.04	BQL
4,4'-DDD	0.11	BQL
ENDOSULFAN SULFATE	0.20	BQL
4,4'-DDT	0.12	BQL
ENDRIN ALDEHYDE	0.23	BQL
METHOXYCHLOR	0.50	BQL
CHLORDANE	0.14	BQL
TOXAPHENE	1.00	BQL
PCB-1016	0.65	BQL
PCB-1221	1.30	BQL
PCB-1232	0.65	BQL
PCB-1242	0.65	BQL
PCB-1248	0.65	BQL
PCB-1254	0.65	BQL
PCB-1260	0.65	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: Wesley C. Felt

REPORT DATE: April 8, 1994

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919) 787-9171/(800) 548-7687 · FAX (919) 781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Sediment - Dam Center
3/31/94; 1:00 PM

RECEIVED FROM: Pick-up: D. Hardin
 DATE RECEIVED: 04/01/94
 DATE EXTRACTED: 04/04/94
 DATE ANALYZED: 04/06/94

WTG LOG NUMBER: 94-04-019-03A
 EPA METHOD: 8080 (SW-846)

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u>		<u>RESULT</u>
	<u>LIMIT</u>	<u>UG/L</u>	
ALPHA-BHC	0.30		BQL
BETA-BHC	0.60		BQL
DELTA-BHC	0.90		BQL
GAMMA-BHC (LINDANE)	0.40		BQL
HEPTACHLOR	0.30		BQL
ALDRIN	0.50		BQL
HEPTACHLOR EPOXIDE	1.00		BQL
ENDOSULFAN I	1.40		BQL
DIELDRIN	0.20		BQL
4,4'-DDE	0.40		BQL
ENDRIN	0.60		BQL
ENDOSULFAN II	0.40		BQL
4,4'-DDD	1.10		BQL
ENDOSULFAN SULFATE	2.00		BQL
4,4'-DDT	1.20		BQL
ENDRIN ALDEHYDE	2.30		BQL
METHOXYCHLOR	5.00		BQL
CHLORDANE	1.40		BQL
TOXAPHENE	10.0		BQL
PCB-1016	6.50		BQL
PCB-1221	13.0		BQL
PCB-1232	6.50		BQL
PCB-1242	6.50		BQL
PCB-1248	6.50		BQL
PCB-1254	6.50		BQL
PCB-1260	6.50		BQL

BQL=Below Quantitation Limit

Comments: 1:10 dilution used.

CERTIFIED BY: *Lucy C. Flint*

REPORT DATE: April 8, 1994

WEBB TECHNICAL GROUP, INC.

4325 Pleasant Valley Road, Suite 110
Raleigh, North Carolina 27612
(919)787-9171/(800) 548-7687. Fax (919)781-5283

CLIENT: CATERPILLAR, INC.
SAMPLE ID: Pond Sediment
4/15/94
WTG LOG NUMBER: 94-04-663-01A
EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up, Pollard
DATE RECEIVED: 04/15/94
DATE EXTRACTED: 04/27/94
DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u>		<u>RESULT</u>
	<u>LIMIT</u>	<u>UG/KG</u>	
ALPHA-BHC	8.0		BQL
BETA-BHC	8.0		BQL
DELTA-BHC	8.0		BQL
GAMMA-BHC (LINDANE)	8.0		BQL
HEPTACHLOR	8.0		BQL
ALDRIN	8.0		BQL
HEPTACHLOR EPOXIDE	8.0		BQL
ENDOSULFAN I	8.0		BQL
DIELDRIN	16.0		BQL
4,4'-DDE	8.0		BQL
ENDRIN	16.0		BQL
ENDOSULFAN II	16.0		BQL
4,4'-DDD	8.0		BQL
ENDOSULFAN SULFATE	16.0		BQL
4,4'-DDT	8.0		BQL
ENDRIN ALDEHYDE	16.0		BQL
METHOXYCHLOR	80.0		BQL
CHLORDANE	80.0		BQL
TOXAPHENE	160.0		BQL
PCB-1016	80.0		BQL
PCB-1221	80.0		BQL
PCB-1232	80.0		BQL
PCB-1242	80.0		BQL
PCB-1248	80.0		BQL
PCB-1254	80.0		BQL
PCB-1260	80.0		BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: *Jerry Hester*

REPORT DATE: May 3, 1994

WEBB TECHNICAL GROUP, INC.

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919)787-9171/(800) 548-7687. Fax (919)781-5283

CLIENT: CATERPILLAR, INC.

SAMPLE ID: Creek M
4/15/94

RECEIVED FROM: Pick-up, Pollard

DATE RECEIVED: 04/15/94

WTG LOG NUMBER: 94-04-663-02A

DATE EXTRACTED: 04/27/94

EPA METHOD: 8080 (SW-846)

DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION LIMIT UG/KG</u>	<u>RESULT UG/KG</u>
ALPHA-BHC	8.0	BQL
BETA-BHC	8.0	BQL
DELTA-BHC	8.0	BQL
GAMMA-BHC (LINDANE)	8.0	BQL
HEPTACHLOR	8.0	BQL
ALDRIN	8.0	BQL
HEPTACHLOR EPOXIDE	8.0	BQL
ENDOSULFAN I	8.0	BQL
DIELDRIN	16.0	BQL
4,4'-DDE	8.0	BQL
ENDRIN	16.0	BQL
ENDOSULFAN II	16.0	BQL
4,4'-DDD	8.0	BQL
ENDOSULFAN SULFATE	16.0	BQL
4,4'-DDT	8.0	BQL
ENDRIN ALDEHYDE	16.0	BQL
METHOXYCHLOR	80.0	BQL
CHLORDANE	80.0	BQL
TOXAPHENE	160.0	BQL
PCB-1016	80.0	BQL
PCB-1221	80.0	BQL
PCB-1232	80.0	BQL
PCB-1242	80.0	BQL
PCB-1248	80.0	BQL
PCB-1254	80.0	BQL
PCB-1260	80.0	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: Garry Hester

REPORT DATE: May 3, 1994

WEBB TECHNICAL GROUP, INC.

4325 Pleasant Valley Road, Suite 110
Raleigh, North Carolina 27612
(919)787-9171/(800) 548-7687. Fax (919)781-5283

CLIENT: CATERPILLAR, INC.
SAMPLE ID: Creek U
4/15/94

RECEIVED FROM: Pick-up, Pollard
DATE RECEIVED: 04/15/94
DATE EXTRACTED: 04/27/94
DATE ANALYZED: 05/03/94

WTG LOG NUMBER: 94-04-663-03A
EPA METHOD: 8080 (SW-846)

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u> <u>LIMIT</u> <u>UG/KG</u>	<u>RESULT</u> <u>UG/KG</u>
ALPHA-BHC	8.0	BQL
BETA-BHC	8.0	BQL
DELTA-BHC	8.0	BQL
GAMMA-BHC (LINDANE)	8.0	BQL
HEPTACHLOR	8.0	BQL
ALDRIN	8.0	BQL
HEPTACHLOR EPOXIDE	8.0	BQL
ENDOSULFAN I	8.0	BQL
DIELDRIN	16.0	BQL
4,4'-DDE	8.0	BQL
ENDRIN	16.0	BQL
ENDOSULFAN II	16.0	BQL
4,4'-DDD	8.0	BQL
ENDOSULFAN SULFATE	16.0	BQL
4,4'-DDT	8.0	BQL
ENDRIN ALDEHYDE	16.0	BQL
METHOXYCHLOR	80.0	BQL
CHLORDANE	80.0	BQL
TOXAPHENE	160.0	BQL
PCB-1016	80.0	BQL
PCB-1221	80.0	BQL
PCB-1232	80.0	BQL
PCB-1242	80.0	BQL
PCB-1248	80.0	BQL
PCB-1254	80.0	BQL
PCB-1260	80.0	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: Jenny Martin

REPORT DATE: May 3, 1994

WEBB TECHNICAL GROUP, INC.

4325 Pleasant Valley Road, Suite 110
 Raleigh, North Carolina 27612
 (919)787-9171/(800) 548-7687. Fax (919)781-5283

CLIENT: CATERPILLAR, INC.
 SAMPLE ID: Pond Water
4/15/94
 WTG LOG NUMBER: 94-04-663-04A
 EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Picl-up, Pollard
 DATE RECEIVED: 04/15/94
 DATE EXTRACTED: 04/27/94
 DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u>	
	<u>LIMIT</u>	<u>RESULT</u>
	<u>UG/L</u>	<u>UG/L</u>
ALPHA-BHC	0.03	BQL
BETA-BHC	0.06	BQL
DELTA-BHC	0.09	BQL
GAMMA-BHC (LINDANE)	0.04	BQL
HEPTACHLOR	0.03	BQL
ALDRIN	0.04	BQL
HEPTACHLOR EPOXIDE	0.10	BQL
ENDOSULFAN I	0.14	BQL
DIELDRIN	0.02	BQL
4,4'-DDE	0.04	BQL
ENDRIN	0.06	BQL
ENDOSULFAN II	0.04	BQL
4,4'-DDD	0.11	BQL
ENDOSULFAN SULFATE	0.20	BQL
4,4'-DDT	0.12	BQL
ENDRIN ALDEHYDE	0.23	BQL
METHOXYCHLOR	0.50	BQL
CHLORDANE	0.14	BQL
TOXAPHENE	1.00	BQL
PCB-1016	0.65	BQL
PCB-1221	1.30	BQL
PCB-1232	0.65	BQL
PCB-1242	0.65	BQL
PCB-1248	0.65	BQL
PCB-1254	0.65	BQL
PCB-1260	0.65	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: *Jimmy Martin*

REPORT DATE: May 3, 1994

CLIENT: CATERPILLAR, INC.
SAMPLE ID: Pond Sediment
4/15/94

WTG LOG NUMBER: 94-04-663-01A
EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up, Pollard
DATE RECEIVED: 04/15/94
DATE EXTRACTED: 04/27/94
DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u> <u>LIMIT</u> <u>UG/KG</u>	<u>RESULT</u> <u>UG/KG</u>
ALPHA-BHC	8.0	BQL
BETA-BHC	8.0	BQL
DELTA-BHC	8.0	BQL
GAMMA-BHC (LINDANE)	8.0	BQL
HEPTACHLOR	8.0	BQL
ALDRIN	8.0	BQL
HEPTACHLOR EPOXIDE	8.0	BQL
ENDOSULFAN I	8.0	BQL
DIELDRIN	16.0	BQL
4,4'-DDE	8.0	BQL
ENDRIN	16.0	BQL
ENDOSULFAN II	16.0	BQL
4,4'-DDD	8.0	BQL
ENDOSULFAN SULFATE	16.0	BQL
4,4'-DDT	8.0	BQL
ENDRIN ALDEHYDE	16.0	BQL
METHOXYCHLOR	80.0	BQL
CHLORDANE	80.0	BQL
TOXAPHENE	160.0	BQL
PCB-1016	80.0	BQL
PCB-1221	80.0	BQL
PCB-1232	80.0	BQL
PCB-1242	80.0	BQL
PCB-1248	80.0	BQL
PCB-1254	80.0	BQL
PCB-1260	80.0	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: _____

REPORT DATE: May 3, 1994

CLIENT: CATERPILLAR, INC.

SAMPLE ID: Creek M
4/15/94

WTG LOG NUMBER: 94-04-663-02A

EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up, Pollard

DATE RECEIVED: 04/15/94

DATE EXTRACTED: 04/27/94

DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION</u>	
	<u>LIMIT</u>	<u>RESULT</u>
	<u>UG/KG</u>	<u>UG/KG</u>
ALPHA-BHC	8.0	BQL
BETA-BHC	8.0	BQL
DELTA-BHC	8.0	BQL
GAMMA-BHC (LINDANE)	8.0	BQL
HEPTACHLOR	8.0	BQL
ALDRIN	8.0	BQL
HEPTACHLOR EPOXIDE	8.0	BQL
ENDOSULFAN I	8.0	BQL
DIELDRIN	16.0	BQL
4,4'-DDE	8.0	BQL
ENDRIN	16.0	BQL
ENDOSULFAN II	16.0	BQL
4,4'-DDD	8.0	BQL
ENDOSULFAN SULFATE	16.0	BQL
4,4'-DDT	8.0	BQL
ENDRIN ALDEHYDE	16.0	BQL
METHOXYCHLOR	80.0	BQL
CHLORDANE	80.0	BQL
TOXAPHENE	160.0	BQL
PCB-1016	80.0	BQL
PCB-1221	80.0	BQL
PCB-1232	80.0	BQL
PCB-1242	80.0	BQL
PCB-1248	80.0	BQL
PCB-1254	80.0	BQL
PCB-1260	80.0	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: _____

REPORT DATE: May 3, 1994

CLIENT: CATERPILLAR, INC.
SAMPLE ID: Creek U
4/15/94
WTG LOG NUMBER: 94-04-663-03A
EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Pick-up, Pollard
DATE RECEIVED: 04/15/94
DATE EXTRACTED: 04/27/94
DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

<u>COMPOUND</u>	<u>QUANTITATION LIMIT UG/KG</u>	<u>RESULT UG/KG</u>
ALPHA-BHC	8.0	BQL
BETA-BHC	8.0	BQL
DELTA-BHC	8.0	BQL
GAMMA-BHC (LINDANE)	8.0	BQL
HEPTACHLOR	8.0	BQL
ALDRIN	8.0	BQL
HEPTACHLOR EPOXIDE	8.0	BQL
ENDOSULFAN I	8.0	BQL
DIELDRIN	16.0	BQL
4,4'-DDE	8.0	BQL
ENDRIN	16.0	BQL
ENDOSULFAN II	16.0	BQL
4,4'-DDD	8.0	BQL
ENDOSULFAN SULFATE	16.0	BQL
4,4'-DDT	8.0	BQL
ENDRIN ALDEHYDE	16.0	BQL
METHOXYCHLOR	80.0	BQL
CHLORDANE	80.0	BQL
TOXAPHENE	160.0	BQL
PCB-1016	80.0	BQL
PCB-1221	80.0	BQL
PCB-1232	80.0	BQL
PCB-1242	80.0	BQL
PCB-1248	80.0	BQL
PCB-1254	80.0	BQL
PCB-1260	80.0	BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: _____

REPORT DATE: May 3, 1994

CLIENT: CATERPILLAR, INC.

SAMPLE ID: Pond Water
4/15/94

WTG LOG NUMBER: 94-04-663-04A

EPA METHOD: 8080 (SW-846)

RECEIVED FROM: Picl-up, Pollard

DATE RECEIVED: 04/15/94

DATE EXTRACTED: 04/27/94

DATE ANALYZED: 05/03/94

PESTICIDES/PCB'S

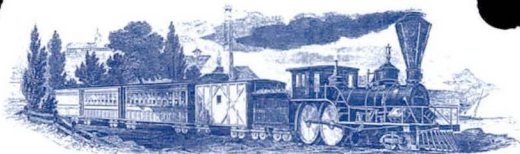
<u>COMPOUND</u>	<u>QUANTITATION</u>		<u>RESULT</u>
	<u>LIMIT</u>	<u>UG/L</u>	
ALPHA-BHC	0.03		BQL
BETA-BHC	0.06		BQL
DELTA-BHC	0.09		BQL
GAMMA-BHC (LINDANE)	0.04		BQL
HEPTACHLOR	0.03		BQL
ALDRIN	0.04		BQL
HEPTACHLOR EPOXIDE	0.10		BQL
ENDOSULFAN I	0.14		BQL
DIELDRIN	0.02		BQL
4,4'-DDE	0.04		BQL
ENDRIN	0.06		BQL
ENDOSULFAN II	0.04		BQL
4,4'-DDD	0.11		BQL
ENDOSULFAN SULFATE	0.20		BQL
4,4'-DDT	0.12		BQL
ENDRIN ALDEHYDE	0.23		BQL
METHOXYCHLOR	0.50		BQL
CHLORDANE	0.14		BQL
TOXAPHENE	1.00		BQL
PCB-1016	0.65		BQL
PCB-1221	1.30		BQL
PCB-1232	0.65		BQL
PCB-1242	0.65		BQL
PCB-1248	0.65		BQL
PCB-1254	0.65		BQL
PCB-1260	0.65		BQL

BQL=Below Quantitation Limit

Comments: _____

CERTIFIED BY: _____

REPORT DATE: May 3, 1994



NORTH CAROLINA RAILROAD COMPANY

234 Fayetteville Street Mall
Suite 600
P.O. Box 2248
Raleigh, NC 27602
(919) 829-7355
Fax (919) 829-7356

Scott M. Saylor
General Counsel

May 11, 1994



Mr. Bruce Nicholson
c/o Mr. Jack Butler
Superfund Section
NC Department of Environment, Health
and Natural Resources
P. O. Box 27687
Raleigh, North Carolina 27611-7687

Dear Mr. Butler:

This is in response to Bruce Nicholson's letter of March 30, 1994. We did not receive this letter in our office until April 21, 1994, due to an incorrect address (please correct your records to the address shown above).

Our records do not show any pond on this parcel. However, by copy of this letter, we are requesting that Norfolk Southern check their records for any pond location information and respond to your letter directly. Also, please recall that NCRS currently does not have any vested possessory rights to the property, and therefore we can assume no responsibility for control of access to the pond.

Sincerely,

Scott M. Saylor
General Counsel

SMS/lam
020

cc: A. Gayle Jordan, Norfolk Southern Corporation
William G. Ross, Jr., Esq.
T. Richard Kane, Esq.

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



March 30, 1994

Mr. Scott Saylor
North Carolina Railroad Company
300 South Salisbury Street
Raleigh, NC 27601

Subj: Pond Sediment Sample Results and Epidemiological Review

Dear Mr. Saylor:

Laboratory results from the Peele Pesticide Site have been received. Part of that sampling effort involved sampling the pond in the drainage basin downgradient of the site (see attached map) to assess potential pesticide migration from the Peele Pesticide Site. Information from Caterpillar Incorporated (Caterpillar) indicates that this pond straddles the property line between Caterpillar and the NC Railroad Company. Therefore, I am notifying you of these results and the subsequent epidemiological review as I had done for Caterpillar yesterday. The results from two samples (attached) indicate a low level of the pesticide DDE (a breakdown product of DDT) was found in the pond sediment (28 and 38 parts per billion). We forwarded these results on the Environmental Epidemiology Section for review of any toxicological significance.

As we discussed on the telephone this morning, the NC Superfund Section has received a memorandum (attached) from Dr. Ken Rudo of the Environmental Epidemiological Section concerning the sampling results in the pond. As is clear from Dr. Rudo's memorandum, and I would like to reiterate, the levels of DDE currently in the pond would not be expected to cause any health concern. However, because there is no data to indicate what the levels in the pond may have been in the past, Dr. Rudo has recommended that there be no further fishing in this pond until such time as fish tissue sampling is conducted.

If you are not the property owner of the other half of the pond (denoted on the attached map) as Caterpillar has indicated, please notify Pat DeRosa or me immediately at 733-2801. If you have any questions, Dr. Rudo can be reached at 733-3410, and/or you may call me at 733-2801.

Sincerely,

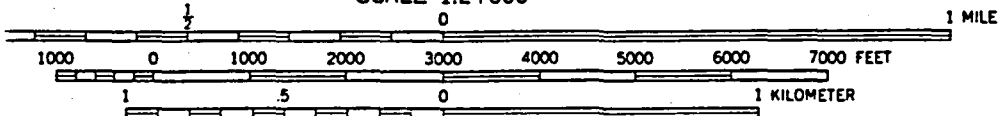
Bruce Nicholson
Chemical Engineer
Superfund Section

bin\let\peelpon2

cc: Dr. Ken Rudo, NC Environmental Epidemiology
Pat DeRosa, NC Superfund
Gayle Jordan, Norfolk and Southern



(POWHATAN)
5355 III SW
SCALE 1:24000



CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



QUADRANGLE LOCATION

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD
SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC
STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00
CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB41

UG/KG ANALYTICAL RESULTS

6.3U ALPHA-BHC
6.3U BETA-BHC
6.3U DELTA-BHC
6.3U GAMMA-BHC (LINDANE)
6.3U HEPTACHLOR
6.3U ALDRIN
6.3U HEPTACHLOR EPOXIDE
6.3U ENDOSULFAN I (ALPHA)
12U DIELDRIN
28 4,4'-DDE (P,P'-DDE)
12U ENDRIN
12U ENDOSULFAN II (BETA)
13U 4,4'-DDD (P,P'-DDD)
12U ENDOSULFAN SULFATE
20U 4,4'-DDT (P,P'-DDT)

UG/KG ANALYTICAL RESULTS

63U METHOXYCHLOR
12U ENDRIN KETONE
12U ENDRIN ALDEHYDE
--- CHLORDANE (TECH. MIXTURE) /1
6.3U GAMMA-CHLORDANE /2
6.3U ALPHA-CHLORDANE /2
630U TOXAPHENE
120U PCB-1016 (AROCLOR 1016)
250U PCB-1221 (AROCLOR 1221)
120U PCB-1232 (AROCLOR 1232)
120U PCB-1242 (AROCLOR 1242)
120U PCB-1248 (AROCLOR 1248)
120U PCB-1254 (AROCLOR 1254)
120U PCB-1260 (AROCLOR 1260)
73 PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC
 ** STATION ID: PE-003-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00
 ** CASE NUMBER: 21362 SAS NUMBER: 81340 D. NUMBER: GB40
 **

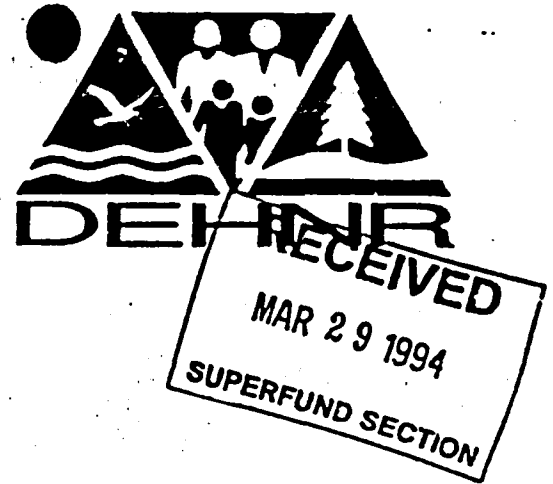
UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
6.8U	ALPHA-BHC	68U	METHOXYCHLOR
6.8U	BETA-BHC	13U	ENDRIN KETONE
6.8U	DELTA-BHC	13U	ENDRIN ALDEHYDE
6.8U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
6.8U	HEPTACHLOR	6.8U	GAMMA-CHLORDANE /2
6.8U	ALDRIN	6.8U	ALPHA-CHLORDANE /2
6.8U	HEPTACHLOR EPOXIDE	680U	TOXAPHENE
6.8U	ENDOSULFAN I (ALPHA)	130U	PCB-1016 (AROCLOR 1016)
13U	DIELDRIN	270U	PCB-1221 (AROCLOR 1221)
38	4,4'-DDE (P,P'-DDE)	130U	PCB-1232 (AROCLOR 1232)
13U	ENDRIN	130U	PCB-1242 (AROCLOR 1242)
13U	ENDOSULFAN II (BETA)	130U	PCB-1248 (AROCLOR 1248)
21U	4,4'-DDD (P,P'-DDD)	130U	PCB-1254 (AROCLOR 1254)
13U	ENDOSULFAN SULFATE	130U	PCB-1260 (AROCLOR 1260)
54U	4,4'-DDT (P,P'-DDT)	75	PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE
- *NA-NOT ANALYZED
- *NAI-INTERFERENCES
- *J-ESTIMATED VALUE
- *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
- *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
- *C-CONFIRMED BY GCMS
- 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
- 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Epidemiology

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary



March 24, 1994

MEMORANDUM

TO: Bruce Nicholson, Environmental Engineer
Superfund Section

FROM: Kenneth Rudo, Ph.D., Toxicologist *KRL*
Environmental Epidemiology Section

SUBJECT: Peele Pesticide Disposal Site
Consumption of Fish from On-Site Pond

After evaluating the data in your March 1, 1994 memo detailing sediment concentrations of DDE from the on-site pond, the Environmental Epidemiology Section (EES) would like to make some recommendations concerning consumption of fish from this pond. The current detected levels would not be expected to translate into fish-fillet concentrations high enough to pose a human health risk. However, since no past data were available, no judgements can be made on DDE or other pesticide levels in the pond sediment previous to the December 7, 1993 sample. It is possible that levels could have been significantly higher. As a result, EES would recommend no further consumption of fish from this pond until fish-fillet sampling for DDE and other pesticides common to this site can be done. Only with this type of data can EES answer your question of whether employees may be exposed to an increased health risk from consuming pond fish from this site.

If you have any further questions, please feel free to contact me at 733-3410.

KR:tm

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management



James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

March 29, 1994

Mr. Jerry Adams
Caterpillar Incorporated
P.O. Box 999
Clayton, NC 27520

Subj: Pond Sediment Sample Results and Epidemiological Review

Dear Mr. Adams:

Laboratory results from the neighboring Peele Pesticide Site have been received. As you are aware, part of that sampling effort involved sampling the pond on your property to assess potential pesticide migration from the Peele Pesticide Site. The results from two samples (attached) indicate a low level of the pesticide DDE (a breakdown product of DDT) was found in the pond sediment (28 and 38 parts per billion). We forwarded these results on the Environmental Epidemiology Section for review of any toxicological significance.

As we discussed on the telephone this morning, the NC Superfund Section has received a memorandum (attached) from Dr. Ken Rudo of the Environmental Epidemiological Section concerning the sampling results in the pond on Caterpillar property. As is clear from Dr. Rudo's memorandum, and I would like to reiterate, the levels of DDE currently in the pond would not be expected to cause any health concern. However, because there is no data to indicate what the levels in the pond may have been in the past, Dr. Rudo has recommended that there be no further fishing in this pond until such time as fish tissue sampling is conducted.

If you have any questions, Dr. Rudo can be reached at 733-3410, and/or you may call me at 733-2801.

Sincerely,

Bruce Nicholson
Chemical Engineer
Superfund Section

bin\et\peelpond

cc: Dr. Ken Rudo
Pat DeRosa

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB41 **

UG/KG ANALYTICAL RESULTS

6.3U ALPHA-BHC
 6.3U BETA-BHC
 6.3U DELTA-BHC
 6.3U GAMMA-BHC (LINDANE)
 6.3U HEPTACHLOR
 6.3U ALDRIN
 6.3U HEPTACHLOR EPOXIDE
 6.3U ENDOSULFAN I (ALPHA)
 12U DIELDRIN
 28 4,4'-DDE (P,P'-DDE)
 12U ENDRIN
 12U ENDOSULFAN II (BETA)
 13U 4,4'-DDD (P,P'-DDD)
 12U ENDOSULFAN SULFATE
 20U 4,4'-DDT (P,P'-DDT)

UG/KG ANALYTICAL RESULTS

63U METHOXYCHLOR
 12U ENDRIN KETONE
 12U ENDRIN ALDEHYDE
 --- CHLORDANE (TECH. MIXTURE) /1
 6.3U GAMMA-CHLORDANE /2
 6.3U ALPHA-CHLORDANE /2
 630U TOXAPHENE
 120U PCB-1016 (AROCLOR 1016)
 250U PCB-1221 (AROCLOR 1221)
 120U PCB-1232 (AROCLOR 1232)
 120U PCB-1242 (AROCLOR 1242)
 120U PCB-1248 (AROCLOR 1248)
 120U PCB-1254 (AROCLOR 1254)
 120U PCB-1260 (AROCLOR 1260)
 73 PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
- *C-CONFIRMED BY GCMS
- *NA-NOT ANALYZED
- *NAI-INTERFERENCES
- *J-ESTIMATED VALUE
- *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
- 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 81340 D. NUMBER: GB40 **

UG/KG ANALYTICAL RESULTS

6.8U ALPHA-BHC
6.8U BETA-BHC
6.8U DELTA-BHC
6.8U GAMMA-BHC (LINDANE)
6.8U HEPTACHLOR
6.8U ALDRIN
6.8U HEPTACHLOR EPOXIDE
6.8U ENDOSULFAN I (ALPHA)
13U DIELDRIN
38 4,4'-DDE (P,P'-DDE)
13U ENDRIN
13U ENDOSULFAN II (BETA)
21U 4,4'-DDD (P,P'-DDD)
13U ENDOSULFAN SULFATE
54U 4,4'-DDT (P,P'-DDT)

UG/KG ANALYTICAL RESULTS

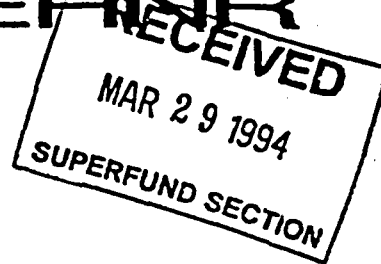
68U METHOXYCHLOR
13U ENDRIN KETONE
13U ENDRIN ALDEHYDE
--- CHLORDANE (TECH. MIXTURE) /1
6.8U GAMMA-CHLORDANE /2
6.8U ALPHA-CHLORDANE /2
680U TOXAPHENE
130U PCB-1016 (AROCLOR 1016)
270U PCB-1221 (AROCLOR 1221)
130U PCB-1232 (AROCLOR 1232)
130U PCB-1242 (AROCLOR 1242)
130U PCB-1248 (AROCLOR 1248)
130U PCB-1254 (AROCLOR 1254)
130U PCB-1260 (AROCLOR 1260)
75 PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Epidemiology

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary



March 24, 1994

MEMORANDUM

TO: Bruce Nicholson, Environmental Engineer
Superfund Section

FROM: Kenneth Rudo, Ph.D., Toxicologist *KMR*
Environmental Epidemiology Section

SUBJECT: Peele Pesticide Disposal Site
Consumption of Fish from On-Site Pond

After evaluating the data in your March 1, 1994 memo detailing sediment concentrations of DDE from the on-site pond, the Environmental Epidemiology Section (EES) would like to make some recommendations concerning consumption of fish from this pond. The current detected levels would not be expected to translate into fish-fillet concentrations high enough to pose a human health risk. However, since no past data were available, no judgements can be made on DDE or other pesticide levels in the pond sediment previous to the December 7, 1993 sample. It is possible that levels could have been significantly higher. As a result, EES would recommend no further consumption of fish from this pond until fish-fillet sampling for DDE and other pesticides common to this site can be done. Only with this type of data can EES answer your question of whether employees may be exposed to an increased health risk from consuming pond fish from this site.

If you have any further questions, please feel free to contact me at 733-3410.

KR:tm

CONFIRMATION LIST

MAR 29 '94 09:28

SENDER: 9197334811

RECIPIENT: 919 550 1100

PAGES SENT: 04

DURATION: 02:16

Post-It™ brand fax transmittal memo 7671

of pages ▶ 4

To	Jerry Adams	From	Bruce Nicholson
Co.	Caterpillar Inc.	Co.	NC Superfund Sect.
Dept.		Phone #	733-2801
Fax #	919-550-1100	Fax #	733-4811

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Epidemiology

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary



March 24, 1994

MEMORANDUM

TO: Bruce Nicholson, Environmental Engineer
Superfund Section

FROM: Kenneth Rudo, Ph.D., Toxicologist *KMR*
Environmental Epidemiology Section

SUBJECT: Peele Pesticide Disposal Site
Consumption of Fish from On-Site Pond

After evaluating the data in your March 1, 1994 memo detailing sediment concentrations of DDE from the on-site pond, the Environmental Epidemiology Section (EES) would like to make some recommendations concerning consumption of fish from this pond. The current detected levels would not be expected to translate into fish-fillet concentrations high enough to pose a human health risk. However, since no past data were available, no judgements can be made on DDE or other pesticide levels in the pond sediment previous to the December 7, 1993 sample. It is possible that levels could have been significantly higher. As a result, EES would recommend no further consumption of fish from this pond until fish-fillet sampling for DDE and other pesticides common to this site can be done. Only with this type of data can EES answer your question of whether employees may be exposed to an increased health risk from consuming pond fish from this site.

If you have any further questions, please feel free to contact me at 733-3410.

KR:tm



Camera & Video

A YORK COMPANY

Cameron Village
434 Woodburn Road
Raleigh, NC 27605

3:05 PM

INVOICE DATE	INVOICE NUMBER
1/06/94	C011204541

INVOICE

SOLD TO

NC DEPT. OF ENVIRONMENT,
HEALTH. & NAT. RESOURCES
PO BOX 27687
RALEIGH NC 27611

SHIP TO

NC DEPT. OF ENVIRONMENT,
HEALTH. & NAT. RESOURCES:
PO BOX 27687
RALEIGH NC 27611

CUSTOMER NO.	PURCHASE ORDER NO.	SHIP VIA	SALESMAN	TERMS	PAGE NO.
140640			00 25	NET, 10 DAYS EOM	1

ORDERED	SHIPPED	U/M	ITEM NUMBER	VENDOR	DESCRIPTION	UNIT PRICE	AMOUNT	TX
1	1	EA	PDP	KLX	PROCESSING, DEVL. & PRINT	11.87	11.87	6
1	1	EA	PDP	KLX	PROCESSING, DEVL. & PRINT	9.59	9.59	6
		EXPR	PAYMENT TYPES	CREDIT CARD/CHECK #		APPROVAL	AMOUNT	
		0000	SAM BASS CHARGE			PS MCGEE	22.75-	

Peele Pesticide Disposal PA/SI

Thank You

ALL CHARGES MUST HAVE NAME AND SIGNATURE

Thomas F. Woodburn
PLEASE PRINT NAME

Thomas F. Woodburn
SIGNATURE

CUSTOMER INVOICE

SUB TOTAL	21.46
TAX	1.29
TOTAL	22.75
PAYMENT	.00
AMOUNT DUE	22.75

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management



James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

March 1, 1994

MEMORANDUM

To: Dr. John Freeman, Chief
Environmental Epidemiology Section

Through: Pat DeRosa, Head *Pat*
CERCLA Branch

From: Bruce Nicholson, Environmental Engineer *BAN*
Superfund Section

Subj: Peele Pesticide Disposal Site
Pond Sediment Sampling Data

As I have discussed with Dr. Ken Rudo of your staff, this memo is for the purpose of transmitting sampling data from the Expanded Site Inspection at the Peele Pesticide Site in Clayton, NC. You may recall that this site is a pesticide disposal trench on which the State fenced off the site and removed arsenic and methoxychlor wastes from the land surface in 1990. DDT, DDE, DDD are still present in high concentrations in the trench on site.

The attached data are sediment samples taken from a pond downstream of the site on neighboring property owned by Caterpillar Corporation. It shows two duplicate samples, one containing 38 ug/Kg DDE and the other 28 ug/Kg DDE. Caterpillar has stated that its employees fish in this pond. As I discussed with Dr. Ken Rudo on the telephone this morning, the Superfund Section will be notifying Caterpillar of this situation. Please advise us (so that we may advise Caterpillar) as to the most appropriate course of action, if any, in an epidemiological sense.

If you have any questions, please contact me at 733-2801.

bin\mem\peelrudo

cc: Dr. Ken Rudo

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

****
** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 81340 D. NUMBER: GB40 **
**

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
6.8U	ALPHA-BHC	68U	METHOXYCHLOR
6.8U	BETA-BHC	13U	ENDRIN KETONE
6.8U	DELTA-BHC	13U	ENDRIN ALDEHYDE
6.8U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
6.8U	HEPTACHLOR	6.8U	GAMMA-CHLORDANE /2
6.8U	ALDRIN	6.8U	ALPHA-CHLORDANE /2
6.8U	HEPTACHLOR EPOXIDE	680U	TOXAPHENE
6.8U	ENDOSULFAN I (ALPHA)	130U	PCB-1016 (AROCLOR 1016)
13U	DIELDRIN	270U	PCB-1221 (AROCLOR 1221)
38	4,4'-DDE (P,P'-DDE)	130U	PCB-1232 (AROCLOR 1232)
13U	ENDRIN	130U	PCB-1242 (AROCLOR 1242)
13U	ENDOSULFAN II (BETA)	130U	PCB-1248 (AROCLOR 1248)
21U	4,4'-DDD (P,P'-DDD)	130U	PCB-1254 (AROCLOR 1254)
13U	ENDOSULFAN SULFATE	130U	PCB-1260 (AROCLOR 1260)
54U	4,4'-DDT (P,P'-DDT)	75	PERCENT MOISTURE

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB41 **

UG/KG ANALYTICAL RESULTS

6.3U ALPHA-BHC
 6.3U BETA-BHC
 6.3U DELTA-BHC
 6.3U GAMMA-BHC (LINDANE)
 6.3U HEPTACHLOR
 6.3U ALDRIN
 6.3U HEPTACHLOR EPOXIDE
 6.3U ENDOSULFAN I (ALPHA)
 12U DIELDRIN
 28 4,4'-DDE (P,P'-DDE)
 12U ENDRIN
 12U ENDOSULFAN II (BETA)
 13U 4,4'-DDD (P,P'-DDD)
 12U ENDOSULFAN SULFATE
 20U 4,4'-DDT (P,P'-DDT)

UG/KG ANALYTICAL RESULTS

63U METHOXYCHLOR
 12U ENDRIN KETONE
 12U ENDRIN ALDEHYDE
 --- CHLORDANE (TECH. MIXTURE) /1
 6.3U GAMMA-CHLORDANE /2
 6.3U ALPHA-CHLORDANE /2
 630U TOXAPHENE
 120U PCB-1016 (AROCLOR 1016)
 250U PCB-1221 (AROCLOR 1221)
 120U PCB-1232 (AROCLOR 1232)
 120U PCB-1242 (AROCLOR 1242)
 120U PCB-1248 (AROCLOR 1248)
 120U PCB-1254 (AROCLOR 1254)
 120U PCB-1260 (AROCLOR 1260)
 73 PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

FEDERAL EXPRESS

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO.
QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL

PACKAGE TRACKING NUMBER

2789623815

Peele Respride File

SENDER'S COPY

Sender's Federal Express Account Number Date

From (Your Name) Please Print Your Phone Number (Very Important)

To (Recipient's Name) Please Print Recipient's Phone Number (Very Important)

Company Department/Floor No.

Company Department/Floor No.

Street Address

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.)

City State ZIP Required

City State ZIP Required

YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE.)

PAYMENT Bill Sender Bill Recipient's FedEx Acct. No. Bill 3rd Party FedEx Acct. No. Bill Credit Card Cash

Expiration Date

IF HOLD FOR PICK-UP, Print FEDEX Address Here

Street Address

City State ZIP Required

SERVICES		DELIVERY AND SPECIAL HANDLING	
1 <input type="checkbox"/> PRIORITY 1 Overnight Delivery	6 <input type="checkbox"/> OVERNIGHT LETTER*	1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box H)	
2 <input type="checkbox"/> COURIER-PAK OVERNIGHT ENVELOPE*	7 <input type="checkbox"/>	2 <input type="checkbox"/> DELIVER WEEKDAY	
3 <input type="checkbox"/> OVERNIGHT BOX	8 <input type="checkbox"/>	3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge)	
4 <input type="checkbox"/> OVERNIGHT TUBE	9 <input type="checkbox"/>	4 <input type="checkbox"/> DAINGEROUS GOODS (Extra charge)	
5 <input type="checkbox"/> STANDARD AIR Delivery not later than second business day	10 <input type="checkbox"/>	5 <input type="checkbox"/> CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)	
		6 <input type="checkbox"/> DRY ICE _____ Lbs.	
		7 <input type="checkbox"/> OTHER SPECIAL SERVICE _____	
		8 <input type="checkbox"/>	
		9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge)	
		10 <input type="checkbox"/>	
		11 <input type="checkbox"/>	
		12 <input type="checkbox"/> HOLIDAY DELIVERY (If offered) (Extra charge)	

PACKAGES	WEIGHT IN POUNDS ONLY	YOUR DECLARED VALUE (See right)	OVER SIZE
Total	Total	Total	

Received At
 1 Regular Stop
 2 On-Call Stop
 3 Drop Box
 4 B.S.C.
 5 Station

FEDEX Corp. Employee No.

Date/Time for FEDEX Use

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide which is available upon request. See back of sender's copy of this airbill for further information.

We will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay or non-delivery, unless you specify a higher amount in the space to the left, pay 40¢ per additional \$100 specified and document your actual loss in the event of a claim. Maximum amount limitations found in the current Federal Express Service Guide apply. Your rights to recover from Federal Express for loss of the intrinsic value of the package, as well as for loss of sales, income, interest, profit, attorneys fees, costs and any other form of damage whether direct, incidental, consequential or special is limited to the greater of \$100 or the declared value specified to the left. In no event shall your recovery exceed your actual loss.

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.

Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature:

Federal Express Use	
Base Charges	
Declared Value Charge	
Other 1	
Other 2	
Total Charges	

PART #111800
REVISION DATE 10/88
 PRINTED IN U.S.A. FXEM

009 PROD. 1/89

© 1988 F.E.C.

SENDER'S COPY

510E29622815

* Declared Value Limit \$100*

TERMS AND CONDITIONS

DEFINITIONS

On this Airbill, we, our and us refer to Federal Express Corporation, its employees and agents. You and your refer to the sender, its employees and agents.

AGREEMENT TO TERMS

By giving us your package to deliver, you agree to all the terms on this Airbill and in our current Service Guide, which is available on request. If there is a conflict between the current Service Guide and this Airbill, the Service Guide will control. No one is authorized to alter or modify the terms of our Agreement.

RESPONSIBILITY FOR PACKAGING AND COMPLETING AIRBILL

You are responsible for adequately packaging your goods and for properly filling out this Airbill. Omission of the number of packages and weight per package from this Airbill will result in a billing based on our best estimate of the number of packages received from you and an estimated "default" weight per package, as determined and periodically adjusted by us.

AIR TRANSPORTATION TAX INCLUDED

Our basic rate includes a federal tax required by Internal Revenue Code Section 4271 on the air transportation portion of this service.

LIMITATIONS ON OUR LIABILITY AND LIABILITIES NOT ASSUMED

Our liability for loss or damage to your package is limited to your actual damages or \$100, whichever is less, unless you pay for and declare a higher authorized value. We do not provide cargo liability insurance, but you may pay forty cents for each additional \$100 of declared value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your package.

In any event we will not be liable for any damages, whether direct, incidental, special or consequential in excess of the declared value of a shipment, whether or not Federal Express had knowledge that such damages might be incurred including, but not limited to, loss of income or profits.

We won't be liable for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking or addressing, or for the acts or omissions of the recipient or anyone else with an interest in the package. Also, we won't be liable if you or the recipient violates any of the terms of our agreement. We won't be liable for loss of or damage to shipments of cash, currency or other prohibited items.

We won't be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, mechanical delays, acts of public enemies, war, strikes, civil commotions, or acts or omissions of public authorities (including customs and quarantine officials) with actual or apparent authority.

DECLARED VALUE LIMITS

The highest declared value we allow for Overnight Letter and Courier-Pak Overnight Envelope shipments is \$100. For other Priority-1 and Standard Air shipments, the highest declared value we allow is \$25,000 unless your package contains items of "extraordinary value," in which case the highest declared value we allow is \$500. Items of "extraordinary value" include artwork, jewelry, furs, money, precious metals, negotiable instruments, and other items listed in our current Service Guide.

If you send more than one package on this Airbill, you may fill in the total declared value for all packages, not to exceed the \$100, \$500 or \$25,000 per package limit described above. (Example: 5 packages can have a total declared value of up to \$125,000.)

If more than one package is shipped on this airbill, our liability for loss or damage will be limited to the actual value of the package(s) lost or damaged (not to exceed the lesser of the total declared value or the per package limits described above). You have the responsibility of proving the actual loss or damage.

FILING A CLAIM

ALL CLAIMS MUST BE MADE BY YOU IN WRITING: You must notify us of your claim within strict time limits. See current Service Guide.

We'll consider your claim filed if you call and notify our Customer Service Department at 800-238-5355 and notify us in writing as soon as possible.

Within 90 days after you notify us of your claim, you must send us all relevant information about it. We are not obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume that the package was delivered in good condition. In order for us to process your claim, you must, to the extent possible, make the original shipping cartons and packing available for inspection.

RIGHT TO INSPECT

We may, at our option, open and inspect your packages prior to or after you give them to us to deliver.

NO C.O.D. SERVICES

We don't provide C.O.D. services.

RESPONSIBILITY FOR PAYMENT

Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any costs we may incur in either returning your package to you or warehousing it pending disposition.

QUALIFIED ACCEPTANCE

We reserve the right to reject a shipment at any time, when such shipment would be likely to cause damage or delay to other shipments, equipment or personnel, or if the transportation of which is prohibited by law or is in violation of any rules contained in this Airbill or our Service Guide.

MONEY-BACK GUARANTEE

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund or credit all transportation charges. See current Service Guide for further information.

FEDERAL EXPRESS

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
 USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO.
 QUESTIONS? CALL 800-238-5355 TOLL FREE.

PACKAGE TRACKING NUMBER

2789623804

9037M

2789623804

SENDER'S COPY

Sender's Federal Express Account Number 1043-9568-6		Date 1/19/93	
From (Your Name) Please Print N CAROLINA DEPT OF HUMAN RESRC		Your Phone Number (Very Important) ()	To (Recipient's Name) Please Print ()
Company N CAROLINA DEPT OF HUMAN RESRC		Department/Floor No.	Company N CAROLINA DEPT OF HUMAN RESRC
Street Address 401 OSERLIN ROAD		Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.)	
City RALEIGH	State NC	ZIP Required 27605	City RALEIGH
YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE.)		IF HOLD FOR PICK-UP, Print FEDEX Address Here	
PAYMENT <input type="checkbox"/> Bill Sender <input type="checkbox"/> Bill Recipient's FedEx Acct. No. <input type="checkbox"/> Bill 3rd Party FedEx Acct. No. <input type="checkbox"/> Bill Credit Card <input type="checkbox"/> Cash		Street Address City State ZIP Required	
Expiration Date			

SENDER'S COPY

SERVICES		DELIVERY AND SPECIAL HANDLING		PACKAGES	WEIGHT IN POUNDS ONLY	YOUR DECLARED VALUE (See right)	OVER SIZE	SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY	
1 <input type="checkbox"/> PRIORITY 1 Overnight Delivery	6 <input type="checkbox"/> OVERNIGHT LETTER*	1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box H)						<p>Use of this airbill constitutes your agreement to the service conditions in our current Service Guide which is available upon request. See back of sender's copy of this airbill for further information.</p> <p>We will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay or non-delivery, unless you specify a higher amount in the space to the left, pay 40¢ per additional \$100 specified and document your actual loss in the event of a claim. Maximum amount limitations found in the current Federal Express Service Guide apply. Your rights to recover from Federal Express for loss of the intrinsic value of the package, as well as for loss of sales, income, interest, profit, attorneys fees, costs and any other form of damage whether direct, incidental, consequential or special is limited to the greater of \$100 or the declared value specified to the left. In no event shall your recovery exceed your actual loss.</p> <p>In the event of untimely delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.</p> <p>Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.</p> <p>Release Signature: _____</p>	
2 <input type="checkbox"/> COURIER-PAK OVERNIGHT ENVELOPE*	7 <input type="checkbox"/>	2 <input type="checkbox"/> DELIVER WEEKDAY							
3 <input type="checkbox"/> OVERNIGHT BOX	8 <input type="checkbox"/>	3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge)							
4 <input type="checkbox"/> OVERNIGHT TUBE	9 <input type="checkbox"/>	4 <input type="checkbox"/> DAANGEROUS GOODS (Extra charge)							
		5 <input type="checkbox"/> CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)							
		6 <input type="checkbox"/> DRY ICE _____ Lbs							
		7 <input type="checkbox"/> OTHER SPECIAL SERVICE _____							
		8 <input type="checkbox"/>							
		9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge)							
		10 <input type="checkbox"/>							
		11 <input type="checkbox"/>							
		12 <input type="checkbox"/> HOLIDAY DELIVERY (if offered) (Extra charge)							
5 <input type="checkbox"/> STANDARD AIR Delivery not later than second business day	10 <input type="checkbox"/>			Received At 1 <input type="checkbox"/> Regular Stop 2 <input type="checkbox"/> On-Call Stop 3 <input type="checkbox"/> Drop Box 4 <input type="checkbox"/> B.S.C. 5 <input type="checkbox"/> Station FEDEX Corp. Employee No. _____ Date/Time for FEDEX Use _____					

* Declared Value Limit \$100.

PART #111800
 REVISION DATE 10/88
 PRINTED IN U.S.A. FXEM

009

© 1988 F.E.C.

TERMS AND CONDITIONS

DEFINITIONS

On this Airbill, we, our and us refer to Federal Express Corporation, its employees and agents. You and your refer to the sender, its employees and agents.

AGREEMENT TO TERMS

By giving us your package to deliver, you agree to all the terms on this Airbill and in our current Service Guide, which is available on request. If there is a conflict between the current Service Guide and this Airbill, the Service Guide will control. No one is authorized to alter or modify the terms of our Agreement.

RESPONSIBILITY FOR PACKAGING AND COMPLETING AIRBILL

You are responsible for adequately packaging your goods and for properly filling out this Airbill. Omission of the number of packages and weight per package from this Airbill will result in a billing based on our best estimate of the number of packages received from you and an estimated "default" weight per package, as determined and periodically adjusted by us.

AIR TRANSPORTATION TAX INCLUDED

Our basic rate includes a federal tax required by Internal Revenue Code Section 4271 on the air transportation portion of this service.

LIMITATIONS ON OUR LIABILITY AND LIABILITIES NOT ASSUMED

Our liability for loss or damage to your package is limited to your actual damages or \$100, whichever is less, unless you pay for and declare a higher authorized value. We do not provide cargo liability insurance, but you may pay forty cents for each additional \$100 of declared value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your package.

In any event we will not be liable for any damages, whether direct, incidental, special or consequential in excess of the declared value of a shipment, whether or not Federal Express had knowledge that such damages might be incurred including, but not limited to, loss of income or profits.

We won't be liable for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking or addressing, or for the acts or omissions of the recipient or anyone else with an interest in the package. Also, we won't be liable if you or the recipient violates any of the terms of our agreement. We won't be liable for loss of or damage to shipments of cash, currency or other prohibited items.

We won't be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, mechanical delays, acts of public enemies, war, strikes, civil commotions, or acts or omissions of public authorities (including customs and quarantine officials) with actual or apparent authority.

DECLARED VALUE LIMITS

The highest declared value we allow for Overnight Letter and Courier-Pak Overnight Envelope shipments is \$100. For other Priority-1 and Standard Air shipments, the highest declared value we allow is \$25,000 unless your package contains items of "extraordinary value," in which case the highest declared value we allow is \$500. Items of "extraordinary value" include artwork, jewelry, furs, money, precious metals, negotiable instruments, and other items listed in our current Service Guide.

If you send more than one package on this Airbill, you may fill in the total declared value for all packages, not to exceed the \$100, \$500 or \$25,000 per package limit described above. (Example: 5 packages can have a total declared value of up to \$125,000.)

If more than one package is shipped on this airbill, our liability for loss or damage will be limited to the actual value of the package(s) lost or damaged (not to exceed the lesser of the total declared value or the per package limits described above). You have the responsibility of proving the actual loss or damage.

FILING A CLAIM

ALL CLAIMS MUST BE MADE BY YOU IN WRITING: You must notify us of your claim within strict time limits. See current Service Guide.

We'll consider your claim filed if you call and notify our Customer Service Department at 800-238-5355 and notify us in writing as soon as possible.

Within 90 days after you notify us of your claim, you must send us all relevant information about it. We are not obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume that the package was delivered in good condition. In order for us to process your claim, you must, to the extent possible, make the original shipping cartons and packing available for inspection.

RIGHT TO INSPECT

We may, at our option, open and inspect your packages prior to or after you give them to us to deliver.

NO C.O.D. SERVICES

We don't provide C.O.D. services.

RESPONSIBILITY FOR PAYMENT

Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any costs we may incur in either returning your package to you or warehousing it pending disposition.

QUALIFIED ACCEPTANCE

We reserve the right to reject a shipment at any time, when such shipment would be likely to cause damage or delay to other shipments, equipment or personnel, or if the transportation of which is prohibited by law or is in violation of any rules contained in this Airbill or our Service Guide.

MONEY-BACK GUARANTEE

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund or credit all transportation charges. See current Service Guide for further information.

FEDERAL EXPRESS

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO.
QUESTIONS? CALL 800-238-5355 TOLL FREE.

PACKAGE TRACKING NUMBER

2789623826

9037M

2789623826

SENDER'S COPY

Sender's Federal Express Account Number **1043-9568-6** Date **12/19/93**

From (Your Name) Please Print **STATE MENTAL HEALTH** Your Phone Number (Very Important) **(919) 733-2831**

Company **N CAROLINA DEPT OF HUMAN RESRC** Department/Floor No.

Street Address **401 OBERLIN ROAD**

City **RALEIGH** State **NC** ZIP Required **27603**

To (Recipient's Name) Please Print _____ Recipient's Phone Number (Very Important) _____

Company _____ Department/Floor No. _____

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.) _____

City _____ State _____ ZIP Required _____

3 YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE.)

IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address _____

PAYMENT Bill Sender Bill Recipient's FedEx Acct. No. Bill 3rd Party FedEx Acct. No. Bill Credit Card
 Cash _____ Expiration Date _____

City _____ State _____ ZIP Required _____

4 SERVICES

1 PRIORITY 1 Overnight Delivery 6 OVERNIGHT LETTER*

2 COURIER-PAK OVERNIGHT ENVELOPE* 7

3 OVERNIGHT BOX 8

4 OVERNIGHT TUBE 9

5 STANDARD AIR Delivery not later than second business day 10

*Declared Value Limit \$100.

DELIVERY AND SPECIAL HANDLING

1 HOLD FOR PICK-UP (Fill in Box H)

2 DELIVER WEEKDAY

3 DELIVER SATURDAY (Extra charge)

4 DANGEROUS GOODS (Extra charge)

5 CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)

6 DRY ICE _____ Lbs.

7 OTHER SPECIAL SERVICE _____

8

9 SATURDAY PICK-UP (Extra charge)

10

11

12 HOLIDAY DELIVERY (if offered) (Extra charge)

PACKAGES	WEIGHT IN POUNDS ONLY	YOUR DECLARED VALUE (See right)	OVER SIZE
Total	Total	Total	

Received At
1 Regular Stop
2 On-Call Stop
3 Drop Box 4 B.S.C. 5 Station

FEDEX Corp. Employee No. _____

Date/Time for FEDEX Use _____

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide which is available upon request. See back of sender's copy of this airbill for further information.

We will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay or non-delivery, unless you specify a higher amount in the space to the left, pay 40¢ per additional \$100 specified and document your actual loss in the event of a claim. Maximum amount limitations found in the current Federal Express Service Guide apply. Your rights to recover from Federal Express for loss of the intrinsic value of the package, as well as for loss of sales, income, interest, profit, attorneys fees, costs and any other form of damage whether direct, incidental, consequential or special is limited to the greater of \$100 or the declared value specified to the left. In no event shall your recovery exceed your actual loss.

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.

5 Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature: _____

Federal Express Use	
Base Charges	
Declared Value Charge	
Other 1	
Other 2	
Total Charges	

PART #111600
REVISION DATE 10/88
PRINTED IN U.S.A. FXEM

009 PROD. 1/89

© 1988 F.E.C.

SENDER'S COPY

928929826

TERMS AND CONDITIONS

DEFINITIONS

On this Airbill, we, our and us refer to Federal Express Corporation, its employees and agents. You and your refer to the sender, its employees and agents.

AGREEMENT TO TERMS

By giving us your package to deliver, you agree to all the terms on this Airbill and in our current Service Guide, which is available on request. If there is a conflict between the current Service Guide and this Airbill, the Service Guide will control. No one is authorized to alter or modify the terms of our Agreement.

RESPONSIBILITY FOR PACKAGING AND COMPLETING AIRBILL

You are responsible for adequately packaging your goods and for properly filling out this Airbill. Omission of the number of packages and weight per package from this Airbill will result in a billing based on our best estimate of the number of packages received from you and an estimated "default" weight per package, as determined and periodically adjusted by us.

AIR TRANSPORTATION TAX INCLUDED

Our basic rate includes a federal tax required by Internal Revenue Code Section 4271 on the air transportation portion of this service.

LIMITATIONS ON OUR LIABILITY AND LIABILITIES NOT ASSUMED

Our liability for loss or damage to your package is limited to your actual damages or \$100, whichever is less, unless you pay for and declare a higher authorized value. We do not provide cargo liability insurance, but you may pay forty cents for each additional \$100 of declared value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your package.

In any event we will not be liable for any damages, whether direct, incidental, special or consequential in excess of the declared value of a shipment, whether or not Federal Express had knowledge that such damages might be incurred including, but not limited to, loss of income or profits.

We won't be liable for your acts or omissions, including but not limited to improper or insufficient packing, securing, marking or addressing, or for the acts or omissions of the recipient or anyone else with an interest in the package. Also, we won't be liable if you or the recipient violates any of the terms of our agreement. We won't be liable for loss of or damage to shipments of cash, currency or other prohibited items.

We won't be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, mechanical delays, acts of public enemies, war, strikes, civil commotions, or acts or omissions of public authorities (including customs and quarantine officials) with actual or apparent authority.

DECLARED VALUE LIMITS

The highest declared value we allow for Overnight Letter and Courier-Pak Overnight Envelope shipments is \$100. For other Priority-1 and Standard Air shipments, the highest declared value we allow is \$25,000 unless your package contains items of "extraordinary value," in which case the highest declared value we allow is \$500. Items of "extraordinary value" include artwork, jewelry, furs, money, precious metals, negotiable instruments, and other items listed in our current Service Guide.

If you send more than one package on this Airbill, you may fill in the total declared value for all packages, not to exceed the \$100, \$500 or \$25,000 per package limit described above. (Example: 5 packages can have a total declared value of up to \$125,000.)

If more than one package is shipped on this airbill, our liability for loss or damage will be limited to the actual value of the package(s) lost or damaged (not to exceed the lesser of the total declared value or the per package limits described above). You have the responsibility of proving the actual loss or damage.

FILING A CLAIM

ALL CLAIMS MUST BE MADE BY YOU IN WRITING: You must notify us of your claim within strict time limits. See current Service Guide.

We'll consider your claim filed if you call and notify our Customer Service Department at 800-238-5355 and notify us in writing as soon as possible.

Within 90 days after you notify us of your claim, you must send us all relevant information about it. We are not obligated to act on any claim until you have paid all transportation charges, and you may not deduct the amount of your claim from those charges.

If the recipient accepts your package without noting any damage on the delivery record, we will assume that the package was delivered in good condition. In order for us to process your claim, you must, to the extent possible, make the original shipping cartons and packing available for inspection.

RIGHT TO INSPECT

We may, at our option, open and inspect your packages prior to or after you give them to us to deliver.

NO C.O.D. SERVICES

We don't provide C.O.D. services.

RESPONSIBILITY FOR PAYMENT

Even if you give us different payment instructions, you will always be primarily responsible for all delivery costs, as well as any costs we may incur in either returning your package to you or warehousing if pending disposition.

QUALIFIED ACCEPTANCE

We reserve the right to reject a shipment at any time, when such shipment would be likely to cause damage or delay to other shipments, equipment or personnel, or if the transportation of which is prohibited by law or is in violation of any rules contained in this Airbill or our Service Guide.

MONEY-BACK GUARANTEE

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund or credit all transportation charges. See current Service Guide for further information.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613



*****MEMORANDUM*****

DATE: 02/17/94

SUBJECT: Results of Pesticide/PCB Analysis;
94-0164 PEELE PESTICIDE DISP
CLAYTON NC
CASE NO: 21362SAS NC: 8134D

FROM: Charles H. Hooper *[Signature]*
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PAT DEROSA

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

ORGANIC DATA QUALIFIER REPORT

Case Number 21362 Project Number 94-0164 SAS Number
 Site ID. Peele Pesticide Disposal, Clayton, NC

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
81711,81712	2-butanone	J	< quantitation limit
81714	all volatiles	J	low internal standard recovery
81715	1,1,1-trichloroethane	J	low internal standard recovery
	carbon tetrachloride	J	low internal standard recovery
	bromodichloromethane	J	low internal standard recovery
	1,2-dichloropropane	J	low internal standard recovery
	cis-1,3-dichloropropene	J	low internal standard recovery
	trichloroethene	J	low internal standard recovery
	dibromochloromethane	J	low internal standard recovery
	1,1,2-trichloroethane	J	low internal standard recovery
	benzene	J	low internal standard recovery
	trans-1,3-dichloropropene	J	low internal standard recovery
	bromoform	J	low internal standard recovery
	4-methyl-2-pentanone	J	low internal standard recovery
	2-hexanone	J	low internal standard recovery
	tetrachloroethene	J	low internal standard recovery
	1,1,2,2-tetrachloroethane	J	low internal standard recovery
	toluene	J	low internal standard recovery
	chlorobenzene	J	low internal standard recovery
	ethylbenzene	J	low internal standard recovery
	styrene	J	low internal standard recovery
	xylenes	J	low internal standard recovery
<u>Extractables</u>			
81708	pyrene	J	< quantitation limit
81710,81719	pyrene	J	low internal standard recovery
	butylbenzylphthalate	J	low internal standard recovery
	3,3'-dichlorobenzidine	J	low internal standard recovery
	benzo(a)anthracene	J	low internal standard recovery
	chrysene	J	low internal standard recovery
	bis(2-ethylhexyl)phthalate	J	low internal standard recovery
81714	hexachlorobutadiene	J	< quantitation limit
81715	2-methylnaphthalene	J	< quantitation limit
	di-n-octylphthalate	J	low internal standard recovery
	benzo(b/k)fluoranthene	J	low internal standard recovery
	benzo(a)pyrene	J	low internal standard recovery
	indeno(1,2,3-cd)pyrene	J	low internal standard recovery
	dibenz(a,h)anthracene	J	low internal standard recovery
	benzo(g,h,i)perylene	J	low internal standard recovery

ORGANIC DATA QUALIFIER REPORT (continued)

Case Number 21362

Project Number 94-0164

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Pesticides</u>			
81709	all compounds	J	exceeded extraction holding times
81710,81713	dieldrin	J	< quantitation limit
81714	aldrin	C	GC/MS confirmed
81715	beta-bhc	N	difference in column quantitations
	dieldrin	J	< quantitation limit
		N	difference in column quantitations
	alpha chlordane	N	difference in column quantitations
	gamma-chlordane	C	GC/MS confirmed
	aldrin	C	GC/MS confirmed
81719	endosulfan sulfate	N	difference in column quantitations
81720	4,4'-DDD	N	difference in column quantitations
81722	4,4'-DDD	R	unexplained inconsistent result
	4,4'-DDT	R	unexplained inconsistent result

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81707 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: B. NICHOLSON **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-SD COLLECTION START: 12/07/93 1105 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB36 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC	21U	METHOXYCHLOR
2.1U	BETA-BHC	4.1U	ENDRIN KETONE
2.1U	DELTA-BHC	4.1U	ENDRIN ALDEHYDE
2.1U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.1U	HEPTACHLOR	2.1U	GAMMA-CHLORDANE /2
2.1U	ALDRIN	2.1U	ALPHA-CHLORDANE /2
2.1U	HEPTACHLOR EPOXIDE	210U	TOXAPHENE
2.1U	ENDOSULFAN I (ALPHA)	41U	PCB-1016 (AROCLOR 1016)
4.1U	DIELDRIN	84U	PCB-1221 (AROCLOR 1221)
6.0U	4,4'-DDE (P,P'-DDE)	41U	PCB-1232 (AROCLOR 1232)
4.1U	ENDRIN	41U	PCB-1242 (AROCLOR 1242)
4.1U	ENDOSULFAN II (BETA)	41U	PCB-1248 (AROCLOR 1248)
4.1U	4,4'-DDD (P,P'-DDD)	41U	PCB-1254 (AROCLOR 1254)
4.1U	ENDOSULFAN SULFATE	41U	PCB-1260 (AROCLOR 1260)
5.0U	4,4'-DDT (P,P'-DDT)	20	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81708 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SD COLLECTION START: 12/07/93 1240 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB37 **
**

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
7.7U	ALPHA-BHC	77U	METHOXYCHLOR
7.7U	BETA-BHC	15U	ENDRIN KETONE
7.7U	DELTA-BHC	15U	ENDRIN ALDEHYDE
7.7U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
7.7U	HEPTACHLOR	7.7U	GAMMA-CHLORDANE /2
7.7U	ALDRIN	7.7U	ALPHA-CHLORDANE /2
7.7U	HEPTACHLOR EPOXIDE	770U	TOXAPHENE
7.7U	ENDOSULFAN I (ALPHA)	150U	PCB-1016 (AROCLOR 1016)
15U	DIELDRIN	300U	PCB-1221 (AROCLOR 1221)
25U	4,4'-DDE (P,P'-DDE)	150U	PCB-1232 (AROCLOR 1232)
15U	ENDRIN	150U	PCB-1242 (AROCLOR 1242)
15U	ENDOSULFAN II (BETA)	150U	PCB-1248 (AROCLOR 1248)
15U	4,4'-DDD (P,P'-DDD)	150U	PCB-1254 (AROCLOR 1254)
15U	ENDOSULFAN SULFATE	150U	PCB-1260 (AROCLOR 1260)
19U	4,4'-DDT (P,P'-DDT)	78	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81709 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-005-PW COLLECTION START: 12/07/93 1255 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB38 **
**

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050UJ	ALPHA-BHC	.50UJ	METHOXYCHLOR
.050UJ	BETA-BHC	.10UJ	ENDRIN KETONE
.050UJ	DELTA-BHC	.10UJ	ENDRIN ALDEHYDE
.050UJ	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
.050UJ	HEPTACHLOR	.050UJ	GAMMA-CHLORDANE /2
.050UJ	ALDRIN	.050UJ	ALPHA-CHLORDANE /2
.050UJ	HEPTACHLOR EPOXIDE	5.0UJ	TOXAPHENE
.050UJ	ENDOSULFAN I (ALPHA)	1.0UJ	PCB-1016 (AROCLOR 1016)
.10UJ	DIELDRIN	2.0UJ	PCB-1221 (AROCLOR 1221)
.10UJ	4,4'-DDE (P,P'-DDE)	1.0UJ	PCB-1232 (AROCLOR 1232)
.10UJ	ENDRIN	1.0UJ	PCB-1242 (AROCLOR 1242)
.10UJ	ENDOSULFAN II (BETA)	1.0UJ	PCB-1248 (AROCLOR 1248)
.10UJ	4,4'-DDD (P,P'-DDD)	1.0UJ	PCB-1254 (AROCLOR 1254)
.10UJ	ENDOSULFAN SULFATE	1.0UJ	PCB-1260 (AROCLOR 1260)
.10UJ	4,4'-DDT (P,P'-DDT)		

REMARKS

HOLDING TIMES EXCEEDED(40 CFR 136, OCTOBER 26, 1984)

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81710 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-SL COLLECTION START: 12/07/93 1445 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB39 **
 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC	20U	METHOXYCHLOR
2.0U	BETA-BHC	3.8U	ENDRIN KETONE
2.0U	DELTA-BHC	3.8U	ENDRIN ALDEHYDE
2.0U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.0U	HEPTACHLOR	2.0U	GAMMA-CHLORDANE /2
2.0U	ALDRIN	2.0U	ALPHA-CHLORDANE /2
2.0U	HEPTACHLOR EPOXIDE	200U	TOXAPHENE
2.0U	ENDOSULFAN I (ALPHA)	38U	PCB-1016 (AROCLOR 1016)
.79J	DIELDRIN	77U	PCB-1221 (AROCLOR 1221)
10	4,4'-DDE (P,P'-DDE)	38U	PCB-1232 (AROCLOR 1232)
3.8U	ENDRIN	38U	PCB-1242 (AROCLOR 1242)
3.8U	ENDOSULFAN II (BETA)	38U	PCB-1248 (AROCLOR 1248)
7.0U	4,4'-DDD (P,P'-DDD)	38U	PCB-1254 (AROCLOR 1254)
3.8U	ENDOSULFAN SULFATE	38U	PCB-1260 (AROCLOR 1260)
7.0U	4,4'-DDT (P,P'-DDT)	13	PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
** PROJECT NO. 94-0164  SAMPLE NO. 81711  SAMPLE TYPE: SEDIMENT  PROG ELEM: SSF  COLLECTED BY: D. RUMFORD  **
** SOURCE: PEELE PESTICIDE DISP  CITY: CLAYTON  ST: NC  **
** STATION ID: PE-003-SD  COLLECTION START: 12/07/93  1615  STOP: 00/00/00  **
** CASE NUMBER: 21362  SAS NUMBER: 8134D  D. NUMBER: GB40  **
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
  
```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
6.8U	ALPHA-BHC	68U	METHOXYCHLOR
6.8U	BETA-BHC	13U	ENDRIN KETONE
6.8U	DELTA-BHC	13U	ENDRIN ALDEHYDE
6.8U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
6.8U	HEPTACHLOR	6.8U	GAMMA-CHLORDANE /2
6.8U	ALDRIN	6.8U	ALPHA-CHLORDANE /2
6.8U	HEPTACHLOR EPOXIDE	680U	TOXAPHENE
6.8U	ENDOSULFAN I (ALPHA)	130U	PCB-1016 (AROCLOR 1016)
13U	DIELDRIN	270U	PCB-1221 (AROCLOR 1221)
38	4,4'-DDE (P,P'-DDE)	130U	PCB-1232 (AROCLOR 1232)
13U	ENDRIN	130U	PCB-1242 (AROCLOR 1242)
13U	ENDOSULFAN II (BETA)	130U	PCB-1248 (AROCLOR 1248)
21U	4,4'-DDD (P,P'-DDD)	130U	PCB-1254 (AROCLOR 1254)
13U	ENDOSULFAN SULFATE	130U	PCB-1260 (AROCLOR 1260)
54U	4,4'-DDT (P,P'-DDT)	75	PERCENT MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** ** ** ** **
** PROJECT NO. 94-0164  SAMPLE NO. 81712  SAMPLE TYPE: SEDIMENT  PROG ELEM: SSF  COLLECTED BY: D. RUMFORD  **
** SOURCE: PEELE PESTICIDE DISP  CITY: CLAYTON  ST: NC  **
** STATION ID: PE-103-SD  COLLECTION START: 12/07/93  1615  STOP: 00/00/00  **
** CASE NUMBER: 21362  SAS NUMBER: 8134D  D. NUMBER: GB41  **
** ** ** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
6.3U	ALPHA-BHC	63U	METHOXYCHLOR
6.3U	BETA-BHC	12U	ENDRIN KETONE
6.3U	DELTA-BHC	12U	ENDRIN ALDEHYDE
6.3U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
6.3U	HEPTACHLOR	6.3U	GAMMA-CHLORDANE /2
6.3U	ALDRIN	6.3U	ALPHA-CHLORDANE /2
6.3U	HEPTACHLOR EPOXIDE	630U	TOXAPHENE
6.3U	ENDOSULFAN I (ALPHA)	120U	PCB-1016 (AROCLOR 1016)
12U	DIELDRIN	250U	PCB-1221 (AROCLOR 1221)
28	4,4'-DDE (P,P'-DDE)	120U	PCB-1232 (AROCLOR 1232)
12U	ENDRIN	120U	PCB-1242 (AROCLOR 1242)
12U	ENDOSULFAN II (BETA)	120U	PCB-1248 (AROCLOR 1248)
13U	4,4'-DDD (P,P'-DDD)	120U	PCB-1254 (AROCLOR 1254)
12U	ENDOSULFAN SULFATE	120U	PCB-1260 (AROCLOR 1260)
20U	4,4'-DDT (P,P'-DDT)	73	PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81713 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-004-SD COLLECTION START: 12/08/93 1000 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB42 **
 ** ** ** **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.3U	ALPHA-BHC	23U	METHOXYCHLOR
2.3U	BETA-BHC	4.5U	ENDRIN KETONE
2.3U	DELTA-BHC	4.5U	ENDRIN ALDEHYDE
2.3U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
2.3U	HEPTACHLOR	2.3U	GAMMA-CHLORDANE /2
2.3U	ALDRIN	2.3U	ALPHA-CHLORDANE /2
2.3U	HEPTACHLOR EPOXIDE	230U	TOXAPHENE
2.3U	ENDOSULFAN I (ALPHA)	45U	PCB-1016 (AROCLOR 1016)
1.7J	DIELDRIN	91U	PCB-1221 (AROCLOR 1221)
6.0U	4,4'-DDE (P,P'-DDE)	45U	PCB-1232 (AROCLOR 1232)
4.5U	ENDRIN	45U	PCB-1242 (AROCLOR 1242)
4.5U	ENDOSULFAN II (BETA)	45U	PCB-1248 (AROCLOR 1248)
51	4,4'-DDD (P,P'-DDD)	45U	PCB-1254 (AROCLOR 1254)
4.5U	ENDOSULFAN SULFATE	45U	PCB-1260 (AROCLOR 1260)
26U	4,4'-DDT (P,P'-DDT)	26	PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
** PROJECT NO. 94-0164  SAMPLE NO. 81714  SAMPLE TYPE: SOIL  PROG ELEM: SSF  COLLECTED BY: H. ZINN  **
** SOURCE: PEELE PESTICIDE DISP  CITY: CLAYTON  ST: NC  **
** STATION ID: PE-002-SL  COLLECTION START: 12/08/93  1120  STOP: 00/00/00  **
** CASE NUMBER: 21362  SAS NUMBER: 8134D  D. NUMBER: GB43  **
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
240000U	ALPHA-BHC	2400000U	METHOXYCHLOR
240000U	BETA-BHC	460000U	ENDRIN KETONE
240000U	DELTA-BHC	460000U	ENDRIN ALDEHYDE
240000U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
240000U	HEPTACHLOR	240000U	GAMMA-CHLORDANE /2
1000000C	ALDRIN	240000U	ALPHA-CHLORDANE /2
240000U	HEPTACHLOR EPOXIDE	2.4E07U	TOXAPHENE
240000U	ENDOSULFAN I (ALPHA)	4600000U	PCB-1016 (AROCLOR 1016)
670000	DIELDRIN	9400000U	PCB-1221 (AROCLOR 1221)
600000	4,4'-DDE (P,P'-DDE)	4600000U	PCB-1232 (AROCLOR 1232)
460000U	ENDRIN	4600000U	PCB-1242 (AROCLOR 1242)
460000U	ENDOSULFAN II (BETA)	4600000U	PCB-1248 (AROCLOR 1248)
1100000	4,4'-DDD (P,P'-DDD)	4600000U	PCB-1254 (AROCLOR 1254)
460000U	ENDOSULFAN SULFATE	4600000U	PCB-1260 (AROCLOR 1260)
12000000	4,4'-DDT (P,P'-DDT)	29	PERCENT MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81715 SAMPLE TYPE: SOIL   PROG ELEM: SSF   COLLECTED BY: H. ZINN   **
** SOURCE: PEELE PESTICIDE DISP                               CITY: CLAYTON   ST: NC   **
** STATION ID: PE-003-SL                                     COLLECTION START: 12/08/93 1240 STOP: 00/00/00   **
** CASE NUMBER: 21362           SAS NUMBER: 8134D           D. NUMBER: GB44   **
** ** ** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
22000U	ALPHA-BHC	220000U	METHOXYCHLOR
24000N	BETA-BHC	43000U	ENDRIN KETONE
22000U	DELTA-BHC	43000U	ENDRIN ALDEHYDE
22000U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
22000U	HEPTACHLOR	72000C	GAMMA-CHLORDANE /2
52000C	ALDRIN	22000N	ALPHA-CHLORDANE /2
22000U	HEPTACHLOR EPOXIDE	9200000U	TOXAPHENE
22000U	ENDOSULFAN I (ALPHA)	430000U	PCB-1016 (AROCLOR 1016)
39000JN	DIELDRIN	870000U	PCB-1221 (AROCLOR 1221)
58000	4,4'-DDE (P,P'-DDE)	430000U	PCB-1232 (AROCLOR 1232)
43000U	ENDRIN	430000U	PCB-1242 (AROCLOR 1242)
43000U	ENDOSULFAN II (BETA)	430000U	PCB-1248 (AROCLOR 1248)
990000	4,4'-DDD (P,P'-DDD)	430000U	PCB-1254 (AROCLOR 1254)
43000U	ENDOSULFAN SULFATE	430000U	PCB-1260 (AROCLOR 1260)
440000	4,4'-DDT (P,P'-DDT)	23	PERCENT MOISTURE

FOOTNOTES

- *A-AVERAGE VALUE
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS
 - *NA-NOT ANALYZED
 - *NAI-INTERFERENCES
 - *J-ESTIMATED VALUE
 - *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81716 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-PW COLLECTION START: 12/08/93 1145 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB45 **
 ** ** ** **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050U	ALPHA-BHC	.50U	METHOXYCHLOR
.050U	BETA-BHC	.10U	ENDRIN KETONE
.050U	DELTA-BHC	.10U	ENDRIN ALDEHYDE
.050U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
.050U	HEPTACHLOR	.050U	GAMMA-CHLORDANE /2
.050U	ALDRIN	.050U	ALPHA-CHLORDANE /2
.050U	HEPTACHLOR EPOXIDE	5.0U	TOXAPHENE
.050U	ENDOSULFAN I (ALPHA)	1.0U	PCB-1016 (AROCLOR 1016)
.10U	DIELDRIN	2.0U	PCB-1221 (AROCLOR 1221)
.10U	4,4'-DDE (P,P'-DDE)	1.0U	PCB-1232 (AROCLOR 1232)
.10U	ENDRIN	1.0U	PCB-1242 (AROCLOR 1242)
.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1248 (AROCLOR 1248)
.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1254 (AROCLOR 1254)
.10U	ENDOSULFAN SULFATE	1.0U	PCB-1260 (AROCLOR 1260)
.10U	4,4'-DDT (P,P'-DDT)		

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81717 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-002-PW COLLECTION START: 12/08/93 1200 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB46 **
 ** ** ** **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050U	ALPHA-BHC	.50U	METHOXYCHLOR
.050U	BETA-BHC	.10U	ENDRIN KETONE
.050U	DELTA-BHC	.10U	ENDRIN ALDEHYDE
.050U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
.050U	HEPTACHLOR	.050U	GAMMA-CHLORDANE /2
.050U	ALDRIN	.050U	ALPHA-CHLORDANE /2
.050U	HEPTACHLOR EPOXIDE	5.0U	TOXAPHENE
.050U	ENDOSULFAN I (ALPHA)	1.0U	PCB-1016 (AROCLOR 1016)
.10U	DIELDRIN	2.0U	PCB-1221 (AROCLOR 1221)
.10U	4,4'-DDE (P,P'-DDE)	1.0U	PCB-1232 (AROCLOR 1232)
.10U	ENDRIN	1.0U	PCB-1242 (AROCLOR 1242)
.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1248 (AROCLOR 1248)
.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1254 (AROCLOR 1254)
.10U	ENDOSULFAN SULFATE	1.0U	PCB-1260 (AROCLOR 1260)
.10U	4,4'-DDT (P,P'-DDT)		

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** ** ** ** **
** PROJECT NO. 94-0164  SAMPLE NO. 81718  SAMPLE TYPE: GRNDWATER  PROG ELEM: SSF  COLLECTED BY: H. ZINN  **
** SOURCE: PEELE PESTICIDE DISP  CITY: CLAYTON  ST: NC  **
** STATION ID: PE-001-TW  COLLECTION START: 12/08/93  1425  STOP: 00/00/00  **
** CASE NUMBER: 21362  SAS NUMBER: 8134D  D. NUMBER: GB47  **
*** ** ** ** **
  
```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050U	ALPHA-BHC	.50U	METHOXYCHLOR
.050U	BETA-BHC	.10U	ENDRIN KETONE
.050U	DELTA-BHC	.10U	ENDRIN ALDEHYDE
.050U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
.050U	HEPTACHLOR	.050U	GAMMA-CHLORDANE /2
.050U	ALDRIN	.050U	ALPHA-CHLORDANE /2
.050U	HEPTACHLOR EPOXIDE	5.0U	TOXAPHENE
.050U	ENDOSULFAN I (ALPHA)	1.0U	PCB-1016 (AROCLOR 1016)
.10U	DIELDRIN	2.0U	PCB-1221 (AROCLOR 1221)
.10U	4,4'-DDE (P,P'-DDE)	1.0U	PCB-1232 (AROCLOR 1232)
.10U	ENDRIN	1.0U	PCB-1242 (AROCLOR 1242)
.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1248 (AROCLOR 1248)
.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1254 (AROCLOR 1254)
.10U	ENDOSULFAN SULFATE	1.0U	PCB-1260 (AROCLOR 1260)
.10U	4,4'-DDT (P,P'-DDT)		

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81719 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-004-SL COLLECTION START: 12/08/93 1525 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB48 **
 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
200U	ALPHA-BHC	2000U	METHOXYCHLOR
200U	BETA-BHC	390U	ENDRIN KETONE
200U	DELTA-BHC	390U	ENDRIN ALDEHYDE
200U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
200U	HEPTACHLOR	480	GAMMA-CHLORDANE /2
420	ALDRIN	380	ALPHA-CHLORDANE /2
200U	HEPTACHLOR EPOXIDE	140000U	TOXAPHENE
200U	ENDOSULFAN I (ALPHA)	3900U	PCB-1016 (AROCLOR 1016)
680	DIELDRIN	8000U	PCB-1221 (AROCLOR 1221)
1400	4,4'-DDE (P,P'-DDE)	3900U	PCB-1232 (AROCLOR 1232)
730	ENDRIN	3900U	PCB-1242 (AROCLOR 1242)
390U	ENDOSULFAN II (BETA)	3900U	PCB-1248 (AROCLOR 1248)
390U	4,4'-DDD (P,P'-DDD)	3900U	PCB-1254 (AROCLOR 1254)
750N	ENDOSULFAN SULFATE	3900U	PCB-1260 (AROCLOR 1260)
8500	4,4'-DDT (P,P'-DDT)	16	PERCENT MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
** PROJECT NO. 94-0164  SAMPLE NO. 81720  SAMPLE TYPE: SOIL  PROG ELEM: SSF  COLLECTED BY: H. ZINN  **
** SOURCE: PEELE PESTICIDE DISP  CITY: CLAYTON  ST: NC  **
** STATION ID: PE-104-SL  COLLECTION START: 12/08/93  1535  STOP: 00/00/00  **
** CASE NUMBER: 21362  SAS NUMBER: 8134D  D. NUMBER: GB49  **
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
  
```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
200U	ALPHA-BHC	2000U	METHOXYCHLOR
200U	BETA-BHC	390U	ENDRIN KETONE
200U	DELTA-BHC	410U	ENDRIN ALDEHYDE
200U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
200U	HEPTACHLOR	230	GAMMA-CHLORDANE /2
200U	ALDRIN	260	ALPHA-CHLORDANE /2
200U	HEPTACHLOR EPOXIDE	130000U	TOXAPHENE
200U	ENDOSULFAN I (ALPHA)	3900U	PCB-1016 (AROCLOR 1016)
550	DIELDRIN	8000U	PCB-1221 (AROCLOR 1221)
1000	4,4'-DDE (P,P'-DDE)	3900U	PCB-1232 (AROCLOR 1232)
540	ENDRIN	3900U	PCB-1242 (AROCLOR 1242)
390U	ENDOSULFAN II (BETA)	3900U	PCB-1248 (AROCLOR 1248)
1200N	4,4'-DDD (P,P'-DDD)	3900U	PCB-1254 (AROCLOR 1254)
390U	ENDOSULFAN SULFATE	3900U	PCB-1260 (AROCLOR 1260)
15000	4,4'-DDT (P,P'-DDT)	16	PERCENT MOISTURE

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** *****
** PROJECT NO. 94-0164   SAMPLE NO. 81721   SAMPLE TYPE: GRNDWATER   PROG ELEM: SSF   COLLECTED BY: D. RUMFORD   **
** SOURCE: PEELE PESTICIDE DISP   CITY: CLAYTON   ST: NC   **
** STATION ID: PE-004-PW   COLLECTION START: 12/08/93   1515   STOP: 00/00/00   **
** CASE NUMBER: 21362   SAS NUMBER: 8134D   D. NUMBER: GB50   **
** *****
  
```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050U	ALPHA-BHC	.50U	METHOXYCHLOR
.050U	BETA-BHC	.10U	ENDRIN KETONE
.050U	DELTA-BHC	.10U	ENDRIN ALDEHYDE
.050U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
.050U	HEPTACHLOR	.050U	GAMMA-CHLORDANE /2
.050U	ALDRIN	.050U	ALPHA-CHLORDANE /2
.050U	HEPTACHLOR EPOXIDE	5.0U	TOXAPHENE
.050U	ENDOSULFAN I (ALPHA)	1.0U	PCB-1016 (AROCLOR 1016)
.10U	DIELDRIN	2.0U	PCB-1221 (AROCLOR 1221)
.10U	4,4'-DDE (P,P'-DDE)	1.0U	PCB-1232 (AROCLOR 1232)
.10U	ENDRIN	1.0U	PCB-1242 (AROCLOR 1242)
.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1248 (AROCLOR 1248)
.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1254 (AROCLOR 1254)
.10U	ENDOSULFAN SULFATE	1.0U	PCB-1260 (AROCLOR 1260)
.10U	4,4'-DDT (P,P'-DDT)		

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81722 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-104-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D D. NUMBER: GB51 **
 *** ** ** ** **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050U	ALPHA-BHC	.50U	METHOXYCHLOR
.050U	BETA-BHC	.10U	ENDRIN KETONE
.050U	DELTA-BHC	.10U	ENDRIN ALDEHYDE
.050U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
.050U	HEPTACHLOR	.050U	GAMMA-CHLORDANE /2
.050U	ALDRIN	.050U	ALPHA-CHLORDANE /2
.050U	HEPTACHLOR EPOXIDE	5.0U	TOXAPHENE
.050U	ENDOSULFAN I (ALPHA)	1.0U	PCB-1016 (AROCLOR 1016)
.10U	DIELDRIN	2.0U	PCB-1221 (AROCLOR 1221)
.10U	4,4'-DDE (P,P'-DDE)	1.0U	PCB-1232 (AROCLOR 1232)
.10U	ENDRIN	1.0U	PCB-1242 (AROCLOR 1242)
.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1248 (AROCLOR 1248)
.10UR	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1254 (AROCLOR 1254)
.10U	ENDOSULFAN SULFATE	1.0U	PCB-1260 (AROCLOR 1260)
.10UR	4,4'-DDT (P,P'-DDT)		

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PESTICIDES/PCB'S DATA REPORT

```

*** *****
** PROJECT NO. 94-0164   SAMPLE NO. 81723   SAMPLE TYPE: GRNDWATER   PROG ELEM: SSF   COLLECTED BY: D. RUMFORD
** SOURCE: PEELE PESTICIDE DISP   CITY: CLAYTON   ST: NC
** STATION ID: PE-003-PW   COLLECTION START: 12/08/93 1635   STOP: 00/00/00
** CASE NUMBER: 21362   SAS NUMBER: 8134D   D. NUMBER: GB52
**
*** *****
  
```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
.050U	ALPHA-BHC	.50U	METHOXYCHLOR
.050U	BETA-BHC	.10U	ENDRIN KETONE
.050U	DELTA-BHC	.10U	ENDRIN ALDEHYDE
.050U	GAMMA-BHC (LINDANE)	---	CHLORDANE (TECH. MIXTURE) /1
.050U	HEPTACHLOR	.050U	GAMMA-CHLORDANE /2
.050U	ALDRIN	.050U	ALPHA-CHLORDANE /2
.050U	HEPTACHLOR EPOXIDE	5.0U	TOXAPHENE
.050U	ENDOSULFAN I (ALPHA)	1.0U	PCB-1016 (AROCLOR 1016)
.10U	DIELDRIN	2.0U	PCB-1221 (AROCLOR 1221)
.10U	4,4'-DDE (P,P'-DDE)	1.0U	PCB-1232 (AROCLOR 1232)
.10U	ENDRIN	1.0U	PCB-1242 (AROCLOR 1242)
.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1248 (AROCLOR 1248)
.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1254 (AROCLOR 1254)
.10U	ENDOSULFAN SULFATE	1.0U	PCB-1260 (AROCLOR 1260)
.10U	4,4'-DDT (P,P'-DDT)		

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 - *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 - *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 - *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.
 - *C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

RECEIVED

FEB 25 1994

SUPERFUND SECTION

*****MEMORANDUM*****

DATE: 02/17/94

SUBJECT: Results of Extractable Organic Analysis;
94-0164 PEELE PESTICIDE DISP
CLAYTON NC
CASE NO: 21362SAS NC: 8134D

FROM: Charles H. Hooper *CH Hooper*
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PAT DEROSA

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

ORGANIC DATA QUALIFIER REPORT

Case Number 21362 Project Number 94-0164 SAS Number
 Site ID. Peele Pesticide Disposal, Clayton, NC

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
81711,81712	2-butanone	J	< quantitation limit
81714	all volatiles	J	low internal standard recovery
81715	1,1,1-trichloroethane	J	low internal standard recovery
	carbon tetrachloride	J	low internal standard recovery
	bromodichloromethane	J	low internal standard recovery
	1,2-dichloropropane	J	low internal standard recovery
	cis-1,3-dichloropropene	J	low internal standard recovery
	trichloroethene	J	low internal standard recovery
	dibromochloromethane	J	low internal standard recovery
	1,1,2-trichloroethane	J	low internal standard recovery
	benzene	J	low internal standard recovery
	trans-1,3-dichloropropene	J	low internal standard recovery
	bromoform	J	low internal standard recovery
	4-methyl-2-pentanone	J	low internal standard recovery
	2-hexanone	J	low internal standard recovery
	tetrachloroethene	J	low internal standard recovery
	1,1,2,2-tetrachloroethane	J	low internal standard recovery
	toluene	J	low internal standard recovery
	chlorobenzene	J	low internal standard recovery
	ethylbenzene	J	low internal standard recovery
	styrene	J	low internal standard recovery
	xylenes	J	low internal standard recovery
<u>Extractables</u>			
81708	pyrene	J	< quantitation limit
81710,81719	pyrene	J	low internal standard recovery
	butylbenzylphthalate	J	low internal standard recovery
	3,3'-dichlorobenzidine	J	low internal standard recovery
	benzo(a)anthracene	J	low internal standard recovery
	chrysene	J	low internal standard recovery
	bis(2-ethylhexyl)phthalate	J	low internal standard recovery
81714	hexachlorobutadiene	J	< quantitation limit
81715	2-methylnaphthalene	J	< quantitation limit
	di-n-octylphthalate	J	low internal standard recovery
	benzo(b/k)fluoranthene	J	low internal standard recovery
	benzo(a)pyrene	J	low internal standard recovery
	indeno(1,2,3-cd)pyrene	J	low internal standard recovery
	dibenz(a,h)anthracene	J	low internal standard recovery
	benzo(g,h,i)perylene	J	low internal standard recovery

ORGANIC DATA QUALIFIER REPORT (continued)

Case Number 21362

Project Number 94-0164

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Pesticides</u>			
81709	all compounds	J	exceeded extraction holding times
81710,81713	dieldrin	J	< quantitation limit
81714	aldrin	C	GC/MS confirmed
81715	beta-bhc	N	difference in column quantitations
	dieldrin	J	< quantitation limit
	alpha chlordane	N	difference in column quantitations
	gamma-chlordane	C	GC/MS confirmed
	aldrin	C	GC/MS confirmed
81719	endosulfan sulfate	N	difference in column quantitations
81720	4,4'-DDD	N	difference in column quantitations
81722	4,4'-DDD	R	unexplained inconsistent result
	4,4'-DDT	R	unexplained inconsistent result

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81707 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: B. NICHOLSON **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-SD COLLECTION START: 12/07/93 1105 STOP: 00/00/00 **
**

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB36 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
410U	PHENOL	1000U	3-NITROANILINE
410U	BIS(2-CHLOROETHYL) ETHER	410U	ACENAPHTHENE
410U	2-CHLOROPHENOL	1000U	2,4-DINITROPHENOL
410U	1,3-DICHLOROBENZENE	1000U	4-NITROPHENOL
410U	1,4-DICHLOROBENZENE	410U	DIBENZOFURAN
410U	1,2-DICHLOROBENZENE	410U	2,4-DINITROTOLUENE
410U	2-METHYLPHENOL	410U	DIETHYL PHTHALATE
410U	2,2'-CHLOROISOPROPYLETHER	410U	4-CHLOROPHENYL PHENYL ETHER
410U	(3-AND/OR 4-)METHYLPHENOL	410U	FLUORENE
410U	N-NITROSODI-N-PROPYLAMINE	1000U	4-NITROANILINE
410U	HEXACHLOROETHANE	1000U	2-METHYL-4,6-DINITROPHENOL
410U	NITROBENZENE	410U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
410U	ISOPHORONE	410U	4-BROMOPHENYL PHENYL ETHER
410U	2-NITROPHENOL	410U	HEXACHLOROENZENE (HCB)
410U	2,4-DIMETHYLPHENOL	1000U	PENTACHLOROPHENOL
410U	BIS(2-CHLOROETHOXY) METHANE	410U	PHENANTHRENE
410U	2,4-DICHLOROPHENOL	410U	ANTHRACENE
410U	1,2,4-TRICHLOROBENZENE	410U	CARBAZOLE
410U	NAPHTHALENE	410U	DI-N-BUTYLPHTHALATE
410U	4-CHLOROANILINE	410U	FLUORANTHENE
410U	HEXACHLOROBUTADIENE	410U	PYRENE
410U	4-CHLORO-3-METHYLPHENOL	410U	BENZYL BUTYL PHTHALATE
410U	2-METHYLNAPHTHALENE	410U	3,3'-DICHLOROBENZIDINE
410U	HEXACHLOROCYCLOPENTADIENE (HCCP)	410U	BENZO(A)ANTHRACENE
410U	2,4,6-TRICHLOROPHENOL	410U	CHRYSENE
1000U	2,4,5-TRICHLOROPHENOL	410U	BIS(2-ETHYLHEXYL) PHTHALATE
410U	2-CHLORONAPHTHALENE	410U	DI-N-OCTYLPHTHALATE
1000U	2-NITROANILINE	410U	BENZO(B AND/OR K)FLUORANTHENE
410U	DIMETHYL PHTHALATE	410U	BENZO-A-PYRENE
410U	ACENAPHTHYLENE	410U	INDENO (1,2,3-CD) PYRENE
410U	2,6-DINITROTOLUENE	410U	DIBENZO(A,H)ANTHRACENE
		410U	BENZO(GHI)PERYLENE
		20	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81708 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-002-SD COLLECTION START: 12/07/93 1240 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB37 **
 *** **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1500U	PHENOL	3600U	3-NITROANILINE
1500U	BIS(2-CHLOROETHYL) ETHER	1500U	ACENAPHTHENE
1500U	2-CHLOROPHENOL	3600U	2,4-DINITROPHENOL
1500U	1,3-DICHLOROBENZENE	3600U	4-NITROPHENOL
1500U	1,4-DICHLOROBENZENE	1500U	DIBENZOFURAN
1500U	1,2-DICHLOROBENZENE	1500U	2,4-DINITROTOLUENE
1500U	2-METHYLPHENOL	1500U	DIETHYL PHTHALATE
1500U	2,2'-CHLOROISOPROPYLETHER	1500U	4-CHLOROPHENYL PHENYL ETHER
1500U	(3-AND/OR 4-)METHYLPHENOL	1500U	FLUORENE
1500U	N-NITROSODI-N-PROPYLAMINE	3600U	4-NITROANILINE
1500U	HEXACHLOROETHANE	3600U	2-METHYL-4,6-DINITROPHENOL
1500U	NITROBENZENE	1500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1500U	ISOPHORONE	1500U	4-BROMOPHENYL PHENYL ETHER
1500U	2-NITROPHENOL	1500U	HEXACHLOROENZENE (HCB)
1500U	2,4-DIMETHYLPHENOL	3600U	PENTACHLOROPHENOL
1500U	BIS(2-CHLOROETHOXY) METHANE	1500U	PHENANTHRENE
1500U	2,4-DICHLOROPHENOL	1500U	ANTHRACENE
1500U	1,2,4-TRICHLOROBENZENE	1500U	CARBAZOLE
1500U	NAPHTHALENE	1500U	DI-N-BUTYL PHTHALATE
1500U	4-CHLOROANILINE	1500U	FLUORANTHENE
1500U	HEXACHLOROBUTADIENE	170J	PYRENE
1500U	4-CHLORO-3-METHYLPHENOL	1500U	BENZYL BUTYL PHTHALATE
1500U	2-METHYLNAPHTHALENE	1500U	3,3'-DICHLOROBENZIDINE
1500U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1500U	BENZO(A)ANTHRACENE
1500U	2,4,6-TRICHLOROPHENOL	1500U	CHRYSENE
3600U	2,4,5-TRICHLOROPHENOL	1500U	BIS(2-ETHYLHEXYL) PHTHALATE
1500U	2-CHLORONAPHTHALENE	1500U	DI-N-OCTYL PHTHALATE
3600U	2-NITROANILINE	1500U	BENZO(B AND/OR K)FLUORANTHENE
1500U	DIMETHYL PHTHALATE	1500U	BENZO-A-PYRENE
1500U	ACENAPHTHYLENE	1500U	INDENO (1,2,3-CD) PYRENE
1500U	2,6-DINITROTOLUENE	1500U	DIBENZO(A,H)ANTHRACENE
		1500U	BENZO(GHI)PERYLENE
		78	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** * * * *
** PROJECT NO. 94-0164 SAMPLE NO. 81709 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-005-PW COLLECTION START: 12/07/93 1255 STOP: 00/00/00 **
** * * * * *

*** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB38 ***
** * * * * *

UG/L ANALYTICAL RESULTS

UG/L ANALYTICAL RESULTS

10U PHENOL
10U BIS(2-CHLOROETHYL) ETHER
10U 2-CHLOROPHENOL
10U 1,3-DICHLOROBENZENE
10U 1,4-DICHLOROBENZENE
10U 1,2-DICHLOROBENZENE
10U 2-METHYLPHENOL
10U 2,2'-CHLOROISOPROPYLETHER
10U (3-AND/OR 4-)METHYLPHENOL
10U N-NITROSODI-N-PROPYLAMINE
10U HEXACHLOROETHANE
10U NITROBENZENE
10U ISOPHORONE
10U 2-NITROPHENOL
10U 2,4-DIMETHYLPHENOL
10U BIS(2-CHLOROETHOXY) METHANE
10U 2,4-DICHLOROPHENOL
10U 1,2,4-TRICHLOROBENZENE
10U NAPHTHALENE
10U 4-CHLOROANILINE
10U HEXACHLOROBUTADIENE
10U 4-CHLORO-3-METHYLPHENOL
10U 2-METHYLNAPHTHALENE
10U HEXACHLOROCYCLOPENTADIENE (HCCP)
10U 2,4,6-TRICHLOROPHENOL
25U 2,4,5-TRICHLOROPHENOL
10U 2-CHLORONAPHTHALENE
25U 2-NITROANILINE
10U DIMETHYL PHTHALATE
10U ACENAPHTHYLENE
10U 2,6-DINITROTOLUENE

25U 3-NITROANILINE
10U ACENAPHTHENE
25U 2,4-DINITROPHENOL
25U 4-NITROPHENOL
10U DIBENZOFURAN
10U 2,4-DINITROTOLUENE
10U DIETHYL PHTHALATE
10U 4-CHLOROPHENYL PHENYL ETHER
10U FLUORENE
25U 4-NITROANILINE
25U 2-METHYL-4,6-DINITROPHENOL
10U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U 4-BROMOPHENYL PHENYL ETHER
10U HEXACHLOROBENZENE (HCB)
25U PENTACHLOROPHENOL
10U PHENANTHRENE
10U ANTHRACENE
10U CARBAZOLE
10U DI-N-BUTYLPHTHALATE
10U FLUORANTHENE
10U PYRENE
10U BENZYL BUTYL PHTHALATE
10U 3,3'-DICHLOROBENZIDINE
10U BENZO(A)ANTHRACENE
10U CHRYSENE
10U BIS(2-ETHYLHEXYL) PHTHALATE
10U DI-N-OCTYLPHTHALATE
10U BENZO(B AND/OR K)FLUORANTHENE
10U BENZO-A-PYRENE
10U INDENO (1,2,3-CD) PYRENE
10U DIBENZO(A,H)ANTHRACENE
10U BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81710 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-SL COLLECTION START: 12/07/93 1445 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB39 **
 *** ** ** ** **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
380U	PHENOL	920U	3-NITROANILINE
380U	BIS(2-CHLOROETHYL) ETHER	380U	ACENAPHTHENE
380U	2-CHLOROPHENOL	920U	2,4-DINITROPHENOL
380U	1,3-DICHLOROBENZENE	920U	4-NITROPHENOL
380U	1,4-DICHLOROBENZENE	380U	DIBENZOFURAN
380U	1,2-DICHLOROBENZENE	380U	2,4-DINITROTOLUENE
380U	2-METHYLPHENOL	380U	DIETHYL PHTHALATE
380U	2,2'-CHLOROISOPROPYLETHER	380U	4-CHLOROPHENYL PHENYL ETHER
380U	(3-AND/OR 4-)METHYLPHENOL	380U	FLUORENE
380U	N-NITROSODI-N-PROPYLAMINE	920U	4-NITROANILINE
380U	HEXACHLOROETHANE	920U	2-METHYL-4,6-DINITROPHENOL
380U	NITROBENZENE	380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	ISOPHORONE	380U	4-BROMOPHENYL PHENYL ETHER
380U	2-NITROPHENOL	380U	HEXACHLOROBENZENE (HCB)
380U	2,4-DIMETHYLPHENOL	920U	PENTACHLOROPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE	380U	PHENANTHRENE
380U	2,4-DICHLOROPHENOL	380U	ANTHRACENE
380U	1,2,4-TRICHLOROBENZENE	380U	CARBAZOLE
380U	NAPHTHALENE	380U	DI-N-BUTYL PHTHALATE
380U	4-CHLOROANILINE	380U	FLUORANTHENE
380U	HEXACHLOROBUTADIENE	380UJ	PYRENE
380U	4-CHLORO-3-METHYLPHENOL	380UJ	BENZYL BUTYL PHTHALATE
380U	2-METHYLNAPHTHALENE	380UJ	3,3'-DICHLOROBENZIDINE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)	380UJ	BENZO(A)ANTHRACENE
380U	2,4,6-TRICHLOROPHENOL	380UJ	CHRYSENE
920U	2,4,5-TRICHLOROPHENOL	380UJ	BIS(2-ETHYLHEXYL) PHTHALATE
380U	2-CHLORONAPHTHALENE	380U	DI-N-OCTYL PHTHALATE
920U	2-NITROANILINE	380U	BENZO(B AND/OR K)FLUORANTHENE
380U	DIMETHYL PHTHALATE	380U	BENZO-A-PYRENE
380U	ACENAPHTHYLENE	380U	INDENO (1,2,3-CD) PYRENE
380U	2,6-DINITROTOLUENE	380U	DIBENZO(A,H)ANTHRACENE
		380U	BENZO(GHI)PERYLENE
		13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

```

*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT   PROG ELEM: SSF   COLLECTED BY: D. RUMFORD   **
** SOURCE: PEELE PESTICIDE DISP   CITY: CLAYTON   ST: NC   **
** STATION ID: PE-003-SD   COLLECTION START: 12/07/93 1615   STOP: 00/00/00   **
**
** CASE NO.: 21362   SAS NO.: 8134D   D. NO.: GB40   **
*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1300U	PHENOL	3200U	3-NITROANILINE
1300U	BIS(2-CHLOROETHYL) ETHER	1300U	ACENAPHTHENE
1300U	2-CHLOROPHENOL	3200U	2,4-DINITROPHENOL
1300U	1,3-DICHLOROBENZENE	3200U	4-NITROPHENOL
1300U	1,4-DICHLOROBENZENE	1300U	DIBENZOFURAN
1300U	1,2-DICHLOROBENZENE	1300U	2,4-DINITROTOLUENE
1300U	2-METHYLPHENOL	1300U	DIETHYL PHTHALATE
1300U	2,2'-CHLOROISOPROPYLETHER	1300U	4-CHLOROPHENYL PHENYL ETHER
1300U	(3-AND/OR 4-)METHYLPHENOL	1300U	FLUORENE
1300U	N-NITROSODI-N-PROPYLAMINE	3200U	4-NITROANILINE
1300U	HEXACHLOROETHANE	3200U	2-METHYL-4,6-DINITROPHENOL
1300U	NITROBENZENE	1300U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1300U	ISOPHORONE	1300U	4-BROMOPHENYL PHENYL ETHER
1300U	2-NITROPHENOL	1300U	HEXACHLOROENZENE (HCB)
1300U	2,4-DIMETHYLPHENOL	3200U	PENTACHLOROPHENOL
1300U	BIS(2-CHLOROETHOXY) METHANE	1300U	PHENANTHRENE
1300U	2,4-DICHLOROPHENOL	1300U	ANTHRACENE
1300U	1,2,4-TRICHLOROBENZENE	1300U	CARBAZOLE
1300U	NAPHTHALENE	1300U	DI-N-BUTYLPHTHALATE
1300U	4-CHLOROANILINE	1300U	FLUORANTHENE
1300U	HEXACHLOROBUTADIENE	1300U	PYRENE
1300U	4-CHLORO-3-METHYLPHENOL	1300U	BENZYL BUTYL PHTHALATE
1300U	2-METHYLNAPHTHALENE	1300U	3,3'-DICHLOROBENZIDINE
1300U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1300U	BENZO(A)ANTHRACENE
1300U	2,4,6-TRICHLOROPHENOL	1300U	CHRYSENE
3200U	2,4,5-TRICHLOROPHENOL	1300U	BIS(2-ETHYLHEXYL) PHTHALATE
1300U	2-CHLORONAPHTHALENE	1300U	DI-N-OCTYLPHTHALATE
3200U	2-NITROANILINE	1300U	BENZO(B AND/OR K)FLUORANTHENE
1300U	DIMETHYL PHTHALATE	1300U	BENZO-A-PYRENE
1300U	ACENAPHTHYLENE	1300U	INDENO (1,2,3-CD) PYRENE
1300U	2,6-DINITROTOLUENE	1300U	DIBENZO(A,H)ANTHRACENE
		1300U	BENZO(GHI)PERYLENE
		75	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

```

*** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT   PROG ELEM: SSF   COLLECTED BY: D. RUMFORD   **
** SOURCE: PEELE PESTICIDE DISP                               CITY: CLAYTON                               ST: NC                               **
** STATION ID: PE-103-SD                                     COLLECTION START: 12/07/93 1615   STOP: 00/00/00                         **
**
** CASE NO.: 21362                                           SAS NO.: 8134D                               D. NO.: GB41                           **
*** ** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1200U	PHENOL	3000U	3-NITROANILINE
1200U	BIS(2-CHLOROETHYL) ETHER	1200U	ACENAPHTHENE
1200U	2-CHLOROPHENOL	3000U	2,4-DINITROPHENOL
1200U	1,3-DICHLOROBENZENE	3000U	4-NITROPHENOL
1200U	1,4-DICHLOROBENZENE	1200U	DIBENZOFURAN
1200U	1,2-DICHLOROBENZENE	1200U	2,4-DINITROTOLUENE
1200U	2-METHYLPHENOL	1200U	DIETHYL PHTHALATE
1200U	2,2'-CHLOROISOPROPYLETHER	1200U	4-CHLOROPHENYL PHENYL ETHER
1200U	(3-AND/OR 4-)METHYLPHENOL	1200U	FLUORENE
1200U	N-NITROSODI-N-PROPYLAMINE	3000U	4-NITROANILINE
1200U	HEXACHLOROETHANE	3000U	2-METHYL-4,6-DINITROPHENOL
1200U	NITROBENZENE	1200U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1200U	ISOPHORONE	1200U	4-BROMOPHENYL PHENYL ETHER
1200U	2-NITROPHENOL	1200U	HEXACHLOROENZENE (HCB)
1200U	2,4-DIMETHYLPHENOL	3000U	PENTACHLOROPHENOL
1200U	BIS(2-CHLOROETHOXY) METHANE	1200U	PHENANTHRENE
1200U	2,4-DICHLOROPHENOL	1200U	ANTHRACENE
1200U	1,2,4-TRICHLOROBENZENE	1200U	CARBAZOLE
1200U	NAPHTHALENE	1200U	DI-N-BUTYLPHTHALATE
1200U	4-CHLOROANILINE	1200U	FLUORANTHENE
1200U	HEXACHLOROBUTADIENE	1200U	PYRENE
1200U	4-CHLORO-3-METHYLPHENOL	1200U	BENZYL BUTYL PHTHALATE
1200U	2-METHYLNAPHTHALENE	1200U	3,3'-DICHLOROBENZIDINE
1200U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1200U	BENZO(A)ANTHRACENE
1200U	2,4,6-TRICHLOROPHENOL	1200U	CHRYSENE
3000U	2,4,5-TRICHLOROPHENOL	1200U	BIS(2-ETHYLHEXYL) PHTHALATE
1200U	2-CHLORONAPHTHALENE	1200U	DI-N-OCTYLPHTHALATE
3000U	2-NITROANILINE	1200U	BENZO(B AND/OR K)FLUORANTHENE
1200U	DIMETHYL PHTHALATE	1200U	BENZO-A-PYRENE
1200U	ACENAPHTHYLENE	1200U	INDENO (1,2,3-CD) PYRENE
1200U	2,6-DINITROTOLUENE	1200U	DIBENZO(A,H)ANTHRACENE
		1200U	BENZO(GHI)PERYLENE
		73	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81713 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-004-SD COLLECTION START: 12/08/93 1000 STOP: 00/00/00 **
 ** ** ** **

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB42 **

*** ** ** ** ** UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS ** ** ** **

450U PHENOL	1100U 3-NITROANILINE
450U BIS(2-CHLOROETHYL) ETHER	450U ACENAPHTHENE
450U 2-CHLOROPHENOL	1100U 2,4-DINITROPHENOL
450U 1,3-DICHLOROBENZENE	1100U 4-NITROPHENOL
450U 1,4-DICHLOROBENZENE	450U DIBENZOFURAN
450U 1,2-DICHLOROBENZENE	450U 2,4-DINITROTOLUENE
450U 2-METHYLPHENOL	450U DIETHYL PHTHALATE
450U 2,2'-CHLOROISOPROPYLETHER	450U 4-CHLOROPHENYL PHENYL ETHER
450U (3-AND/OR 4-)METHYLPHENOL	450U FLUORENE
450U N-NITROSODI-N-PROPYLAMINE	1100U 4-NITROANILINE
450U HEXACHLOROETHANE	1100U 2-METHYL-4,6-DINITROPHENOL
450U NITROBENZENE	450U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
450U ISOPHORONE	450U 4-BROMOPHENYL PHENYL ETHER
450U 2-NITROPHENOL	450U HEXACHLOROENZENE (HCB)
450U 2,4-DIMETHYLPHENOL	1100U PENTACHLOROPHENOL
450U BIS(2-CHLOROETHOXY) METHANE	450U PHENANTHRENE
450U 2,4-DICHLOROPHENOL	450U ANTHRACENE
450U 1,2,4-TRICHLOROBENZENE	450U CARBAZOLE
450U NAPHTHALENE	450U DI-N-BUTYLPHTHALATE
450U 4-CHLOROANILINE	450U FLUORANTHENE
450U HEXACHLOROBUTADIENE	450U PYRENE
450U 4-CHLORO-3-METHYLPHENOL	450U BENZYL BUTYL PHTHALATE
450U 2-METHYLNAPHTHALENE	450U 3,3'-DICHLOROENZIDINE
450U HEXACHLOROCYCLOPENTADIENE (HCCP)	450U BENZO(A)ANTHRACENE
450U 2,4,6-TRICHLOROPHENOL	450U CHRYSENE
1100U 2,4,5-TRICHLOROPHENOL	450U BIS(2-ETHYLHEXYL) PHTHALATE
450U 2-CHLORONAPHTHALENE	450U DI-N-OCTYLPHTHALATE
1100U 2-NITROANILINE	450U BENZO(B AND/OR K)FLUORANTHENE
450U DIMETHYL PHTHALATE	450U BENZO-A-PYRENE
450U ACENAPHTHYLENE	450U INDENO (1,2,3-CD) PYRENE
450U 2,6-DINITROTOLUENE	450U DIBENZO(A,H)ANTHRACENE
	450U BENZO(GHI)PERYLENE
	26 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81714 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-002-SL COLLECTION START: 12/08/93 1120 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB43 **
 *** **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
460U	PHENOL	1100U	3-NITROANILINE
460U	BIS(2-CHLOROETHYL) ETHER	460U	ACENAPHTHENE
460U	2-CHLOROPHENOL	1100U	2,4-DINITROPHENOL
460U	1,3-DICHLOROBENZENE	1100U	4-NITROPHENOL
460U	1,4-DICHLOROBENZENE	460U	DIBENZOFURAN
460U	1,2-DICHLOROBENZENE	460U	2,4-DINITROTOLUENE
460U	2-METHYLPHENOL	460U	DIETHYL PHTHALATE
460U	2,2'-CHLOROISOPROPYLETHER	460U	4-CHLOROPHENYL PHENYL ETHER
460U	(3-AND/OR 4-)METHYLPHENOL	460U	FLUORENE
460U	N-NITROSODI-N-PROPYLAMINE	1100U	4-NITROANILINE
460U	HEXACHLOROETHANE	1100U	2-METHYL-4,6-DINITROPHENOL
460U	NITROBENZENE	460U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
460U	ISOPHORONE	460U	4-BROMOPHENYL PHENYL ETHER
460U	2-NITROPHENOL	460U	HEXACHLOROBENZENE (HCB)
460U	2,4-DIMETHYLPHENOL	1100U	PENTACHLOROPHENOL
460U	BIS(2-CHLOROETHOXY) METHANE	460U	PHENANTHRENE
460U	2,4-DICHLOROPHENOL	460U	ANTHRACENE
460U	1,2,4-TRICHLOROBENZENE	460U	CARBAZOLE
460U	NAPHTHALENE	460U	DI-N-BUTYLPHTHALATE
460U	4-CHLOROANILINE	460U	FLUORANTHENE
290J	HEXACHLOROBUTADIENE	460U	PYRENE
460U	4-CHLORO-3-METHYLPHENOL	460U	BENZYL BUTYL PHTHALATE
460U	2-METHYLNAPHTHALENE	460U	3,3'-DICHLOROBENZIDINE
460U	HEXACHLOROCYCLOPENTADIENE (HCCP)	460U	BENZO(A)ANTHRACENE
460U	2,4,6-TRICHLOROPHENOL	460U	CHRYSENE
1100U	2,4,5-TRICHLOROPHENOL	460U	BIS(2-ETHYLHEXYL) PHTHALATE
460U	2-CHLORONAPHTHALENE	460U	DI-N-OCTYLPHTHALATE
1100U	2-NITROANILINE	460U	BENZO(B AND/OR K)FLUORANTHENE
460U	DIMETHYL PHTHALATE	460U	BENZO-A-PYRENE
460U	ACENAPHTHYLENE	460U	INDENO (1,2,3-CD) PYRENE
460U	2,6-DINITROTOLUENE	460U	DIBENZO(A,H)ANTHRACENE
		460U	BENZO(GHI)PERYLENE
		29	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81715 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-003-SL COLLECTION START: 12/08/93 1240 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB44 **
 *** **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
430U	PHENOL	1000U	3-NITROANILINE
430U	BIS(2-CHLOROETHYL) ETHER	430U	ACENAPHTHENE
430U	2-CHLOROPHENOL	1000U	2,4-DINITROPHENOL
430U	1,3-DICHLOROBENZENE	1000U	4-NITROPHENOL
430U	1,4-DICHLOROBENZENE	430U	DIBENZOFURAN
430U	1,2-DICHLOROBENZENE	430U	2,4-DINITROTOLUENE
430U	2-METHYLPHENOL	430U	DIETHYL PHTHALATE
430U	2,2'-CHLOROISOPROPYLETHER	430U	4-CHLOROPHENYL PHENYL ETHER
430U	(3-AND/OR 4-)METHYLPHENOL	430U	FLUORENE
430U	N-NITROSODI-N-PROPYLAMINE	1000U	4-NITROANILINE
430U	HEXACHLOROETHANE	1000U	2-METHYL-4,6-DINITROPHENOL
430U	NITROBENZENE	430U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
430U	ISOPHORONE	430U	4-BROMOPHENYL PHENYL ETHER
430U	2-NITROPHENOL	430U	HEXACHLOROENZENE (HCB)
430U	2,4-DIMETHYLPHENOL	1000U	PENTACHLOROPHENOL
430U	BIS(2-CHLOROETHOXY) METHANE	430U	PHENANTHRENE
430U	2,4-DICHLOROPHENOL	430U	ANTHRACENE
430U	1,2,4-TRICHLOROBENZENE	430U	CARBAZOLE
430U	NAPHTHALENE	430U	DI-N-BUTYLPHTHALATE
430U	4-CHLOROANILINE	430U	FLUORANTHENE
430U	HEXACHLOROBUTADIENE	430U	PYRENE
430U	4-CHLORO-3-METHYLPHENOL	430U	BENZYL BUTYL PHTHALATE
180J	2-METHYLNAPHTHALENE	430U	3,3'-DICHLOROENZIDINE
430U	HEXACHLOROCYCLOPENTADIENE (HCCP)	430U	BENZO(A)ANTHRACENE
430U	2,4,6-TRICHLOROPHENOL	430U	CHRYSENE
1000U	2,4,5-TRICHLOROPHENOL	430U	BIS(2-ETHYLHEXYL) PHTHALATE
430U	2-CHLORONAPHTHALENE	430UJ	DI-N-OCTYLPHTHALATE
1000U	2-NITROANILINE	430UJ	BENZO(B AND/OR K)FLUORANTHENE
430U	DIMETHYL PHTHALATE	430UJ	BENZO-A-PYRENE
430U	ACENAPHTHYLENE	430UJ	INDENO (1,2,3-CD) PYRENE
430U	2,6-DINITROTOLUENE	430UJ	DIBENZO(A,H)ANTHRACENE
		430UJ	BENZO(GHI)PERYLENE
		23	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81716 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-PW COLLECTION START: 12/08/93 1145 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB45 **
 *** **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	PHENOL	25U	3-NITROANILINE
10U	BIS(2-CHLOROETHYL) ETHER	10U	ACENAPHTHENE
10U	2-CHLOROPHENOL	25U	2,4-DINITROPHENOL
10U	1,3-DICHLOROBENZENE	25U	4-NITROPHENOL
10U	1,4-DICHLOROBENZENE	10U	DIBENZOFURAN
10U	1,2-DICHLOROBENZENE	10U	2,4-DINITROTOLUENE
10U	2-METHYLPHENOL	10U	DIETHYL PHTHALATE
10U	2,2'-CHLOROISOPROPYLETHER	10U	4-CHLOROPHENYL PHENYL ETHER
10U	(3-AND/OR 4-)METHYLPHENOL	10U	FLUORENE
10U	N-NITROSODI-N-PROPYLAMINE	25U	4-NITROANILINE
10U	HEXACHLOROETHANE	25U	2-METHYL-4,6-DINITROPHENOL
10U	NITROBENZENE	10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	ISOPHORONE	10U	4-BROMOPHENYL PHENYL ETHER
10U	2-NITROPHENOL	10U	HEXACHLOROENZENE (HCB)
10U	2,4-DIMETHYLPHENOL	25U	PENTACHLOROPHENOL
10U	BIS(2-CHLOROETHOXY) METHANE	10U	PHENANTHRENE
10U	2,4-DICHLOROPHENOL	10U	ANTHRACENE
10U	1,2,4-TRICHLOROBENZENE	10U	CARBAZOLE
10U	NAPHTHALENE	10U	DI-N-BUTYLPHTHALATE
10U	4-CHLOROANILINE	10U	FLUORANTHENE
10U	HEXACHLOROBUTADIENE	10U	PYRENE
10U	4-CHLORO-3-METHYLPHENOL	10U	BENZYL BUTYL PHTHALATE
10U	2-METHYLNAPHTHALENE	10U	3,3'-DICHLOROBENZIDINE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)	10U	BENZO(A)ANTHRACENE
10U	2,4,6-TRICHLOROPHENOL	10U	CHRYSENE
25U	2,4,5-TRICHLOROPHENOL	10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	2-CHLORONAPHTHALENE	10U	DI-N-OCTYLPHTHALATE
25U	2-NITROANILINE	10U	BENZO(B AND/OR K)FLUORANTHENE
10U	DIMETHYL PHTHALATE	10U	BENZO-A-PYRENE
10U	ACENAPHTHYLENE	10U	INDENO (1,2,3-CD) PYRENE
10U	2,6-DINITROTOLUENE	10U	DIBENZO(A,H)ANTHRACENE
		10U	BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81717 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-002-PW COLLECTION START: 12/08/93 1200 STOP: 00/00/00 **
 **

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB46 **

*** **
 UG/L ANALYTICAL RESULTS UG/L ANALYTICAL RESULTS

10U PHENOL
 10U BIS(2-CHLOROETHYL) ETHER
 10U 2-CHLOROPHENOL
 10U 1,3-DICHLOROBENZENE
 10U 1,4-DICHLOROBENZENE
 10U 1,2-DICHLOROBENZENE
 10U 2-METHYLPHENOL
 10U 2,2'-CHLOROISOPROPYLETHER
 10U (3-AND/OR 4-)METHYLPHENOL
 10U N-NITROSODI-N-PROPYLAMINE
 10U HEXACHLOROETHANE
 10U NITROBENZENE
 10U ISOPHORONE
 10U 2-NITROPHENOL
 10U 2,4-DIMETHYLPHENOL
 10U BIS(2-CHLOROETHOXY) METHANE
 10U 2,4-DICHLOROPHENOL
 10U 1,2,4-TRICHLOROBENZENE
 10U NAPHTHALENE
 10U 4-CHLOROANILINE
 10U HEXACHLOROBUTADIENE
 10U 4-CHLORO-3-METHYLPHENOL
 10U 2-METHYLNAPHTHALENE
 10U HEXACHLOROCYCLOPENTADIENE (HCCP)
 10U 2,4,6-TRICHLOROPHENOL
 25U 2,4,5-TRICHLOROPHENOL
 10U 2-CHLORONAPHTHALENE
 25U 2-NITROANILINE
 10U DIMETHYL PHTHALATE
 10U ACENAPHTHYLENE
 10U 2,6-DINITROTOLUENE

25U 3-NITROANILINE
 10U ACENAPHTHENE
 25U 2,4-DINITROPHENOL
 25U 4-NITROPHENOL
 10U DIBENZOFURAN
 10U 2,4-DINITROTOLUENE
 10U DIETHYL PHTHALATE
 10U 4-CHLOROPHENYL PHENYL ETHER
 10U FLUORENE
 25U 4-NITROANILINE
 25U 2-METHYL-4,6-DINITROPHENOL
 10U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
 10U 4-BROMOPHENYL PHENYL ETHER
 10U HEXACHLOROBENZENE (HCB)
 25U PENTACHLOROPHENOL
 10U PHENANTHRENE
 10U ANTHRACENE
 10U CARBAZOLE
 10U DI-N-BUTYLPHTHALATE
 10U FLUORANTHENE
 10U PYRENE
 10U BENZYL BUTYL PHTHALATE
 10U 3,3'-DICHLOROBENZIDINE
 10U BENZO(A)ANTHRACENE
 10U CHRYSENE
 10U BIS(2-ETHYLHEXYL) PHTHALATE
 10U DI-N-OCTYLPHTHALATE
 10U BENZO(B AND/OR K)FLUORANTHENE
 10U BENZO-A-PYRENE
 10U INDENO (1,2,3-CD) PYRENE
 10U DIBENZO(A,H)ANTHRACENE
 10U BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81718 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-TW COLLECTION START: 12/08/93 1425 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB47 **
*** ** ** ****

UG/L ANALYTICAL RESULTS

10U PHENOL
10U BIS(2-CHLOROETHYL) ETHER
10U 2-CHLOROPHENOL
10U 1,3-DICHLOROBENZENE
10U 1,4-DICHLOROBENZENE
10U 1,2-DICHLOROBENZENE
10U 2-METHYLPHENOL
10U 2,2'-CHLOROISOPROPYLETER
10U (3-AND/OR 4-)METHYLPHENOL
10U N-NITROSODI-N-PROPYLAMINE
10U HEXACHLOROETHANE
10U NITROBENZENE
10U ISOPHORONE
10U 2-NITROPHENOL
10U 2,4-DIMETHYLPHENOL
10U BIS(2-CHLOROETHOXY) METHANE
10U 2,4-DICHLOROPHENOL
10U 1,2,4-TRICHLOROBENZENE
10U NAPHTHALENE
10U 4-CHLOROANILINE
10U HEXACHLOROBUTADIENE
10U 4-CHLORO-3-METHYLPHENOL
10U 2-METHYLNAPHTHALENE
10U HEXACHLOROCYCLOPENTADIENE (HCCP)
10U 2,4,6-TRICHLOROPHENOL
25U 2,4,5-TRICHLOROPHENOL
10U 2-CHLORONAPHTHALENE
25U 2-NITROANILINE
10U DIMETHYL PHTHALATE
10U ACENAPHTHYLENE
10U 2,6-DINITROTOLUENE

UG/L ANALYTICAL RESULTS

25U 3-NITROANILINE
10U ACENAPHTHENE
25U 2,4-DINITROPHENOL
25U 4-NITROPHENOL
10U DIBENZOFURAN
10U 2,4-DINITROTOLUENE
10U DIETHYL PHTHALATE
10U 4-CHLOROPHENYL PHENYL ETHER
10U FLUORENE
25U 4-NITROANILINE
25U 2-METHYL-4,6-DINITROPHENOL
10U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U 4-BROMOPHENYL PHENYL ETHER
10U HEXACHLOROBENZENE (HCB)
25U PENTACHLOROPHENOL
10U PHENANTHRENE
10U ANTHRACENE
10U CARBAZOLE
10U DI-N-BUTYLPHTHALATE
10U FLUORANTHENE
10U PYRENE
10U BENZYL BUTYL PHTHALATE
10U 3,3'-DICHLOROBENZIDINE
10U BENZO(A)ANTHRACENE
10U CHRYSENE
10U BIS(2-ETHYLHEXYL) PHTHALATE
10U DI-N-OCTYLPHTHALATE
10U BENZO(B AND/OR K)FLUORANTHENE
10U BENZO-A-PYRENE
10U INDENO (1,2,3-CD) PYRENE
10U DIBENZO(A,H)ANTHRACENE
10U BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

```
*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **  
** PROJECT NO. 94-0164 SAMPLE NO. 81719 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **  
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **  
** STATION ID: PE-004-SL COLLECTION START: 12/08/93 1525 STOP: 00/00/00 **  
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **  
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB48 **  
*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
390U	PHENOL	950U	3-NITROANILINE
390U	BIS(2-CHLOROETHYL) ETHER	390U	ACENAPHTHENE
390U	2-CHLOROPHENOL	950U	2,4-DINITROPHENOL
390U	1,3-DICHLOROBENZENE	950U	4-NITROPHENOL
390U	1,4-DICHLOROBENZENE	390U	DIBENZOFURAN
390U	1,2-DICHLOROBENZENE	390U	2,4-DINITROTOLUENE
390U	2-METHYLPHENOL	390U	DIETHYL PHTHALATE
390U	2,2'-CHLOROISOPROPYLETHER	390U	4-CHLOROPHENYL PHENYL ETHER
390U	(3-AND/OR 4-)METHYLPHENOL	390U	FLUORENE
390U	N-NITROSODI-N-PROPYLAMINE	950U	4-NITROANILINE
390U	HEXACHLOROETHANE	950U	2-METHYL-4,6-DINITROPHENOL
390U	NITROBENZENE	390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	ISOPHORONE	390U	4-BROMOPHENYL PHENYL ETHER
390U	2-NITROPHENOL	390U	HEXACHLOROBENZENE (HCB)
390U	2,4-DIMETHYLPHENOL	950U	PENTACHLOROPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE	390U	PHENANTHRENE
390U	2,4-DICHLOROPHENOL	390U	ANTHRACENE
390U	1,2,4-TRICHLOROBENZENE	390U	CARBAZOLE
390U	NAPHTHALENE	390U	DI-N-BUTYLPHTHALATE
390U	4-CHLOROANILINE	390U	FLUORANTHENE
390U	HEXACHLOROBUTADIENE	390UJ	PYRENE
390U	4-CHLORO-3-METHYLPHENOL	390UJ	BENZYL BUTYL PHTHALATE
390U	2-METHYLNAPHTHALENE	390UJ	3,3'-DICHLOROBENZIDINE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)	390UJ	BENZO(A)ANTHRACENE
390U	2,4,6-TRICHLOROPHENOL	390UJ	CHRYSENE
950U	2,4,5-TRICHLOROPHENOL	390UJ	BIS(2-ETHYLHEXYL) PHTHALATE
390U	2-CHLORONAPHTHALENE	390U	DI-N-OCTYLPHTHALATE
950U	2-NITROANILINE	390U	BENZO(B AND/OR K)FLUORANTHENE
390U	DIMETHYL PHTHALATE	390U	BENZO-A-PYRENE
390U	ACENAPHTHYLENE	390U	INDENO (1,2,3-CD) PYRENE
390U	2,6-DINITROTOLUENE	390U	DIBENZO(A,H)ANTHRACENE
		390U	BENZO(GHI)PERYLENE
		16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81720 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-104-SL COLLECTION START: 12/08/93 1535 STOP: 00/00/00 **

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB49 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
390U	PHENOL	950U	3-NITROANILINE
390U	BIS(2-CHLOROETHYL) ETHER	390U	ACENAPHTHENE
390U	2-CHLOROPHENOL	950U	2,4-DINITROPHENOL
390U	1,3-DICHLOROBENZENE	950U	4-NITROPHENOL
390U	1,4-DICHLOROBENZENE	390U	DIBENZOFURAN
390U	1,2-DICHLOROBENZENE	390U	2,4-DINITROTOLUENE
390U	2-METHYLPHENOL	390U	DIETHYL PHTHALATE
390U	2,2'-CHLOROISOPROPYLETHER	390U	4-CHLOROPHENYL PHENYL ETHER
390U	(3-AND/OR 4-)METHYLPHENOL	390U	FLUORENE
390U	N-NITROSODI-N-PROPYLAMINE	950U	4-NITROANILINE
390U	HEXACHLOROETHANE	950U	2-METHYL-4,6-DINITROPHENOL
390U	NITROBENZENE	390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	ISOPHORONE	390U	4-BROMOPHENYL PHENYL ETHER
390U	2-NITROPHENOL	390U	HEXACHLOROBENZENE (HCB)
390U	2,4-DIMETHYLPHENOL	950U	PENTACHLOROPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE	390U	PHENANTHRENE
390U	2,4-DICHLOROPHENOL	390U	ANTHRACENE
390U	1,2,4-TRICHLOROBENZENE	390U	CARBAZOLE
390U	NAPHTHALENE	390U	DI-N-BUTYLPHTHALATE
390U	4-CHLOROANILINE	390U	FLUORANTHENE
390U	HEXACHLOROBUTADIENE	390U	PYRENE
390U	4-CHLORO-3-METHYLPHENOL	390U	BENZYL BUTYL PHTHALATE
390U	2-METHYLNAPHTHALENE	390U	3,3'-DICHLOROBENZIDINE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)	390U	BENZO(A)ANTHRACENE
390U	2,4,6-TRICHLOROPHENOL	390U	CHRYSENE
950U	2,4,5-TRICHLOROPHENOL	390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	2-CHLORONAPHTHALENE	390U	DI-N-OCTYLPHTHALATE
950U	2-NITROANILINE	390U	BENZO(B AND/OR K)FLUORANTHENE
390U	DIMETHYL PHTHALATE	390U	BENZO-A-PYRENE
390U	ACENAPHTHYLENE	390U	INDENO (1,2,3-CD) PYRENE
390U	2,6-DINITROTOLUENE	390U	DIBENZO(A,H)ANTHRACENE
		390U	BENZO(GHI)PERYLENE
		16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81721 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-004-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB50 **
 *** **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	PHENOL	25U	3-NITROANILINE
10U	BIS(2-CHLOROETHYL) ETHER	10U	ACENAPHTHENE
10U	2-CHLOROPHENOL	25U	2,4-DINITROPHENOL
10U	1,3-DICHLOROBENZENE	25U	4-NITROPHENOL
10U	1,4-DICHLOROBENZENE	10U	DIBENZOFURAN
10U	1,2-DICHLOROBENZENE	10U	2,4-DINITROTOLUENE
10U	2-METHYLPHENOL	10U	DIETHYL PHTHALATE
10U	2,2'-CHLOROISOPROPYLETHYR	10U	4-CHLOROPHENYL PHENYL ETHER
10U	(3-AND/OR 4-)METHYLPHENOL	10U	FLUORENE
10U	N-NITROSODI-N-PROPYLAMINE	25U	4-NITROANILINE
10U	HEXACHLOROETHANE	25U	2-METHYL-4,6-DINITROPHENOL
10U	NITROBENZENE	10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	ISOPHORONE	10U	4-BROMOPHENYL PHENYL ETHER
10U	2-NITROPHENOL	10U	HEXACHLOROENZENE (HCB)
10U	2,4-DIMETHYLPHENOL	25U	PENTACHLOROPHENOL
10U	BIS(2-CHLOROETHOXY) METHANE	10U	PHENANTHRENE
10U	2,4-DICHLOROPHENOL	10U	ANTHRACENE
10U	1,2,4-TRICHLOROBENZENE	10U	CARBAZOLE
10U	NAPHTHALENE	10U	DI-N-BUTYLPHTHALATE
10U	4-CHLOROANILINE	10U	FLUORANTHENE
10U	HEXACHLOROBUTADIENE	10U	PYRENE
10U	4-CHLORO-3-METHYLPHENOL	10U	BENZYL BUTYL PHTHALATE
10U	2-METHYLNAPHTHALENE	10U	3,3'-DICHLOROBENZIDINE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)	10U	BENZO(A)ANTHRACENE
10U	2,4,6-TRICHLOROPHENOL	10U	CHRYSENE
25U	2,4,5-TRICHLOROPHENOL	10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	2-CHLORONAPHTHALENE	10U	DI-N-OCTYLPHTHALATE
25U	2-NITROANILINE	10U	BENZO(B AND/OR K)FLUORANTHENE
10U	DIMETHYL PHTHALATE	10U	BENZO-A-PYRENE
10U	ACENAPHTHYLENE	10U	INDENO (1,2,3-CD) PYRENE
10U	2,6-DINITROTOLUENE	10U	DIBENZO(A,H)ANTHRACENE
		10U	BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81722 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-104-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB51 **

UG/L ANALYTICAL RESULTS

UG/L ANALYTICAL RESULTS

10U PHENOL
10U BIS(2-CHLOROETHYL) ETHER
10U 2-CHLOROPHENOL
10U 1,3-DICHLOROBENZENE
10U 1,4-DICHLOROBENZENE
10U 1,2-DICHLOROBENZENE
10U 2-METHYLPHENOL
10U 2,2'-CHLOROISOPROPYLETHER
10U (3-AND/OR 4-)METHYLPHENOL
10U N-NITROSODI-N-PROPYLAMINE
10U HEXACHLOROETHANE
10U NITROBENZENE
10U ISOPHORONE
10U 2-NITROPHENOL
10U 2,4-DIMETHYLPHENOL
10U BIS(2-CHLOROETHOXY) METHANE
10U 2,4-DICHLOROPHENOL
10U 1,2,4-TRICHLOROBENZENE
10U NAPHTHALENE
10U 4-CHLOROANILINE
10U HEXACHLOROBUTADIENE
10U 4-CHLORO-3-METHYLPHENOL
10U 2-METHYLNAPHTHALENE
10U HEXACHLOROCYCLOPENTADIENE (HCCP)
10U 2,4,6-TRICHLOROPHENOL
25U 2,4,5-TRICHLOROPHENOL
10U 2-CHLORONAPHTHALENE
25U 2-NITROANILINE
10U DIMETHYL PHTHALATE
10U ACENAPHTHYLENE
10U 2,6-DINITROTOLUENE

25U 3-NITROANILINE
10U ACENAPHTHENE
25U 2,4-DINITROPHENOL
25U 4-NITROPHENOL
10U DIBENZOFURAN
10U 2,4-DINITROTOLUENE
10U DIETHYL PHTHALATE
10U 4-CHLOROPHENYL PHENYL ETHER
10U FLUORENE
25U 4-NITROANILINE
25U 2-METHYL-4,6-DINITROPHENOL
10U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U 4-BROMOPHENYL PHENYL ETHER
10U HEXACHLOROENZENE (HCB)
25U PENTACHLOROPHENOL
10U PHENANTHRENE
10U ANTHRACENE
10U CARBAZOLE
10U DI-N-BUTYLPHTHALATE
10U FLUORANTHENE
10U PYRENE
10U BENZYL BUTYL PHTHALATE
10U 3,3'-DICHLOROBENZIDINE
10U BENZO(A)ANTHRACENE
10U CHRYSENE
10U BIS(2-ETHYLHEXYL) PHTHALATE
10U DI-N-OCTYLPHTHALATE
10U BENZO(B AND/OR K)FLUORANTHENE
10U BENZO-A-PYRENE
10U INDENO (1,2,3-CD) PYRENE
10U DIBENZO(A,H)ANTHRACENE
10U BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

EXTRACTABLE ORGANICS DATA REPORT

*** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81723 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-003-PW COLLECTION START: 12/08/93 1635 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB52 **
 *** **

UG/L ANALYTICAL RESULTS

- 10U PHENOL
- 10U BIS(2-CHLOROETHYL) ETHER
- 10U 2-CHLOROPHENOL
- 10U 1,3-DICHLOROBENZENE
- 10U 1,4-DICHLOROBENZENE
- 10U 1,2-DICHLOROBENZENE
- 10U 2-METHYLPHENOL
- 10U 2,2'-CHLOROISOPROPYLETHER
- 10U (3-AND/OR 4-)METHYLPHENOL
- 10U N-NITROSODI-N-PROPYLAMINE
- 10U HEXACHLOROETHANE
- 10U NITROBENZENE
- 10U ISOPHORONE
- 10U 2-NITROPHENOL
- 10U 2,4-DIMETHYLPHENOL
- 10U BIS(2-CHLOROETHOXY) METHANE
- 10U 2,4-DICHLOROPHENOL
- 10U 1,2,4-TRICHLOROBENZENE
- 10U NAPHTHALENE
- 10U 4-CHLOROANILINE
- 10U HEXACHLOROBUTADIENE
- 10U 4-CHLORO-3-METHYLPHENOL
- 10U 2-METHYLNAPHTHALENE
- 10U HEXACHLOROCYCLOPENTADIENE (HCCP)
- 10U 2,4,6-TRICHLOROPHENOL
- 25U 2,4,5-TRICHLOROPHENOL
- 10U 2-CHLORONAPHTHALENE
- 25U 2-NITROANILINE
- 10U DIMETHYL PHTHALATE
- 10U ACENAPHTHYLENE
- 10U 2,6-DINITROTOLUENE

UG/L ANALYTICAL RESULTS

- 25U 3-NITROANILINE
- 10U ACENAPHTHENE
- 25U 2,4-DINITROPHENOL
- 25U 4-NITROPHENOL
- 10U DIBENZOFURAN
- 10U 2,4-DINITROTOLUENE
- 10U DIETHYL PHTHALATE
- 10U 4-CHLOROPHENYL PHENYL ETHER
- 10U FLUORENE
- 25U 4-NITROANILINE
- 25U 2-METHYL-4,6-DINITROPHENOL
- 10U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
- 10U 4-BROMOPHENYL PHENYL ETHER
- 10U HEXACHLOROBENZENE (HCB)
- 25U PENTACHLOROPHENOL
- 10U PHENANTHRENE
- 10U ANTHRACENE
- 10U CARBAZOLE
- 10U DI-N-BUTYL PHTHALATE
- 10U FLUORANTHENE
- 10U PYRENE
- 10U BENZYL BUTYL PHTHALATE
- 10U 3,3'-DICHLOROBENZIDINE
- 10U BENZO(A)ANTHRACENE
- 10U CHRYSENE
- 10U BIS(2-ETHYLHEXYL) PHTHALATE
- 10U DI-N-OCTYL PHTHALATE
- 10U BENZO(B AND/OR K)FLUORANTHENE
- 10U BENZO-A-PYRENE
- 10U INDENO (1,2,3-CD) PYRENE
- 10U DIBENZO(A,H)ANTHRACENE
- 10U BENZO(GHI)PERYLENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81708 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SD COLLECTION START: 12/07/93 1240 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB37 MD NO: GB37 **
** **

ANALYTICAL RESULTS UG/KG

2000JN OCTADECANOIC ACID
3000JN HEXADECANOIC ACID
100000J 13 UNIDENTIFIED COMPOUNDS
N PETROLEUM PRODUCT

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81710 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-SL COLLECTION START: 12/07/93 1445 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB39 MD NO: GB39 **
** ** ** **

ANALYTICAL RESULTS UG/KG

9000J 7 UNIDENTIFIED COMPOUNDS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** * * * *
** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB40 MD NO: GB40 **
** * * * * *

ANALYTICAL RESULTS UG/KG

700JN OCTADECANOIC ACID
900JN HEXADECANOIC ACID
100000J 14 UNIDENTIFIED COMPOUNDS
N PETROLEUM PRODUCT

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB41 MD NO: GB41 **
**

ANALYTICAL RESULTS UG/KG

500JN HEXADECANOIC ACID
50000J 9 UNIDENTIFIED COMPOUNDS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81713 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-SD COLLECTION START: 12/08/93 1000 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB42 MD NO: GB42 **
**

ANALYTICAL RESULTS UG/KG

600JN TETRADECANOIC ACID
1000JN HEXADECANOIC ACID
1000JN HEXADECENOIC ACID
10000J 6 UNIDENTIFIED COMPOUNDS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81714 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SL COLLECTION START: 12/08/93 1120 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB43 MD NO: GB43 **
** ** ** **

ANALYTICAL RESULTS UG/KG

300JN CHLOROBENZILATE
2000J 3 UNIDENTIFIED COMPOUNDS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81715 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SL COLLECTION START: 12/08/93 1240 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB44 MD NO: GB44 **
** ** ** **

ANALYTICAL RESULTS UG/KG

100000J 10 UNIDENTIFIED COMPOUNDS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81719 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-SL COLLECTION START: 12/08/93 1525 STOP: 00/00/00 **
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB48 MD NO: GB48 **
** **

ANALYTICAL RESULTS UG/KG

600JN CHLOROBENZILATE
3000J 1 UNIDENTIFIED COMPOUND

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81720 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-104-SL COLLECTION START: 12/08/93 1535 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB49 MD NO: GB49 **

ANALYTICAL RESULTS UG/KG

200JN HEXADECANOIC ACID
600JN CHLOROBENZILATE
3000J 1 UNIDENTIFIED COMPOUND

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

RECEIVED

FEB 25 1994

SUPERFUND SECTION

*****MEMORANDUM*****

DATE: 02/17/94

SUBJECT: Results of Purgeable Organic Analysis;
94-0164 PEELE PESTICIDE DISF
CLAYTON NC
CASE NO: 21362SAS NC: 8134D

FROM: *CH* Charles H. Hooper *CHH*
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PAT DEROSA

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

ORGANIC DATA QUALIFIER REPORT

Case Number 21362 Project Number 94-0164 SAS Number
 Site ID. Peele Pesticide Disposal, Clayton, NC

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Volatiles</u>			
81711,81712	2-butanone	J	< quantitation limit
81714	all volatiles	J	low internal standard recovery
81715	1,1,1-trichloroethane	J	low internal standard recovery
	carbon tetrachloride	J	low internal standard recovery
	bromodichloromethane	J	low internal standard recovery
	1,2-dichloropropane	J	low internal standard recovery
	cis-1,3-dichloropropene	J	low internal standard recovery
	trichloroethene	J	low internal standard recovery
	dibromochloromethane	J	low internal standard recovery
	1,1,2-trichloroethane	J	low internal standard recovery
	benzene	J	low internal standard recovery
	trans-1,3-dichloropropene	J	low internal standard recovery
	bromoform	J	low internal standard recovery
	4-methyl-2-pentanone	J	low internal standard recovery
	2-hexanone	J	low internal standard recovery
	tetrachloroethene	J	low internal standard recovery
	1,1,2,2-tetrachloroethane	J	low internal standard recovery
	toluene	J	low internal standard recovery
	chlorobenzene	J	low internal standard recovery
	ethylbenzene	J	low internal standard recovery
	styrene	J	low internal standard recovery
	xylenes	J	low internal standard recovery
<u>Extractables</u>			
81708	pyrene	J	< quantitation limit
81710,81719	pyrene	J	low internal standard recovery
	butylbenzylphthalate	J	low internal standard recovery
	3,3'-dichlorobenzidine	J	low internal standard recovery
	benzo(a)anthracene	J	low internal standard recovery
	chrysene	J	low internal standard recovery
	bis(2-ethylhexyl)phthalate	J	low internal standard recovery
81714	hexachlorobutadiene	J	< quantitation limit
81715	2-methylnaphthalene	J	< quantitation limit
	di-n-octylphthalate	J	low internal standard recovery
	benzo(b/k)fluoranthene	J	low internal standard recovery
	benzo(a)pyrene	J	low internal standard recovery
	indeno(1,2,3-cd)pyrene	J	low internal standard recovery
	dibenz(a,h)anthracene	J	low internal standard recovery
	benzo(g,h,i)perylene	J	low internal standard recovery

ORGANIC DATA QUALIFIER REPORT (continued)

Case Number 21362

Project Number 94-0164

<u>Affected Samples</u>	<u>Compound or Fraction</u>	<u>Flag Used</u>	<u>Reason</u>
<u>Pesticides</u>			
81709	all compounds	J	exceeded extraction holding times
81710,81713	dieldrin	J	< quantitation limit
81714	aldrin	C	GC/MS confirmed
81715	beta-bhc	N	difference in column quantitations
	dieldrin	J	< quantitation limit
		N	difference in column quantitations
	alpha chlordane	N	difference in column quantitations
	gamma-chlordane	C	GC/MS confirmed
	aldrin	C	GC/MS confirmed
81719	endosulfan sulfate	N	difference in column quantitations
81720	4,4'-DDD	N	difference in column quantitations
81722	4,4'-DDD	R	unexplained inconsistent result
	4,4'-DDT	R	unexplained inconsistent result

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81707 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: B. NICHOLSON **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-SD COLLECTION START: 12/07/93 1105 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB36 **
*** ** ** ** **

UG/KG ANALYTICAL RESULTS

12U CHLOROMETHANE
12U BROMOMETHANE
12U VINYL CHLORIDE
12U CHLOROETHANE
12U METHYLENE CHLORIDE
40U ACETONE
12U CARBON DISULFIDE
12U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U 1,1-DICHLOROETHANE
12U 1,2-DICHLOROETHENE (TOTAL)
12U CHLOROFORM
12U 1,2-DICHLOROETHANE
12U METHYL ETHYL KETONE
12U 1,1,1-TRICHLOROETHANE
12U CARBON TETRACHLORIDE
12U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

12U 1,2-DICHLOROPROPANE
12U CIS-1,3-DICHLOROPROPENE
12U TRICHLOROETHENE (TRICHLOROETHYLENE)
12U DIBROMOCHLOROMETHANE
12U 1,1,2-TRICHLOROETHANE
12U BENZENE
12U TRANS-1,3-DICHLOROPROPENE
12U BROMOFORM
12U METHYL ISOBUTYL KETONE
12U METHYL BUTYL KETONE
12U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
12U 1,1,2,2-TETRACHLOROETHANE
12U TOLUENE
12U CHLOROBENZENE
12U ETHYL BENZENE
12U STYRENE
12U TOTAL XYLENES
17 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81708 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-002-SD COLLECTION START: 12/07/93 1240 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB37 **
 *** ** ** ** **

UG/KG ANALYTICAL RESULTS

43U CHLOROMETHANE
 43U BROMOMETHANE
 43U VINYL CHLORIDE
 43U CHLOROETHANE
 43U METHYLENE CHLORIDE
 43U ACETONE
 43U CARBON DISULFIDE
 43U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
 43U 1,1-DICHLOROETHANE
 43U 1,2-DICHLOROETHENE (TOTAL)
 43U CHLOROFORM
 43U 1,2-DICHLOROETHANE
 43U METHYL ETHYL KETONE
 43U 1,1,1-TRICHLOROETHANE
 43U CARBON TETRACHLORIDE
 43U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

43U 1,2-DICHLOROPROPANE
 43U CIS-1,3-DICHLOROPROPENE
 43U TRICHLOROETHENE (TRICHLOROETHYLENE)
 43U DIBROMOCHLOROMETHANE
 43U 1,1,2-TRICHLOROETHANE
 43U BENZENE
 43U TRANS-1,3-DICHLOROPROPENE
 43U BROMOFORM
 43U METHYL ISOBUTYL KETONE
 43U METHYL BUTYL KETONE
 43U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
 43U 1,1,2,2-TETRACHLOROETHANE
 43U TOLUENE
 43U CHLOROBENZENE
 43U ETHYL BENZENE
 43U STYRENE
 43U TOTAL XYLENES
 77 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81709 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-005-PW COLLECTION START: 12/07/93 1255 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB38 **
*** ** ** ** **

UG/L ANALYTICAL RESULTS

10U CHLOROMETHANE
10U BROMOMETHANE
10U VINYL CHLORIDE
10U CHLOROETHANE
10U METHYLENE CHLORIDE
30U ACETONE
10U CARBON DISULFIDE
10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U 1,1-DICHLOROETHANE
10U 1,2-DICHLOROETHENE (TOTAL)
10U CHLOROFORM
10U 1,2-DICHLOROETHANE
10U METHYL ETHYL KETONE
10U 1,1,1-TRICHLOROETHANE
10U CARBON TETRACHLORIDE
10U BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS

10U 1,2-DICHLOROPROPANE
10U CIS-1,3-DICHLOROPROPENE
10U TRICHLOROETHENE(TRICHLOROETHYLENE)
10U DIBROMOCHLOROMETHANE
10U 1,1,2-TRICHLOROETHANE
10U BENZENE
10U TRANS-1,3-DICHLOROPROPENE
10U BROMOFORM
10U METHYL ISOBUTYL KETONE
10U METHYL BUTYL KETONE
10U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U 1,1,2,2-TETRACHLOROETHANE
10U TOLUENE
10U CHLOROBENZENE
10U ETHYL BENZENE
10U STYRENE
10U TOTAL XYLENES

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81710 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-SL COLLECTION START: 12/07/93 1445 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB39 **
 *** ** ** ** **

UG/KG ANALYTICAL RESULTS

11U CHLOROMETHANE
 11U BROMOMETHANE
 11U VINYL CHLORIDE
 11U CHLOROETHANE
 11U METHYLENE CHLORIDE
 11U ACETONE
 11U CARBON DISULFIDE
 11U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
 11U 1,1-DICHLOROETHANE
 11U 1,2-DICHLOROETHENE (TOTAL)
 11U CHLOROFORM
 11U 1,2-DICHLOROETHANE
 11U METHYL ETHYL KETONE
 11U 1,1,1-TRICHLOROETHANE
 11U CARBON TETRACHLORIDE
 11U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

11U 1,2-DICHLOROPROPANE
 11U CIS-1,3-DICHLOROPROPENE
 11U TRICHLOROETHENE (TRICHLOROETHYLENE)
 11U DIBROMOCHLOROMETHANE
 11U 1,1,2-TRICHLOROETHANE
 11U BENZENE
 11U TRANS-1,3-DICHLOROPROPENE
 11U BROMOFORM
 11U METHYL ISOBUTYL KETONE
 11U METHYL BUTYL KETONE
 11U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
 11U 1,1,2,2-TETRACHLOROETHANE
 11U TOLUENE
 11U CHLOROBENZENE
 11U ETHYL BENZENE
 11U STYRENE
 11U TOTAL XYLENES
 12 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

```

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT   PROG ELEM: SSF   COLLECTED BY: D. RUMFORD   **
** SOURCE: PEELE PESTICIDE DISP   CITY: CLAYTON   ST: NC   **
** STATION ID: PE-003-SD   COLLECTION START: 12/07/93 1615   STOP: 00/00/00   **
**
** CASE NO.: 21362   SAS NO.: 8134D   D. NO.: GB40   **
*** ** ** ** **
  
```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
40U	CHLOROMETHANE	40U	1,2-DICHLOROPROPANE
40U	BROMOMETHANE	40U	CIS-1,3-DICHLOROPROPENE
40U	VINYL CHLORIDE	40U	TRICHLOROETHENE (TRICHLOROETHYLENE)
40U	CHLOROETHANE	40U	DIBROMOCHLOROMETHANE
40U	METHYLENE CHLORIDE	40U	1,1,2-TRICHLOROETHANE
130U	ACETONE	40U	BENZENE
40U	CARBON DISULFIDE	40U	TRANS-1,3-DICHLOROPROPENE
40U	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)	40U	BROMOFORM
40U	1,1-DICHLOROETHANE	40U	METHYL ISOBUTYL KETONE
40U	1,2-DICHLOROETHENE (TOTAL)	40U	METHYL BUTYL KETONE
40U	CHLOROFORM	40U	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
40U	1,2-DICHLOROETHANE	40U	1,1,2,2-TETRACHLOROETHANE
30J	METHYL ETHYL KETONE	40U	TOLUENE
40U	1,1,1-TRICHLOROETHANE	40U	CHLOROBENZENE
40U	CARBON TETRACHLORIDE	40U	ETHYL BENZENE
40U	BROMODICHLOROMETHANE	40U	STYRENE
		40U	TOTAL XYLENES
		75	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
**

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB41 **
*** ** ** ** **

UG/KG ANALYTICAL RESULTS

38U CHLOROMETHANE
38U BROMOMETHANE
38U VINYL CHLORIDE
38U CHLOROETHANE
38U METHYLENE CHLORIDE
120U ACETONE
38U CARBON DISULFIDE
38U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
38U 1,1-DICHLOROETHANE
38U 1,2-DICHLOROETHENE (TOTAL)
38U CHLOROFORM
38U 1,2-DICHLOROETHANE
25J METHYL ETHYL KETONE
38U 1,1,1-TRICHLOROETHANE
38U CARBON TETRACHLORIDE
38U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

38U 1,2-DICHLOROPROPANE
38U CIS-1,3-DICHLOROPROPENE
38U TRICHLOROETHENE(TRICHLOROETHYLENE)
38U DIBROMOCHLOROMETHANE
38U 1,1,2-TRICHLOROETHANE
38U BENZENE
38U TRANS-1,3-DICHLOROPROPENE
38U BROMOFORM
38U METHYL ISOBUTYL KETONE
38U METHYL BUTYL KETONE
38U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
38U 1,1,2,2-TETRACHLOROETHANE
38U TOLUENE
38U CHLOROBENZENE
38U ETHYL BENZENE
38U STYRENE
38U TOTAL XYLENES
74 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81713 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-SD COLLECTION START: 12/08/93 1000 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB42 **

UG/KG ANALYTICAL RESULTS

14U CHLOROMETHANE
14U BROMOMETHANE
14U VINYL CHLORIDE
14U CHLOROETHANE
14U METHYLENE CHLORIDE
20U ACETONE
14U CARBON DISULFIDE
14U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
14U 1,1-DICHLOROETHANE
14U 1,2-DICHLOROETHENE (TOTAL)
14U CHLOROFORM
14U 1,2-DICHLOROETHANE
14U METHYL ETHYL KETONE
14U 1,1,1-TRICHLOROETHANE
14U CARBON TETRACHLORIDE
14U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

14U 1,2-DICHLOROPROPANE
14U CIS-1,3-DICHLOROPROPENE
14U TRICHLOROETHENE(TRICHLOROETHYLENE)
14U DIBROMOCHLOROMETHANE
14U 1,1,2-TRICHLOROETHANE
14U BENZENE
14U TRANS-1,3-DICHLOROPROPENE
14U BROMOFORM
14U METHYL ISOBUTYL KETONE
14U METHYL BUTYL KETONE
14U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
14U 1,1,2,2-TETRACHLOROETHANE
14U TOLUENE
14U CHLOROBENZENE
14U ETHYL BENZENE
14U STYRENE
14U TOTAL XYLENES
30 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

```
*** ***** **
** PROJECT NO. 94-0164  SAMPLE NO. 81714  SAMPLE TYPE: SOIL  PROG ELEM: SSF  COLLECTED BY: H. ZINN  **
** SOURCE: PEELE PESTICIDE DISP  CITY: CLAYTON  ST: NC  **
** STATION ID: PE-002-SL  COLLECTION START: 12/08/93  1120  STOP: 00/00/00  **
**
** CASE NO.: 21362  SAS NO.: 8134D  D. NO.: GB43  **
*** ***** **
```

```
UG/KG  ANALYTICAL RESULTS
15UJ CHLOROMETHANE
15UJ BROMOMETHANE
15UJ VINYL CHLORIDE
15UJ CHLOROETHANE
80UJ METHYLENE CHLORIDE
260UJ ACETONE
15UJ CARBON DISULFIDE
15UJ 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
15UJ 1,1-DICHLOROETHANE
15UJ 1,2-DICHLOROETHENE (TOTAL)
15UJ CHLOROFORM
15UJ 1,2-DICHLOROETHANE
15UJ METHYL ETHYL KETONE
15UJ 1,1,1-TRICHLOROETHANE
15UJ CARBON TETRACHLORIDE
15UJ BROMODICHLOROMETHANE
```

```
UG/KG  ANALYTICAL RESULTS
15UJ 1,2-DICHLOROPROPANE
15UJ CIS-1,3-DICHLOROPROPENE
15UJ TRICHLOROETHENE (TRICHLOROETHYLENE)
15UJ DIBROMOCHLOROMETHANE
15UJ 1,1,2-TRICHLOROETHANE
15UJ BENZENE
15UJ TRANS-1,3-DICHLOROPROPENE
15UJ BROMOFORM
15UJ METHYL ISOBUTYL KETONE
15UJ METHYL BUTYL KETONE
15UJ TETRACHLOROETHENE (TETRACHLOROETHYLENE)
15UJ 1,1,2,2-TETRACHLOROETHANE
15UJ TOLUENE
15UJ CHLOROBENZENE
15UJ ETHYL BENZENE
15UJ STYRENE
15UJ TOTAL XYLENES
34 PERCENT MOISTURE
```

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81715 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SL COLLECTION START: 12/08/93 1240 STOP: 00/00/00 **
**

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB44 **

*** ** ** ** **

UG/KG ANALYTICAL RESULTS

UG/KG ANALYTICAL RESULTS

13U CHLOROMETHANE
13U BROMOMETHANE
13U VINYL CHLORIDE
13U CHLOROETHANE
30U METHYLENE CHLORIDE
50U ACETONE
13U CARBON DISULFIDE
13U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U 1,1-DICHLOROETHANE
13U 1,2-DICHLOROETHENE (TOTAL)
13U CHLOROFORM
13U 1,2-DICHLOROETHANE
13U METHYL ETHYL KETONE
13UJ 1,1,1-TRICHLOROETHANE
13UJ CARBON TETRACHLORIDE
13UJ BROMODICHLOROMETHANE

13UJ 1,2-DICHLOROPROPANE
13UJ CIS-1,3-DICHLOROPROPENE
13UJ TRICHLOROETHENE (TRICHLOROETHYLENE)
13UJ DIBROMOCHLOROMETHANE
13UJ 1,1,2-TRICHLOROETHANE
13UJ BENZENE
13UJ TRANS-1,3-DICHLOROPROPENE
13UJ BROMOFORM
13UJ METHYL ISOBUTYL KETONE
13UJ METHYL BUTYL KETONE
13UJ TETRACHLOROETHENE (TETRACHLOROETHYLENE)
13UJ 1,1,2,2-TETRACHLOROETHANE
13UJ TOLUENE
13UJ CHLOROBENZENE
13UJ ETHYL BENZENE
13UJ STYRENE
13UJ TOTAL XYLENES
24 PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** *
** PROJECT NO. 94-0164 SAMPLE NO. 81716 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-PW COLLECTION START: 12/08/93 1145 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB45 **

UG/L ANALYTICAL RESULTS

10U CHLOROMETHANE
10U BROMOMETHANE
10U VINYL CHLORIDE
10U CHLOROETHANE
10U METHYLENE CHLORIDE
10U ACETONE
10U CARBON DISULFIDE
10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U 1,1-DICHLOROETHANE
10U 1,2-DICHLOROETHENE (TOTAL)
10U CHLOROFORM
10U 1,2-DICHLOROETHANE
10U METHYL ETHYL KETONE
10U 1,1,1-TRICHLOROETHANE
10U CARBON TETRACHLORIDE
10U BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS

10U 1,2-DICHLOROPROPANE
10U CIS-1,3-DICHLOROPROPENE
10U TRICHLOROETHENE (TRICHLOROETHYLENE)
10U DIBROMOCHLOROMETHANE
10U 1,1,2-TRICHLOROETHANE
10U BENZENE
10U TRANS-1,3-DICHLOROPROPENE
10U BROMOFORM
10U METHYL ISOBUTYL KETONE
10U METHYL BUTYL KETONE
10U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
10U 1,1,2,2-TETRACHLOROETHANE
10U TOLUENE
10U CHLOROBENZENE
10U ETHYL BENZENE
10U STYRENE
10U TOTAL XYLENES

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81717 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-PW COLLECTION START: 12/08/93 1200 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB46 **
*** ** ** ****

UG/L ANALYTICAL RESULTS
10U CHLOROMETHANE
10U BROMOMETHANE
10U VINYL CHLORIDE
10U CHLOROETHANE
10U METHYLENE CHLORIDE
20U ACETONE
10U CARBON DISULFIDE
10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U 1,1-DICHLOROETHANE
10U 1,2-DICHLOROETHENE (TOTAL)
10U CHLOROFORM
10U 1,2-DICHLOROETHANE
10U METHYL ETHYL KETONE
10U 1,1,1-TRICHLOROETHANE
10U CARBON TETRACHLORIDE
10U BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS
10U 1,2-DICHLOROPROPANE
10U CIS-1,3-DICHLOROPROPENE
10U TRICHLOROETHENE (TRICHLOROETHYLENE)
10U DIBROMOCHLOROMETHANE
10U 1,1,2-TRICHLOROETHANE
10U BENZENE
10U TRANS-1,3-DICHLOROPROPENE
10U BROMOFORM
10U METHYL ISOBUTYL KETONE
10U METHYL BUTYL KETONE
10U TETRACHLOROETHENE (TETRACHLOROETHYLENE)
10U 1,1,2,2-TETRACHLOROETHANE
10U TOLUENE
10U CHLOROBENZENE
10U ETHYL BENZENE
10U STYRENE
10U TOTAL XYLENES

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81718 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: H. ZINN **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-TW COLLECTION START: 12/08/93 1425 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB47 **

UG/L ANALYTICAL RESULTS

NA CHLOROMETHANE
 NA BROMOMETHANE
 NA VINYL CHLORIDE
 NA CHLOROETHANE
 NA METHYLENE CHLORIDE
 NA ACETONE
 NA CARBON DISULFIDE
 NA 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
 NA 1,1-DICHLOROETHANE
 NA 1,2-DICHLOROETHENE (TOTAL)
 NA CHLOROFORM
 NA 1,2-DICHLOROETHANE
 NA METHYL ETHYL KETONE
 NA 1,1,1-TRICHLOROETHANE
 NA CARBON TETRACHLORIDE
 NA BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS

NA 1,2-DICHLOROPROPANE
 NA CIS-1,3-DICHLOROPROPENE
 NA TRICHLOROETHENE(TRICHLOROETHYLENE)
 NA DIBROMOCHLOROMETHANE
 NA 1,1,2-TRICHLOROETHANE
 NA BENZENE
 NA TRANS-1,3-DICHLOROPROPENE
 NA BROMOFORM
 NA METHYL ISOBUTYL KETONE
 NA METHYL BUTYL KETONE
 NA TETRACHLOROETHENE(TETRACHLOROETHYLENE)
 NA 1,1,2,2-TETRACHLOROETHANE
 NA TOLUENE
 NA CHLOROENZENE
 NA ETHYL BENZENE
 NA STYRENE
 NA TOTAL XYLENES

REMARKS
 SAMPLE LOST DURING PREPARATION OR ANALYSIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81721 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-004-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB50 **
 *** ** ** ** **

UG/L ANALYTICAL RESULTS

10U CHLOROMETHANE
 10U BROMOMETHANE
 10U VINYL CHLORIDE
 10U CHLOROETHANE
 10U METHYLENE CHLORIDE
 30U ACETONE
 10U CARBON DISULFIDE
 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
 10U 1,1-DICHLOROETHANE
 10U 1,2-DICHLOROETHENE (TOTAL)
 10U CHLOROFORM
 10U 1,2-DICHLOROETHANE
 10U METHYL ETHYL KETONE
 10U 1,1,1-TRICHLOROETHANE
 10U CARBON TETRACHLORIDE
 10U BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS

10U 1,2-DICHLOROPROPANE
 10U CIS-1,3-DICHLOROPROPENE
 10U TRICHLOROETHENE(TRICHLOROETHYLENE)
 10U DIBROMOCHLOROMETHANE
 10U 1,1,2-TRICHLOROETHANE
 10U BENZENE
 10U TRANS-1,3-DICHLOROPROPENE
 10U BROMOFORM
 10U METHYL ISOBUTYL KETONE
 10U METHYL BUTYL KETONE
 10U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
 10U 1,1,2,2-TETRACHLOROETHANE
 10U TOLUENE
 10U CHLOROENZENE
 10U ETHYL BENZENE
 10U STYRENE
 10U TOTAL XYLENES

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81722 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-104-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
**

** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB51 **

*** ** ** ** **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	10U	1,2-DICHLOROPROPANE
10U	BROMOMETHANE	10U	CIS-1,3-DICHLOROPROPENE
10U	VINYL CHLORIDE	10U	TRICHLOROETHENE (TRICHLOROETHYLENE)
10U	CHLOROETHANE	10U	DIBROMOCHLOROMETHANE
10U	METHYLENE CHLORIDE	10U	1,1,2-TRICHLOROETHANE
20U	ACETONE	10U	BENZENE
10U	CARBON DISULFIDE	10U	TRANS-1,3-DICHLOROPROPENE
10U	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)	10U	BROMOFORM
10U	1,1-DICHLOROETHANE	10U	METHYL ISOBUTYL KETONE
10U	1,2-DICHLOROETHENE (TOTAL)	10U	METHYL BUTYL KETONE
10U	CHLOROFORM	10U	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
10U	1,2-DICHLOROETHANE	10U	1,1,2,2-TETRACHLOROETHANE
10U	METHYL ETHYL KETONE	10U	TOLUENE
10U	1,1,1-TRICHLOROETHANE	10U	CHLOROBENZENE
10U	CARBON TETRACHLORIDE	10U	ETHYL BENZENE
10U	BROMODICHLOROMETHANE	10U	STYRENE
		10U	TOTAL XYLENES

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81723 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-PW COLLECTION START: 12/08/93 1635 STOP: 00/00/00 **
**
** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB52 **
*** ** ** ** **

UG/L ANALYTICAL RESULTS

10U CHLOROMETHANE
10U BROMOMETHANE
10U VINYL CHLORIDE
10U CHLOROETHANE
10U METHYLENE CHLORIDE
20U ACETONE
10U CARBON DISULFIDE
10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U 1,1-DICHLOROETHANE
10U 1,2-DICHLOROETHENE (TOTAL)
10U CHLOROFORM
10U 1,2-DICHLOROETHANE
10U METHYL ETHYL KETONE
10U 1,1,1-TRICHLOROETHANE
10U CARBON TETRACHLORIDE
10U BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS

10U 1,2-DICHLOROPROPANE
10U CIS-1,3-DICHLOROPROPENE
10U TRICHLOROETHENE(TRICHLOROETHYLENE)
10U DIBROMOCHLOROMETHANE
10U 1,1,2-TRICHLOROETHANE
10U BENZENE
10U TRANS-1,3-DICHLOROPROPENE
10U BROMOFORM
10U METHYL ISOBUTYL KETONE
10U METHYL BUTYL KETONE
10U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U 1,1,2,2-TETRACHLOROETHANE
10U TOLUENE
10U CHLOROBENZENE
10U ETHYL BENZENE
10U STYRENE
10U TOTAL XYLENES

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

PURGEABLE ORGANICS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81724 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: H. ZINN **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-006-PW COLLECTION START: 12/08/93 1700 STOP: 00/00/00 **
 **
 ** CASE NO.: 21362 SAS NO.: 8134D D. NO.: GB53 **
 *** ** ** ** **

UG/L ANALYTICAL RESULTS

10U CHLOROMETHANE
 10U BROMOMETHANE
 10U VINYL CHLORIDE
 10U CHLOROETHANE
 10U METHYLENE CHLORIDE
 10U ACETONE
 10U CARBON DISULFIDE
 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
 10U 1,1-DICHLOROETHANE
 10U 1,2-DICHLOROETHENE (TOTAL)
 10U CHLOROFORM
 10U 1,2-DICHLOROETHANE
 10U METHYL ETHYL KETONE
 10U 1,1,1-TRICHLOROETHANE
 10U CARBON TETRACHLORIDE
 10U BROMODICHLOROMETHANE

UG/L ANALYTICAL RESULTS

10U 1,2-DICHLOROPROPANE
 10U CIS-1,3-DICHLOROPROPENE
 10U TRICHLOROETHENE(TRICHLOROETHYLENE)
 10U DIBROMOCHLOROMETHANE
 10U 1,1,2-TRICHLOROETHANE
 10U BENZENE
 10U TRANS-1,3-DICHLOROPROPENE
 10U BROMOFORM
 10U METHYL ISOBUTYL KETONE
 10U METHYL BUTYL KETONE
 10U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
 10U 1,1,2,2-TETRACHLOROETHANE
 10U TOLUENE
 10U CHLOROBENZENE
 10U ETHYL BENZENE
 10U STYRENE
 10U TOTAL XYLENES

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81714 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SL COLLECTION START: 12/08/93 1120 STOP: 00/00/00 **
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB43 MD NO: GB43 **
** **

ANALYTICAL RESULTS UG/KG
200J 1 UNIDENTIFIED COMPOUND

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/16/94

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

```
*** *****  
** PROJECT NO. 94-0164 SAMPLE NO. 81715 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **  
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **  
** STATION ID: PE-003-SL COLLECTION START: 12/08/93 1240 STOP: 00/00/00 **  
** CASE.NO.: 21362 SAS NO.: 8134D D. NO.: GB44 MD NO: GB44 **  
** *****
```

ANALYTICAL RESULTS UG/KG

80J 3 UNIDENTIFIED COMPOUNDS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

RECEIVED
FEB 14 1994
SUPERFUND SECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM*****

DATE: 02/02/94

SUBJECT: Results of Dioxin/Furan Analysis;
94-0164 PEELE PESTICIDE DISF
CLAYTON NC
CASE NO: 21362SAS NC: 8134D

FROM: *CH* Charles H. Hooper *J.H. Hooper*
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PAT DEROSA

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

DATA QUALIFIER REPORT

Project No.: 94-0164
Case No.: 21362
SAS No.: 8134D

Site Name: Peele Pesticide Disposal, Clayton, NC

<u>Affected</u> <u>Samples</u>	<u>Analyte</u>	<u>Flag</u> <u>Used</u>	<u>Reason</u>
All	total congeners	J	Assumed Resp. Factors/ Cal. Stds not available for all congeners
81729	1234678 HpCDD	J	1
	123678 HxCDF	J	1
81732	1234678 HpCDF	J	1
	OCDF	J	1
81733	123678 HxCDF	J	1
81734	1234678 HpCDF	J	1
81735	2378 TCDD	R	Matrix Interference
	TCDD (Total)	R	Matrix Interference
	12378 PeCDD	R	Matrix Interference
	PeCDD (Total)	R	Matrix Interference
	2378 TCDF	R	Matrix Interference
	TCDF (Total)	R	Matrix Interference
	12378 PeCDF	R	Matrix Interference
	23478 PeCDF	R	Matrix Interference
	PeCDF (Total)	R	Matrix Interference
81736	2378 TCDD	R	Matrix Interference
	TCDD (Total)	R	Matrix Interference
	1234678 HpCDD	J	2
	OCDF	J	2
	2378 TCDF	R	Matrix Interference
	TCDF (Total)	R	Matrix Interference
81739	2378 TCDD	R	Matrix Interference
	TCDD (Total)	R	Matrix Interference
	12378 PeCDD	R	Matrix Interference
	PeCDD (Total)	R	Matrix Interference
	123678 HxCDD	J	1
	2378 TCDF	R	Matrix Interference
	TCDF (Total)	R	Matrix Interference
	12378 PeCDF	R	Matrix Interference
	23478 PeCDF	R	Matrix Interference
	PeCDF (Total)	R	Matrix Interference

TEQ's : The Toxic Equivalent (TEQ) represents a summation of values from the individual equivalents that are calculated for each of the 2,3,7,8 containing isomers. If 10% or greater of the total value was from data considered to be estimated, then the TEQ is reported as estimated (J flag).

Abbreviation Key:

TCDD = Tetrachlorodibenzodioxin	TCDF = Tetrachlorodibenzofuran
PeCDD = Penta " " "	PeCDF = Penta " " " "
HxCDD = Hexa " " "	HxCDF = Hexa " " " "
HpCDD = Hepta " " "	HpCDF = Hepta " " " "
OCDD = Octa " " "	OCDF = Octa " " " "

Reason Codes

1. Results lower than the minimum quantitation limit
2. Results higher than the maximum calibration limit
3. Poor precision on the 2,3,7,8-TCDF confirmation column

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81729 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: B. NICHOLSON **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-SD COLLECTION START: 12/07/93 1105 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G57 **
*** ** ** ****

NG/KG ANALYTICAL RESULTS
1.0U 2,3,7,8 TETRACHLORODIBENZODIOXIN
1.0UJ TETRACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,7,8 PENTACHLORODIBENZODIOXIN
5.0UJ PENTACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN
5.0U 1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN
5.0UJ HEXACHLORODIBENZODIOXIN(TOTAL)
2.5J 1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN
2.5J HEPTACHLORODIBENZODIOXIN(TOTAL)
61 OCTACHLORODIBENZODIOXIN(TOTAL)
1.0U 2,3,7,8 TETRACHLORODIBENZOFURAN
1.0UJ TETRACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,7,8 PENTACHLORODIBENZOFURAN

NG/KG ANALYTICAL RESULTS
5.0U 2,3,4,7,8 PENTACHLORODIBENZOFURAN
5.0UJ PENTACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
1.1J 1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U 2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
1.1J HEXACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
5.0U 1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
5.0UJ HEPTACHLORODIBENZOFURAN(TOTAL)
10U OCTACHLORODIBENZOFURAN(TOTAL)
0.2J TEQ(TOxic. EQUIV. VALUE, FROM I-TEF/89)
20 % MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81730 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SD COLLECTION START: 12/07/93 1240 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G58 **
** ** ** **

NG/KG ANALYTICAL RESULTS
1.0U 2,3,7,8 TETRACHLORODIBENZODIOXIN
1.0UJ TETRACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,7,8 PENTACHLORODIBENZODIOXIN
5.0UJ PENTACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN
5.0U 1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN
5.0UJ HEXACHLORODIBENZODIOXIN(TOTAL)
9.8 1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN
26J HEPTACHLORODIBENZODIOXIN(TOTAL)
190 OCTACHLORODIBENZODIOXIN(TOTAL)
1.0U 2,3,7,8 TETRACHLORODIBENZOFURAN
1.0UJ TETRACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,7,8 PENTACHLORODIBENZOFURAN

NG/KG ANALYTICAL RESULTS
5.0U 2,3,4,7,8 PENTACHLORODIBENZOFURAN
5.0UJ PENTACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U 2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
5.0UJ HEXACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
5.0U 1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
5.0UJ HEPTACHLORODIBENZOFURAN(TOTAL)
10U OCTACHLORODIBENZOFURAN(TOTAL)
0.29 TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
71 % MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

```

*** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81731 SAMPLE TYPE: SEDIMENT   PROG ELEM: SSF   COLLECTED BY: D. RUMFORD   **
** SOURCE: PEELE PESTICIDE DISP                               CITY: CLAYTON   ST: NC   **
** STATION ID: PE-001-SL                                       COLLECTION START: 12/07/93 1445   STOP: 00/00/00   **
** CASE NUMBER: 21362           SAS NUMBER: 8134D               D NUMBER: G59   **
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

```

NG/KG	ANALYTICAL RESULTS	NG/KG	ANALYTICAL RESULTS
1.0U	2,3,7,8 TETRACHLORODIBENZODIOXIN	5.0U	2,3,4,7,8 PENTACHLORODIBENZOFURAN
1.0UJ	TETRACHLORODIBENZODIOXIN(TOTAL)	4.7J	PENTACHLORODIBENZOFURAN(TOTAL)
5.0U	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
5.0UJ	PENTACHLORODIBENZODIOXIN(TOTAL)	5.0U	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	5.0U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	5.0U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	5.0UJ	HEXACHLORODIBENZOFURAN(TOTAL)
5.0UJ	HEXACHLORODIBENZODIOXIN(TOTAL)	5.0U	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
5.0U	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
12J	HEPTACHLORODIBENZODIOXIN(TOTAL)	5.0UJ	HEPTACHLORODIBENZOFURAN(TOTAL)
67O	OCTACHLORODIBENZODIOXIN(TOTAL)	10U	OCTACHLORODIBENZOFURAN(TOTAL)
1.0U	2,3,7,8 TETRACHLORODIBENZOFURAN	0.67	TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
15J	TETRACHLORODIBENZOFURAN(TOTAL)		
5.0U	1,2,3,7,8 PENTACHLORODIBENZOFURAN	13	% MOISTURE

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81732 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G60 **

NG/KG	ANALYTICAL RESULTS	NG/KG	ANALYTICAL RESULTS
1.0U	2,3,7,8 TETRACHLORODIBENZODIOXIN	5.0U	2,3,4,7,8 PENTACHLORODIBENZOFURAN
1.0UJ	TETRACHLORODIBENZODIOXIN(TOTAL)	5.0UJ	PENTACHLORODIBENZOFURAN(TOTAL)
5.0U	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
5.0UJ	PENTACHLORODIBENZODIOXIN(TOTAL)	5.0U	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	5.0U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	5.0U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	6.9J	HEXACHLORODIBENZOFURAN(TOTAL)
5.0UJ	HEXACHLORODIBENZODIOXIN(TOTAL)	3.5J	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
16	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
16J	HEPTACHLORODIBENZODIOXIN(TOTAL)	9.3J	HEPTACHLORODIBENZOFURAN(TOTAL)
710	OCTACHLORODIBENZODIOXIN(TOTAL)	6.4J	OCTACHLORODIBENZOFURAN(TOTAL)
1.0U	2,3,7,8 TETRACHLORODIBENZOFURAN	0.91	TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
9.3J	TETRACHLORODIBENZOFURAN(TOTAL)		
5.0U	1,2,3,7,8 PENTACHLORODIBENZOFURAN	56	% MOISTURE

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81733 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G61 **
**

NG/KG	ANALYTICAL RESULTS	NG/KG	ANALYTICAL RESULTS
1.0U	2,3,7,8 TETRACHLORODIBENZODIOXIN	5.0U	2,3,4,7,8 PENTACHLORODIBENZOFURAN
1.0UJ	TETRACHLORODIBENZODIOXIN(TOTAL)	5.0UJ	PENTACHLORODIBENZOFURAN(TOTAL)
5.0U	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
5.0UJ	PENTACHLORODIBENZODIOXIN(TOTAL)	1.4J	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	5.0U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	5.0U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	1.4J	HEXACHLORODIBENZOFURAN(TOTAL)
2.6J	HEXACHLORODIBENZODIOXIN(TOTAL)	5.0U	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
22	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
50J	HEPTACHLORODIBENZODIOXIN(TOTAL)	10J	HEPTACHLORODIBENZOFURAN(TOTAL)
900	OCTACHLORODIBENZODIOXIN(TOTAL)	10	OCTACHLORODIBENZOFURAN(TOTAL)
1.0U	2,3,7,8 TETRACHLORODIBENZOFURAN	1.3	TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
2.0J	TETRACHLORODIBENZOFURAN(TOTAL)		
5.0U	1,2,3,7,8 PENTACHLORODIBENZOFURAN	65	% MOISTURE

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81734 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-SD COLLECTION START: 12/08/93 1000 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G62 **
*** ** ** ****

NG/KG ANALYTICAL RESULTS
1.0U 2,3,7,8 TETRACHLORODIBENZODIOXIN
1.0UJ TETRACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,7,8 PENTACHLORODIBENZODIOXIN
5.0UJ PENTACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN
5.0U 1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN
5.0UJ HEXACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN
5.0UJ HEPTACHLORODIBENZODIOXIN(TOTAL)
110 OCTACHLORODIBENZODIOXIN(TOTAL)
1.0U 2,3,7,8 TETRACHLORODIBENZOFURAN
0.4J TETRACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,7,8 PENTACHLORODIBENZOFURAN

NG/KG ANALYTICAL RESULTS
5.0U 2,3,4,7,8 PENTACHLORODIBENZOFURAN
5.0UJ PENTACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U 2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
4.8J HEXACHLORODIBENZOFURAN(TOTAL)
1.1J 1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
5.0U 1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
3.7J HEPTACHLORODIBENZOFURAN(TOTAL)
10U OCTACHLORODIBENZOFURAN(TOTAL)
0.12 TEQ(TOxic. EQUIV. VALUE, FROM I-TEF/89)
29 % MOISTURE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81735 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SL COLLECTION START: 12/08/93 1120 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G63 **
** ** ** **

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
NG/KG		NG/KG	
30UR	2,3,7,8 TETRACHLORODIBENZODIOXIN	150UR	2,3,4,7,8 PENTACHLORODIBENZOFURAN
30UR	TETRACHLORODIBENZODIOXIN(TOTAL)	150UR	PENTACHLORODIBENZOFURAN(TOTAL)
150UR	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	150U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
150UR	PENTACHLORODIBENZODIOXIN(TOTAL)	150U	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
150U	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	150U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
150U	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	150U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
150U	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	13000J	HEXACHLORODIBENZOFURAN(TOTAL)
810J	HEXACHLORODIBENZODIOXIN(TOTAL)	1400	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
2500	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	150U	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
4200J	HEPTACHLORODIBENZODIOXIN(TOTAL)	7800J	HEPTACHLORODIBENZOFURAN(TOTAL)
25000	OCTACHLORODIBENZODIOXIN(TOTAL)	3300	OCTACHLORODIBENZOFURAN(TOTAL)
30UR	2,3,7,8 TETRACHLORODIBENZOFURAN	67	TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
30UR	TETRACHLORODIBENZOFURAN(TOTAL)		
150UR	1,2,3,7,8 PENTACHLORODIBENZOFURAN	30	% MOISTURE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81736 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SL COLLECTION START: 12/08/93 1240 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G64 **
*** ** ** ****

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
NG/KG		NG/KG	
1.0UR	2,3,7,8 TETRACHLORODIBENZODIOXIN	500U	2,3,4,7,8 PENTACHLORODIBENZOFURAN
1.0UR	TETRACHLORODIBENZODIOXIN(TOTAL)	500UJ	PENTACHLORODIBENZOFURAN(TOTAL)
500U	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
500UJ	PENTACHLORODIBENZODIOXIN(TOTAL)	5.0U	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	5.0U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
690	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	5.0U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
640	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	3300J	HEXACHLORODIBENZOFURAN(TOTAL)
6500J	HEXACHLORODIBENZODIOXIN(TOTAL)	1500	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
2800J	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
5200J	HEPTACHLORODIBENZODIOXIN(TOTAL)	1500J	HEPTACHLORODIBENZOFURAN(TOTAL)
8800J	OCTACHLORODIBENZODIOXIN(TOTAL)	1600	OCTACHLORODIBENZOFURAN(TOTAL)
1.0UR	2,3,7,8 TETRACHLORODIBENZOFURAN	190J	TEQ(TOxic. EQUIV. VALUE, FROM I-TEF/89)
1.0UR	TETRACHLORODIBENZOFURAN(TOTAL)		
500U	1,2,3,7,8 PENTACHLORODIBENZOFURAN	22	% MOISTURE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81737 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-SL COLLECTION START: 12/08/93 1525 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: G65 **
*** ** ** ****

NG/KG ANALYTICAL RESULTS
100U 2,3,7,8 TETRACHLORODIBENZODIOXIN
100UJ TETRACHLORODIBENZODIOXIN(TOTAL)
7.1 1,2,3,7,8 PENTACHLORODIBENZODIOXIN
30J PENTACHLORODIBENZODIOXIN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN
30 1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN
41 1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN
240J HEXACHLORODIBENZODIOXIN(TOTAL)
220 1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN
370J HEPTACHLORODIBENZODIOXIN(TOTAL)
2000 OCTACHLORODIBENZODIOXIN(TOTAL)
100U 2,3,7,8 TETRACHLORODIBENZOFURAN
100UJ TETRACHLORODIBENZOFURAN(TOTAL)
500U 1,2,3,7,8 PENTACHLORODIBENZOFURAN

NG/KG ANALYTICAL RESULTS
500U 2,3,4,7,8 PENTACHLORODIBENZOFURAN
500UJ PENTACHLORODIBENZOFURAN(TOTAL)
5.0U 1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
5.0U 1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
5.0U 2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
5.0UJ HEXACHLORODIBENZOFURAN(TOTAL)
61 1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
5.0U 1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
180J HEPTACHLORODIBENZOFURAN(TOTAL)
210 OCTACHLORODIBENZOFURAN(TOTAL)
16 TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
14 % MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/01/94

DIOXIN/FURAN DATA REPORT

```

***
** PROJECT NO. 94-0164   SAMPLE NO. 81738   SAMPLE TYPE: SOIL   PROG ELEM: SSF   COLLECTED BY: H. ZINN
** SOURCE: PEELE PESTICIDE DISP   CITY: CLAYTON   ST: NC
** STATION ID: PE-104-SL   COLLECTION START: 12/08/93   1535   STOP: 00/00/00
** CASE NUMBER: 21362   SAS NUMBER: 8134D   D NUMBER: G66
**

```

NG/KG	ANALYTICAL RESULTS	NG/KG	ANALYTICAL RESULTS
100U	2,3,7,8 TETRACHLORODIBENZODIOXIN	500U	2,3,4,7,8 PENTACHLORODIBENZOFURAN
100UJ	TETRACHLORODIBENZODIOXIN(TOTAL)	500UJ	PENTACHLORODIBENZOFURAN(TOTAL)
6.4	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	5.0U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
55J	PENTACHLORODIBENZODIOXIN(TOTAL)	5.0U	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
7.6	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	5.0U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
31	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	5.0U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
43	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	5.0UJ	HEXACHLORODIBENZOFURAN(TOTAL)
240J	HEXACHLORODIBENZODIOXIN(TOTAL)	46	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
180	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	12	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
300J	HEPTACHLORODIBENZODIOXIN(TOTAL)	100J	HEPTACHLORODIBENZOFURAN(TOTAL)
1200	OCTACHLORODIBENZODIOXIN(TOTAL)	50	OCTACHLORODIBENZOFURAN(TOTAL)
100U	2,3,7,8 TETRACHLORODIBENZOFURAN	15	TEQ(TOXIC. EQUIV. VALUE, FROM I-TEF/89)
100UJ	TETRACHLORODIBENZOFURAN(TOTAL)		
500U	1,2,3,7,8 PENTACHLORODIBENZOFURAN	16	% MOISTURE

FOOTNOTES

```

*A-AVERAGE VALUE   *NA-NOT ANALYZED   *NAI-INTERFERENCES   *J-ESTIMATED VALUE   *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN   *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

```

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

02/02/94

DIOXIN/FURAN DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81739 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-005-SL COLLECTION START: 12/08/93 1100 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D D NUMBER: 667 **
**

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
30UR	2,3,7,8 TETRACHLORODIBENZODIOXIN	150UR	2,3,4,7,8 PENTACHLORODIBENZOFURAN
30UR	TETRACHLORODIBENZODIOXIN(TOTAL)	150UR	PENTACHLORODIBENZOFURAN(TOTAL)
150UR	1,2,3,7,8 PENTACHLORODIBENZODIOXIN	150U	1,2,3,4,7,8 HEXACHLORODIBENZOFURAN
150UR	PENTACHLORODIBENZODIOXIN(TOTAL)	150U	1,2,3,6,7,8 HEXACHLORODIBENZOFURAN
150U	1,2,3,4,7,8 HEXACHLORODIBENZODIOXIN	150U	1,2,3,7,8,9 HEXACHLORODIBENZOFURAN
100J	1,2,3,6,7,8 HEXACHLORODIBENZODIOXIN	150U	2,3,4,6,7,8 HEXACHLORODIBENZOFURAN
150U	1,2,3,7,8,9 HEXACHLORODIBENZODIOXIN	5600J	HEXACHLORODIBENZOFURAN(TOTAL)
340J	HEXACHLORODIBENZODIOXIN(TOTAL)	1800	1,2,3,4,6,7,8 HEPTACHLORODIBENZOFURAN
1800	1,2,3,4,6,7,8 HEPTACHLORODIBENZODIOXIN	200	1,2,3,4,7,8,9 HEPTACHLORODIBENZOFURAN
3300J	HEPTACHLORODIBENZODIOXIN(TOTAL)	5100J	HEPTACHLORODIBENZOFURAN(TOTAL)
18000	OCTACHLORODIBENZODIOXIN(TOTAL)	4900	OCTACHLORODIBENZOFURAN(TOTAL)
30UR	2,3,7,8 TETRACHLORODIBENZOFURAN	71J	TEQ(TOxic. EQUIV. VALUE, FROM I-TEF/89)
30UR	TETRACHLORODIBENZOFURAN(TOTAL)		
150UR	1,2,3,7,8 PENTACHLORODIBENZOFURAN	22	% MOISTURE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

Pat

RECEIVED
FEB 02 1994
SUPERFUND SECTION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM*****

DATE: 01/25/94

SUBJECT: Results of Metals Analysis;
94-0164 PEELE PESTICIDE DISF
CLAYTON NC
CASE NO: 21362SAS NC: 8134D

FROM: Charles H. Hooper *for*
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PAT DEROSA

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

INORGANIC DATA QUALIFIERS REPORT

Case Number: 21362
 Project Number: 94-0164
 Site: Peele Pesticide Disposal, Clayton, NC

<u>Element</u>	<u>Flag</u>	<u>Samples Affected</u>	<u>Reason</u>
<u>A. Water</u>			
As, Be, Fe, Tl, Zn	U	All positives > IDL, but < CRDL	Baseline instability
Al, Na	U	All positives > IDL, but < 10X contaminant level	Positives in blanks
Cd	J	All with Al concentrations in solution > 90,000 ug/L	Suspected over correction as noted in the contractor ICS
Na	J	All	Serial dilution percent difference = 10.9%
Pb	J	MDGB45	Duplicate MSA r < .995
Ba	J	MDGB50	% RSD > 20% for ICP multiple exposures
<u>B. Soil</u>			
As, Be, Fe, Tl, Zn	U	All positives > IDL, but < CRDL	Baseline instability
Al, Ca, Mg, Na	U	All positives > IDL, but < 10X contaminant level	Positives in blanks
Ag	J	All with Al or Fe concentrations in solution > 100,000 ug/L	Suspected over correction as noted in the contractor ICS
Pb	J	MDGB39 & 44	Duplicate MSA R < .995
Co	J	MDGB40	% RSD > 20% for ICP multiple exposures
Cu	J	MDGB42	% RSD > 20% for ICP multiple exposures
Cd	JN	MDGB44	Suspected positive interference from high (> 240,000 ug/L) concentrations of Fe in solution
Pb	J	MDGB36	%CV > 20% for duplicate analysis

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81707 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: B. NICHOLSON **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-SD COLLECTION START: 12/07/93 1105 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB36 **
 **

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
510	ALUMINUM	1.9U	MANGANESE
20U	ANTIMONY	0.12U	MERCURY
2U	ARSENIC	4.6U	NICKEL
1.5	BARIIUM	100U	POTASSIUM
0.24U	BERYLLIUM	0.73U	SELENIUM
0.97U	CADMIUM	1.7U	SILVER
160	CALCIUM	90U	SODIUM
2.2U	CHROMIUM	0.24U	THALLIUM
1.7U	COBALT	NA	TIN
6.9	COPPER	3.4U	VANADIUM
670	IRON	8.2	ZINC
1.1J	LEAD	17	PERCENT MOISTURE
40U	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81708 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SD COLLECTION START: 12/07/93 1240 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB37 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
12000	ALUMINUM	110	MANGANESE
30U	ANTIMONY	0.29U	MERCURY
5U	ARSENIC	20U	NICKEL
62	BARIUM	400	POTASSIUM
0.57U	BERYLLIUM	1.7U	SELENIUM
2.3U	CADMIUM	4U	SILVER
1200	CALCIUM	260	SODIUM
16	CHROMIUM	0.57U	THALLIUM
4U	COBALT	NA	TIN
22	COPPER	25	VANADIUM
12000	IRON	33	ZINC
17	LEAD	65	PERCENT MOISTURE
390	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81709 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-005-PW COLLECTION START: 12/07/93 1255 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB38 **

*** UG/L ANALYTICAL RESULTS ***		*** UG/L ANALYTICAL RESULTS ***	
80U	ALUMINUM	13	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
3U	ARSENIC	19U	NICKEL
43	BARIUM	2700	POTASSIUM
2U	BERYLLIUM	3U	SELENIUM
4U	CADMIUM	7U	SILVER
3800	CALCIUM	5400J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
21U	COPPER	14U	VANADIUM
27U	IRON	20U	ZINC
9	LEAD		
860	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81710 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-SL COLLECTION START: 12/07/93 1445 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB39 **
** **

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
8300	ALUMINUM	31	MANGANESE
20U	ANTIMONY	0.11U	MERCURY
2.8	ARSENIC	4.3U	NICKEL
14	BARIUM	140	POTASSIUM
0.23U	BERYLLIUM	0.68U	SELENIUM
0.91U	CADMIUM	1.6U	SILVER
420	CALCIUM	90U	SODIUM
11	CHROMIUM	0.23U	THALLIUM
1.6U	COBALT	NA	TIN
8.3	COPPER	18	VANADIUM
8100	IRON	7.8	ZINC
10J	LEAD	12	PERCENT MOISTURE
130	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81711 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB40 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
13000	ALUMINUM	120	MANGANESE
40U	ANTIMONY	0.33U	MERCURY
5U	ARSENIC	13	NICKEL
82	BARIUM	430	POTASSIUM
2U	BERYLLIUM	2U	SELENIUM
2.7U	CADMIUM	4.7U	SILVER
2500	CALCIUM	390	SODIUM
18	CHROMIUM	0.67U	THALLIUM
5.6J	COBALT	NA	TIN
23	COPPER	38	VANADIUM
14000	IRON	82	ZINC
27	LEAD	70	PERCENT MOISTURE
810	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81712 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-103-SD COLLECTION START: 12/07/93 1615 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB41 **
 **

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
14000	ALUMINUM	110	MANGANESE
30U	ANTIMONY	0.76	MERCURY
5U	ARSENIC	20U	NICKEL
84	BARIUM	490	POTASSIUM
2U	BERYLLIUM	1.8U	SELENIUM
2.3U	CADMIUM	4.1U	SILVER
2400	CALCIUM	360	SODIUM
23	CHROMIUM	0.58U	THALLIUM
4.5	COBALT	NA	TIN
21	COPPER	37	VANADIUM
14000	IRON	83	ZINC
26	LEAD	66	PERCENT MOISTURE
840	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81713 SAMPLE TYPE: SEDIMENT PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-004-SD COLLECTION START: 12/08/93 1000 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB42 **
 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1600	ALUMINUM	44	MANGANESE
20U	ANTIMONY	0.18	MERCURY
0.82U	ARSENIC	5.2U	NICKEL
11	BARIUM	150	POTASSIUM
0.27U	BERYLLIUM	0.82U	SELENIUM
1.1U	CADMIUM	1.9U	SILVER
400	CALCIUM	140U	SODIUM
2.4U	CHROMIUM	0.27U	THALLIUM
1.9U	COBALT	NA	TIN
8.9J	COPPER	4.3	VANADIUM
2000	IRON	16	ZINC
2.1	LEAD	26	PERCENT MOISTURE
180	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81714 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-SL COLLECTION START: 12/08/93 1120 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB43 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
19000	ALUMINUM	28	MANGANESE
20U	ANTIMONY	0.14U	MERCURY
6.1	ARSENIC	6	NICKEL
93	BARIUM	920	POTASSIUM
1U	BERYLLIUM	0.84U	SELENIUM
1.1U	CADMIUM	1.9U	SILVER
1800	CALCIUM	170U	SODIUM
39	CHROMIUM	1U	THALLIUM
3.2	COBALT	NA	TIN
190	COPPER	31	VANADIUM
16000	IRON	77	ZINC
110	LEAD	28	PERCENT MOISTURE
1500	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81715 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-SL COLLECTION START: 12/08/93 1240 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB44 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
22000	ALUMINUM	270	MANGANESE
20U	ANTIMONY	0.14	MERCURY
13	ARSENIC	110	NICKEL
49	BARIUM	310	POTASSIUM
0.26U	BERYLLIUM	0.79U	SELENIUM
1.9JN	CADMIUM	1.8UJ	SILVER
870	CALCIUM	170U	SODIUM
100	CHROMIUM	1U	THALLIUM
9.1	COBALT	NA	TIN
610	COPPER	55	VANADIUM
65000	IRON	420	ZINC
200J	LEAD	24	PERCENT MOISTURE
900	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

 ** PROJECT NO. 94-0164 SAMPLE NO. 81716 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-001-PW COLLECTION START: 12/08/93 1145 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB45 **
 **

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
28U	ALUMINUM	14	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
3U	ARSENIC	19U	NICKEL
16	BARIUM	2900	POTASSIUM
2U	BERYLLIUM	3U	SELENIUM
4U	CADMIUM	7U	SILVER
7100	CALCIUM	7300J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
11	COPPER	14U	VANADIUM
110	IRON	1200	ZINC
5J	LEAD		
2100	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

*** ** ** ** **
** PROJECT NO. 94-0164 SAMPLE NO. 81717 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-002-PW COLLECTION START: 12/08/93 1200 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB46 **
** ** ** **

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
28U	ALUMINUM	8U	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
3U	ARSENIC	19U	NICKEL
36	BARIIUM	2800	POTASSIUM
2U	BERYLLIUM	3U	SELENIUM
4U	CADMIUM	7U	SILVER
8900	CALCIUM	7100J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
93	COPPER	14U	VANADIUM
27U	IRON	92	ZINC
3U	LEAD		
5800	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81718 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-001-TW COLLECTION START: 12/08/93 1425 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB47 **

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
170U	ALUMINUM	52	MANGANESE
46U	ANTIMONY	0.51	MERCURY
3U	ARSENIC	19U	NICKEL
13	BARIUM	890	POTASSIUM
2U	BERYLLIUM	3U	SELENIUM
4U	CADMIUM	7U	SILVER
2600	CALCIUM	4500J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
52	COPPER	14U	VANADIUM
50U	IRON	23	ZINC
3U	LEAD		
480	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81719 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-SL COLLECTION START: 12/08/93 1525 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB48 **

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
23000	ALUMINUM	59	MANGANESE
11U	ANTIMONY	0.24	MERCURY
5.1	ARSENIC	4.6U	NICKEL
27	BARIUM	270	POTASSIUM
0.24U	BERYLLIUM	0.72U	SELENIUM
0.96U	CADMIUM	1.7UJ	SILVER
1700	CALCIUM	130U	SODIUM
30	CHROMIUM	0.24U	THALLIUM
1.7U	COBALT	NA	TIN
15	COPPER	60	VANADIUM
25000	IRON	52	ZINC
16	LEAD	17	PERCENT MOISTURE
250	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81720 SAMPLE TYPE: SOIL PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-104-SL COLLECTION START: 12/08/93 1535 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB49 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
25000	ALUMINUM	45	MANGANESE
11U	ANTIMONY	1.6	MERCURY
5.3	ARSENIC	7	NICKEL
40	BARIUM	260	POTASSIUM
0.24U	BERYLLIUM	0.72U	SELENIUM
0.96U	CADMIUM	1.7UJ	SILVER
1100	CALCIUM	150U	SODIUM
33	CHROMIUM	0.24U	THALLIUM
1.7U	COBALT	NA	TIN
16	COPPER	62	VANADIUM
25000	IRON	57	ZINC
18	LEAD	17	PERCENT MOISTURE
250	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

** PROJECT NO. 94-0164 SAMPLE NO. 81721 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-004-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB50 **
**

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
70U	ALUMINUM	20	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
3U	ARSENIC	19U	NICKEL
7J	BARIUM	1800	POTASSIUM
2U	BERYLLIUM	30U	SELENIUM
4U	CADMIUM	7U	SILVER
26000	CALCIUM	12000J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
52	COPPER	14U	VANADIUM
100U	IRON	120	ZINC
9	LEAD		
3300	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

*** ** ** ** **
 ** PROJECT NO. 94-0164 SAMPLE NO. 81722 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
 ** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
 ** STATION ID: PE-104-PW COLLECTION START: 12/08/93 1515 STOP: 00/00/00 **
 ** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB51 **
 *** ** ** ** **

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
UG/L		UG/L	
28U	ALUMINUM	20	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
3U	ARSENIC	19U	NICKEL
6	BARIUM	1800	POTASSIUM
2U	BERYLLIUM	30U	SELENIUM
4U	CADMIUM	7U	SILVER
27000	CALCIUM	12000J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
59	COPPER	14U	VANADIUM
40U	IRON	150	ZINC
8	LEAD		
3300	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
 *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

*** **
** PROJECT NO. 94-0164 SAMPLE NO. 81723 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: D. RUMFORD **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-003-PW COLLECTION START: 12/08/93 1635 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB52 **
*** **

ANALYTICAL RESULTS		ANALYTICAL RESULTS	
UG/L		UG/L	
28U	ALUMINUM	10	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
4U	ARSENIC	19U	NICKEL
28	BARIUM	2000	POTASSIUM
2U	BERYLLIUM	3U	SELENIUM
4U	CADMIUM	7U	SILVER
3900	CALCIUM	6300J	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
47	COPPER	14U	VANADIUM
70U	IRON	420	ZINC
3U	LEAD		
1000	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/94

METALS DATA REPORT

*** ** *
** PROJECT NO. 94-0164 SAMPLE NO. 81724 SAMPLE TYPE: GRNDWATER PROG ELEM: SSF COLLECTED BY: H. ZINN **
** SOURCE: PEELE PESTICIDE DISP CITY: CLAYTON ST: NC **
** STATION ID: PE-006-PW COLLECTION START: 12/08/93 1700 STOP: 00/00/00 **
** CASE NUMBER: 21362 SAS NUMBER: 8134D MD NUMBER: GB53 **
*** ** *

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
28U	ALUMINUM	8U	MANGANESE
46U	ANTIMONY	0.20U	MERCURY
3U	ARSENIC	19U	NICKEL
3U	BARIUM	380U	POTASSIUM
2U	BERYLLIUM	3U	SELENIUM
4U	CADMIUM	7U	SILVER
60U	CALCIUM	160U	SODIUM
9U	CHROMIUM	4U	THALLIUM
7U	COBALT	NA	TIN
9U	COPPER	14U	VANADIUM
27U	IRON	7U	ZINC
3U	LEAD		
47U	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES

- *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
- *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
- *R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

REGION: IV
CASE No.: 21362
SAS No.: 8134D
ATCH No.:

ORGANIC TRAFFIC REPORT
NC Department of Environment Health & Natural Resources
CHAIN-OF-CUSTODY REPORT
Division of Solid Waste Management/Superfund Section
P.O. Box 27687 Raleigh, NC 27611-7687
Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

ACTIVITY: RSI SPILL ID: PL
PROJECT ID: 94-0164
SITE NAME: Peele Pesticide Disposal Site
CITY, STATE: Clayton/Johnston, NC

DATE SHIPPED: 12/09/93 CARRIER: Federal Express

AIRBILL: 278 9623743

SHIPPED TO: Davis & Floyd, Inc.
816 East Durst Street

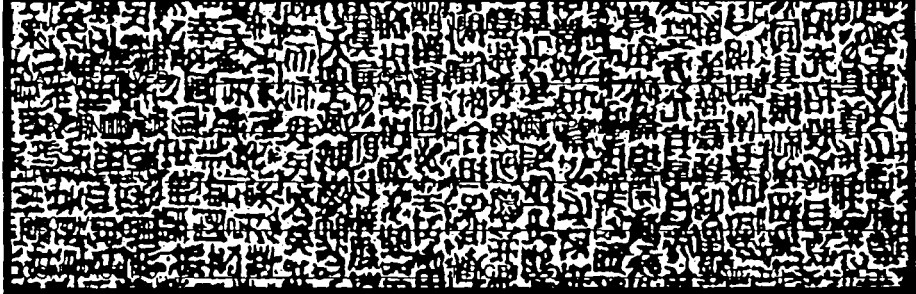
Greenwood, SC 29646

ATTN: Sample Custodian

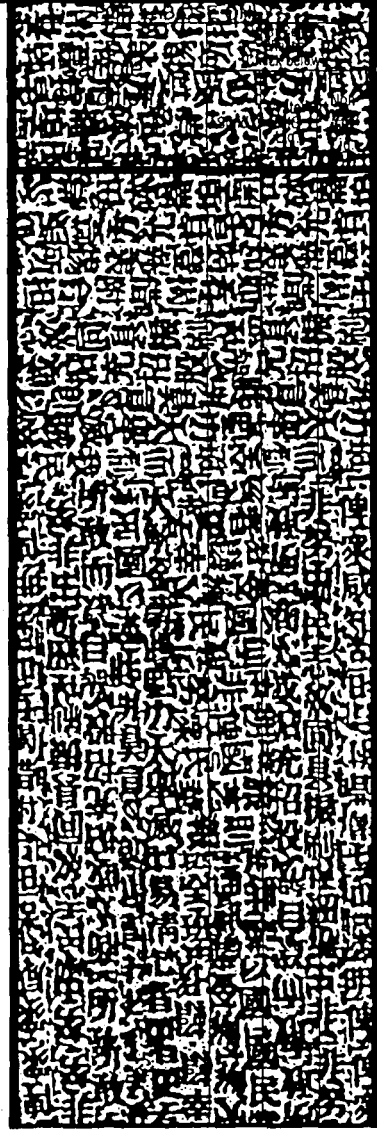
PHONE: 803/229-5211

SAMPLERS (Signature)
Henry Eric Sam Nicks
Darryl Ruffin

RELINQUISHED BY: <i>Sam Nicks</i>	DATE/TIME 12/9/93 1900	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:



ORGANIC CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS			REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	INORG CLP ID
			VOA	BNA	PCB				
DGB36	Sediment B. NICHOLSON	LOW	X	X	X	(2) 4A- 28501, 02	PE-001-SD	12-07/1105	MDGB36
DGB37	Sediment D. RUMFORD	LOW	X	X	X	(2) 4A- 28505, 06	PE-002-SD	12-07/1240	MDGB37
DGB38	Ground Water D. RUMFORD	LOW	X	X	X	(3) 4A- 28509, 10, 11	PE-005-PW	12-07/1255	MDGB38
DGB39	Soil D. RUMFORD	LOW	X	X	X	(2) 4A- 28513, 14	PE-001-SL	12-07/1445	MDGB39
DGB40	Sediment D. RUMFORD	LOW	X	X	X	(2) 4A- 28517, 18	PE-003-SD	12-07/1615	MDGB40
DGB41	Sediment D. RUMFORD	LOW	X	X	X	(2) 4A- 28521, 22	PE-103-SD	12-07/1615	MDGB41



ORGANIC TRAFFIC REPORT
 NC Department of Environment Health & Natural Resources
 Division of Solid Waste Management/Superfund Section
CHAIN-OF-CUSTODY REPORT
 P.O. Box 2600 Raleigh, NC 27611-7687
 Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

REGION: IV
 CASE No.: 21362
 SAS No.: 8134D
 ATCH No.:

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

ACTIVITY: ESI SPILL ID: PL
 PROJECT ID: 94-0164
 SITE NAME: Peele Pesticide Disposal Site
 CITY, STATE: Clayton/Johnston, NC

DATE SHIPPED: 12/09/93 CARRIER: Federal Express
 AIRBILL: 2789623793

SHIPPED TO: Davis & Floyd, Inc.
 816 East Durst Street

Greenwood, SC 29646

ATTN: Sample Custodian

PHONE: 803/229-5211

SAMPLERS (Signature) <i>Henry Zinn Bruce Kirk</i> <i>Doug Runkel</i>		
RELINQUISHED BY: <i>Bruce Kirk</i>	DATE/TIME 12/9/93 900	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

ORGANIC CLP ID	MATRIX/SAMPLER	CONC	RAS ANALYSIS			REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	INORG CLP ID
			VOA	BNA	PCB				
DGB42	Sediment D. RUMFORD	LOW	X	X	X	(2) 4A- 28525, 26	PE-004-SD	12-08/1000	HDGB42
DGB43	Soil H. ZINN	HIGH	X	X	X	(2) 4A- 28529, 30	PE-002-SL	12-08/1120	HDGB43
DGB44	Soil H. ZINN	MED	X	X	X	(2) 4A- 28533, 34	PE-003-SL	12-08/1240	HDGB44
DGB45	Ground Water D. RUMFORD	LOW	X	X	X	(3) 4A- 28537, 38, 39	PE-001-PW	12-08/1145	HDGB45
DGB46	Ground Water D. RUMFORD	LOW	X	X	X	(3) 4A- 28541, 42, 43	PE-002-PW	12-08/1200	HDGB46
DGB47	Ground Water H. ZINN	LOW	X	X	X	(3) 4A- 28545, 46, 47	PE-001-PW	12-08/1425	HDGB47
DGB48	Soil H. ZINN	LOW		X	X	(1) 4A- 28549	PE-004-SL	12-08/1525	HDGB48
DGB49	Soil H. ZINN	LOW		X	X	(1) 4A- 28552	PE-104-SL	12-08/1535	HDGB49
DGB50	Ground Water D. RUMFORD	LOW	X	X	X	(3) 4A- 28555, 56, 57	PE-004-PW	12-08/1515	HDGB50
DGB51	Ground Water D. RUMFORD	LOW	X	X	X	(3) 4A- 28559, 60, 61	PE-104-PW	12-08/1515	HDGB51
DGB52	Ground Water D. RUMFORD	LOW	X	X	X	(6) 4A- 28563, 64, 65, 66, 67, 68	PE-003-PW	12-08/1635	HDGB52
DGB53	Ground Water H. ZINN	LOW	X			(2) 4A- 28571, 72	PE-006-PW	12-08/1700	HDGB53



REGION: -IV
 CASE No.: 21362
 SAS No.: 8134D
 ATCH No.:

ORGANIC TRAFFIC REPORT
 CHAIN OF CUSTODY RECORD

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

NC Department of Environment Health & Natural Resources
 Division of Solid Waste Management/Superfund Section
 P.O. Box 27687 Raleigh, NC 27611-7687
 Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

ACTIVITY: ESI SPILL ID: PL
 PROJECT ID: 94-0164
 SITE NAME: Peele Pesticide Disposal Site
 CITY, STATE: Clayton/Johnston, NC

SAMPLERS (Signature)
Harry Zinn
Bruce Vinkler
Doug Ralston

DATE SHIPPED: 12/09/93 CARRIER: Federal Express
 AIRBILL: 2789623793⁸¹⁵

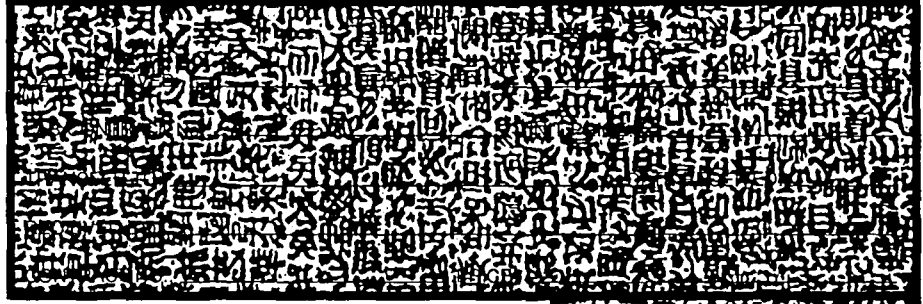
RELINQUISHED BY: <i>Bruce Vinkler</i>	DATE/TIME 12/9/93 19:00	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

SHIPPED TO: Davis & Floyd, Inc.
 816 East Durst Street

Greenwood, SC 29646

ATTN: Sample Custodian

PHONE: 803/229-5211



ORGANIC CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS			REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	INORG CLP ID
			VOA	BNA	PCB				
DGB31	Ground Water H. ZINN	LOW	X	X	X	(3) 4A- 28574, 75, 76	PE-201-PW	12-09/1100	MDGB31
DGB32	Ground Water H. ZINN	LOW	X	X	X	(3) 4A- 28578, 79, 80	PE-202-PW	12-09/1230	MDGB32
DGB34	Sediment H. ZINN	LOW	X	X	X	(2) 4A- 28582, 83	PE-201-SD	12-09/1300	MDGB34
DGB35	Sediment H. ZINN	LOW		X	X	(1) 4A- 28586	PE-202-SD	12-09/1405	MDGB33



REGION: IV
 CASE No.: 21362
 SAS No.: 8134D
 ATCH No.:

INORGANIC TRAFFIC REPORT
CHAIN - CUSTODY RECORD

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

NC Department of Environment Health & Natural Resources
 Division of Solid Waste Management/Superfund Section
 P.O. Box 27687 Raleigh, NC 27611-7687
 Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

ACTIVITY: ESI SPILL ID: PL
 PROJECT ID: 94-0164
 SITE NAME: Peele Pesticide Disposal Site
 CITY, STATE: Clayton/Johnston, NC

DATE SHIPPED: 12/09/93 CARRIER: Federal Express

AIRBILL: 2789623804

SHIPPED TO: Chemtech Consulting Group
 360 West 11th Street

New York, NY 10014

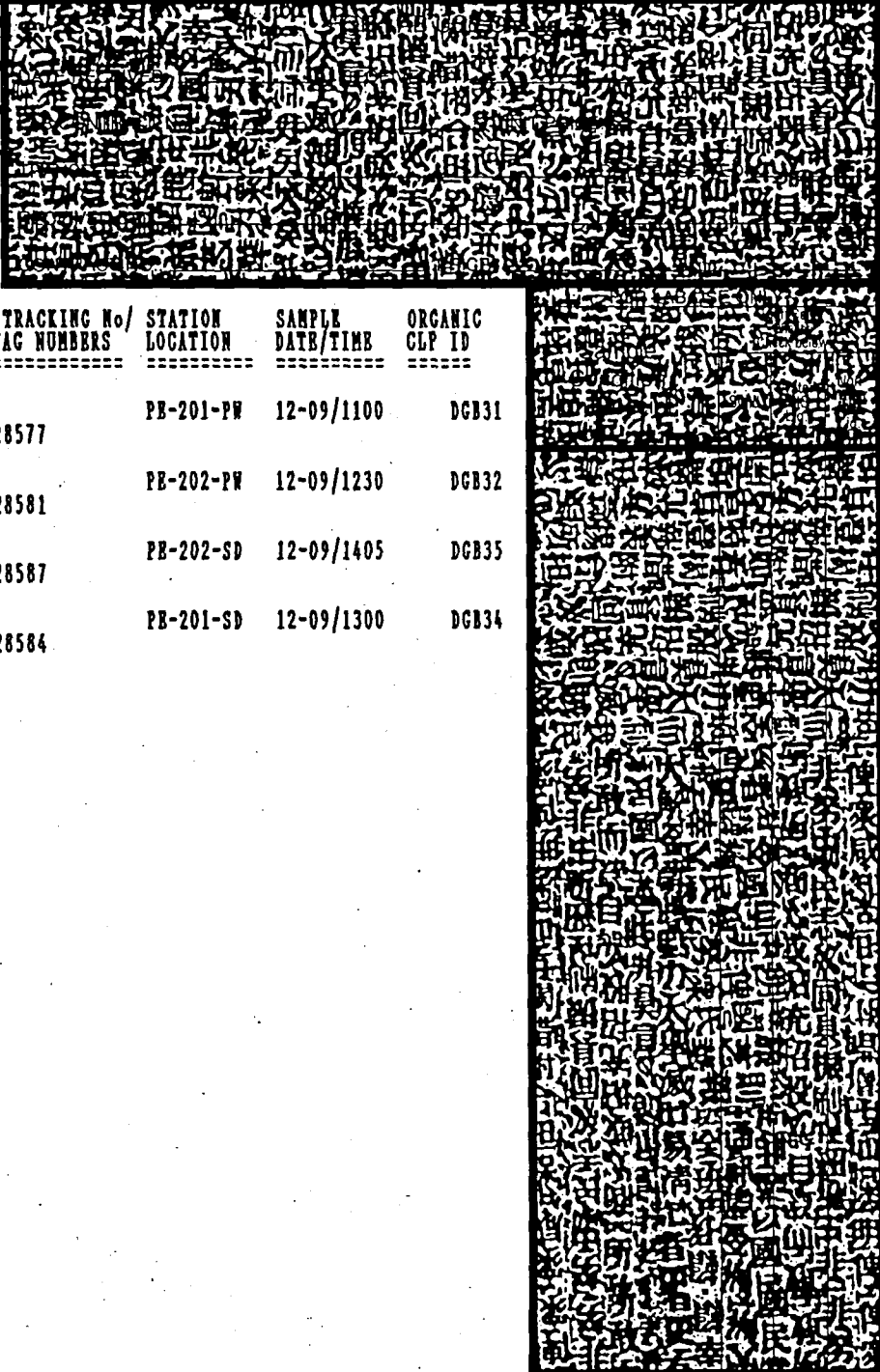
ATTN: Vijay Trivedi

PHONE: 212/255-2100

SAMPLERS (Signature)
Henry Zinn Ben Vink
Darryl Rubin

RELINQUISHED BY: <i>Ben Vink</i>	DATE/TIME 12/9/93 19:00	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

INORG CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS		REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	ORGANIC CLP ID
			TOTAL METALS	CW				
MDGB31	Ground Water H. ZINN	LOW	X		(1) 4A- 28577	PE-201-PW	12-09/1100	DGB31
MDGB32	Ground Water H. ZINN	LOW	X		(1) 4A- 28581	PE-202-PW	12-09/1230	DGB32
MDGB33	Sediment H. ZINN	LOW	X		(1) 4A- 28587	PE-202-SD	12-09/1405	DGB35
MDGB34	Sediment H. ZINN	LOW	X		(1) 4A- 28584	PE-201-SD	12-09/1300	DGB34



8

REGION: IV
CASE No.: 21362
SAS No.: 8134D
ATCH No.:

INORGANIC TRAFFIC REPORT
CHAIN - CUSTODY RECORD

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

NC Department of Environment Health & Natural Resources
Division of Solid Waste Management/Superfund Section
P.O. Box 27687 Raleigh, NC 27611-7687
Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

ACTIVITY: ESI SPILL ID: PL
PROJECT ID: 94-0164
SITE NAME: Peele Pesticide Disposal Site
CITY, STATE: Clayton/Johnston, NC

DATE SHIPPED: 12/09/93 CARRIER: Federal Express
AIRBILL: 2789623804
SHIPPED TO: Chemtech Consulting Group
360 West 11th Street

New York, NY 10014

ATTN: Vijay Trivedi

PHONE: 212/255-2100

SAMPLERS (Signature)
Harry Zinn *Bruce Nishik*
Danny Ruben

RELINQUISHED BY: <i>Bruce Nishik</i>	DATE/TIME 12/9/93 19:00	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

INORG CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS		REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	ORGANIC CLP ID
			TOTAL METALS	CN				
MDGB42	Sediment D. RUMFORD	LOW	X		(1) 4A- 28527	PE-004-SD	12-08/1000	DGB42
MDGB43	Soil H. ZINN	HIGH	X		(1) 4A- 28531	PE-002-SL	12-08/1120	DGB43
MDGB44	Soil H. ZINN	MED	X		(1) 4A- 28535	PE-003-SL	12-08/1240	DGB44
MDGB45	Ground Water D. RUMFORD	LOW	X		(1) 4A- 28540	PE-001-PW	12-08/1145	DGB45
MDGB46	Ground Water D. RUMFORD	LOW	X		(1) 4A- 28544	PE-002-PW	12-08/1200	DGB46
MDGB47	Ground Water H. ZINN	LOW	X		(1) 4A- 28548	PE-001-TW	12-08/1425	DGB47
MDGB48	Soil H. ZINN	LOW	X		(1) 4A- 28550	PE-004-SL	12-08/1525	DGB48
MDGB49	Soil H. ZINN	LOW	X		(1) 4A- 28553	PE-104-SL	12-08/1535	DGB49
MDGB50	Ground Water D. RUMFORD	LOW	X		(1) 4A- 28558	PE-004-PW	12-08/1515	DGB50
MDGB51	Ground Water D. RUMFORD	LOW	X		(1) 4A- 28562	PE-104-PW	12-08/1515	DGB51
MDGB52	Ground Water D. RUMFORD	LOW	X		(1) 4A- 28569	PE-003-PW	12-08/1635	DGB52
MDGB53	Ground Water H. ZINN	LOW	X		(1) 4A- 28573	PE-006-PW	12-08/1700	DGB53



INORGANIC TRAFFIC REPORT
 CHAI - CUSTODY RECORD

REGION: IV
 CASE No.: 21362
 CAS No.: 8134D
 PATCH No.:

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

NC Department of Environment Health & Natural Resources
 Division of Solid Waste Management/Superfund Section
 P.O. Box 27687 Raleigh, NC 27611-7687
 Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

ACTIVITY: ESI SPILL ID: PL
 PROJECT ID: 94-0164
 SITE NAME: Peele Pesticide Disposal Site
 CITY, STATE: Clayton/Johnston, NC

DATE SHIPPED: 12/09/93 CARRIER: Federal Express

AIRBILL: 2789623804

SHIPPED TO: Chemtech Consulting Group

360 West 11th Street

New York, NY 10014

ATTN: Vijay Trivedi

PHONE: 212/255-2100

SAMPLERS (Signature)
Henry Zini Ben Kirkham
Darryl Rumbold

RELINQUISHED BY: <i>Ben Kirkham</i>	DATE/TIME <i>12/9/93 1900</i>	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

INORG CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS		REGIONAL TRACKING No/ (WCTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	ORGANIC CLP ID
			TOTAL METALS	CN				
MDGB36	Sediment B. NICHOLSON	LOW	X		(1) 4A- 28503	PE-001-SD	12-07/1105	DGB36
MDGB37	Sediment D. RUMFORD	LOW	X		(1) 4A- 28507	PE-002-SD	12-07/1240	DGB37
MDGB38	Ground Water D. RUMFORD	LOW	X		(1) 4A- 28512	PE-005-PW	12-07/1255	DGB38
MDGB39	Soil D. RUMFORD	LOW	X		(1) 4A- 28515	PE-001-SL	12-07/1445	DGB39
MDGB40	Sediment D. RUMFORD	LOW	X		(1) 4A- 28519	PE-003-SD	12-07/1615	DGB40
MDGB41	Sediment D. RUMFORD	LOW	X		(1) 4A- 28523	PE-103-SD	12-07/1615	DGB41

REGION: LV
 AS2 No.: 21362
 SAS No.: 8134D
 TCH No.:

DIOXIN SHIPMENT RECORD
 CHAIN-OF-CUSTODY RECORD

ROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

NC Department of Environment Health & Natural Resources
 Division of Solid Waste Management/Superfund Section
 P.O. Box 27687 Raleigh, NC 27611-7687
 Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
 Contract Laboratory Program Sample Management Office
 PO Box 818 Alexandria, VA 22313
 703-557-2490 FTS 557-2490

ACTIVITY: ESI SPILL ID: PL
 PROJECT ID: 94-0164
 SITE NAME: Peele Pesticide Disposal Site
 CITY, STATE: Clayton/Johnston, NC

SAMPLERS (Signature)
Ernie Nishler
Dary Rumpford

ATE SHIPPED: 12/09/93 CARRIER: Federal Express

RELINQUISHED BY: <i>Ernie Nishler</i>	DATE/TIME 12/9/93 19:00	RECEIVED BY:
--	----------------------------	--------------

AIRBILL: 2789623782

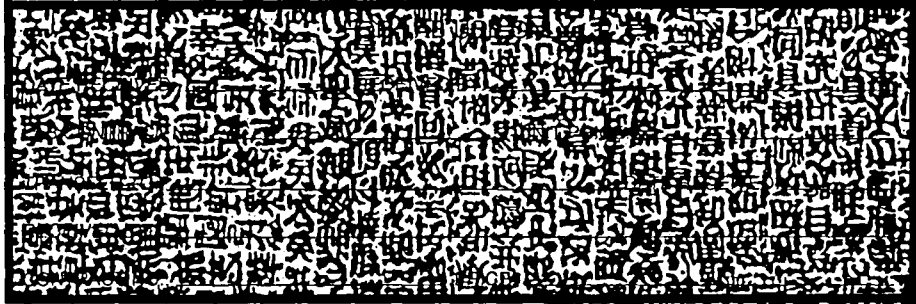
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
------------------	-----------	--------------

SHIPPED TO: American Analytical & Technica
 1700 W. Albany, Suite C

Broken Arrow, OK 74012

ATTN: Sample Custodian

PHONE: 918/251-0545



DIOXIN CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS PCDD/PCDF	REGIONAL TRACKING No/ (FCTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	ORG/INORG CLP ID
PDC57	Sediment B. NICHOLSON	LOW	X	(1) 4A- 28504	PE-001-SD	12-07/1105	DGB36 HDGB36
PDC58	Sediment D. RUMFORD	LOW	X	(1) 4A- 28508	PE-002-SD	12-07/1240	DGB37 HDGB37
PDC59	Soil D. RUMFORD	LOW	X	(1) 4A- 28516	PE-001-SL	12-07/1445	DGB39 HDGB39
PDC60	Sediment D. RUMFORD	LOW	X	(1) 4A- 28520	PE-003-SD	12-07/1615	DGB40 HDGB40
PDC61	Sediment D. RUMFORD	LOW	X	(1) 4A- 28524	PE-103-SD	12-07/1615	DGB41 HDGB41



CASE No.: 21362
SAS No.: 8134D
ATCB No.:

CHAIN-OF-CUSTODY RECORD

PROJ. LEADER: B. NICHOLSON COMPANY: SUPBFUND

NC Department of Environment Health & Natural Resources
Division of Solid Waste Management/Superfund Section
P.O. Box 27687 Raleigh, NC 27611-7687
Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

ACTIVITY: RSI SPILL ID: PL
PROJECT ID: 94-0164
SITE NAME: Peele Pesticide Disposal Site
CITY, STATE: Clayton/Johnston, NC

SAMPLERS (Signature)
Henry Zinn *Bruce Nishik*
Darryl Ruben

DATE SHIPPED: 12/09/93 CARRIER: Federal Express
AIRBILL: 2789623702 ⁸²⁶

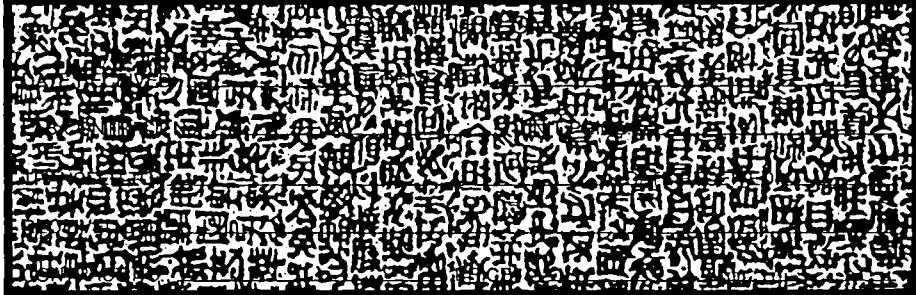
RELINQUISHED BY: <i>Bruce Nishik</i>	DATE/TIME 12/9/93 19:00	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

SHIPPED TO: American Analytical & Technica
1700 W. Albany, Suite C

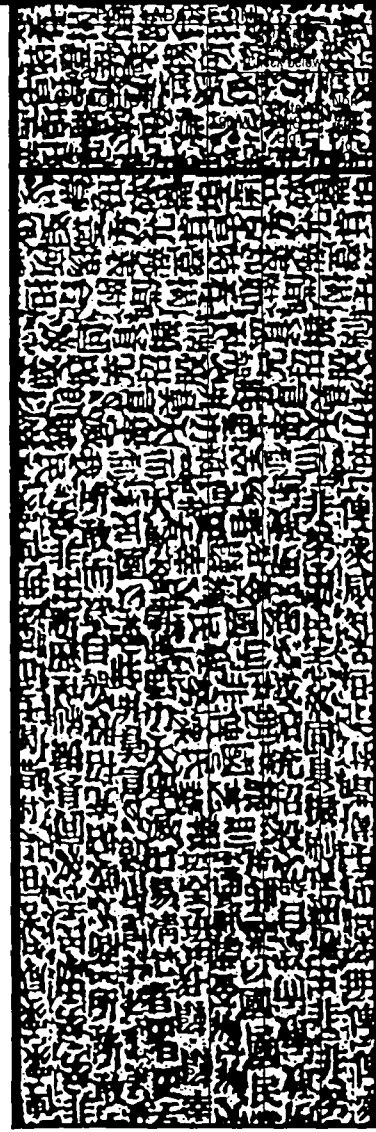
Broken Arrow, OK 74012

ATTN: Sample Custodian

PHONE: 918/251-0545



DIOXIN GLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS PCDD/PCDF	REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	ORG/INORG GLP ID
PDG62	Sediment D. RUMFORD	LOW	X	(1) 4A- 28528	PE-004-SD	12-08/1000	DCB42 MDCB42
PDG63	Soil H. ZINN	LOW HIGH	BAW X	(1) 4A- 28532	PE-002-SL	12-08/1120	DCB43 MDCB43
PDG64	Soil H. ZINN	LOW MED	BAW X	(1) 4A- 28536	PE-003-SL	12-08/1240	DCB44 MDCB44
PDG65	Soil H. ZINN	LOW	X	(1) 4A- 28551	PE-004-SL	12-08/1525	DCB48 MDCB48
PDG66	Soil H. ZINN	LOW	X	(1) 4A- 28554	PE-104-SL	12-08/1535	DCB49 MDCB49
PDG67	Soil H. ZINN	MED	X	(1) 4A- 28570	PE-005-SL	12-08/1100	



REGION: IV
CASE No.: 21362
SAS No.: 8134D
ATCH No.:

DIOXIN SHIPMENT RECORD
CHAIN-OF-CUSTODY RECORD

PROJ. LEADER: B. NICHOLSON COMPANY: SUPERFUND

NC Department of Environment Health & Natural Resources
Division of Solid Waste Management/Superfund Section
P.O. Box 27687 Raleigh, NC 27611-7687
Telephone (919) 733-2801 Fax (919) 733-4811

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

ACTIVITY: BSI SPILL ID: PL
PROJECT ID: 94-0164
SITE NAME: Peele Pesticide Disposal Site
CITY, STATE: Clayton/Johnston, NC

SAMPLERS (Signature)
Henry Zinn *Bruce Vahleh*
Dany Ruben

DATE SHIPPED: 12/09/93 CARRIER: Federal Express

RELINQUISHED BY: *Bruce Vahleh* DATE/TIME: 12/9/93 1900 RECEIVED BY:

AIRBILL: 2789623782

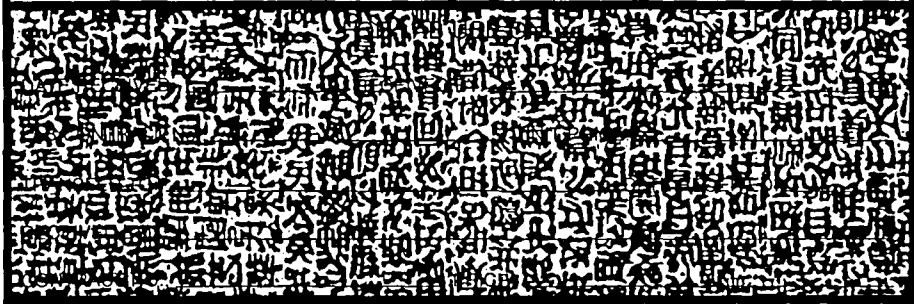
SHIPPED TO: American Analytical & Technica
1700 W. Albany, Suite C

RELINQUISHED BY: DATE/TIME RECEIVED BY:

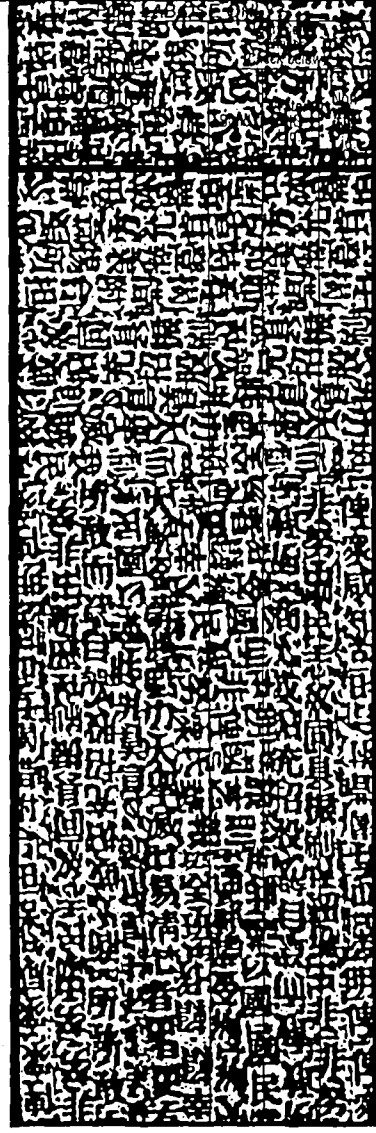
Broken Arrow, OK 74012

ATTN: Sample Custodian

PHONE: 918/251-0545



DIOXIN CLP ID	MATRIX/ SAMPLER	CONC	RAS ANALYSIS PCDD/PCDF	REGIONAL TRACKING No/ (#CTRS) TAG NUMBERS	STATION LOCATION	SAMPLE DATE/TIME	ORG/INORG CLP ID
PDC55	Sediment H. ZINN	LOW	X	(1) 4A- 28585	PE-201-SD	12-09/1300	DGB34 HDCB34
PDC56	Sediment H. ZINN	LOW	X	(1) 4A- 28588	PE-202-SD	12-09/1405	DGB35 HDCB33



SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Peele Pesticide Disposal ID # NCD 054 417 308

Location Intersection of Highways 42 and 70,
Clayton, Johnston County, NC 27520

Nature of Visit (check one): On-Site Reconnaissance _____
Off-Site Reconnaissance _____
Sampling X _____
Remediation Overview _____

Proposed Date of Investigation December 7 - 9, 1993

Date of Briefing December 6, 1993

Date of Debriefing December 10, 1993

Health Department Official Contacted Angela Pennell for Leon Powell

Date of Contact November 19, 1993

Site Investigation Team: All site personnel have read the Site Health and Safety Plan and are familiar with its provisions.

	<u>Personnel</u>	<u>Responsibilities</u>	<u>Signature</u>
	<u>Bruce Nicholson</u>	<u>team leader, sampling</u>	<u>Bruce Nicholson</u>
Team 1	<u>Harry Zinn</u>	<u>sampling</u>	<u>Harry Zinn</u>
Team 1	<u>Bob Gandley</u>	<u>sampling</u>	<u>Robert Gandley</u>
Team 2	<u>Doug Moore</u>	<u>sampling</u>	<u>Douglas Moore</u>
Team 2	<u>Doug Rumford</u>	<u>sampling</u>	<u>Doug Rumford</u>
Team 3	<u>Irene Williams</u>	<u>computer</u>	<u>Irene Williams</u>
Team 3	<u>Jeanette Stanley</u>	<u>computer</u>	<u>Jeanette Stanley</u>

Plan Preparation:

Prepared By: David Lilley, Industrial Hygiene Consultant

Reviewed By: Jack Butler, Environmental Engineering Supervisor

David B. Lilley
Jack Butler

B. SITE/WASTE CHARACTERISTICS

Waste Type(s) Liquid Solid Sludge Gas
 Characteristics Corrosive Ignitable Radioactive
 Volatile Toxic Reactive Other

List Known or Suspected Hazards (physical, chemical biological or radioactive) on Site and their toxicological effects. Also, if known, list chemical amounts

HAZARD	WARNING PROPERTIES	TLV
<u>Sevin</u>	<u>Odor Threshold (OT) = no data</u>	<u>5mg/m³</u>
<u>Malathion</u>	<u>OT = 10-13.5mg/m³</u>	<u>10mg/m³</u>
<u>Roundup (Glyphosate)</u>	<u>OT = no data</u>	<u>no data</u>
<u>Bacillus thurigenensis (a non-toxic spore forming bacterium) (Merck Index)</u>		
<u>Lead arsenate</u>	<u>OT = no data</u>	<u>0.15mg/m³</u>
<u>Paris green (Copper Acetoarsenite)</u>	<u>OT = "odorless" (As Arsenic)</u>	<u>0.2mg/m³</u>
<u>Chlordane</u>	<u>OT = "odorless"</u>	<u>0.5mg/m³</u>
<u>DDT and Derivatives</u>	<u>OT = 2.9 mg/m³</u>	<u>1 mg/m³</u>
<u>Toxaphene</u>	<u>OT = 2.4 mg/m³</u>	<u>0.5 mg/m³</u>
<u>Endrin</u>	<u>OT = no data</u> skin	<u>0.1 mg/m³</u>
<u>1,2,4-Trichlorobenzene</u>	<u>OT = no data</u> ceiling =	<u>5 ppm</u>
<u>Hexachlorobenzene</u>	<u>OT = no data</u>	<u>no data</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

Facility Description: Size unknown Buildings unknown
 Disposal Methods Being Investigated Burial of pesticide wastes.
 Unusual Features on Site (dike integrity, power lines, terrain, etc.):
none known

History of the Site: The W.R. Peele Co. operated an agricultural supply distribution company from 1946-1971. Peele bought pesticides in bulk and repackaged them for sale. It is suspected that Peele may have disposed of some wastes (including pesticides that got wet) at the site. More than 95% of sales were from the redistribution of chemicals in their original package. The remainder revenues were from the formulation of sevin, malathion, and Bacillus thuringensis products.

C. HAZARD EVALUATION

The site can be toured and sampled in level D protection. PE or PVC gloves will be worn while collecting water and soil samples, nitrile gloves under PE or PVC gloves will be worn if discolored soil or sludge is encountered. The OVA and HNU will be used to monitor breathing zone air while augering. If readings exceed background in the breathing zone, fill in that hole and evacuate that area. The OVA or HNU will also be used to monitor breathing zone are when uncapping and bailing monitoring wells. If readings exceed background in the breathing zone when uncapping or bailing, stand upwind of the well until vapor concentrations fall to background levels. If vapor concentrations do not fall to background levels within 15 minutes, close that well and evacuate the area. Tyvek suits (saranex in wet conditions) will be used while auguring. Steel toed work boots will be worn at all times while on the site, steel toed hiking boots may be worn while collecting drinking water well samples.

D. WORK PLAN INSTRUCTION

Map or Sketch Attached? yes
 Perimeter Identified? no
 Command Post Identified? no
 Zones of Contamination Identified? no

Personal Protective Equipment/Level of Protection: C X D

Modifications Wear goggles, face shield, and PVC gloves while preparing acid preserved samples, goggles and PVC gloves while collecting acid preserved samples. Avoid breathing acid vapors. Rinse pipetts with deionized water before disposing of in trash bag.

Surveillance Equipment:

<u> </u> HNU	<u> </u> Detector Tubes and Pumps
<u> X </u> OVA	<u> </u> O2 Meter
<u> </u> Explosimeter	<u> </u> Radiation Monitor

Decontamination Procedures

 Level C Respirator wash, respirator removal, suit wash (if needed), suit removal, boot wash, boot removal and glove removal.

 X Level D Boot wash and rinse and boot removal, suit removal, glove and goggle removal.

Modifications Dispose of trash properly, on-site if possible.

Work Schedule/Visit Objectives The purpose of this visit is to determine if the site poses a threat to the public health or environment because of releases of contaminants to soil, surface water, groundwater, or air. Sampling may consist of groundwater, surface water, surface soil and subsurface soil sampling.

EMERGENCY PRECAUTIONS

<u>Route of Exposure</u>	<u>First Aid</u>
<u>Eyes</u>	<u>irrigate immediately</u>
<u>Skin</u>	<u>soap and water wash</u>
<u>Inhalation</u>	<u>fresh air and artificial respiration</u>
<u>Ingestion</u>	<u>get medical attention immediately</u>

Location of Nearest Phone: nearby residences

Hospital (Address and Phone Number)

Johnston Memorial Hospital, P.O. Box 1376, Smithfield, NC 27577

(919) 934-8171 - can handle chemically contaminated patients

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital Take Route 70 East to Route 301 and take a left (North). The hospital will be about 5 or 6 blocks up 301 on the left.

PREVAILING WEATHER CONDITIONS AND FORECAST _____

EQUIPMENT CHECKLIST

_____ Air purifying respirator	<u>X</u>	First Aid Kit
_____ Cartridges for respirator	<u>X</u>	3 gal. Distilled H2O
_____ Dust Mask	<u>X</u>	Rainsuit
_____ O ₂ Indicator	<u>X</u>	Gloves (<u>PE/PVC/nitrile/cloth</u>)
<u>X</u> Eye Wash Unit	<u>X</u>	Boots/Boot Covers
<u>X</u> HNU	<u>X</u>	Coveralls (<u>tyvek/saranex</u>)
<u>X</u> OVA	<u>X</u>	Eye Protection
_____ Explosimeter	<u>X</u>	Hard Hat
_____ Radiation Monitor	<u>X</u>	Decontamination Materials.

Poison Control Center - State Coordinator

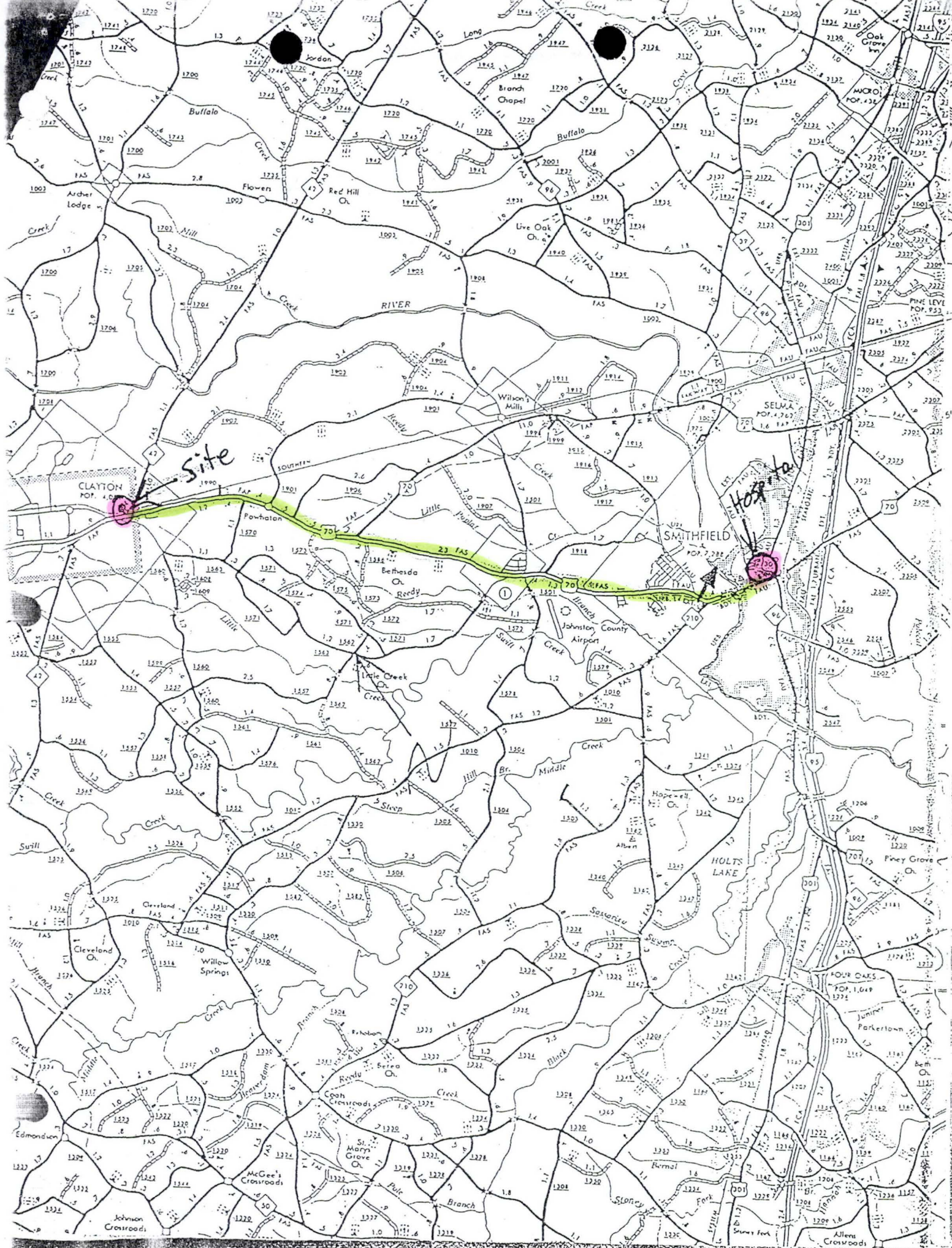
Duke University Medical Center

Telephone: 1-800-672-1697

Box 3024

Durham, NC 27710

ASHEVILLE 704-255-4490	Western NC Poison Control Center Memorial Mission Hosp. 509 Biltmore Ave. 28801	HENDERSONVILLE 704-693-6522 Ext. 555,556	Margaret R. Pardee Memorial Hospital Fleming St., 28739
CHARLOTTE 704-379-5827	Mercy Hospital 2001 Vail Ave, 28207	HICKORY 704-322-6649	Catawba Mem. Hosp. Fairgrove Chur. Rd 28601
DURHAM 1-800-672-1697	Duke Univ. Med. Center Box 3007, 27710	JACKSONVILLE 919-577-2555	Onslow Mem. Hospital Western Blvd. 28540
GREENSBORO 919-379-4105	Moses Cone Hospital 1200 N. Elm St. 27420	WILMINGTON 919-343-7046	New Hanover Mem. Hospital 2131 S. 17th St. 28401



site

Hox

23 FAS

CLAYTON
POP. 4,000

SMITHFIELD
POP. 7,700

SELMA
POP. 4,700

FOUR OAKS
POP. 1,649

RIVER

HOLTS LAKE

Johnston County
Airport

Archer
Lodge

Flowers

Red Hill
Ch.

Live Oak
Ch.

Wilson's
Mill

Bethesda
Ch.

Rordy

Little Creek
Ch.

Hope-well
Ch.

Alben

Cleveland
Ch.

Willow
Springs

St. Mary's
Grave Ch.

St. Paul

Branch

St. John

Allen's
Crossroad

TO BE COMPLETED BY PROJECT MANAGER

PROJECT MANAGER: Bruce Nicholson PROJECT: Peele Pesticides
INVESTIGATION DATE: _____
RECONNAISSANCE _____ SAMPLING VISIT X REMEDIATION OVERVIEW _____

Materials Used (Please insert a number in the blank)

_____ Air Purifying respirator cartridges	_____ Gloves (nitrile)
_____ Eye Wash Units	_____ Gloves (cloth)
_____ First Aid Kit	_____ Boot covers
_____ Gloves (polyethylene)	_____ Coveralls (tyvek)
_____ Gloves (PVC)	_____ Coveralls (saranex)

Respirator Worn By _____	Approximate Time in Respirator _____
_____	_____
_____	_____

Air Monitoring Data (Include Calibration Reading)

HNU: _____

OVA: _____

Explosimeter: _____

Radiation Meter: _____

Were there any injuries? _____ If yes, explain: _____

If the maximum personal protective equipment as outlined in the Hazard Evaluation Section was not used, please justify:

Visitors Present

Organization Represented

Signature

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Sevin (Carbaryl or 1-naphthyl-N-methyl carbamate)

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C12 H11 N02</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>1</u>
Vapor Pressure <u>0.00004</u> mm Hg at 20°C	<u>1</u>
Melting Point <u>293</u> °F/°C Boiling Point <u>decomposes</u> °F/°C	<u>1</u>
Flash Point (open or closed cup) <u>NA</u> °C/°F	<u>1</u>
Solubility - H ₂ O <u>0.01%</u>	<u></u>
Other <u>May be dissolved in flammable</u>	<u></u>
<u>liquids (1)</u>	<u></u>

Physical Features: (odor, color, etc.) White or gray odorless solid (1)

II. TOXICOLOGICAL DATA

Standards: 5 mg/m³ (2) TLV 5 mg/m³ (3) PEL 600mg/m³ (1) IDLH

Routes of Exposure: Inhalation, Ingestion, Skin/Eye contact

Acute/Chronic Symptoms: tearing, nasal irritation, salivating, sweating, nausea, vomiting, tremors, skin irritation, blurred vision, abdominal cramps diarrhea, convulsions (1)

First Aid: Eye: irrigate immediately; Skin: soap and water wash; Inhalation: artificial respiration and prompt medical attention; Ingestion: get prompt medical attention

Chemical Name: Sevin

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No
Toxic by-products not pertinent

1
4

B. Flammability LEL NA UEL NA

1

C. Reactivity Hazard strong oxidizers

1

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate
Background yes/no	_____
Alpha particles yes/no	_____
Beta particles yes/no	_____
Gamma radiation yes/no	_____

IV. REFERENCES

1. NIOSH Pocket Guide to Chemical Hazards, 1990.
2. Threshold Limit Values and Biological Exposure Indices
for 1991-1992
3. 29 CFR 1910.1000, 1989
4. Chemical Hazard Response Information System, US Coast
Guard, 1985.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Malathion

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C10 H19 O6 PS2</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1</u>
Vapor Pressure <u>4 x 10⁻⁵ mm Hg at 20°C</u>	<u>2</u>
Melting Point <u>2.9 °F/°C</u> Boiling Point <u>156 °F/°C</u>	<u>2</u>
Flash Point (<u>open</u> or closed cup) <u>>325 °C/°F</u>	<u>1</u>
Solubility - H ₂ O <u>145 ppm</u>	
Other <u>miscible with many organic solvents</u>	

Physical Features: (odor, color, etc.) clear to amber liquid with a garlic odor (1,3). Formulations: emulsifiable concentrate wettable powder, dust, ULV concentrate (3).

II. TOXICOLOGICAL DATA

(skin)

Standards: 10 mg/m3 (4) TLV 10mg/m3 (5) PEL 5000 mg/m3 (1) IDLH

Routes of Exposure: Inhalation, ingestion, skin absorbtion, eye contact

Acute/Chronic Symptoms: Acute: cholinesterase inhibitor-nausea, vomiting, diarrhea, excessive salivation, bronchoconstriction, muscle twitching, convulsion, respiratory failure. (6)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Malathion

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No
Toxic by-products Vapors and fumes from fires are
hazardous and may include Sulfur dioxide and Phosphoric acid

6

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard Strong oxidizer

1

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard		Exposure Rate	
Background	yes/ <u>no</u>	_____	<u>1,2,3</u>
Alpha particles	yes/ <u>no</u>	_____	<u>1,2,3</u>
Beta particles	yes/ <u>no</u>	_____	<u>1,2,3</u>
Gamma radiation	yes/ <u>no</u>	_____	<u>1,2,3</u>

IV. REFERENCES

1. NIOSH Pocket Guide to Chemical Hazards, 1987
2. The Merck Index, 11th Edition, 1989
3. The Farm Chemicals Handbook, 1982
4. Threshold Limit Values and Biological Exposure Indices
for 1990-1991, ACGIH
5. 29 CFR 1910.1000
6. Chemical Hazard Response Information System, US Coast
Guard, 1985.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Glyphosate

I. PHYSICAL/CHEMICAL PROPERTIES

	Refer
Chemical Formula <u>C₃ H₈ NO₅ P</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>1</u>
Vapor Pressure _____ mm Hg at 20°C	_____
Melting Point <u>230°</u> °F/°C Boiling Point _____ °F/°C	<u>1</u>
Flash Point (open or closed cup) _____ °C/°F	_____
Solubility - H ₂ O <u>12g/l at 25°C</u>	<u>1</u>
Other _____	_____

Physical Features: (odor, color, etc.) White solid (1)

II. TOXICOLOGICAL DATA

Standards: none TLV none PEL no data IDLH

Routes of Exposure: Inhalation, Ingestion, Skin and/or Eye contact

Acute/Chronic Symptoms: Causes kidney problems in rats (2)

Not classifiable as to human carcinogenicity (2)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Glyphosate

III. HAZARDOUS CHARACTERISTICS

Re

A. Combustibility Yes ___ No ___ no data

Toxic by-products _____

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard _____

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard Exposure Rate

Background yes/no _____

Alpha particles yes/no _____

Beta particles yes/no _____

Gamma radiation yes/no _____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.

2. Integrated Risk Information System, EPA, November, 1989

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Lead Arsenate

I. PHYSICAL/CHEMICAL PROPERTIES

	Refer
Chemical Formula <u>Pb HAs O₄</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>2</u>
Vapor Pressure <u>no data</u> mm Hg at 20°C	<u>3</u>
Melting Point _____ °F/°C Boiling Point <u>no data</u>	<u>1</u>
Flash Point (open or closed cup) <u>not flammable</u> °C/°F	<u>3</u>
Solubility - H ₂ O <u>insoluble</u>	<u>1,2,3</u>
Other <u>HNO₃, caustic alkalies</u>	<u>1</u>

Physical Features: (odor, color, etc.) Odorless, white solid (3)

II. TOXICOLOGICAL DATA

Standards: 0.15mg/m³ (4) TLV no data PEL potential human carcinogen (5) ID

Routes of Exposure: Inhalation, Ingestion, Skin and/or Eye contact

Acute/Chronic Symptoms: Inhalation or ingestion causes dizziness, headache, paralysis, cramps, constipation, collapse, coma. Subacute doses cause irritability, loss of weight, anemia, constipation. Blood and urine concentrations of lead increase. (3) Potential human carcinogen. (5)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Lead Arsenate

III. HAZARDOUS CHARACTERISTICS

Re

A. Combustibility Yes No
Toxic by-products not pertinent

3
7

B. Flammability LEL NA UEL NA

3

C. Reactivity Hazard no reaction with common materials

3

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate
Background yes/no	_____
Alpha particles yes/no	_____
Beta particles yes/no	_____
Gamma radiation yes/no	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.
3. Chemical Hazard Response Information System, US Coast Guard, 1985.
4. Threshold Limit Values and Biological Exposure Indices for 1991-1992, ACGIH
5. NIOSH Pocket Guide to Chemical Hazards, 1987

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Copper Acetoarsenite

I. PHYSICAL/CHEMICAL PROPERTIES

	Refer
Chemical Formula <u>$C_4H_6As_6Cu_4O_{16}$</u>	<u>1</u>
Natural Physical State at 25°C <u>solid</u>	<u>2</u>
Vapor Pressure <u>no data</u> mm Hg at 20°C	<u>3</u>
Melting Point <u>169-170 °F/°C</u> Boiling Point <u>decomposes °F/°C</u>	<u>3,4</u>
Flash Point (open or closed cup) <u>not flammable °C/°F</u>	<u>3</u>
Solubility - H ₂ O <u>3%</u>	<u>3</u>
Other <u>soluble in acids</u>	<u>2</u>

Physical Features: (odor, color, etc.) Green, odorless powder (3)

II. TOXICOLOGICAL DATA as Arsenic

Standards: 0.2mg/m³ (5) TLV 0.5mg/m³ (6) PEL no data (3) IDLH

Routes of Exposure: Inhalation, Ingestion, Skin and/or Eye contact

Acute/Chronic Symptoms: Dust causes eye irritation. Ingestion causes gas disturbances, tremors, muscular cramps, and nervous collapse which may lead to death.

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Copper Acetoarsenite

III. HAZARDOUS CHARACTERISTICS

Re

A. Combustibility Yes No X

Toxic by-products Poisonous, volatile arsenic
oxides may form in fire

B. Flammability LEL NA UEL NA

C. Reactivity Hazard No reaction with common materials

D. Corrosivity Hazard yes/no pH:

Neutralizing agent:

E. Radioactive Hazard Exposure Rate

Background yes/no

Alpha particles yes/no

Beta particles yes/no

Gamma radiation yes/no

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.
3. Chemical Hazard Response Information System, US Coast Guard, 1985.
4. Farm Chemicals Handbook, 1982.
5. Threshold Limit Values and Biological Exposure Indices for 1991-1992, ACGIH
6. 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Chlordane

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C10 H6 Cl8*</u>	<u>1</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1</u>
Vapor Pressure <u>1 x 10⁻⁵</u> mm Hg at 20°C	<u>2</u>
Melting Point _____ °F/°C Boiling Point <u>decomposes</u> °F/°C	<u>3</u>
Flash Point (open or <u>closed cup</u>) (<u>liquid</u>) <u>132</u> °C/°F	<u>7</u>
Solubility - H ₂ O <u>insoluble</u>	<u>1</u>
Other <u>miscible with aliphatic and aromatic</u>	<u>1</u>
<u>solvents</u>	

Physical Features: (odor, color, etc.) viscous amber colored liquid¹.
It is odorless.² Formulations: Granules, dusts, wettable powder, emulsion
concentrate and oil solutions.

II. TOXICOLOGICAL DATA

(skin)

Standards: 0.5 mg/m³ (5) TLV 0.5 mg/m³ (6) PEL 500 mg/m³ (3) IDLH

Routes of Exposure: Inhalation, ingestion, skin absorbtion, eye contact

Acute/Chronic Symptoms: Acute: irritating to skin, irritability, convulsions,
and deep depression. Chronic: liver damage possible. (1)

First Aid: Eyes: irriqate immediately; Skin: soap wash immediately;

Inhalation: fresh air and ariticial respiration; Ingestion: get medical
attention immediately.

* Commercial product is a mixture containing 60 to 75% pure compound and
 25 to 40% related compounds. Chlorine content 64 - 67%.

Chemical Name: Chlordane

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes X No (as liquid) 7
Toxic by-products Irritating and toxic hydrogen chloride
and phosgene gases may be formed when kerosene solution burns 7

B. Flammability LEL 0.7% UEL 5% 7

C. Reactivity Hazard stable in alkaline conditions 4

D. Corrosivity Hazard yes/no pH:

Neutralizing agent:

E. Radioactive Hazard	Exposure Rate
Background <u>yes/no</u>	<u> </u>
Alpha particles <u>yes/no</u>	<u> </u>
Beta particles <u>yes/no</u>	<u> </u>
Gamma radiation <u>yes/no</u>	<u> </u>

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. Documentation of the TLV, 4th Edition, 1980.
3. NIOSH/OSHA Pocket Guide to Chemical Hazards, 1987.
4. Farm Chemicals Handbook, 1982.
5. Threshold Limit Values and Biological Exposure Indices
for 1991-1992, ACGIH
6. 29 CFR 1910.1000
7. Chemical Hazard Response Information System, US Coast
Guard, 1985

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: DDT & Derivatives

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C₁₄ H₉ Cl₅</u>	<u>1</u>
Natural Physical State at 25°C <u>Solid</u>	<u>1</u>
Vapor Pressure <u>1.5 x 10⁻⁷ mm Hg at 20°C</u>	<u>1</u>
Melting Point <u>228 °F/°C</u> Boiling Point <u>decomposes °F/°C</u>	<u>1,2</u>
Flash Point (open or closed cup) <u>N/A °C/°F</u>	<u>3</u>
Solubility - H ₂ O <u>insoluble</u>	<u>1</u>
Other <u>78 g/100 ml benzene</u>	<u>1</u>

Physical Features: (odor, color, etc.) colorless to white to slightly off-white powder with a weak, chemical odor. (2)

II. TOXICOLOGICAL DATA

	skin	suspect or conformed
		human carcinogen
Standards: <u>1 mg/m³ (4) TLV</u>	<u>1 mg/m³ (5) PEL</u>	<u>4</u> IDLH

Routes of Exposure: Inhalation, Ingestion, Eye and/or Skin absorption

Acute/Chronic Symptoms: Acute: tremors of head and neck, convulsions, cardiac or respiratory failure. Chronic: hepatic damage, CNS degeneration, dermatitis weakness, convulsions. (3)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: DDT & Derivatives

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No x
Toxic by-products

B. Flammability LEL UEL

C. Reactivity Hazard DDT is incompatible with alkaline materials and strong oxidizers. 2,3

D. Corrosivity Hazard yes/no pH:

Neutralizing agent:

E. Radioactive Hazard		Exposure Rate	
Background	yes/ <u>no</u>	<u> </u>	<u> </u>
Alpha particles	yes/ <u>no</u>	<u> </u>	<u> </u>
Beta particles	yes/ <u>no</u>	<u> </u>	<u> </u>
Gamma radiation	yes/ <u>no</u>	<u> </u>	<u> </u>

IV. REFERENCES

1. The Merck Index, 11 th Edition, 1989
2. NIOSH/OSHA Pocket Guide to Chemical Hazards, 1987
3. Documentation of the TLV, 4th Edition, 1980
4. Threshold Limit Values and Biological Exposure Indices for 1991-1992, ACGIH
5. 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Toxaphene*

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>empirical formula: C10 H10 Cl8°</u>	<u>1</u>
Natural Physical State at 25°C <u>Solid</u>	<u>1</u>
Vapor Pressure <u>.2 to .4</u> mm Hg at 20°C	<u>2</u>
Melting Point <u>65-90</u> °F/°C Boiling Point <u>decomposes</u> °F/°C	<u>2</u>
Flash Point (open or <u>closed cup</u>) <u>275</u> °C/°F	<u>2</u>
Solubility - H ₂ O <u>insoluble</u>	<u>1</u>
Other <u>freely sol. in aromatic solvents</u>	<u>1</u>

Physical Features: (odor, color, etc.) amber, yellow waxy solid with a mild odor of chlorine and camphor (piney odor) (1,2). Formulations: Emul. conc. 4 to 8 lbs/gal. wetttable powder 40%. Oil solutions -90% (4).

II. TOXICOLOGICAL DATA

skin

skin, suspect human carcinogen

Standards: 0.5 mg/m3 (5) TLV 0.5 mg/m3 (6) PE 200 mg/m3 (3) IDLH

Routes of Exposure: Inhalation, Ingestion, Eye and/skin absorbtion

Acute/Chronic Symptoms: considered to have low toxicity in man (2), mild irritation of skin, CNS stimulation with tremors, convulsions, and death. Has caused liver damage in experimental animals. Listed as a carcinogen by EPA.

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

*Toxaphene is chlorinated camphene. There are approximately 177 Cl0 polychlorinated derivatives in Toxaphene. It is 67-69% chlorine by weight.

Chemical Name: Toxaphene

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes No 2
Toxic by-products Toxic vapors are generated 7
when heated

B. Flammability LEL _____ UEL _____

C. Reactivity Hazard corrosive to iron 1

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate	
Background <u>yes/no</u>	_____	_____
Alpha particles <u>yes/no</u>	_____	_____
Beta particles <u>yes/no</u>	_____	_____
Gamma radiation <u>yes/no</u>	_____	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989
2. Documentation of the TLV, 4th Edition, 1980
4. Farm Chemicals Handbook, 1982
5. Threshold Limit Values and Biological Exposure Indices
for 1991-1992, ACGIH.
6. OSHA 1910.1000.
7. Chemical Hazard Response Information System, US Coast
Guard, 1985.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Endrin

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C₁₂ H₈ Cl₆ O</u>	<u>1</u>
Natural Physical State at 25°C <u>Solid</u>	<u>1</u>
Vapor Pressure <u>about 0</u> mm Hg at 20°C.	<u>1</u>
Melting Point <u>decomposes</u> °F/°C Boiling Point _____ °F/°C	<u>1</u>
Flash Point (open or closed cup) <u>N/A</u> °C/°F	<u>1</u>
Solubility - H ₂ O <u>insoluble</u>	<u>1</u>
Other <u>moderately soluble in benzene, xylene,</u>	<u>2</u>
<u>carbon tetrachloride and hexane.</u>	

Physical Features: (odor, color, etc.) cream to light tan in color with a mild chemical odor. Formulations: emulsifiable concentrate, wettable powder, dust & dust concentrate (3).

II. TOXICOLOGICAL DATA

standards 0.1 mg/m³ (4) TLV 0.1 mg/m³ (5) PEL 200 mg/m³ IDLH 1

Routes of Exposure: Inhalation and skin absorption are major routes of exposure.

Acute/Chronic Symptoms: Inhalation causes moderate irritation of nose and throat; prolonged breathing may cause same toxic symptoms as for ingestion. Contact with liquid causes moderate irritation of eyes and skin. Prolonged contact with skin may cause same toxic symptoms as for ingestion. Ingestion causes frothing of the mouth, facial congestion, convulsions, violent muscular contractions, dizziness, weakness, nausea. (6)

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: 1,2,4-Trichlorobenzene

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula <u>C₆H₃Cl₃</u>	<u>1,2</u>
Natural Physical State at 25°C <u>liquid</u>	<u>1,2</u>
Vapor Pressure <u>1</u> mm Hg at 20°C	<u>3</u>
Melting Point <u>17</u> °F/°C Boiling Point <u>213</u> °F/°C	<u>1,2</u>
Flash Point (open or closed cup) <u>210</u> °C/°F	<u>2</u>
Solubility - H ₂ O <u>insoluble</u>	<u>2</u>
Other <u>miscible with most organic solvents</u>	<u>2</u>
<u>and oils</u>	

Physical Features: (odor, color, etc.) Colorless, stable liquid, odor similar to that of o-dichlorobenzene (2)

II. TOXICOLOGICAL DATA

Standards: ceiling= 5 ppm (4) TLV ceiling= 5 ppm (5) PEL no data IDLH

Routes of Exposure: Ingestion, Inhalation, Skin and/or eye contact

Acute/Chronic Symptoms: skin irritation (3)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: 1,2,4-Trichlorobenzene

III. HAZARDOUS CHARACTERISTICS

Re

A. Combustibility Yes X No
Toxic by-products

1

B. Flammability LEL ? UEL ?

C. Reactivity Hazard

D. Corrosivity Hazard yes/no pH:

Neutralizing agent:

E. Radioactive Hazard		Exposure Rate	
Background	yes/no	<u> </u>	<u> </u>
Alpha particles	yes/no	<u> </u>	<u> </u>
Beta particles	yes/no	<u> </u>	<u> </u>
Gamma radiation	yes/no	<u> </u>	<u> </u>

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.
3. Encyclopaedia of Occupational Health and Safety, International Labour Office, Geneva, Switzerland, 3rd Edition, 1983.
4. Threshold Limit Values and Biological Exposure Indices for 1991-1992, ACGIH.
5. 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Hexachlorobenzene

I. PHYSICAL/CHEMICAL PROPERTIES

	Refer
Chemical Formula <u>C₆Cl₆</u>	<u>1,2</u>
Natural Physical State at 25°C <u>solid</u>	<u>2</u>
Vapor Pressure <u>1.09 x 10⁻⁵</u> mm Hg at 20°C	<u>1</u>
Melting Point <u>231</u> °F/°C Boiling Point <u>323-326</u> °F/°C	<u>1,2</u>
Flash Point (open or closed cup) <u>468</u> °C/°F	<u>2</u>
Solubility - H ₂ O <u>insoluble</u>	<u>1,2</u>
Other <u>Sparingly soluble in cold alcohol,</u> <u>soluble in benzene, chloroform, ether</u>	<u>1</u>

Physical Features: (odor, color, etc.) White needles (2)

II. TOXICOLOGICAL DATA

Standards: none TLV none PEL no data IDLH

Routes of Exposure: Ingestion, Inhalation, Skin and/or eye contact.

Acute/Chronic Symptoms: none listed

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Hexachlorobenzene

III. HAZARDOUS CHARACTERISTICS

Re

A. Combustibility Yes X No _____
Toxic by-products Fire may produce irritating
or poisonous gases. _____ 3

B. Flammability LEL ? UEL ? _____

C. Reactivity Hazard _____

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard	Exposure Rate	
Background	yes/no	_____
Alpha particles	yes/no	_____
Beta particles	yes/no	_____
Gamma radiation	yes/no	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th, Edition, 1987.
3. Computer-Aided Management of Emergency Operations, NOAA, Seattle, WA. 1988.

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary



November 19, 1993

Mr. Leon Powell
Environmental Health Supervisor
Johnston County Health Department
205 South Second Street
Smithfield, NC 27577

RE: Expanded Site Inspection
Peele Pesticides Disposal
NCD 986 171 338

Dear Mr. Powell:

David Lilley of the NC Superfund Section spoke with Ms. Angela Pennell of your office today to notify you that the NC Superfund Section will conduct a site inspection of the subject site located in Johnston County, North Carolina. The inspection will be conducted December 7 to 9, 1993 by Bruce Nicholson of the NC Superfund Section.

The purpose of the inspection is to determine if the site poses a hazard to public health or the environment because of releases of contaminants to soil, surface water, groundwater, or air. The inspection team will take samples on and around the site to determine if a hazardous condition exists. Additionally, they will locate all nearby water supplies (surface and groundwater, community and private) and any close sensitive environments, schools, and day care centers.

You may want to have your representative meet the inspection team at the site. If so, please contact Bruce Nicholson at (919) 733-2801 and he will coordinate a meeting. I am enclosing background data on the site for your information.

Mr. Powell
11-19-93
Page 2

If the inspection indicates the need for future study of the site, we will contact your office to advise. If you have any questions, please don't hesitate to call David Lilley or me at (919) 733-2801.

Sincerely,

A handwritten signature in black ink, appearing to read 'Pat DeRosa', with a long horizontal flourish extending to the right.

Pat DeRosa, Head
CERCLA Branch
NC Superfund Section

Enclosures

cc: Dexter Matthews
Doug Holyfield
Debbie Crane
Kim Clarke
David Lilley
File

Federal
Trip Notification & Authorization

Prepared by: BRUCE NICHOLSON

Today's Date: 11/19/93

*Use Black Ink or Typewriter only-Staff to fill out first 2 blocks only.

Site Trip

Date of Trip: 12/07/93 - 12/09/93

If trip date changed or cancelled note below:

Trip Date Changed To: _____ Cancelled: _____

NCD#: 986171338

Site Name: PEELE PESTICIDE DISPOSAL

City: CLAYTON

County: JOHNSTON

Reason for Trip: EXPANDED SITE INSPECTION

Name of Hotel (Overnight Trip): _____ Hotel Telephone Number: () _____

Authorized by: [Signature]
Industrial Hygienist

Project Team Leader: BRUCE NICHOLSON

Assistants: HARRY ZINN, IRENE WILLIAMS, OTHERS TBA

Attach To Notification Form: 1 copy each: Preliminary Assessment Form (First page only)
Submit to the Site Map DAVE - I BELIEVE YOU
Industrial Hygienist PA Transmittal Letter HAVE A COPY OF SAMPLING PLAN

(Please list appropriate County Health Department contact person to call to advise of trip)
Environmental Supervisor or Health Director to call: Mr. Leon Powell Title: Env. Health Supervisor
(Note if Dr., M.P., etc.)
Telephone Number: (919) 989-5180

Notes: Health Department Official Contacted: Angela Pennell
Back Up Letter Required: Yes No
Notified Ms. A. Pennell for Mr. Powell
on 11-19-93 (DBL)

Note: Signed original to Data Manager

THE MUTUAL FIRE, MARINE and INLAND INSURANCE COMPANY

(In Rehabilitation)

CENTRE SQUARE
17TH FLOOR - EAST TOWER
1500 MARKET STREET
PHILADELPHIA, PA 19102
(215) 567-9600
FAX (215) 567-9300

HON. CYNTHIA M. MALESKI
REHABILITATOR

ALEXANDER BRATIC
SPECIAL DEPUTY

VINCENT VACCARELLO
ASST. SPECIAL DEPUTY

AUGUST 19, 1993 ;

CLAIM NUMBER: RD 2707
POLICY NUMBER: EL100464 & EL103054
POC NUMBER: 54001
DATE OF LOSS: Various
NAME OF INSURED: Southern Railway Co.
CLAIMANT: Peel Pesticide Dispos
Site-Clayton, NC
Dept. EH & NR

FIRST CLASS MAIL

1 Norfolk Southern Corp.
110 Franklin Road S. E.
Roanoke, VA 24042-0022
Attn: David Fries

2 North Carolina Dept. of
Human Resources
Solid & Hazardous Waste
P. O. Box 27687
Raleigh, NC 27611

NOTICE OF DETERMINATION

The Class 4 claim filed on behalf of the claimant identified above against the Company has been denied as filed. The claim has been determined by the Company in the amount of \$ 0. The reason for this determination is:

- Denial of Coverage Denial of Loss Value Denial of Liability
- Claim Has Been Paid In Full
- Value Of The Claim Is Below The Insured's Deductible or Policy Layer
- The Claim Was Fully Satisfied By A Co-defendant
- The Litigation Was Dismissed Against the Insured
- The Statute of Limitations Ran Prior To Litigation Being Filed
- Other -

IF EITHER THE CLAIMANT OR THE INSURED/POLICYHOLDER DOES NOT ACCEPT THIS DETERMINATION, SUCH PERSON MAY FILE AN OBJECTION WITH THE COMMONWEALTH COURT OF PENNSYLVANIA, THE WIDENER BUILDING, 1339 CHESTNUT STREET, SUITE 990, PHILADELPHIA, PA 19107, WITHIN SIXTY (60) DAYS FROM THE DATE OF MAILING OF THIS NOTICE. A COPY OF ALL OBJECTIONS MUST BE FILED WITH THE REHABILITATOR, C/O MUTUAL FIRE, MARINE AND INLAND INSURANCE COMPANY (IN REHABILITATION DEPT. NOD, CENTRE SQUARE EAST, 17TH FLOOR, 1500 MARKET STREET, PHILADELPHIA, PA 19102 WITHIN THE SIXTY (60) DAY PERIOD.

THE MUTUAL FIRE, MARINE AND INLAND INSURANCE COMPANY
(In Rehabilitation)

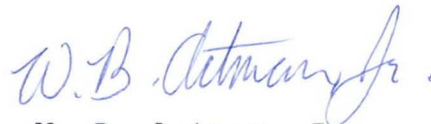
IF NO OBJECTION IS FILED WITH THE COURT AND SERVED ON THE REHABILITATOR WITHIN SIXTY (60) DAYS OF THE DATE OF THIS NOTICE, ALL RIGHTS TO OBJECT TO THE AMOUNT OF THIS CLAIM DETERMINATION ARE WAIVED AND THE COMPANY'S DETERMINATION, AS SET FORTH ABOVE, SHALL BE FINAL AND SHALL LIMIT THE COMPANY'S MAXIMUM LIABILITY TO THE CLAIMANT AND THE INSURED POLICYHOLDER TO THE AMOUNT OF THE DETERMINATION.

THIS NOTICE OF CLAIM DENIAL IS ISSUED PURSUANT TO THE COMPANY'S PLAN OF REHABILITATION APPROVED BY THE COMMONWEALTH COURT OF PENNSYLVANIA. IF NO OBJECTION IS TIMELY AND PROPERLY FILED, THE COMPANY'S DETERMINATION SHALL BE BINDING AND ENFORCEABLE ON THE CLAIMANT AND THE INSURED/POLICYHOLDER AND SHALL RELEASE THE COMPANY FROM ALL LIABILITY TO THE CLAIMANT AND THE INSURED/POLICYHOLDER, AND SHALL RELEASE THE INSURED/POLICYHOLDER FROM ALL LIABILITY TO THE CLAIMANT, IN EXCESS OF THE CLAIM DETERMINATION SET FORTH HEREIN.

THIS NOTICE IS NOT AN OFFER OF SETTLEMENT. RATHER, THE NOTICE SETS FORTH THE REHABILITATOR'S DETERMINATION OF THE MAXIMUM VALUE OF THE CLAIM AND LIABILITY TO THE ESTATE. INFORMATION RECEIVED AND EVENTS THAT OCCUR SUBSEQUENT TO THE ISSUANCE OF THIS NOTICE MAY REDUCE THE AMOUNTS ULTIMATELY PAID, IF ANY, ON THIS CLAIM.

FOR CLAIMS IN EXCESS OF \$10,000 COURT APPROVAL IS REQUIRED BEFORE THE AMOUNT OF THIS DETERMINATION MAY BE PAID. ALL PAYMENTS WILL BE MADE IN ACCORDANCE WITH THE PLAN OF REHABILITATION BASED ON THE AVAILABILITY OF FUNDS FOR THE PAYMENT OF CLASS IV CLAIMS.

The Plan of Rehabilitation requires that you keep us informed of any change of address so we are able to keep in touch with you as this matter evolves.



W. B. Artman, Jr.
Claims Evaluator



State of North Carolina
Department of Environment, Health, and Natural Resources
512 North Salisbury Street • Raleigh, North Carolina 27604

James B. Hunt, Jr., Governor

Division of Solid Waste Management
Telephone (919) 733-4996

Jonathan B. Howes, Secretary

July 2, 1993

Mr. David Williams
NC CERCLA Project Officer
U.S. EPA Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

Subj: Revised Phase II Expanded Site Inspection Sampling Plan
Peele Pesticide Disposal Site
NCD986171338
Clayton, Johnston County, NC

Ref: Letter from Bruce Nicholson, NC Superfund Section, to David Williams, Region IV
Site Assessment Section, 15 June 1992

Dear Mr. Williams:

As you know, the Region IV Emergency Response and Removal Branch (ERRB) has conducted a recent sampling event at the Peele Pesticide Disposal Site to evaluate the potential for a removal action. As a result, sampling needs have changed somewhat, and this letter presents a Revised Expanded Site Inspection (ESI) Sampling Plan.

As we discussed, I have developed this sampling plan on the assumption that the ERRB sampling event has sufficient QA/QC behind it to support the future HRS scoring package. This is an important issue, and we request that before this sampling plan is approved, the Agency determine whether the ERRB data is of sufficient quality for HRS purposes.

The attached tables and maps show the proposed sampling locations and analytes. The primary use of the ERRB data is in providing additional trench characterization. The ERRB took three soil samples from the burn trench and found all the isomers of BHC. The BHC had been found in the groundwater previously and now can be attributed to the site. However, the ERRB analytes did not include dioxin. Therefore, some trench sampling

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-4984 Fax # 919-733-0513

An Equal Opportunity Affirmative Action Employer

Mr. Williams
7-2-93
Page 2

will still be necessary for a dioxin assessment, but we have reduced the trench characterization samples from 4 subsurface and 2 surface samples proposed in the referenced letter to 2 subsurface and 1 surface sample proposed in this plan.

All other sampling locations remain the same as in the referenced letter. Note, however, that I have added the QA/QC samples to the table in the form of duplicates for each matrix and have designated the matrix spike sample for groundwater.

Please advise as to any comments or questions you have regarding this plan and as to the useable quality of the ERRB data. Upon approval of the sampling plan, the field date for the ESI will set based on openings for dioxin bookings in the CLP program.

Sincerely,



Bruce Nicholson
Chemical Engineer
Superfund Section

bin/let/peelplan

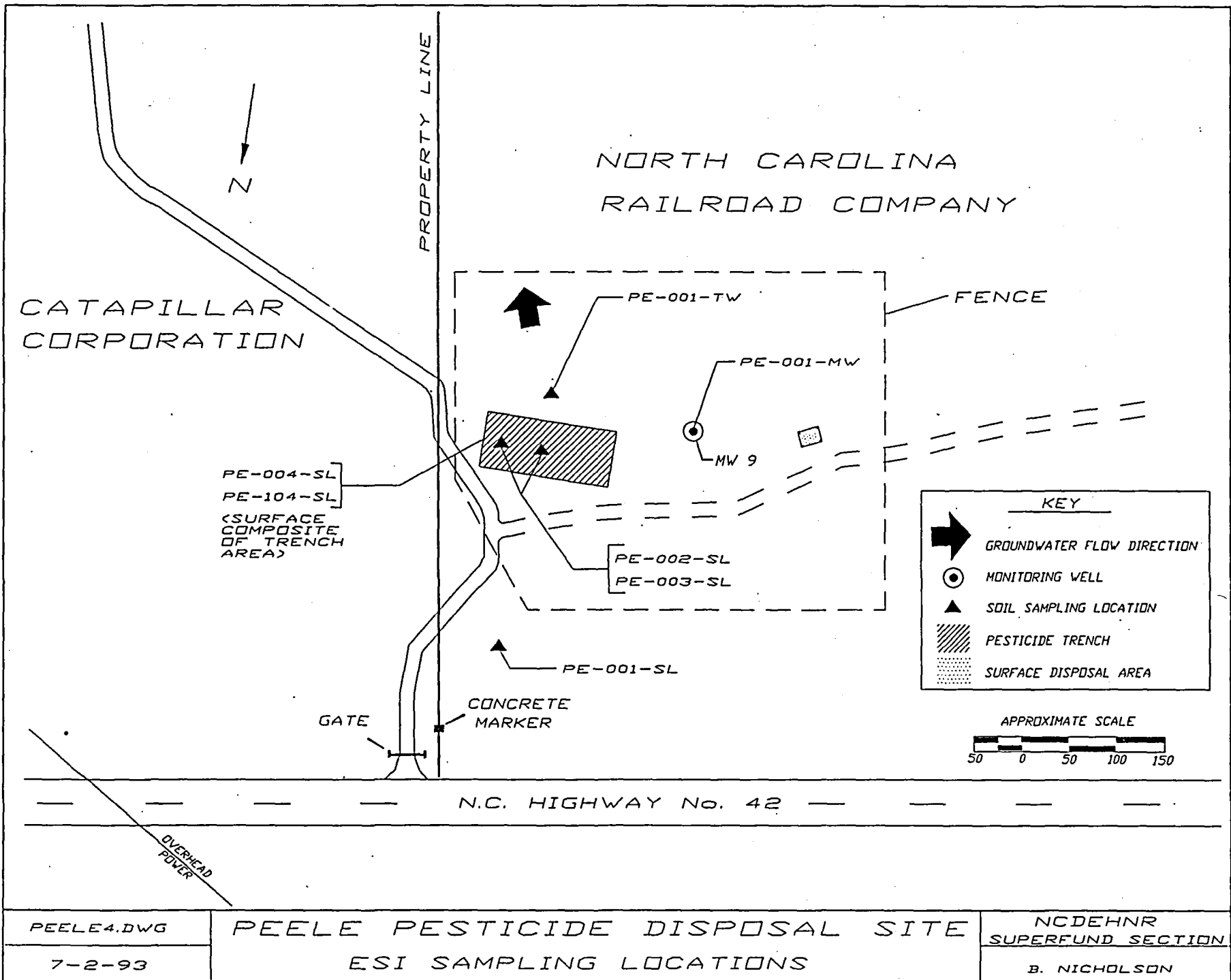
cc: Pat DeRosa

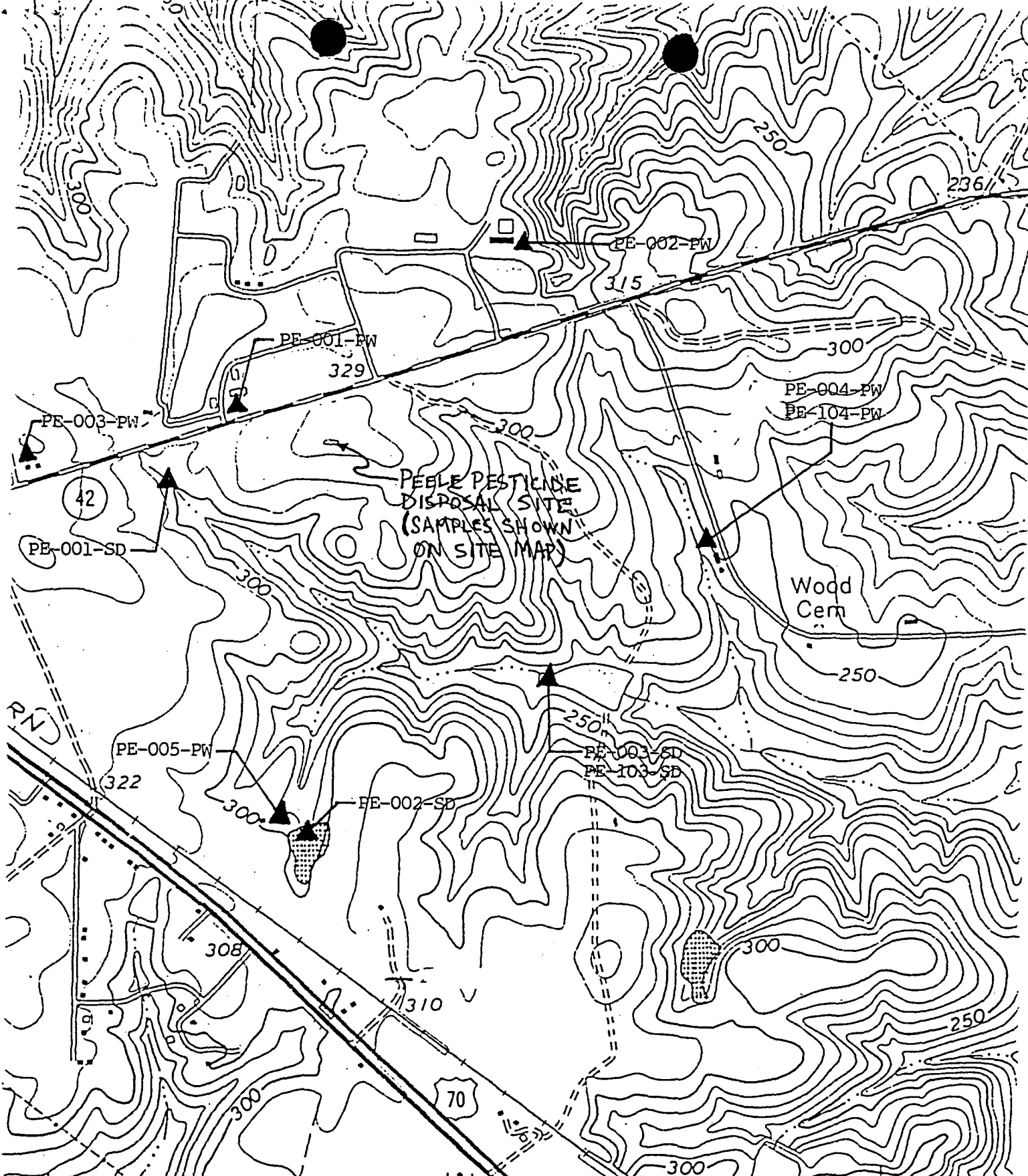
PEELING PESTICIDE SITE ESI SAMPLING LOCATIONS

SAMPLE NO.	DESCRIPTION	ANALYTES	COMMENTS/NOTES
PE-001-SL	Background Soil	D,E,V,I	Taken below surface organic layer
PE-002-SL	Waste/soil in trench area	D,E,V,I	Subsurface vertical composite with auger/shovel
PE-003-SL	Waste/soil in trench area	D,E,V,I	Subsurface vertical composite with auger/shovel
PE-004-SL	Composite surface soil east end of trench	D,E,I	Taken below surficial organic layer
PE-104-SL	Duplicate of PE-004-SL	D,E,I	
PE-001-SD	Unnamed intermittent tributary sediment upstream of site	D,E,V,I	As a background sample
PE-002-SD	Upstream/Control pond on Highway 70, Starr Hardee's property	D,E,V,I	Upstream of Caterpillar Corp.'s Pond for background
PE-003-SD	Caterpillar Corp. Pond Sediment	D,E,V,I	Pond is a fishery
PE-103-SD	Duplicate of PE-003-SD	D,E,V,I	
PE-001-MW	MW-9 (the only remaining monitoring well)	D,E,V,I	Well is in a cross gradient position, has had pesticides in past, has not been sampled using CLP QA/QC.
PE-001-TW	Temporary well point downgradient of site in area of stressed trees	D,E,V,I	Optional sample
PE-001-PW	Rhone-Poullenc Potable Well No. 1	E,V,I	Also serves as potential background well
PE-002-PW	Rhone-Poullenc Potable Well No. 2	E,V,I	
PE-003-PW	Partlow well on Highway 42	E,V,I	Matrix Spike Sample
PE-004-PW	Joe Smith well on SR 1902, 553-5826	E,V,I	
PE-104-PW	Duplicate of PE-004-PW	E,V,I	
PE-005-PW	Starr Hardee well on Highway 70, 553-8473 (work)	E,V,I	

D = dioxin
 E = extractable organics
 V = volatile organics
 I = inorganics

SL = soil
 SD = sediment
 PW = potable well
 MW = monitoring well
 TW = temporary well





POWHATAN)
5355 III SW

733

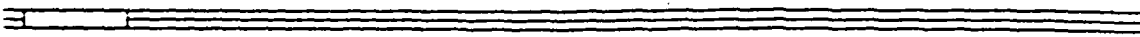
SMITHFIELD 10 MI.
GOLDSBORO 32 MI.

25'

SCALE 1:24 000

0

1 MILE



3000 4000 5000 6000 7000 FEET

Bruce



State of North Carolina
Department of Environment, Health, and Natural Resources

512 North Salisbury Street • Raleigh, North Carolina 27604

Division of Solid Waste Management

Telephone 919-733-4996

James B. Hunt, Jr., Governor

Jonathan B. Howes, Secretary

June 30, 1993

Mr. Doug Lair, Chief
Emergency Response and Removal Branch
U.S. EPA Region IV
Waste Management Division
345 Courtland Street, N.E.
Atlanta, GA 30365

Subj: Peele Pesticide Disposal Site (NCD986171338)
Clayton, Johnston County, NC

Dear Mr. Lair:

First, let me say that the Division of Solid Waste Management (DSWM) appreciates the recent effort that the Region IV Emergency Response and Removal Branch (ERRB) has made to assess the Peele Pesticide Disposal Site in Clayton, NC. The DSWM supports the ERRB effort to conduct a removal action at this site. We understand that a medium priority for the removal has been recommended, and that under this recommendation a removal can be expected to occur, but within a time frame that depends on its priority against other medium priority sites. While we agree that the site is not a high priority candidate because it is fenced it seems that there are significant problems that a timely removal could address. There are about 1,000 cubic yards of material in the trench, most of which may be pure product pesticides in bags. The bags are under a thin veneer of pine straw and can be encountered less than 6 inches below the land surface. Groundwater has already been contaminated at the site, and a timely removal action will mitigate the threats of plume migration to private wells and additional aquifer damage.

Having said this, I would like to apprise you of a recent occurrence and communication breakdown concerning the Peele Pesticide Disposal Site. Our Superfund Section staff has been tasked by the U.S. EPA Site Assessment Section under a Cooperative Agreement to conduct an Expanded Site Inspection (ESI) for this site. As part of this effort we sent the Site assessment Section an ESI Sampling Plan outlining our proposed sampling

Mr. Lair
6-30-93
Page 2

efforts on 15 June 1993. This plan is now under review by Site Assessment Section Staff. On 25 June 1993 our project manager for this ESI notified the site owner that an ESI was being planned and requested permission for site access. The site owner was puzzled and stated to our project manager that an EPA representative from ERRB had contacted him by telephone on 24 May 1993 to notify the site owner that EPA was visiting the site that day. The site owner had assumed that we were a party to this visit since he did not supply EPA with a key to the site, and the only other key is in our Superfund Section office. However, we were never contacted by ERRB about this visit.

The site has a surrounding fence and a locked gate. We were surprised that someone with the Agency would not only enter the site without notifying us, but would do so without benefit of the key which is in our office. This site is an example how lack of communication can cause redundant efforts on a site; something we had discussed with Bill Steiner during our midyear review in April 13-14, 1993. Had we been notified of this visit many benefits would have resulted. Our staff could have coordinated with ERRB's sampling efforts to be sure that the samples are useful for scoring the site under the Hazard Ranking System. Furthermore, we would have prepared our ESI Sampling Plan with full knowledge that certain samples had already been collected. We could have easily and quickly provided a key to the site as we are only 25 minutes away. Lastly, we are familiar with the site and could have provided some technical input based on this familiarity. For example, we and the Region IV Site Assessment Section are concerned that dioxin may be present due to the nature of the pesticides present and the fact that pesticides were burned in the pit. Dioxin has been found on NPL sites of a similar nature in this State. We may have to retake some samples just for dioxin. Arranging for dioxin analyses of your samples would probably have been more cost effective.

We understand that the data ERRB collected on the site during the 24 May 1993 visit is now being sent to us. This data may allow us to make adjustments to our ESI Sampling Plan, as appropriate.

In a separate incident, we found out just today that yesterday ERRB had taken samples at the Old Mount Holly PCE Site in Paw Creek, Mecklenburg County. Again, we were not notified, and again we have spent considerable staff time on a sampling plan for the site. Please forward the sampling location data to us as quickly as possible so that delays in our sampling plan may be minimized.

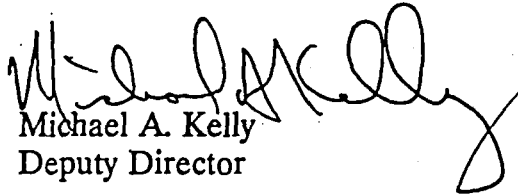
From our discussions with Bill Steiner during our mid-year review, we are aware that ERRB is overburdened with requests for action, and that the ERRB staff is trying to get to the higher priority sites as quickly as possible. We support the recent advent of RAT-PAC meetings which are designed to promote coordination with the Site Assessment Section. However, it is evident that there is still room for improvement, as we are not getting the

Mr. Lair
6-30-93
Page 3

word on some sites as we should. There have been some recent coordination successes at some sites such as Cherokee Oil and Supreme Finishing. For these sites, one phone call by the OSC prior to the ERRB site visit made the difference. I hope it is possible to improve communications based on these good examples.

We appreciate your efforts on this site to date and in the future, and hope to continue striving to improve communications on all sites in the State.

Sincerely,


Michael A. Kelly
Deputy Director

bin\let\peelerrb

cc: Craig Benedikt, Region IV Site Assessment Section

FAX COVER SHEET

North Carolina Department of Environment,
Health, and Natural Resources

Division of Solid Waste Management
Superfund Section

*Stamped 7/1/93
2:10 pm
[Signature]*

TO: Doug LAIR

DEPT: EMERGENCY Response & Removal Branch

FAX #: (404) 347-4464

FROM: Mike Kelly

FAX: (919) 733-4811

PHONE: (919) 733-4996

NUMBER OF PAGES: 4 (including cover sheet)

COMMENTS:

June 28, 1993

MEMORANDUM

To: Peele Pesticide Disposal Site File
From: Bruce Nicholson *BN*
Subj: Telecon with Matt Taylor, U.S. EPA Region IV Emergency Response and Removal Branch (ERRB), (404)347-3931.

As a follow-up to my conversation this morning with Matt Taylor, I recontacted Mr. Taylor and determined the following concerning the removal status of the Peele Pesticide Disposal Site.

- Mr. Taylor wrote a memo to the ERRB Removal Assessment Team (RAT), currently consisting of Don Rigger and Mary Joe Penick, recommending that the Peele Pesticide Disposal Site be given a "medium" priority for a removal. This designation means that a removal action is possible in the future but not imminent. The schedule will be dictated by how the RAT ranks this site against others that are in the same category.
- Mr. Taylor's position that he provided in the RAT memo is that the site is fenced and away from populated areas and is not an immediate contact threat. Nonetheless it makes sense to remove the pure product in the trench reasonably quickly.
- The RAT will communicate these findings to the Preliminary Assessment Committee (PAC) during the next RAT-PAC meeting. Mr. Taylor did not know when this would take place.
- The site was not sampled for dioxin during Mr. Taylor's visit.

bin\mem\peelerr2

cc: Jack Butler
Pat DeRosa

June 28, 1993

MEMORANDUM

To: Peele Pesticide Disposal Site File

From: Bruce Nicholson *BN*

Subj: Telecons with:

Scott Saylor, NC Railroad Company, (919)-829-7355.

Matt Taylor, U.S. EPA Region IV Emergency Response and Removal Branch (ERRB), (404)347-3931.

On 25 June 1993 I spoke with Mr. Scott Saylor of the NC Railroad Company to notify him of the upcoming Expanded Site Investigation at the Peele Pesticide Disposal Site. He indicated that we are certainly allowed site access and requested a letter notifying him of our general plans. He also indicated that he thought we had already done a recent investigation at the site. After reviewing his notes, he stated that Matt Taylor had called him on a cellular phone on 24 May 1993 while en route to the site. Mr. Taylor told him that he was going to take samples from the site. Mr. Saylor had thought Mr. Taylor had coordinated with our office to obtain the key for the site. Mr. Saylor did not provide a gate key to Mr. Taylor. I informed Mr. Saylor that, to my knowledge, we had not provided a key to Mr. Taylor either.

I then attempted to contact Mr. Taylor concerning the Peele Pesticide Disposal Site. He was not available and I left a message for him to contact me.

This morning I recontacted Mr. Taylor and determined that Mr. Taylor had visited the site and taken several samples. I told Mr. Taylor that we were about to conduct an Expanded Site Investigation at the site and any data he collected might be very useful to us. He stated he took three soil samples in the trench area, one soil sample in the surface disposal area, and one sediment sample in the creek approximately 500 yards downhill from the site. The analytical results have returned and he will mail them to me today. He indicated that they found what they thought was pure product in the trench area, and low residual levels in the surface disposal area. The sediment sample came out clean.

I asked if he had any maps or drawings of where the samples were taken. He said he would look in the file and forward them, if available. I told him not to delay sending the results if he could not find it. I said I would confer with him by phone, if necessary, to determine his sampling locations.

Peele Memo
6-25-93
Page 2

I asked Mr. Taylor how he managed to gain access to the site since it is completely fenced and locked. He stated that he thought his crew may have removed the gate from its hinges and then refit it when they were done, but he was not absolutely sure of this [I have been to the site since that time and have observed the lock to be in place and in working order. Therefore, the site is still secure.].

bin\mem\peelerrb

cc: Jack Butler
Pat DeRosa

June 25, 1993

To: Dave Lilley

From: Bruce Nicholson *bin*

Subj: Peele Pesticide Disposal Site ESI Field Work

As requested, this memo contains the pertinent facts about the situation at the Peele Pesticide Disposal Site that may help in making a decision about the level of personnel protection required during trench characterization.

From the late 1950's through the 1960's the trench was used to dispose of waste pesticides of the W.R. Peele Company, a pesticide formulator/distributor. During the Site Investigation, Ed Wallingford and I took two samples from bags that are just below the land surface. Both samples were from 6 to 18 inches deep directly from the pesticide bags. It is reported that the pesticides were burned in the trench, and indeed, some of the bags appeared to have been charred. The bags are sitting beneath a thin surface layer of soil and pine straw. The pesticides found include DDT (17,501 ppm), DDD (3,715 ppm), toxaphene (17,944 ppm), methoxychlor (68,103 ppm), and endrin (119 ppm). It is important to note that these came from discrete bags of pesticides and it is probable that there are other types of pesticides at the trench yet to be sampled. Disposers have stated that chlordane and lindane were also disposed of in the trench, and along with the pesticides noted above, lindane (gamma-BHC) has been found in the groundwater. Also, as you may remember, a few small packages of "Paris Green" containing arsenic (350,000 ppm) were found in the surface disposal area which may or may not be in the trench area as well.

My greatest concern is the possibility that there is dioxin in the trench area. In the cases of both the FCX-Statesville and FCX-Washington NPL sites, where there were organochlorine type pesticides similar to the Peele Site, dioxin has been found. At the Peele Site, this issue is further complicated by the fact that the pesticides were burned which could also cause dioxin formation. In my opinion, we should expect dioxin to be at the site.

Given these facts, I feel it is wise to consider using Level C in any surface or subsurface sampling procedure on the burn trench. While these contaminants are not very volatile, I am concerned about wind blown particulate. I have attached a copy of the sampling plan. If you feel level C is warranted, please provide me a list of staff members capable of Level C work so that I can develop a staffing plan.

bin\mem\peeldave



STATE OF NORTH CAROLINA
OFFICE OF THE GOVERNOR
RALEIGH 27603-8001

JAMES B. HUNT, JR.
GOVERNOR

June 23, 1993

Mr. Richard B. Self
County Manager
Johnston County
P.O. Box 1049
Smithfield, NC 27577

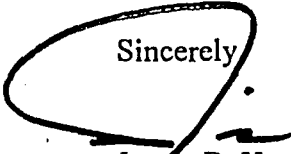
Dear Richard:

Thank you for your letter and the enclosed information about the Peele Pesticide site. I appreciate your concern about how the environmental problems affects the suitability of the site for industry.

By copy of this letter, I am asking Jonathan Howes, Secretary of the Department of Environment, Health and Natural Resources, to determine if anything can be done.

My warmest personal regards.

Sincerely


James B. Hunt, Jr.

cc: Secretary Jonathan Howes



Office of
County Commissioners
(919) 989-5100
FAX (919) 989-5179

Joyce H. Ennis, Clerk

Johnston County

POST OFFICE BOX 1049
SMITHFIELD, N. C. 27577

Norman C. Denning, Chm.
Frank B. Holding, V-Chm.
James W. Cash
John M. Booker, DVM
Jerry F. Wood, DDS
Eleanor N. Creech
Cecil M. Massengill

June 11, 1993

The Honorable James B. Hunt
Governor of North Carolina
State Capitol
116 West Jones Street
Raleigh, North Carolina 27603-8001

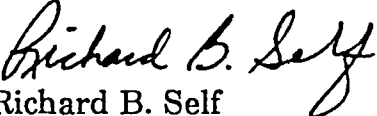
Dear Governor Hunt:

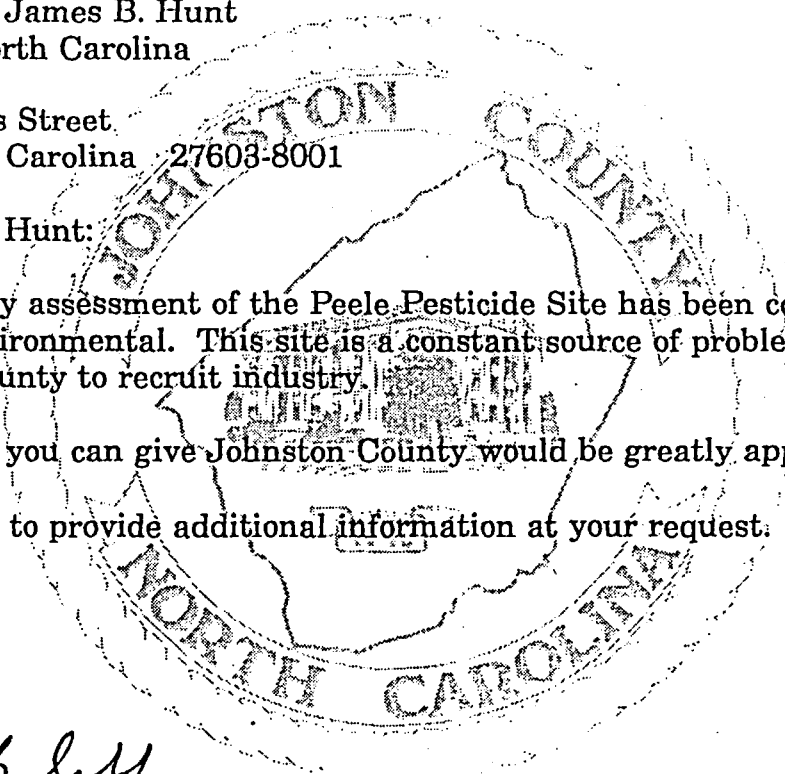
The preliminary assessment of the Peele Pesticide Site has been completed by Leonhardt Environmental. This site is a constant source of problems in the efforts of Johnston County to recruit industry.

Any assistance you can give Johnston County would be greatly appreciated.

I will be happy to provide additional information at your request.

Sincerely,


Richard B. Self
County Manager





**LEONHARDT
ENVIRONMENTAL**

616 Bantry Court
Raleigh, North Carolina 27615
(919) 846-7492
FAX (919) 847-8112

May 23, 1993

Johnston County Economic Development
P. O. Box 1179
Smithfield, North Carolina 27577

Attn: Mike de Sherbinin

Subject: Assessment of Peele Pesticide Site File
Johnston County, North Carolina

Dear Mr. de Sherbinin:

During the performance of the recently completed Phase I environmental site assessment for the Finch site near Clayton, North Carolina, I reviewed the North Carolina SUPERFUND Section files for the Peele Pesticide Site. In my Phase I report, I concluded, because of measured and assumed groundwater flow directions in the area of the two sites, that an impact onto the Finch site from the contamination at the Peele site would not be likely. You have asked that I now assess the overall situation surrounding the Peele site and specifically look at the likelihood of impacts at other sites within Johnston County. Such information would be useful in determining the extent that the presence of this site might affect industrial recruiting in your county.

The Peele Pesticide Site file includes a considerable number of news articles speculating that the site is a major catastrophe. The news articles chose selective information concerning the data collected during the initial assessment of the site. Coupled with the ominous tone of press releases from, and interviews with, the Department of Human Resources, which encouraged people in the area to not drink well water, and that exposure to the soil on-site could be fatal, the file paints a bleak picture.

The amount of data included in the file is extremely small for the degree of concern expressed. There were a few soil samples collected prior to the excavation of soil from the trench which contained the pesticide bags and residue. There are no records of groundwater monitoring wells installed specifically to determine the extent of contamination. The closest neighbor to the Peele site, Data General, installed, at their own expense, three shallow wells along the line between their site and the Peele site. The data from these wells was used to plot the flow direction of groundwater in the area of the site. No data from deep wells

was found in the file. The three Data General wells indicated that some contamination had moved onto their site. However, the levels were found to be acceptable to them, and ultimately to the new owners, Caterpillar, Inc. A memo in the file from the Epidemiology Section concludes that the levels found are above acceptable drinking water standards.

The file contains records of sampling done at drinking water wells in the area. No indication was found that the contamination had reached the wells tested.

Based on this limited information the EPA concluded:

"Exposed surface disposal wastes were removed in January of 1991. The trench area has not been remediated, but is covered, vegetated, and surrounded by a fence. The shallow groundwater surrounding the site has been found to contain low levels of pesticides, however a nearby residential well contained no contaminants. The estimated amounts of remaining waste at the site are minimal according to CERCLA standards. The surrounding population is not large. The area is fenced and only four residents are located within 1/4 mile. There are no schools, workers or other sensitive environments within a 1/4 mile. For these reasons, further action under CERCLA is not recommended."

From this recommendation, work on the site essentially stopped. The State reports the site in their INACTIVE HAZARDOUS WASTE SITE PRIORITY LIST as "remedial action completed" then adds that "cost recovery is pending-additional clean-up necessary". EPA lists the site on their WASTELAN report as "site investigation complete 10/31/90".

This leaves Johnston County in a sort of limbo. The agencies involved are satisfied, for the moment, that no immediate action is needed. However, any company which might have an interest in any industrial site located within 3-5 miles of the Peele site, particularly those industrial sites located downgradient of the Peele site, would have a number of very pertinent and as yet unanswered questions. Such uncertainty often leads to the selection of a site elsewhere.

Insufficient evidence appears to have been collected to determine the vertical or horizontal extent of groundwater contamination. The site has not been officially "closed", yet no steps are ongoing which would allow that to happen. The file indicates that answering the question as to who will pay for the remaining closure steps is the largest remaining obstacle to overcome.

The simplest solution, as far as Johnston County is concerned, would be collect sufficient data to determine the remaining extent of the problem and from that to propose a remedial action plan. Such a plan might include the removal of additional soils and the collection and treatment of groundwater, or it might merely include

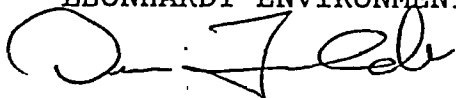
the installation of a series of monitoring wells to keep an eye on the contamination during the period of its natural degradation. The cost of remediation, which might range from a few thousand to a few million dollars, simply cannot be estimated from the data which was included in the agency file.

Following the collection of the data and the preparation of the plan, the County could either chose to have the remediation performed (at an expense to the property owner, the SUPERFUND, or the County) or they could choose to stop at that point. The fact that the contamination would now be fully defined and delineated would mean that those sites outside of the area of impact would be demonstrably free of contamination. Such hard evidence would eliminate the doubt which, at present, might lead companies to look elsewhere.

The completion of closure steps, at the present rate of movement, will undoubtedly take several years. If the area in question is to be an attractive location for new industry, I recommend that immediate steps be taken to move the site higher toward the top of the priority list such that the State will force the issue, or that action be taken on a local level to collect enough data to put to rest the uncertainty surrounding the site.

If you need additional information concerning this matter, please let me know. I look forward to being of continuing service to Johnston County.

Sincerely,
LEONHARDT ENVIRONMENTAL



H. Derr Leonhardt II, PE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED
JUL 01 1993
SUPERFUND SECTION

JUN 28 1993
4WD-ERRB

Mr. Bruce Nicholson
North Carolina Division of
Solid Waste Management
PO Box 27687
Raleigh, NC 27611-7687

RE: Peele Pesticide Site, Clayton, North Carolina

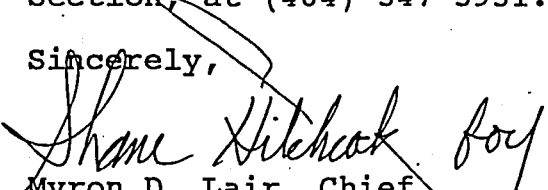
Dear Mr. Nicholson:

On June 17, 1993, the U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) reviewed the available information for the above referenced site to determine its eligibility for a potential removal action under the National Contingency Plan (NCP). The site information was evaluated using criteria from Section 300.415 of the NCP and current ERRB program guidance.

Based upon ERRB's review, the above referenced site meets the criteria for a low priority removal action. The site is located in a remote area and is secured by a chain linked fence. Surface water and sediment samples did not show any contamination. The composite sample from the surface disposal area revealed the presence of toxaphene at a level of 9.9 ppm. There is no direct contact threat at the site and no evidence of contaminants migrating off-site, however the trench on-site does contain pure pesticides and could be a source of future groundwater contamination. Due to ERRB's limited budget and resources, a removal action cannot be scheduled for anytime in the near future; therefore, it may be necessary for the State of North Carolina to conduct any cleanup activities. This determination does not preclude any other investigations or response actions by other parties. Should site conditions change or additional information become available, ERRB will re-evaluate this site as necessary.

Should you have any questions concerning ERRB's determination, please contact Mr. Shane Hitchcock, Chief of Removal Operations Section, at (404) 347-3931.

Sincerely,


Myron D. Lair, Chief
Emergency Response and Removal Branch

cc: Narindar Kumar, Site Assessment Section, EPA

June 18, 1993

To: Peele Pesticide Disposal File

From: Bruce Nicholson *BW*

Subj: Pre ESI Site Reconnaissance Summary

Rob Gelblum of the NC Department of Justice and I visited the Peele Pesticide Disposal Site yesterday. The purposes of this visit were to acquaint Mr. Gelblum with the site and to obtain further data on some nearby targets and sampling points for the upcoming Expanded Site Investigation (ESI). We arrived at the site at 9:15 am and the weather was dry with estimated temperatures in the 80's. We toured the site and visually observed the following:

- Several recently dead and fallen pine trees were noted. Whereas there had appeared to be some question in the past, it can now be stated with near certainty that the trees to the south of the disposal pit appear to be stressed.
- At the edge of the surface disposal area between it and the burn trench we noted a dead black snake. It appeared to be no more than a day or two old. A box turtle was scavenging on it. The snake was laying directly on an area of open ground and nothing had apparently fallen on it. It was laying in the shape similar to a figure 8 so it was apparently not dragged to this location by another animal after it had died.
- MW-9 was locked and secure. However, we have no key. I will contact Scott Saylor of the NC Railroad Company to obtain one.

We determined the following concerning targets and ESI sampling locations:

- On SR 1902 the appropriate well to sample is found 0.6 miles from highway 42 on the right and the home and business of Joe Smith, owner of Neuse Custom Woodcraft (553-5826). Mr. Smith was not home at the time, but Bobby Britt, his associate, provided us with a business card (copy attached) to contact Mr. Smith later. Mr. Britt was virtually certain that Mr. Smith would consent to having his well sampled.
- On Highway 70 we located the upstream/control pond. It is on the property of Starr Hardee. Ms. Hardee was cooperative and indicated that we could sample the pond during the upcoming ESI. She can be reached at 553-4223 at home and 553-8473 at work. She is also amenable to having her well tested.

Mr. Gelblum and I then returned to the office and arrived at 11:00 am.

bin\mem\peel1



NEUSE CUSTOM WOODCRAFT

P.O. Box 471
Clayton, NC 27520

JOE SMITH
(919) 553-5826

BOBBY BRITT
(919) 284-5837



State of North Carolina
Department of Environment, Health, and Natural Resources

512 North Salisbury Street • Raleigh, North Carolina 27604

Division of Solid Waste Management

Telephone 919-733-4996

James B. Hunt, Jr., Governor

Jonathan B. Howes, Secretary

June 15, 1993

Mr. David Williams
NC CERCLA Project Officer
U.S. EPA Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

Subj: Phase II Expanded Site Inspection Sampling Plan
Peele Pesticide Disposal Site
NCD986171338
Clayton, Johnston County, NC

Ref: Letter from Ms. Cathy Amoroso to Ms. Pat DeRosa,
9 October 1992

Dear Mr. Williams:

This letter contains the proposed sampling plan for the Phase II of the Expanded Site Inspection (ESI) of the Peele Pesticide Site in Clayton, Johnston County, NC. The site consists of a burn trench area and a surface disposal area where the W.R. Peele Company disposed of containers and bags of waste pesticides from its distribution/formulation operation in the late 1950's through the 1960's. In 1990 the State contracted a removal of wastes in the surface disposal area which was felt to represent a direct contact threat. As part of this action, a fence was erected around the entire site to limit access to the residuals at the surface disposal area and the burn trench area, where high levels of chlorinated pesticides have been found in their original bags directly beneath the land surface.

The attached tables and maps show the proposed sampling locations and analytes. Note that because the trench was used to burn some of the pesticide waste, and the chlorinated pesticides in question could form dioxins in a combustion setting, we have included dioxin as an analyte for all on-site and surface water pathway sampling locations.

Please note that the plan does not call for the construction of additional on-site monitoring wells. Only one monitoring well remains on site. It will be sampled to establish a groundwater release with CLP-quality data. However, constructing additional

Mr. Williams
6-15-93
Page 2

monitoring wells will not be cost effective because there are not sufficient targets subject to potential contamination to drive the score. If additional wells are deemed necessary, then temporary well points should be employed. This would be in the form of one well immediately downgradient of the site in an area where trees are potentially showing signs of stress.

Soil/waste sampling in the trench area will be conducted to establish with CLP quality data the suite of pesticides or other chemicals that are present on site. In the referenced letter, Ms. Amoroso noted that analytical data indicated there are certain pesticides found in the on site monitoring wells which were not found in the two waste samples from the burn trench. She indicated that site attribution for these groundwater contaminants may be in doubt if those same contaminants are not found in the burn trench. This is a point well taken. However, we believe, based on what we know of the site, that the trench is the source of these contaminants. The reason that certain groundwater contaminants have not been found in the trench area is not that they are absent but simply because the two trench area samples were taken from discrete bags of pesticides which did not contain the entire suite of pesticides presently in the trench. Furthermore, Ms. Amoroso's point may be somewhat moot given that the monitoring well results she refers to do not drive the score. Therefore, at this time, we do not consider it cost effective to spend numerous samples establishing attribution for groundwater contaminants which may not significantly affect the score.

However, issue of site attribution on the whole is very important, and Ms. Amoroso's comments are most applicable for the surface water. The sampling plan should be designed to expand the potential suite of contaminants found in the trench area so that if the same contaminants are found in the surface water they can be attributed to the site. This sampling plan addresses this issue by proposing to conduct additional source sampling within the burn trench to identify the suite of pesticides which are present in the trench waste. Obviously, the more samples taken the greater the chances of finding additional contaminants. As a reasonable effort to expand the suite of pesticides attributable to the site, we have proposed four subsurface vertical composite samples and two surface composite samples be taken in the trench area.

We thought that one other way to support attribution to the site might be to sample groundwater immediately upgradient of the site. If clean, this provides a strong case that the trench was the source of the pesticides in the groundwater even if they have not been found in trench samples yet. However, we felt that because the site area was once used as an agricultural field, this evidence, though strong, would still be inconclusive. Therefore,

Mr. Williams
6-15-93
Page 3

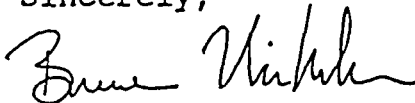
we have not proposed an upgradient temporary well. If you feel differently, an additional upgradient temporary well could be added to the sampling plan. In the plan as proposed, one or more of the nearby potable wells would serve as background wells.

As requested in Ms. Amoroso's referenced letter, additional sampling will be aimed at determining whether the pond downgradient of the site has been contaminated from site related compounds. It is significant to the site score as the pond is a fishery. However, because there are two branches which flow into this pond, two upstream samples must be taken. The first would be on the intermittent stream near Highway 42 and the other on a farm pond near Highway 70 (see attached map).

The scope of the proposed off-site private well sampling effort is somewhat different than what Ms. Amoroso had requested in her letter. The Fox Hollow subdivision is simply not a likely target as it is a mile from the site and not in the downgradient direction. There is also at least one well on SR 1902 between Fox Hollow subdivision and the site. Therefore, we have proposed to sample the SR 1902 well in place of Fox Hollow. Furthermore, the groundwater contaminants are just not mobile enough to support a widespread off-site well sampling program. It is notable that there are no private wells directly downgradient of the site. The topography is such that groundwater is flowing down the side of a draw where there are no wells until you go up the opposite side of that draw over one half mile away. Also, agricultural use of pesticides in the area where private wells are located is likely. Therefore, site attribution for private wells is very tricky. However, because the groundwater pathway is not sufficiently driven by potential contamination, the site warrants some level of local potable well sampling, and we have taken this into account with this plan.

Please advise as to any comments or questions you have regarding this plan. Upon approval of the sampling plan, the field date for the ESI will set based on openings for dioxin bookings in the CLP program.

Sincerely,



Bruce Nicholson
Chemical Engineer
Superfund Section

bin/let/peelplan

cc: Pat DeRosa

PESTICIDE SITE ESI SAMPLING LOCATIONS

SAMPLE NO.	DESCRIPTION	ANALYTES	COMMENTS/NOTES
PE-001-SL	Background Soil	D,E,V,I	Taken below surface organic layer
PE-002-SL	Waste/soil in trench area, quadrant 1	D,E,V,I	Subsurface vertical composite with auger/shovel
PE-003-SL	Waste/Soil in trench area, quadrant 2	D,E,V,I	Subsurface vertical composite with auger/shovel
PE-004-SL	Waste/Soil in trench area, quadrant 3	D,E,V,I	Subsurface vertical composite with auger/shovel
PE-005-SL	Waste/Soil in trench area, quadrant 4	D,E,V,I	Subsurface vertical composite with auger/shovel
PE-006-SL	Composite surface soil east end of trench	D,E,V,I	Taken below surficial organic layer
PE-007-SL	Composite surface soil west end of trench	D,E,V,I	Taken below surface organic layer
PE-001-SD	Unnamed intermittent tributary upstream sediment	D,E,V,I	As a background sample
PE-002-SD	Upstream/Control pond on Highway 70, 0.6 miles south of site	D,E,V,I	Upstream of Caterpillar Corp.'s Pond for background
PE-003-SD	Caterpillar Corp. Pond Sediment	D,E,V,I	Pond is a fishery
PE-001-MW	MW-9 (the only remaining monitoring well)	D,E,V,I	Well is in a cross gradient position, has had pesticides in past, has not been sampled using CLP QA/QC.
PE-001-TW	Temporary well point downgradient of site in area of potentially stressed trees	D,E,V,I	Optional sample
PE-001-PW	Rhone-Poullenc Potable Well No. 1	E,V,I	Also serves as potential background well
PE-002-PW	Rhone-Poullenc Potable Well No. 2	E,V,I	
PE-003-PW	Partlow well on Highway 42	E,V,I	
PE-004-PW	Private well on SR 1902	E,V,I	
PE-005-PW	Private well on Highway 70	E,V,I	

D = dioxin
 E = extractable organics
 V = volatile organics
 I = inorganics

SL = soil
 SD = sediment
 PW = potable well
 MW = monitoring well
 TW = temporary well

NORTH CAROLINA
RAILROAD COMPANY

PROPERTY LINE



PE-006-SL

PE-001-TW

PE-007-SL

MW 9

PE-001-MW

ABANDONED
CENETERY

PE-002-SL






PE-003-SL

PE-004-SL

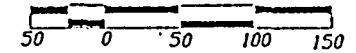
PE-005-SL

PE-001-SL

KEY

-  GROUNDWATER FLOW DIRECTION
-  MONITORING WELL
-  SAMPLING LOCATION
-  PESTICIDE TRENCH
-  SURFACE DISPOSAL AREA

APPROXIMATE SCALE



GATE

CONCRETE
MARKER

N.C. HIGHWAY No. 42

OVERHEAD
POWER

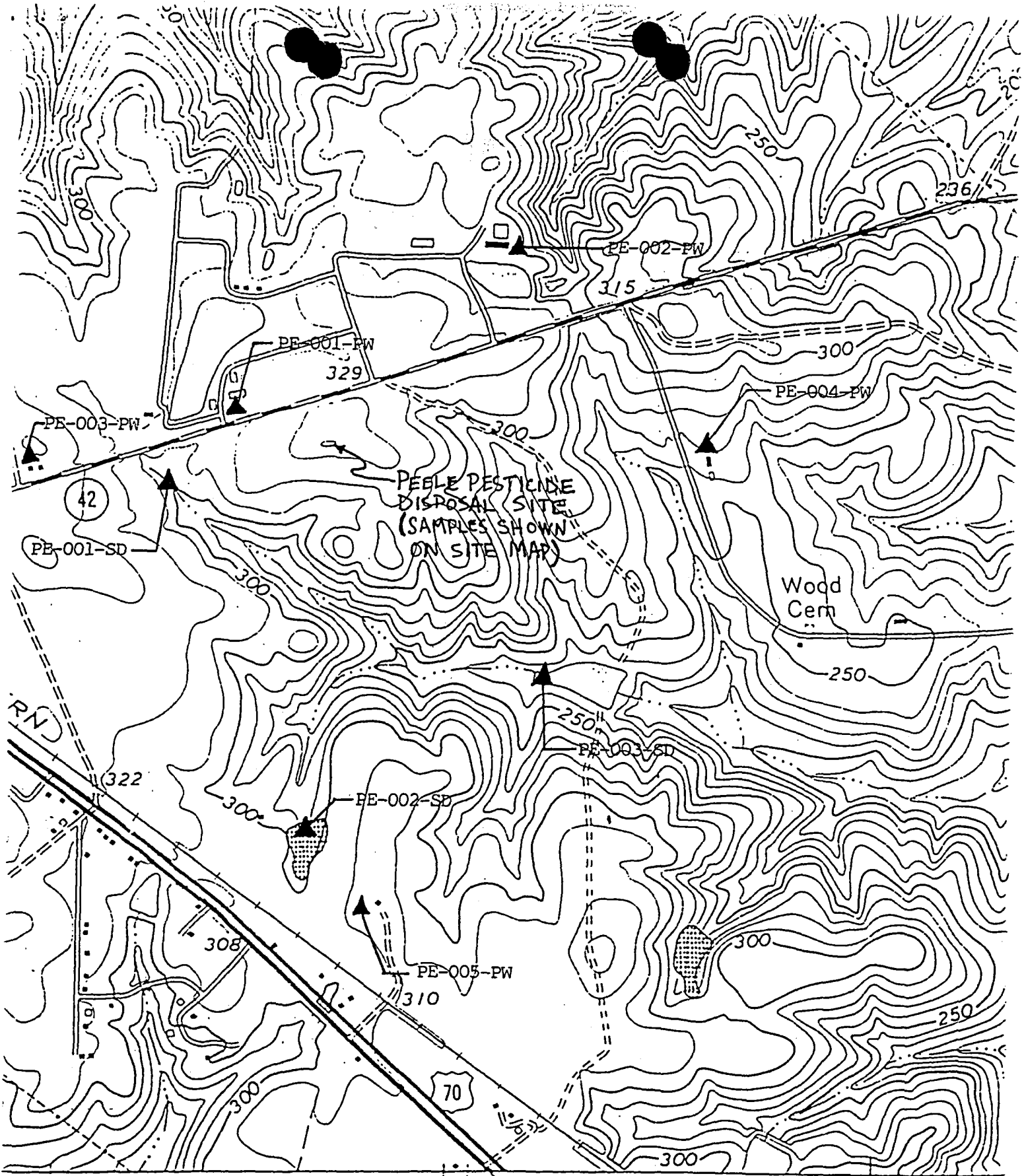
PEELE3.DWG

NC DEHNR

SOURCE: SIRRINE ENVIRONMENTAL

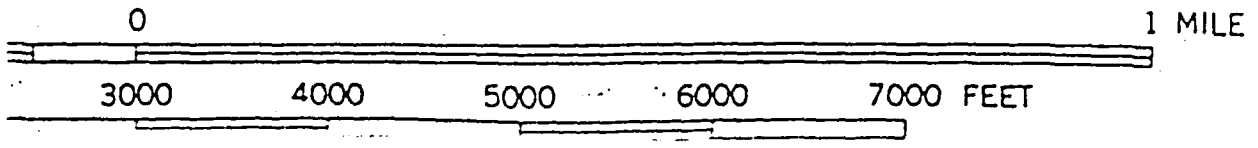
PEELE PESTICIDE DISPOSAL SITE LAYOUT

SUPERFUND SECTION



POWHATAN)
5355 III SW
SCALE 1:24 000
0

793' SMITHFIELD 10 MI.
GOLDSBORO 32 MI. 25'





State of North Carolina
Department of Environment, Health, and Natural Resources
512 North Salisbury Street • Raleigh, North Carolina 27604

James B. Hunt, Jr., Governor

Division of Solid Waste Management
Telephone (919) 733-4996

Jonathan B. Howes, Secretary

June 14, 1993

Mr. Leon Powell
Environmental Health Supervisor
Johnston County Health Department
205 South Second Street
Smithfield, NC 27577

RE: On-Site Reconnaissance
Peele Pesticide Disposal Site
NCD 986 171 338

Dear Mr. Powell:

David Lilley of the NC Superfund Section spoke with Angela Pennell to notify you that the NC Superfund Section will conduct an on-site reconnaissance of the subject site located in Johnston County, NC. The reconnaissance will be conducted on June 17, 1993 by Bruce Nicholson of the NC Superfund Section.

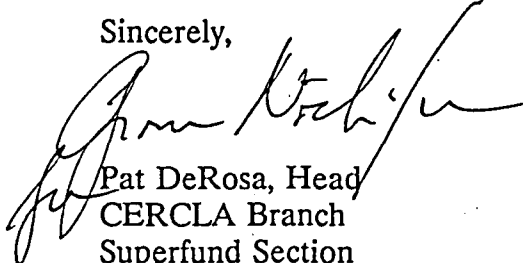
The purpose of the reconnaissance is to determine if the site poses a hazard to public health or the environment because of releases of contaminants to soil, surface water, groundwater, or air.

You may want to have your representative meet the reconnaissance team at the site. If so, please contact Bruce Nicholson at (919) 733-2801 and he will coordinate a meeting. I am enclosing background data on the site for your information.

Mr. Powell
6-14-93
Page 2

If the reconnaissance indicates the need for future study of the site, we will contact your office to advise. If you have any questions, please don't hesitate to call David Lilley or me at (919) 733-2801.

Sincerely,



Pat DeRosa, Head
CERCLA Branch
Superfund Section

Enclosures

cc: Dexter Matthews
Doug Holyfield
Debbie Crane
Angie Coppola
David Lilley
File

Federal
Trip Notification & Authorization

Prepared by: B. Nicholson

Today's Date: June 14, 1993

*Use Black Ink or Typewriter only-Staff to fill out first 2 blocks only.

Site Trip

Date of Trip: June 17, 1993

If trip date changed or cancelled note below:

Trip Date Changed To: _____ Cancelled: _____

NCD#: 986171338

Site Name: Peek Pesticide Disposal Site

City: Clayton

County: Johnston

Reason for Trip: Expanded Site Investigation On Site Reconnaissance

Name of Hotel (Overnight Trip): _____

Hotel Telephone Number: () _____

Authorized by: David B. [Signature]

Industrial Hygienist

Project Team Leader: Bruce Nicholson

Assistants: Rob Gelblum

Attach To Notification Form: 1 copy each: Preliminary Assessment Form (First page only)
Submit to the Industrial Hygienist Site Map
PA Transmittal Letter

(Please list appropriate County Health Department contact person to call to advise of trip)

Environmental Supervisor or Health Director to call: Leon Powell

Leon Powell

(Note if Dr., M.P., etc.)

Env. Health Title: Supervisor

Telephone Number: (919) 909-5180

Notes:

Health Department Official Contacted: Angela Pennell
Back Up Letter Required: Yes No

Notified Ms. Pennell on June 14, 1993 for
Leon Powell (DBL)

Note: Signed original to Data Manager

May 27, 1993

Memorandum

To: Pat DeRosa, Head
CERCLA Branch

From: Bruce Nicholson, Environmental Engineer *BN*

Subj: Peele Pesticide Site

Ref: Cathy Amoroso Letter of 9 October 1992

As requested, I will develop a sampling plan for the Peele Pesticide Site that responds to the questions raised by Cathy Amoroso in her referenced letter. Ms. Amoroso mentions specific wells which should be sampled including private wells from the Fox Hollow subdivision, the Rhone Poulenc potable well, and the Partlow well, and representative downgradient potable wells. All of these wells will be given consideration for inclusion in the sampling plan although the Fox Hollow wells and all of the "downgradient" wells are a great distance from the site. I think it is definitely worthwhile to sample the Rhone-Poulenc well; however, a hit in this well cannot easily be attributed to the site since the Rhone-Poulenc facility is an agrichemical research farm.

Ms. Amoroso also indicated that to complete the surface water pathway we should sample the pond and upstream of the site. The pond and upstream of the pond will be included in the sampling plan. Ms. Amoroso states in her letter that this pond is a likely fishery. I believe there is file evidence to indicate otherwise, but we will determine this for certain during the ESI.

Ms. Amoroso also notes that the 1960 aerial photo shows several rectangular areas lacking vegetation similar in size and shape to the trench area on the site. In her letter she indicated a preference for locating and sampling them. During the Site Investigation, I too was puzzled by these areas. However, after discussions with Bill Peele and others familiar with agriculture, I identified those areas as tobacco beds (and I believe this information is included in the SI report). These beds are long rectangular plots seeded with tobacco and covered with plastic until the seedlings are large enough to be transplanted into tobacco fields. The plastic is reflective and appears white in the aerial photograph. These beds will not be included in the sampling plan.

Memorandum
5-27-93
Page 2

Ms. Amoroso also points out that some of the pesticides found in the monitoring wells were not found in the soil or waste samples taken in the trench area. She states that these particular pesticides cannot be attributed to the site and cannot be used for HRS scoring purposes. I disagree with her statement if the background well is clean. There are obviously more different kinds of pesticides in the trench than can be identified with the one or two grab samples we have of pure product in bags. If EPA is still concerned with site attribution for certain pesticides, we may want to conduct additional source sampling in the trench area. I will raise this issue with them to determine the appropriate course.

bin\mem\peelemem



1575 Northside Dr., N.W., Suite 325, Bldg. 300, Atlanta, GA 30318 404-352-4147

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036

RECEIVED
JUL 01 1993
SUPERFUND SECTION

MEMORANDUM

TO: FILE

FROM: Paula C. MacLaren *PCM*
Analytical Manager

THRU: Donnissa L. Duvic *DD*
TATL, Region IV

SUBJECT: Peele Pesticide Site Analytical Data
TDD# 04-9304-L015-0732

DATE: 26 May 1993

EcoTek LSI laboratory performed pesticide and priority pollutant metals analyses on one water, one sediment and four soil samples collected from the Peele Pesticide site on 28 April 1993. Three soil samples were also analyzed for volatile compounds. A soil matrix spike and laboratory blank analysis provided quality control checks for the sample set. Due to extremely high levels of pesticides within the samples a three day extension was given to the lab to perform additional sample dilutions and tests to ensure accurate data.

The laboratory blank showed trace system contamination of methylene chloride, chromium and zinc. The effect on sample data was evaluated and is presented in the attached data summary.

The matrix spike was performed on soil sample DT-1, disposal trench (2' depth). All volatile spiked compounds were within the QA/QC recommended limit of 80% - 120%. The pesticide analysis showed four out of twelve compounds to have percent recoveries slightly below the guidelines; all were within method quality control limits. All metal matrix spike percent recoveries were within the recommended limits except thallium. All laboratory control samples were within limits, thereby verifying the analytical process.

The laboratory has provided additional information concerning sample analyses in their case narrative. This has been reviewed and found to be accurate.

A summary of the sample data can be found on the following pages.

cc: Matt Taylor
Randy Barnhart

**PEELE PESTICIDE SITE
ANALYTICAL DATA**

SEDIMENT AND SOIL SAMPLES

VOLATILE AND PESTICIDE COMPOUNDS (mg/kg)

SAMPLE ID	DT-1	DT-2	DT-3	SDA-SC	SD-1	LAB BLANK
LOCATION	DISPOSAL TRENCH (2' DEPTH)	DISPOSAL TRENCH (2' DEPTH)	DISPOSAL TRENCH (2' DEPTH)	SURFACE DISPOSAL AREA	SEDIMENT /CREEK	
Methylene Chloride	U	U	U	-	-	0.015
Trichloroethene			0.001 E	-	-	
Ethylbenzene		0.003 E		-	-	
Styrene		0.012		-	-	
alpha-BHC		673	1.07			
beta-BHC		1330		0.0495		
delta-BHC		1180	2.8	0.0659		
gamma-BHC		174		0.0447		
Aldrin		116	9.85			
Heptachlor Epoxide		37.4	0.767			
Dieldrin			10.6	0.0438		
4,4'-DDE		103	13.5		0.00446	
4,4'-DDD		2970				
4,4'-DDT	0.00992	9800	156	0.512		
Methoxychlor				0.340		
Toxaphene		30200	120	9.9		

NOTES:

- U - Undetected; the compound was present in the lab blank.
 E - Estimated value; the concentration was below the practical quantitation limit (PQL).
 - - - The sample was not tested for this compound.

PEELE PESTICIDE SITE
ANALYTICAL DATA

SEDIMENT, SOIL AND WATER SAMPLES

METALS (ppm)

SAMPLE ID	DT-1	DT-2	DT-3	SDA-SC	SD-1	SW-1	LAB BLANK *
LOCATION	DISPOSAL TRENCH (2' DEPTH)	DISPOSAL TRENCH (2' DEPTH)	DISPOSAL TRENCH (2' DEPTH)	SURFACE DISPOSAL AREA	SEDIMENT/CREEK	SURFACE WATER CREEK	
Arsenic		14.6	7.8	6.6			
Beryllium	0.28	0.18		0.14	0.14		
Cadmium	1.3	2.0		0.42			
Chromium	64.7 B	40.9 B	32.5 B	27.1 B	6.4	U	0.3/0.002
Copper	12.8	95.6	118	81.9	3.1		
Lead	9.1	107	13	6.3	4.0		
Mercury	0.17	0.12					
Nickel	3.4	5.2	1.9	3.0	1.5		
Thallium	142	131	63.8	40.1			
Tin		9.6					
Zinc	9.8	250 B	90 B	12.4 B	8.6 B	U	0.32/0.003

NOTES:

- B - Analyte was present in laboratory blank.
- U - Undetected; analyte was present in laboratory blank.
- ** - Values listed are for soil analysis and water analysis, respectively.