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DocumentID	NONCD0002832
Site Name	MARY CHAPPEL RESIDENCE
DocumentType	Correspondence (C)
RptSegment	1
DocDate	8/26/2010
DocRcvd	8/26/2010
Box	SF1110
AccessLevel	PUBLIC
Division	WASTE MANAGEMENT
Section	SUPERFUND
Program	IHS (IHS)
DocCat	FACILITY

Mary Chappell Site
Hamlet, Richmond Co.

NCDENR

North Carolina Department of Environment and Natural Resources
Division of Water Quality

Beverly Eaves Perdue
Governor

Coleen H. Sullins
Director

Dee Freeman
Secretary

August 26, 2010

NC DENR-DWM
1646 MSC
RALEIGH, NC 27699-1646

FILE

SUBJECT: Well Construction Permit No. WM0600824
Seven (7) monitoring wells
1061 Hwy 177 North
Hamlet, Richmond County

To Whom It May Concern:

In accordance with your application dated August 4, 2010 and received in the Fayetteville Regional Office August 26, 2010 we are forwarding herewith Well Construction Permit No. WM0600824 dated August 26, 2010 issued to NC DENR Division Waste Management for the construction of seven (7) monitoring wells located at the aforementioned site which is owned by Mary Chappell.

This Permit will be effective from the date of its issuance and shall be subject to the conditions and limitations as specified therein.

Please note that according to North Carolina Administrative Code, Title 15A, Subchapter 2C, Section .0105 (g), "it is the responsibility of the well owner or his agent to see that a permit is secured prior to the beginning of construction of any well for which a permit is required."

Issuance of this permit does not constitute approval of the subject wells for reimbursement from Trust Funds.

If any parts, requirements, or limitations contained in this Permit are unacceptable to you, you have the right to an adjudicatory hearing before a hearing officer upon written demand to the Director within 30 days following receipt of this Permit, identifying the specific issues to be contended. Unless such demand is made, this Permit shall be final and binding.

Sincerely,

Stephen A. Barnhardt, L.G.
Aquifer Protection Regional Supervisor

Enclosure
cc: FRO Files, S&ME, Inc.
Richmond County Health Dept., Mary Chappell

AQUIFER PROTECTION SECTION
225 Green St., Ste. 714
Fayetteville, North Carolina 28301
Phone: 910-433-3300 \ FAX : 910-486-0707\ Customer Service: 1-877-623-6748
Internet: www.h20.enr.state.nc.us

FILE COPY

NORTH CAROLINA

ENVIRONMENTAL MANAGEMENT COMMISSION

RALEIGH, NORTH CAROLINA

PERMIT FOR THE CONSTRUCTION OF A WELL OR WELL SYSTEM

In accordance with the provisions of Article 7, Chapter 87, North Carolina General Statutes, and other applicable Laws, Rules and Regulations.

PERMISSION IS HEREBY GRANTED TO

NC DENR Division of Waste Management

FOR THE CONSTRUCTION OF one (1) monitoring well on a piece of property owned by Mary Chappell located at 1061 Hwy 177 North, Hamlet, NC in accordance with the application dated August 4, 2010 and in conformity with specifications and supporting data, all of which are filed with the Department of Environment and Natural Resources and are considered a part of this Permit.

This Permit is for well construction only and does not waive any provisions or requirements of the Water Use Act of 1967 or any other applicable laws or regulations.

Construction of a well under this Permit shall be in compliance with the North Carolina Well Construction Regulations and Standards and any other laws and regulations pertaining to well construction. This Permit will be effective from the date of its issuance through the duration of this project.

Permit issued this the **26th day of August 2010.**

FOR THE NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

S. A. Barnhardt 27 August 2010

Stephen A. Barnhardt, L.G. Aquifer Protection Regional Supervisor
DIVISION OF WATER QUALITY

By Authority of the Environmental Management Commission
Permit No. **WM0600824**

S&ME

July 29, 2010

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Inactive Hazardous Site Branch
Superfund Section
401 Oberlin Road – Suite 150
Raleigh, North Carolina 27605

Attention: Mr. Keith Snavely, P.G. Keith.Snavely@ncdenr.gov
Hydrogeologist

Reference: Cost Proposal for Groundwater Assessment/Source Location
Mary Chappell Site
Hamlet, Richmond County, North Carolina
NONCD0002832
NCDENR Contract #N10005S
S&ME, Inc. Proposal No. P136-10V Rev. 1.0

Dear Mr. Snavely:

S&ME, Inc. (S&ME) is pleased to present the following work plan and cost proposal to assess the Mary Chappell site located in Hamlet (Richmond County), North Carolina. S&ME is submitting this work plan and fee proposal per your letter request to Ed Woloszyn on July 1, 2010 and subsequent meeting on July 15, 2010 regarding a suggested change in the scope of services. This proposal presents our scope of services based on our July 15th meeting, a schedule for completing the services, and a fee estimate. All services will be provided under NCDENR Contract #N10005S. If NCDENR accepts this proposal, NCDENR will issue a Task Authorization as notice to proceed with our services.

INTRODUCTORY SUMMARY

S&ME's David Wells met with you, John Walch, Sean Boyles, and David Brown of the Inactive Hazardous Sites Branch (IHSB), and with Michael Norton of Richmond County Health Department on June 24, 2010 at the Mary Chappell site in Hamlet, North Carolina. During that meeting, the attendees walked the site and discussed possible approaches to assess each area to identify the possible sources of chlorinated hydrocarbons. Subsequent to the meeting, you issued a request for a cost proposal to perform several work tasks (reference July 1, 2010 letter).

The site history is documented in your July 1, 2010 letter. A private drinking water well at the Mary Chappell residence was found to be contaminated with trichloroethylene (TCE) with concentrations ranging from 25.7 to 70.6 micrograms per liter (µg/L). There are no construction records on the Mary Chappell well, but it is believed to be constructed to a depth of possibly 65 to 100 feet below the ground surface. However, the lithology at the Mary Chappell property, including confining layers is unknown.

Containers such as 55-gallon drums, paint cans and solvent cans were observed on the property and near the automobile shop. In addition, storage of heavy equipment and an automobile maintenance shop is located on or next to the Mary Chappell property. A possible source of TCE in groundwater is the CSX railroad site located about 600 feet to the south.

No assessments have been completed to date other than the sampling of the Mary Chappell water supply well and her son's water supply well, which is an adjoining property to the west.

An initial assessment of the Mary Chappell site is intended to either find or rule out sources originating from the property. To accomplish this goal, S&ME is submitting this scope of services and cost proposal that deviates from the requested scope of services for controlling costs, while endeavoring to meet the aforementioned goal. Our proposal also itemizes costs and presents a schedule to complete our proposed scope of services.

SCOPE OF SERVICES

Project Preparation

S&ME will write a site specific Health and Safety Plan to comply with 29 CFR 1910.120, hazardous waste operations and emergency response (HAZWOPER) rule for the protection of workers at uncontrolled hazardous sites. In addition, S&ME will contact NC One Call and obtain a private utility locating contractor to clear the locations of the proposed borings of underground utilities.

Work Tasks

1. Obtain Permits or Well Installation

S&ME will submit permit applications to install temporary monitor wells and soil borings that will be advanced to the water table on the Mary Chappell property. Two permit applications, one from Richmond County Health Department and one from the North Carolina Division of Water Quality (DWQ), will be submitted prior to drilling. Based on our conversation with Mr. Michael Norton, Environmental Health Supervisor with Richmond County, S&ME will complete the application for the Health Department and sign the application as an Agent to the State of North Carolina. The property owners do not need to sign this permit. According to Mr. Norton, no application fees are required, because the State of North Carolina is the applicant. S&ME will need the property owners' signed authorizations on DWQ's *Application for Permit to Construct a*

Monitoring Well System to install monitor wells and soil borings that will intersect the water table. Once signed, DWQ application forms are obtained from the owners, S&ME will submit the permit application packages to the DWQ Fayetteville Regional Office.

2. Geoprobe Borings on the Mary Chappell Property

The Mary Chappell water supply well construction details are not known. Therefore, S&ME suggests that the well be sounded for total depth and if possible, identify the base of the well casing or screen interval. To accomplish this task, S&ME will subcontract a licensed local water supply well installer, McCallum Well Drilling, to break the well-head seal, remove the well pump, and sound the well. McCallum Well Drilling will then shock the well and re-install the pump and re-seal the well head.

The July 1, 2010 letter states that six Geoprobe borings are to be advanced and the borings converted to Type II monitor wells on the subject property. However, S&ME suggests to advance one additional Geoprobe boring near the shop area where containers of paints and solvents were identified (reference attached figure). The seven soil borings would be advanced to a depth of 30 to 35 feet below land surface (ft.bls.) then converted to a 1-inch Type II PVC monitor well with 10 feet of well screen.

While advancing the Geoprobe borings, soil samples would be collected in acetate sleeves, extracted, and screened on five foot intervals down to the top of the water table. Soil samples will be screened with a photo-ionization detector (PID). As an alternative, S&ME may use a Toxic Vapor Analyzer with a combination of PID/flame ionization detector (FID) to screen the soil.

This screening procedure involves splitting each soil sample into two portions. One portion will be placed in a re-sealable plastic bag and the other portion will be place in a labeled laboratory-supplied container and placed on ice in an insulated container. The soil in the re-sealable bag will be used to measure relative headspace concentrations of volatile organic compounds (VOCs). VOC headspace readings will be obtained from an aliquot of each soil sample after waiting approximately 15 minutes to allow the sample to reach ambient temperature and headspace equilibrium. After 15 minutes have passed, the PID probe will be inserted into the bag to obtain a headspace reading. The soil sample from each boring having the highest relative VOC concentration will be noted, and the corresponding portion of the sample that was placed in a laboratory-supplied container, labeled, placed on ice, and shipped under standard Chain-of-Custody procedures to ENCO Laboratories, a North Carolina certified laboratory.

Each Type II well will be completed with a flush-mounted manhole protective cover surrounded by a concrete pad. The well will be developed. After 48 hours, S&ME will purge the wells and then sampled after field parameters (pH, temperature, conductivity, turbidity and REDOX) stabilize. S&ME will use low flow sampling techniques with a peristaltic pump to sample the well. The groundwater sample will be placed directly into laboratory supplied bottles, labeled, placed on ice, and shipped under standard Chain-of-Custody procedures to ENCO Laboratories.

3. Soil and Groundwater Analyses from Geoprobe Borings/Wells

The July 1, 2010 letter requested analyses for VOCs by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, 14 metals, and pesticides by EPA Method 8081. S&ME suggested that only VOCs should initially be run on soil and groundwater samples for this initial assessment to focus on identifying the source of the TCE in the Mary Chappell water supply well. Therefore, a total of seven soil samples and seven groundwater samples are planned to be submitted for VOC analyses by EPA Method 8260B.

In the event the IHSB wants to analyze the collected soil and groundwater samples for the additional analyses, S&ME will collect a sufficient volume of samples for each soil and groundwater sample, but will ask the laboratory to hold the analyses until the VOC results are obtained. If a soil or groundwater sample exhibited detectable VOCs, then S&ME would ask the laboratory to run that sample for the additional analytical tests. This approach is intended to save analytical costs while obtaining a data to meet the objecting of finding the source of TCE in Mary Chappell's water supply well.

4. Obtain Permission from Mary Chappell, Mary Chappell's Son, and Four Other Residences to Sample Drinking Water Wells

S&ME will call or visit with these property owners and request verbal authorization from the property owners, at a minimum, to sample their water supply wells. S&ME will also request signed authorization to sample the water supply wells in the form of a letter from the same. Once permission is received, S&ME will collect water samples from the nearest spigot to the water supply well. The method of collection will be allowing the water to run for 15 minutes, reducing the flow from the spigot, and collecting a water sample. The samples will be placed in labeled laboratory-supplied containers, placed on ice, and shipped under standard Chain-of-Custody procedures to ENCO Laboratories for analysis by EPA Method 8260B.

As with the soil and groundwater samples collected during the Geoprobe assessment (Task 3 above), S&ME will collect a sufficient quantity of water for analyses for SVOCs, 14 metals and pesticides. We will instruct the laboratory to hold these samples until the VOC results are reported. If VOCs are detected in any sample, the S&ME will request the laboratory to analyze that sample for the remaining analyses (SVOCs, 14 metals and pesticides).

5. IDW Management

With the Geoprobe study, very little investigative derived waste (IDW) is anticipated. Therefore, S&ME will containerize soil and purge water in 55-gallon drums. The number of drums anticipated for this assessment is two.

6. Survey

At the completion of the soil borings and well installations, S&ME will subcontract a local surveyor licensed in the state of North Carolina to collect horizontal and vertical controls of the wells.

7. Report

After completion of the Geoprobe assessment and receipt of the analytical data, a report will be submitted that contains the following information:

- Introduction: Describes site conditions at the time of our field activities.
- Methods: Describes procedures for installing the Geoprobe borings and wells, sample collection, and analytical methods used in the field for data collection.
- Results: Presents field and analytical results, figures and other pertinent information in a summarized format. Pending the outcome of the analytical data, S&ME will provide figures showing groundwater flow or potentiometric map, plume maps and lithologic cross sections.
- Appendices: Will provide bore logs, well construction records, complete laboratory analytical reports and other pertinent detailed information, such as pertinent sections from previous assessment reports and well construction permits,.

In addition to a hard copy report, S&ME will also generate a portable file document (.pdf) electronic file via a compact disc (CD).

8. Additional Considerations

S&ME will advance soil borings to depths down to the first confining layer, only. S&ME will not advance a boring through a confining layer without explicit authorization from IHSB. Authorization will be requested only if no evidence of contamination exists in the overlying aquifer.

For Quality Control and Quality Assurance during the sampling process, S&ME will collect one duplicate, one equipment blank, and submit one trip blank for water samples. For soil samples S&ME will collect one duplicate and one equipment rinse blank.

SCHEDULE

S&ME will begin the permitting process and obtaining permission from property owners within seven days of receiving authorization from IHSB to proceed. Field activities will take approximately two to three days in the field, including surveying and sample

collection. Samples will be submitted on a standard laboratory reporting time, which is 10 to 15 business days, and S&ME will submit a report within three weeks after we receive the laboratory reports.

ASSOCIATED FEES

The services described herein, including analytical services will be provided on a lump-sum basis of **$28, 074.** The proposed fee is based on the attached itemized fee sheet (**Table 1**), which is in accordance with our contracted fee schedule. This cost assumes all samples will be analyzed for VOCs, SVOCs, 14 metals and pesticides. The final budget will be less if the samples are only analyzed for VOCs. The difference will be based on unit rates as presented in **Table 1**.

LIMITATIONS

S&ME's proposed scope of services may not yield data that could conclusively define or identify the source of contamination in the Mary Chappell water supply well. S&ME also provides no assurances for site access permission to the other properties for the intended tasks presented in this proposal. If S&ME cannot obtain access to the properties listed in the July 1, 2010 IHSB letter, we will contact you for assistance in obtaining access.

AUTHORIZATION

It is our understanding that IHSB will authorize these services through a task authorization letter. Once in receipt of the authorization, S&ME will proceed with our services.

CLOSING

We trust that this work plan and cost proposal is responsive to your needs. S&ME welcomes the opportunity to assist IHSB. Please contact us at (919) 872-2660 if you have any questions or comments regarding this proposal.

Sincerely,
S&ME, Inc.

David Wells

David Wells, P.G.
Senior Project Manager

Edmund Woloszyn, Jr., R.E.M.
Senior Consultant

Attachment:
Table 1 Itemized Fees
Figure –Proposed Soil Boring Locations.

Itemized Fees
Mary Chappell Site, Hamlet, North Carolina
DENR Contract #N10005S
S&ME Proposal No. P136-10V Rev. 1.0
July 29, 2010

Project Preparation, Access Agreements, Permits, & HASP	**Units**			**Rates**			**Subtotal**	**Fee/Task**
Senior Project Manager	6	hrs @	$	101.00	/hr	$	606.00	
Staff Professional	8	hrs @	$	75.00	/hr	$	600.00	
Clerical	6	hrs @	$	42.50	/hr	$	255.00	
Subcontract McCallum Well Drill to Sound Mary Chappell's WSV	1	ea @	$	300.00	ea	$	300.00	
Mileage	100	miles @	$	0.55	/hr	$	55.00	
							Subtotal project prep.	$ 1,816.00

DRILLING COSTS	**Units**			**Rates**			**Subtotal**	**Fee/Task**
Geoprobe Borings								
Mobilization/Demobilization (>50 miles)	1	ea @	$	300.00	/ea	$	300.00	
Geoprobe Daily Rate	2	days @	$	1,850.00	/day	$	3,700.00	
7 Type II wells (1-inch PVC screen and riser; 35 bgs ea)	245	feet @	$	12.00	/ft	$	2,940.00	
Well Head Completion (flush-mount man hole with concrete pad)	7	ea @	$	150.00	/ea	$	1,050.00	
							Sub-Total for three 2-inch wells to 95 feet	$ 7,990.00

FIELD SUPPORT AND ANALYSES								
Staff Geologist	20	hrs @	$	75.00	/hr	$	1,500.00	
Technician	10	hrs @	$	60.00	/hr	$	600.00	
Laboratory Costs								
EPA Method 8260B Groundwater	13	ea @	$	77.00	/ea	$	1,001.00	
EPA Method 8260B Soil	7	ea @	$	77.00	/ea	$	539.00	
EPA Method 8260B Groundwater duplicate	1	ea @	$	77.00	/ea	$	77.00	
EPA Method 8260B Soil duplicate	1	ea @	$	77.00	/ea	$	77.00	
EPA Method 8260B Trip Blank	1	ea @	$	77.00	/ea	$	77.00	
EPA Method 8260B Equipment Blank	1	ea @	$	77.00	/ea	$	77.00	
* EPA Method 8270D Groundwater	13	ea @	$	165.00	/ea	$	2,145.00	
* EPA Method 8270D Soil	7	ea @	$	165.00	/ea	$	1,155.00	
* EPA Method 8270D Groundwater duplicate	1	ea @	$	165.00	/ea	$	165.00	
* EPA Method 8270D Soil duplicate	1	ea @	$	165.00	/ea	$	165.00	
* EPA Method 8270D Equipment Blank	1	ea @	$	165.00	/ea	$	165.00	
* EPA Method 8081 Groundwater	13	ea @	$	72.00	/ea	$	936.00	
* EPA Method 8081 Soil	7	ea @	$	72.00	/ea	$	504.00	
* EPA Method 8081 Groundwater duplicate	1	ea @	$	72.00	/ea	$	72.00	
* EPA Method 8081 Soil duplicate	1	ea @	$	72.00	/ea	$	72.00	
* EPA Method 8081 Equipment Blank	1	ea @	$	72.00	/ea	$	72.00	
* 14 Metals Groundwater	13	ea @	$	99.00	/ea	$	1,287.00	
* 14 Metals Soil	7	ea @	$	99.00	/ea	$	693.00	
* 14 Metals Groundwater duplicate	1	ea @	$	99.00	/ea	$	99.00	
* 14 Metals Soil duplicate	1	ea @	$	99.00	/ea	$	99.00	
* 14 Metals Equipment Blank	1	ea @	$	99.00	/ea	$	99.00	
Soil and Purge Water Management and Disposal	2	drums @	$	100.00	/ea	$	200.00	
pH, Conductivity, Temperature Meter	2	days @	$	25.00	/day	$	50.00	
Parastaltic pump - Low flow sampling	2	days @	$	40.00	/ea	$	80.00	
Field Expendibles	2	days @	$	25.00	/day	$	50.00	
Photo-ionization Detector (PID)	2	days @	$	125.00	/day	$	250.00	
Surveyor (Subcontractor - estimated)	1	ea @	$	1,500.00	/ea	$	1,500.00	
Per Diem (Geologist)	2	nights @	$	110.00	/night	$	220.00	
Per Diem (Driller)	2	nights @	$	110.00	/night	$	220.00	
Per Diem (Driller's Assistant)	2	nights @	$	110.00	/night	$	220.00	
Mileage (estimate for Geologist / Technician)	400	miles @	$	0.55	/hr	$	220.00	
							Subtotal Field Activities	$ 14,686.00

** Soil, Groundwater and Water Supply Well samples will only be run if a positive detection of VOCs are discovered*

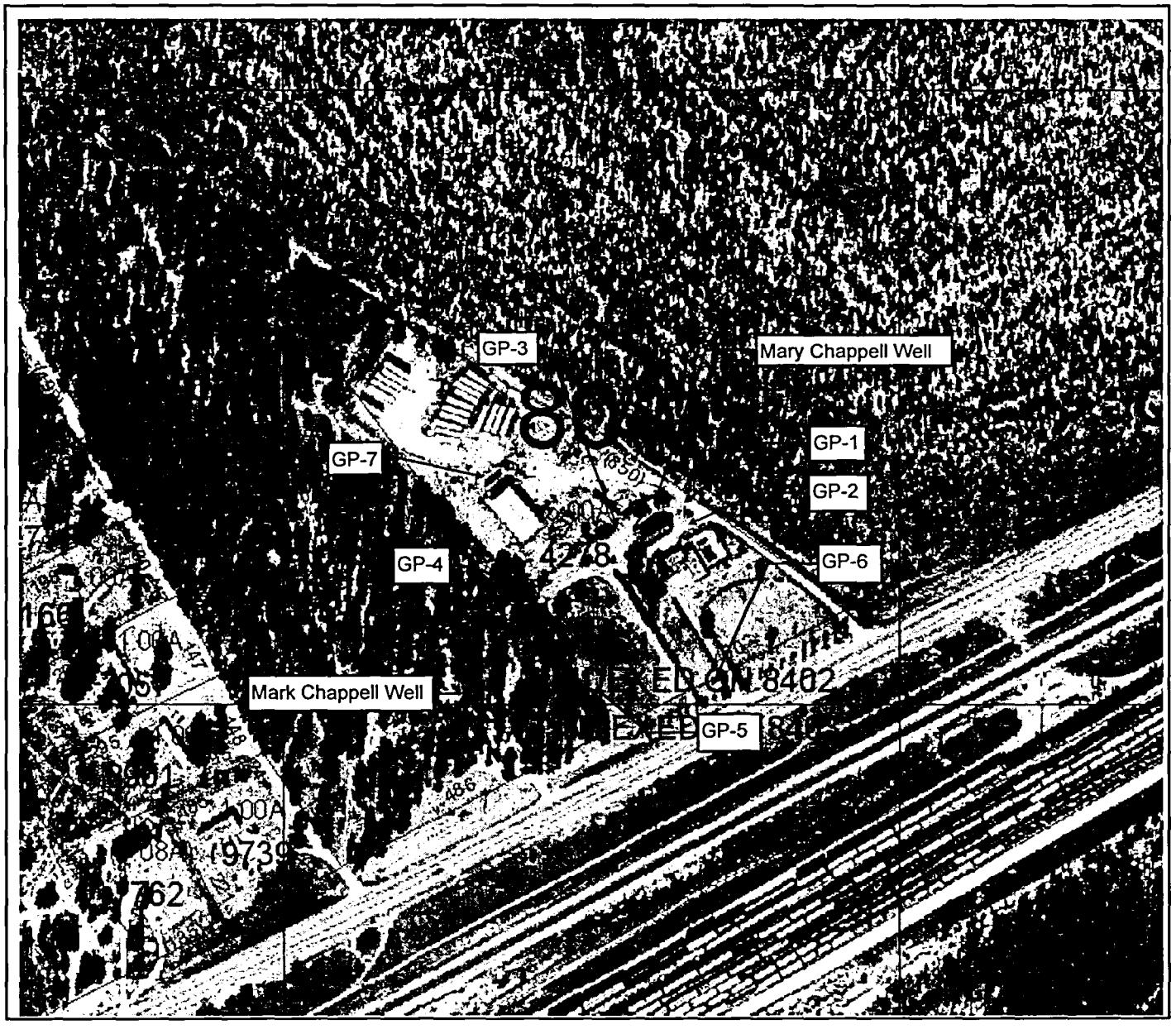
Report	**Units**			**Rates**			**Subtotal**	**Fee/Task**
Senior Project Manager	8	hrs @	$	101.00	/hr	$	808.00	
Staff Professional	24	hrs @	$	75.00	/hr	$	1,800.00	
CAD	8	hrs @	$	58.00	/hr	$	464.00	
Clerical	12	hrs @	$	42.50	/hr	$	510.00	
							Subtotal Report	$ 3,582.00

Total $ 29,074.00

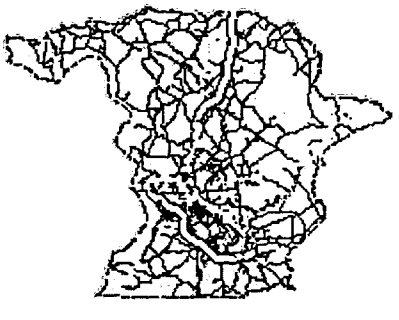
FIGURE 1
S&ME Proposal P136-10V
July 22, 2010

RICHMOND COUNTY
NORTH CAROLINA

Printed On:
7/22/2010



Disclaimer: All information on this map is prepared for the inventory of real property found within Richmond County. All data, including maps, is compiled from recorded deeds, plats, and other public records and data. Users of this data are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information. All information contained herein was created for the County 's internal use. Richmond County, its agents and employees make no warranty as to the correctness or accuracy of the information set forth on this media whether express or implied, in fact or in law, including without limitation the implied warranties of merchantability and fitness for a particular use. Any resale of this data is strictly prohibited in accordance with North Carolina General Statute 132-10. Grid is based on North Carolina State Plane NAD83.



Snavely, Keith

From: Snavely, Keith
Sent: Wednesday, July 28, 2010 5:58 PM
To: 'Ed Woloszyn'
Subject: Mary Chappell Site

Ed,

On S&ME's July 22 cost proposal for the Mary Chappell site, item #4 referenced obtaining permission to sample the water supply wells from 5 residences other than Mary Chappell and her son. One of my draft cost estimates I prepared may have indicated 5 residences but I reduced it to four and I think I may have sent you the unedited draft. Can you check my July 1, 2010 cost estimate request. I should have listed:

(1) Herman Russell
(2) William Brown
(3) Marshall Chavis
(4) Anna Harrison

If there is a fifth well, please delete it from the list and make any necessary changes to the well sampling costs.

Thanks,
Keith

Keith Snavely, Hydrogeologist
Inactive Hazardous Sites Branch
NC Division of Waste Management
401 Oberlin Road -Suite 150
Raleigh, NC 27612

Office #: (919) 508- 8479
Fax#: (919) 733-4811
email: Keith.Snavely@ncdenr.gov

Snavely, Keith

From: David Wells [DWells@smeinc.com]
Sent: Wednesday, July 14, 2010 2:00 PM
To: Snavely, Keith
Subject: RE: Atkinson Street and Mary Chappell Sites- Cost Estimate Requests

Thanks Keith.

Ed and I are working to complete the proposals for both properties.

Let me know if we get any additional info.

Welcome Back!!

David

From: Snavely, Keith [mailto:keith.snavely@ncdenr.gov]
Sent: Wednesday, July 14, 2010 1:45 PM
To: David Wells
Subject: RE: Atkinson Street and Mary Chappell Sites- Cost Estimate Requests

David,

Mike Norton does not have any information on Mary Chappell's well (my guess is- because it is older than her son's adjacent well). Sean Boyles has spoken to her and she did not know any details about her well. I am going to try to reach her son today and see if he knows anything about her well depth and screen intervals and where the pump is located. Maybe we can found out the info we need without having to vertically sound her well. I get back with you tomorrow if not earlier. I just got back in the office today and trying to sort through things. I will also let you know if we finally have our funding approved to get the work started.

Keith

From: dwells@smeinc.com [mailto:dwells@smeinc.com]
Sent: Thursday, July 01, 2010 8:08 PM
To: Snavely, Keith
Subject: Re: Atkinson Street and Mary Chappell Sites- Cost Estimate Requests

Thanks Keith. I will get on the permits and the well install costs. We may want to research local drillers to see depths of the water producing zones. Does Ms Chappel know who drilled her well?

Does Mike Norton have a well record?

Have a great vacation to Costa Rica!

David

Sent from my Verizon Wireless BlackBerry

From: "Snavely, Keith" <keith.snavely@ncdenr.gov>

Date: Thu, 1 Jul 2010 18:15:11 -0400
To: ewoloszyn@smeinc.com<ewoloszyn@smeinc.com>
Cc: Thomas Raymond<TRaymond@smeinc.com>; DWells@smeinc.com<DWells@smeinc.com>; Walch, John<john.walch@ncdenr.gov>; Brown, Dave<dave.brown@ncdenr.gov>; Boyles, Sean<sean.boyles@ncdenr.gov>
Subject: Atkinson Street and Mary Chappell Sites- Cost Estimate Requests

Ed,

Attached are the cost estimate requests for the Atkinson Street Contamination and Mary Chappell sites. I am still waiting to get the money approved by Purchase and Services. However, they do have some of the paper work almost approved, so I hope by the end of next week (July 9) they will approve the money so I can get task you all this work. In the mean time, you all can work on getting the permits for the monitoring wells on both sites. We have to get well permit/approvals from Richmond County Health Department and with DWQ (well construction record permits).

Based on our site visits last week with our Branch staff, Mike Norman of Richmond County and David Wells from your office, we determined that we will put in 4 wells and additional borings at the Atkinson Street site. The attached cost estimate explains the details of the boring/well depths and locations.

As for the Mary Chappell site, I have proposed 6 borings/well. However, I don't yet know to what depths we need to advance the borings. Mary Chappells son's well (Mark Chappell-on the property to the west) was clean, but her well as of 9/09 had 47.8 PPB pf TCE. I do not have any well depth information on Mary Chappell's water supply well, however her son's well is a 4" well drilled to a depth of 120 feet. The well is screened at two depths: (1) 60- 65 feet and 93-105 feet. The static water level is 60 feet. It produces about 10 gal/min.

Maybe we need to install the wells to about 60-70 feet deep. I did not propose any wells at this time on the property to the north of Mary Chappell. I don't know yet if we can get her second son's (Larry Chappell) approval. This is a maintenance yard surrounded by fencing. However, some areas on this property are possible suspect spill areas. In regards to the additional water supply wells that I listed, disregard the request specific only to the Marshall Chavis property. I later found out today that this well was found to be clean from a separate DWQ previous investigation and also quite a distance from the Mary Chappell site.

I will be on vacation from July 2- 13 and back in the office on the 14. We can talk more then about this then. If you have more questions, you can contact John Walch at 505-8485 or Dave Brown (for the Atkinson Street Site) and Sean Boyles (Mary Chappell site) in our Fayetteville office at (910-433-3300). I will also set up something for the Spencer Site – NC Finishing/Pillowtex site when I get back.

Originals of these request were mailed to you as a hard copy as well.

Have a good July 4th weekend.

Keith

Keith Snavely, Hydrogeologist
Inactive Hazardous Sites Branch
NC Division of Waste Management
401 Oberlin Road -Suite 150
Raleigh, NC 27612

Office #: (919) 508- 8479
Fax#: (919) 733-4811
email: Keith.Snavely@ncdenr.gov

****

Snavely, Keith

From: dwells@smeinc.com
Sent: Thursday, July 01, 2010 8:08 PM
To: Snavely, Keith
Subject: Re: Atkinson Street and Mary Chappell Sites- Cost Estimate Requests

Thanks Keith. I will get on the permits and the well install costs. We may want to research local drillers to see depths of the water producing zones. Does Ms Chappel know who drilled her well?

Does Mike Norton have a well record?

Have a great vacation to Costa Rica!

David

Sent from my Verizon Wireless BlackBerry

From: "Snavely, Keith" <keith.snavely@ncdenr.gov>
Date: Thu, 1 Jul 2010 18:15:11 -0400
To: ewoloszyn@smeinc.com<ewoloszyn@smeinc.com>
Cc: Thomas Raymond<TRaymond@smeinc.com>; DWells@smeinc.com<DWells@smeinc.com>; Walch, John<john.walch@ncdenr.gov>; Brown, Dave<dave.brown@ncdenr.gov>; Boyles, Sean<sean.boyles@ncdenr.gov>
Subject: Atkinson Street and Mary Chappell Sites- Cost Estimate Requests

Ed,

Attached are the cost estimate requests for the Atkinson Street Contamination and Mary Chappell sites. I am still waiting to get the money approved by Purchase and Services. However, they do have some of the paper work almost approved, so I hope by the end of next week (July 9) they will approve the money so I can get task you all this work. In the mean time, you all can work on getting the permits for the monitoring wells on both sites. We have to get well permit/approvals from Richmond County Health Department and with DWQ (well construction record permits).

Based on our site visits last week with our Branch staff, Mike Norman of Richmond County and David Wells from your office, we determined that we will put in 4 wells and additional borings at the Atkinson Street site. The attached cost estimate explains the details of the boring/well depths and locations.

As for the Mary Chappell site, I have proposed 6 borings/well. However, I don't yet know to what depths we need to advance the borings. Mary Chappells son's well (Mark Chappell-on the property to the west) was clean, but her well as of 9/09 had 47.8 PPB pf TCE. I do not have any well depth information on Mary Chappell's water supply well, however her son's well is a 4" well drilled to a depth of 120 feet. The well is screened at two depths: (1) 60- 65 feet and 93-105 feet. The static water level is 60 feet. It produces about 10 gal/min.

Maybe we need to install the wells to about 60-70 feet deep. I did not propose any wells at this time on the property to the north of Mary Chappell. I don't know yet if we can get her second son's (Larry Chappell) approval. This is a maintenance yard surrounded by fencing. However, some areas on this property are possible suspect spill areas. In regards to the additional water supply wells that I listed, disregard the request specific only to the Marshall Chavis property. I later found out today that this well was found to be clean from a separate DWQ previous investigation and also quite a distance from the Mary Chappell site.

I will be on vacation from July 2- 13 and back in the office on the 14. We can talk more then about this then. If you have more questions, you can contact John Walch at 505-8485 or Dave Brown (for the Atkinson Street Site) and Sean Boyles (Mary Chappell site) in our Fayetteville office at (910-433-3300). I will also set up something for the Spencer Site – NC Finishing/Pillowtex site when I get back.

Originals of these request were mailed to you as a hard copy as well.

Have a good July 4th weekend.

Keith

Keith Snavely, Hydrogeologist
Inactive Hazardous Sites Branch
NC Division of Waste Management
401 Oberlin Road -Suite 150
Raleigh, NC 27612

Office #: (919) 508- 8479
Fax#: (919) 733-4811
email: Keith.Snavely@ncdenr.gov

NCDENR
North Carolina Department of Environment and Natural Resources
Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

July 1, 2010

Mr. Ed Woloszyn
Senior Project Manager
S&ME
3201 Spring Forest Road
Raleigh, North Carolina 27616

RE: Cost Estimate Request for Assessment
Mary Chappell Site
1061 North NC Hwy 177
Hamlet, Richmond County
NONCD0002832

Dear Mr. Woloszyn

Please submit a cost proposal for S&ME to implement the assessment as outlined below for the subject site (Site). Please submit the cost proposal with a brief (1 to 2 page) Site Assessment Plan for this work. The Site's file name, location, site status and proposed assessment goals are listed below.

Site Name: Mary Chappell Site, NONCD0002832
Hamlet, Richmond County

Site Location: The Mary Chappell site is located at 1061N. NC Hwy 177 near the intersection of Fruitland Road and Highway 177 North in Hamlet. Figure 1 shows the general site location.

Site Status and Proposed Assessment Goals: The Site is a residential property that was discovered by the Aquifer Protection Section (APS) as a result of an assessment and survey of private drinking water supply wells located in Moore, Montgomery and Richmond counties to identify impacts resulting from agricultural spraying of fungicide and nematocide chemicals in the footprint of former peach tree orchards. The typical contaminant of concern associated with the peach orchard spraying is 1,2-Dichloropropane. While no agricultural related chemicals have been identified in the Site's water supply well (WSW), the industrial solvent trichloroethene (TCE) has been detected at levels ranging from 25.7 to 70.6 ug/l. (micrograms/liter). The main CSX railyard switching station is located to the south of the Site and the tracks are approximately 600 feet southeast of the private supply well at the household of Mary Chappell. Two 55-gallon drums were also previously identified on the property within 20 feet of Mary Chappell's supply well, the contents of which were unknown. The drums are no longer present. However, there is a fenced-in area located directly behind the well house

that appears to have been used for some sort of storage of heavy equipment and auto maintenance shop. An outside wooden storage container of primarily old rusted paint cans and sprays about 4 feet square in size is located adjacent to the shop area.

Mary Chappell who currently resides at the Site is being furnished with bottled water service under a separate contract using Bernard Allen monies. Her son's family lives in the house next door and has reportedly not shown any of the solvent contamination in their supply well.

Based on the topographic map, the site appears to be relatively flat and the direction of groundwater flow cannot be predicted with reasonable certainty. The Branch is requesting S&ME resample Mary Chappell's supply well and determine the depth of the supply well including the location of the pump in the well with respect to the water table. In addition, resample and sound her son's adjacent water supply well.

In addition to the depth sounding of these wells, the Branch is requesting S & ME conduct a soil and groundwater assessment on the Mary Chappell site. The cost estimate should be based on the following requests:

Site Assessment Details:

1) Apply for well construction permits for 6 monitoring wells to be installed on the Mary Chappell site with the Richmond County Health Department and with DWQ (where necessary).

2) Advance a minimum of six (6) soil borings to groundwater in the approximate locations shown on the attached Figure 2. Sample location GP-1 should be installed in an approximate upgradient location, possibly northeast of the Mary Chappell WSW property or on the adjacent property to the northeast. Sample point GP-2 should be located between the septic tank system and the WSW (possibly just south or west of the existing car/boat garage between the Mary Chappell home and the garage). Geoprobe GP-3 should be located near the fence line located north of the well. GP-4 should be installed along the western edge of the Mary Chappell property near the garden area between the Mary Chappell property and her son's property. Wells GP-5 and GP-6 should be installed southwest and south of the WSW along the road near Hwy 177. The soil samples shall be collected from each boring every five feet to the water table. The soil samples shall be screened with a FID/PID and the sample with the highest vapor value selected for analyses. A total of six (6) soil samples shall be collected.

3) Each geoprobe shall be advanced to the water table and completed into a groundwater monitoring well. One groundwater sample shall be collected from each well for a total of six (6) groundwater samples. The soil and groundwater samples shall be analyzed for Volatile Organic Compounds (VOCs) using US EPA Method 8260; Semi-volatile Organic Compounds SVOCs using US EPA Method 8270; the 14 Metals: antimony, arsenic, beryllium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc using US EPA Method 624 and for the Pesticides 8081.

4) In addition to the WSW samples from the Mary Chappell well and her son's well, the soil samples, and groundwater samples from the monitoring wells, five additional WSWs located along Highway 177 and the immediate vicinity must also be sampled. These are the WSWs located at the Herman Russell property at 1027 N Hwy 177, the William Brown property at 115 Fruitland Road, the Marshall Chavis property at 179 Peachview Road and the Anna Harrison property located at 961 N. Hwy 177. Each of these wells shall also be sampled for VOCs, SVOCs, the 14 metals, and Pesticides using the methods listed above.

This cost proposal must be itemized by personnel, material, activity/use, costs/units as outlined by S&ME's March 29, 2010 Technical Cost Proposal. Once the cost proposal is approved by the Branch, a task order will be issued by the Branch for S&ME to begin the work.

As previously indicated, time to complete these projects are of concern. Please submit the cost proposal as soon as possible and be prepared to initiate field work within seven days of receiving approval from the Branch.

If you have any questions, please contact Keith Snavely at (919) 508-8479 or me at (910) 433-3345.

Sincerely,

Keith Snavely, Hydrogeologist
Inactive Hazardous Sites Branch
Superfund Section

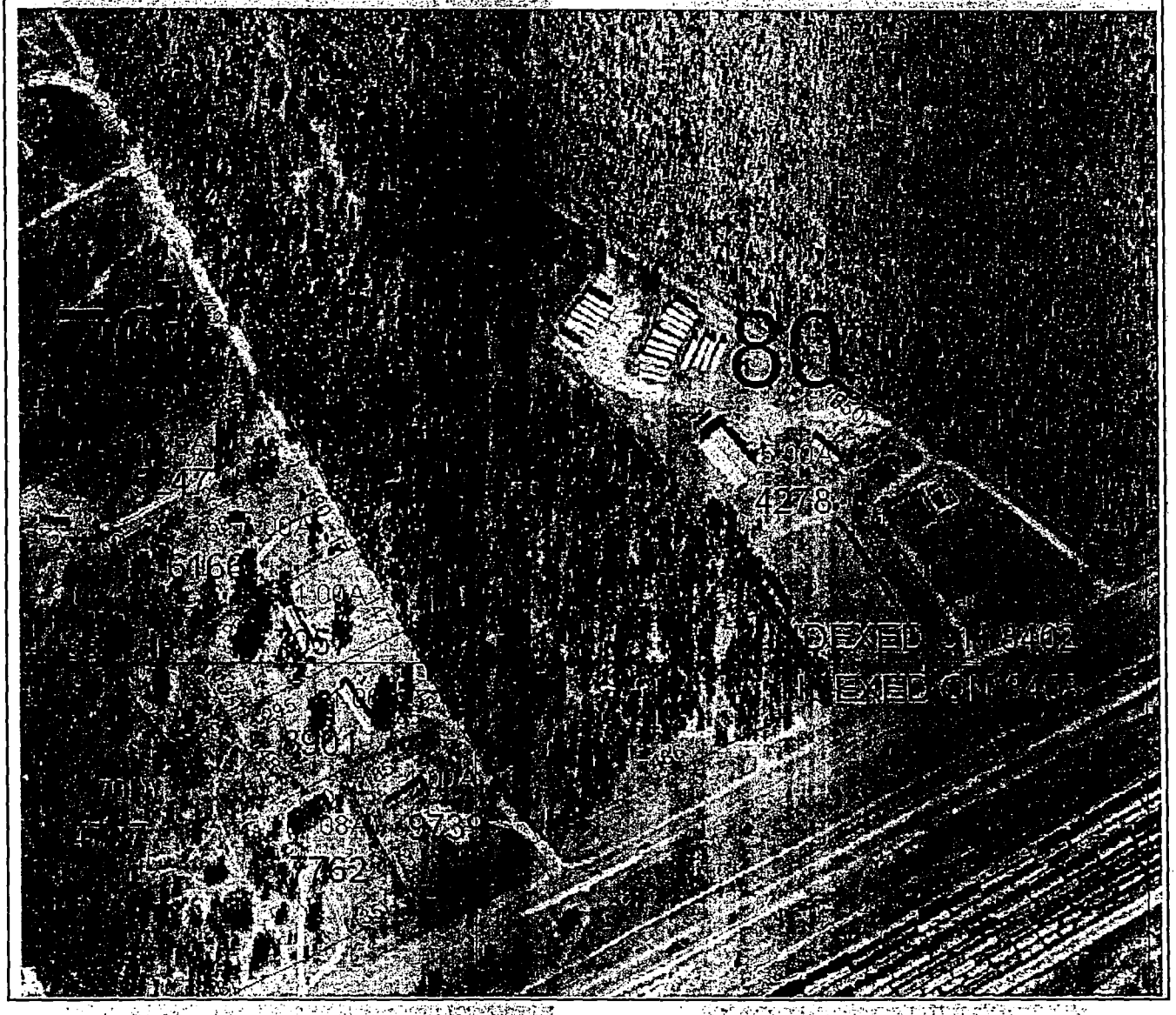
Enclosures

225 Green Street, Suite 714, Fayetteville North Carolina 28301
Phone: 910-433-3300 \ FAX: 910-486-0707 \ Internet: www.wastenotnc.org

RICHMOND COUNTY
NORTH CAROLINA

Printed On:
5/26/2010

Figure 1

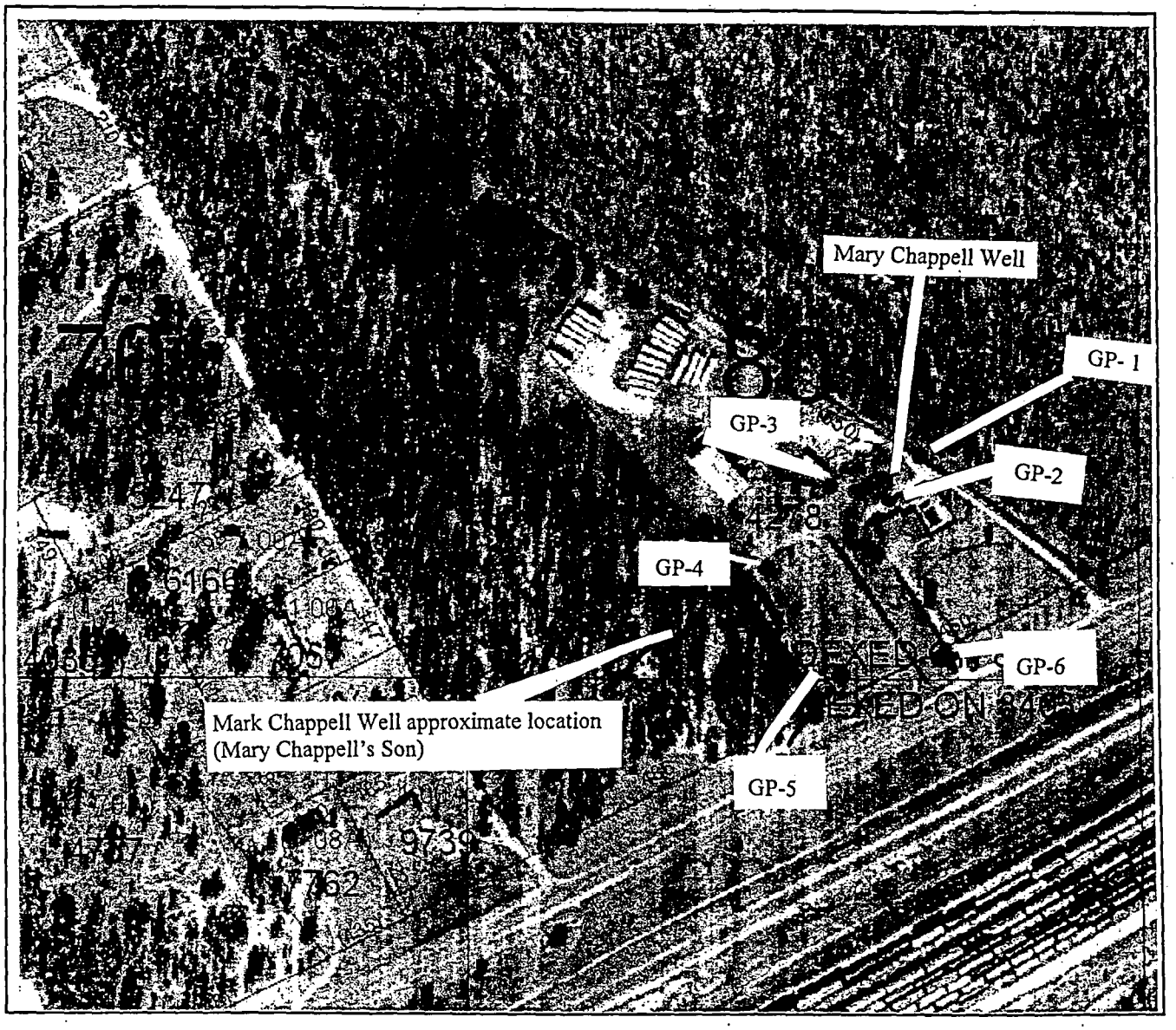


Disclaimer: All information on this map is prepared for the inventory of real property found within Richmond County. All data, including maps, is compiled from recorded deeds, plats, and other public records and data. Users of this data are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information. All information contained herein was created for the County's internal use. Richmond County, its agents and employees make no warranty as to the correctness or accuracy of the information set forth on this media whether express or implied, in fact or in law, including without limitation the implied warranties of merchantability and fitness for a particular use. Any resale of this data is strictly prohibited in accordance with North Carolina General Statute 132-10. Grid is based on North Carolina State Plane NAD83.

RICHMOND COUNTY
NORTH CAROLINA

Printed On:
5/26/2010

Figure 2



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July 1, 2010

Mary Chappell

WSW

6" well ~~asca~~
on card permanent card

Mary Chappell
sample data

Sim's well
Mark, Larry = excel lot dan tona
WSW

4" chicken
120 feet deep
Screen 60-65 ft deep
2 screened
Screen 93-105 ft
Stick. -60 ft
10 gal/month

She owns
rental property
up Hwy 177

for Mary Chappell

1061 - 5th sample collected from WSW

Date 9/22/09

~~Date~~ - 9/16/09 - sample date

9/22/09

VOCs

TCE = 47.8 ppb

MEMORANDUM

DATE: June 25, 2010

TO: File

FROM: Keith Snavely, Hydrogeologist KS
Inactive Hazardous Sites Branch
NC Superfund Section

RE: Atkinson Street Contamination site and Mary Chappell site
109 Atkinson Street and 1061 NC Highway 177
Hamlet, Richmond County

On June 24, 2010, John Walch , Dave Brown, Sean Boyles and I of the Inactive Hazardous Sites Branch met David Wells (S&ME) and Mike Norman (Richmond County Health Dept.) at the Atkinson Street Contamination site in the morning and after lunch at the Mary Chappell property to discuss soil and groundwater investigations at these sites.

We all met at 109 Atkinson Street and spoke to resident Mr. Gordon Haught to discuss our plans to install soil borings and monitoring wells on his property at 109 Atkinson Street. We were able to determine that we could access our first monitoring well location by entering Mr. Haught's property from Atkinson Street and installing an upgradient well on the northeastern end of the Haught property. We then discussed whether we needed to install a second well on the property south and adjacent to 109 Atkinson. This property has a water supply well located near the Haught property line that has been found to be clean in past sampling events and is drilled to a depth of 66'. Since this well is near the Haught property line we do not necessarily need a second upgradient well on the Haught property.

We also discussed the monitoring well locations in regards to set back rules from homes, existing wells and septic fields. We indicated to Mr. Haught and Mr. Norman that we would also install a shallow monitoring well near the WSW as well as soil borings between his contaminated WSW and a garage building he owns. Mr. Norman and Mr. Haught was in agreement with our plans and locations for the well and borings.

We also walked south of Atkinson Street on to the Butler property. The Butlers previously allowed us to install two monitoring wells in March 2009 during our initial investigation of the 1,1 DCE contamination in the Haught well. Their residence and WSW are located approximately 250-300 feet south of Atkinson street. Their well was sampled in late 2008 and found to contain 4.9 ppb PCE. This is below the MCL limit of 7 ppb for 1,1 DCE for drinking water, however last year it was thought that this well was only used for irrigation. We determined on this June 24 site visit that one well head has no pump, but instead has a subsurface water line attached to a permanent well located about 30 to 40 feet west of this small well house. The permanent well contained a fiberglass/plastic well covering and red hose. Our site investigation from last year

showed that the monitoring wells installed in March 2009 located on Atkinson Street were clean- so the contamination in the Butler well and Haught well may or may not be related. We hope this next phase of work will clearly define the contamination on the Haught property and help to determine what and where the plume starts for the Butler property. We are going to install two more new wells on the Butler property. One will be located about 50 yards west of the existing wells located on Atkinson Street and the second well will be located at the corner of Ashley and Atkinson Street just west of the DOT right-of-way for Atkison Street.

We completed our site visit at Atkinson Street Site at 11:30 and took a break for lunch due to the excessive 100 degree heat. We planned to meet after lunch at the Mary Chappell Property located on Highway 177 several miles north of the Atkinson Street site.

We met at the Mary Chappell street site at 12:30 pm and discussed locating a minimum of 6 soil borings and completing these into groundwater monitoring points. The WSW for the Mary Chappell site is contaminated with as much as 70 ppb of TCE.

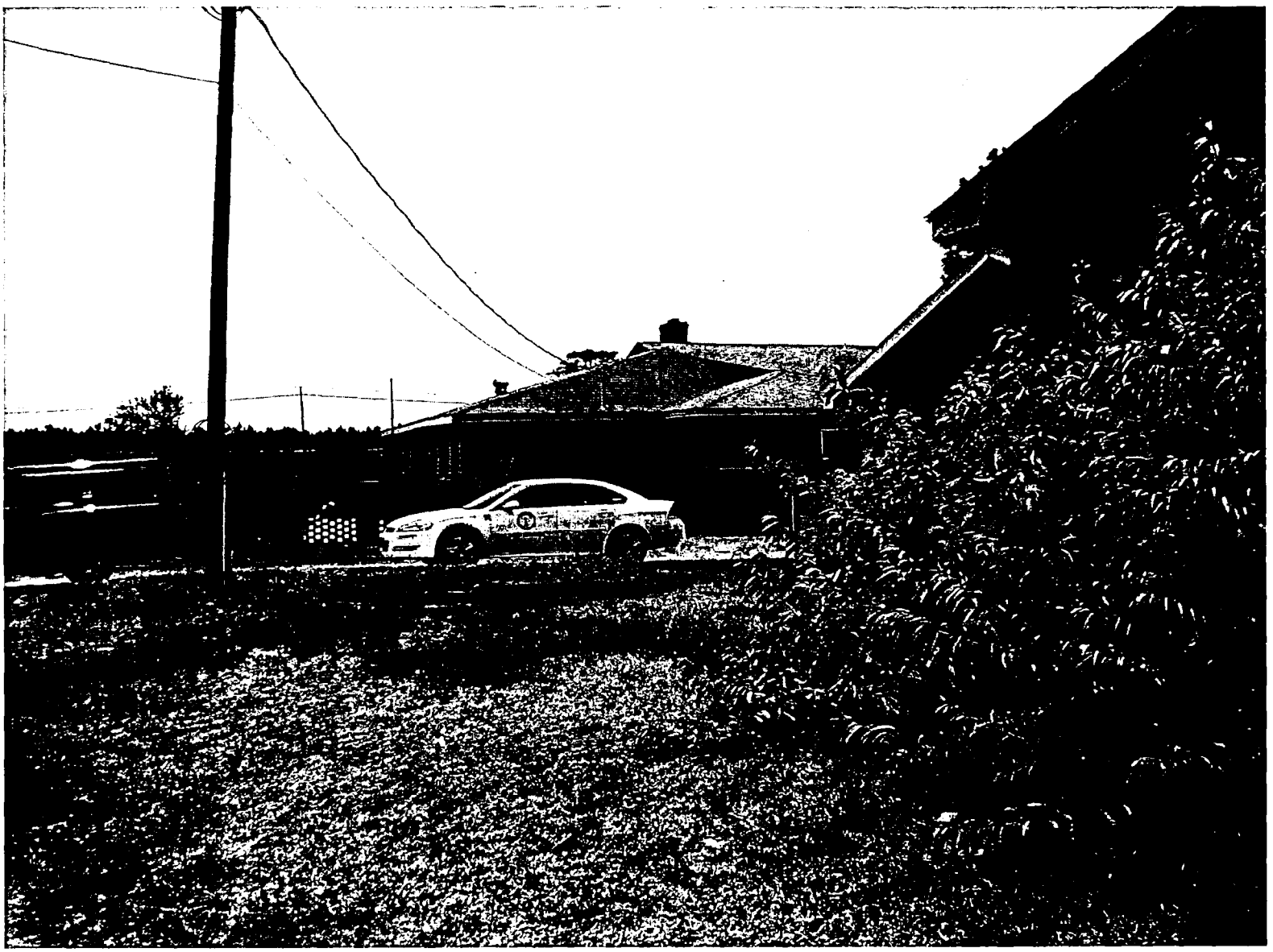
The Mary Chappell property contains an occupied home with an in ground pool located north of the residence. The residence's water supply well (WSW) is located about 40- 50 feet from the home, about 30 to 40 feet from the pool, and about 30-40 feet from a locked gate. Mary Chappell's outside garage is located 10 feet from the well and two additional small storage buildings are located against the north fence line about 20 feet from the WSW. The gate and fence that forms the northern property boundary with the Mary Chappell property encloses an old car & machinery maintenance garage.

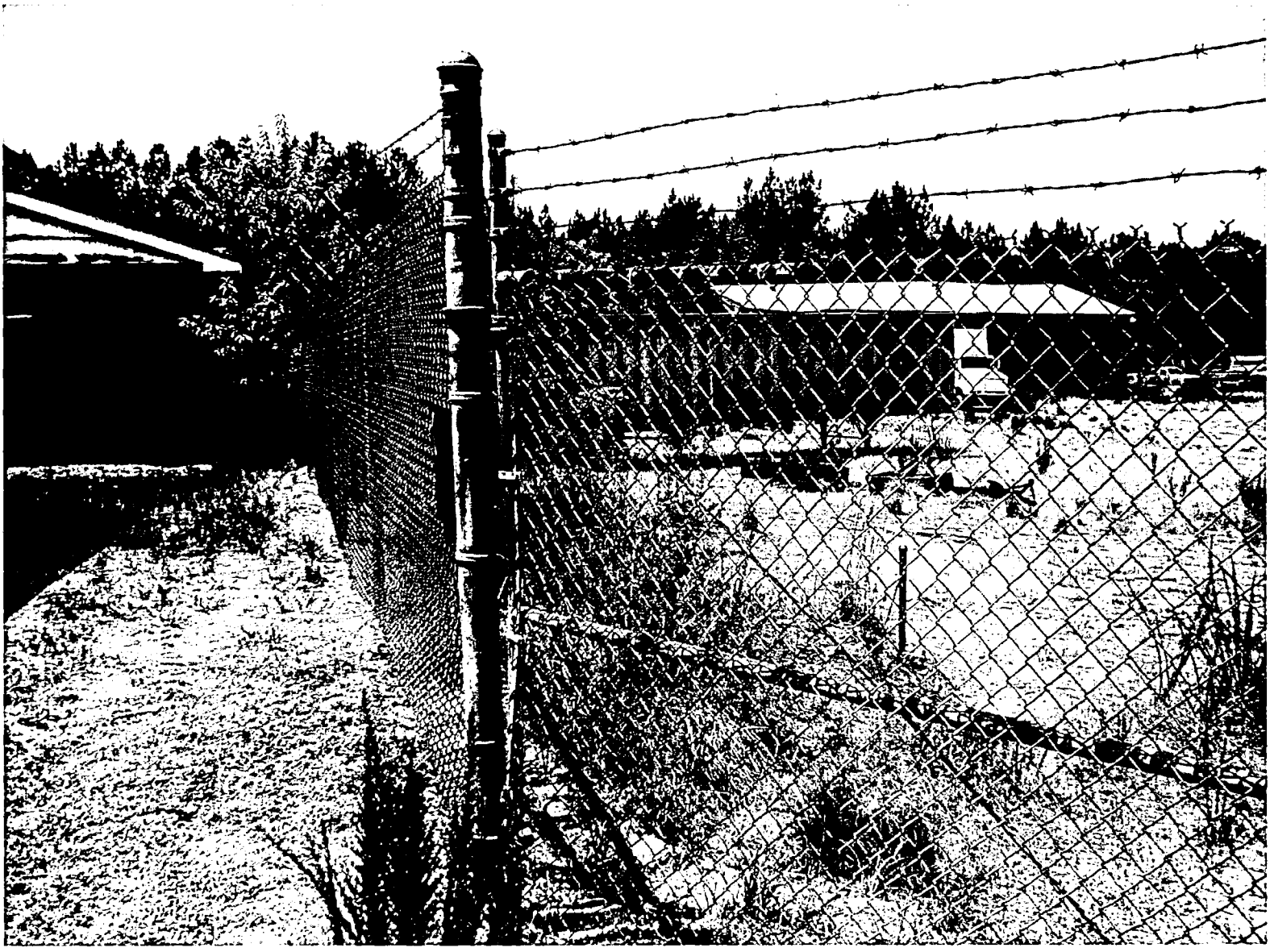
We also noted minimal containers (about 5- 2 liter sealed plastic containers of concrete sealant and two 5 – gallon sealed buckets of this concrete sealant) on this property through the fence. Mary Chappell had keys to the gate and fence located at her northern property boundary. So we were able to walk on the unoccupied property enclosed in the gate looking at possible source areas of TCE. Additionally, one area inside the fence just north of the garage area on this enclosed property contained a questionable storage bin for old paint cans, varnishes and cleaners. Spillage was noted in the container box but not seen on the ground. However, we were not able to lift the container box to view directly beneath its location. The box is a wooden storage box about 4 feet x 4 feet x 3 feet deep with no lid. This container was housing rusted paint cans and suspected varnish and lacquers as well as cleaners. There was not spillage seen on the ground at this box, but holes were noted at its base and rusted containers were found open and leaking. This property inside the gate is owned buy one of Mary Chappell's sons. Her other son lives in a home located to the southwest adjacent property. His WSW from this house was sampled and found to be clean.

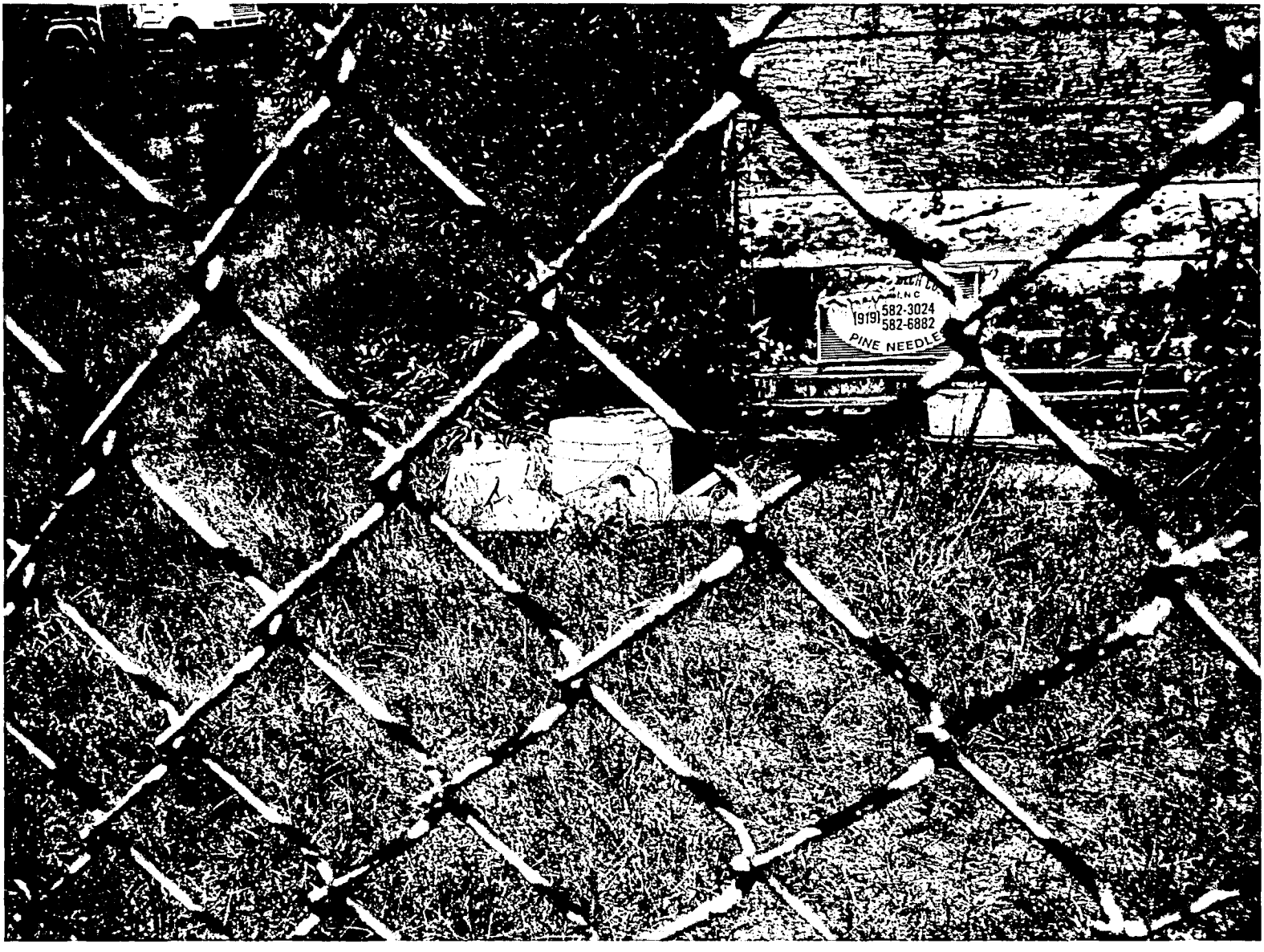
Mr. Norman indicated that one of Mary Chappell's sons runs an Auto car care /used car lot in Hamlet and also uses this property for storing and hauling pine straw. The area surrounding the Mary Chappell residence and several other residents is called "Fruitland" because of the previous peach orchards that once covered this area.

Once some additional funding gets approved by Purchase and Services for the Contract that S&ME is working under for DWM we will task the soil and groundwater assessments at both of these sites. For now, we are working to obtain well construction records and permits for well installation from DWQ and Richmond County Health Dept.

We remained at the Mary Chappell site until about 2:00 and retuned to Raleigh.



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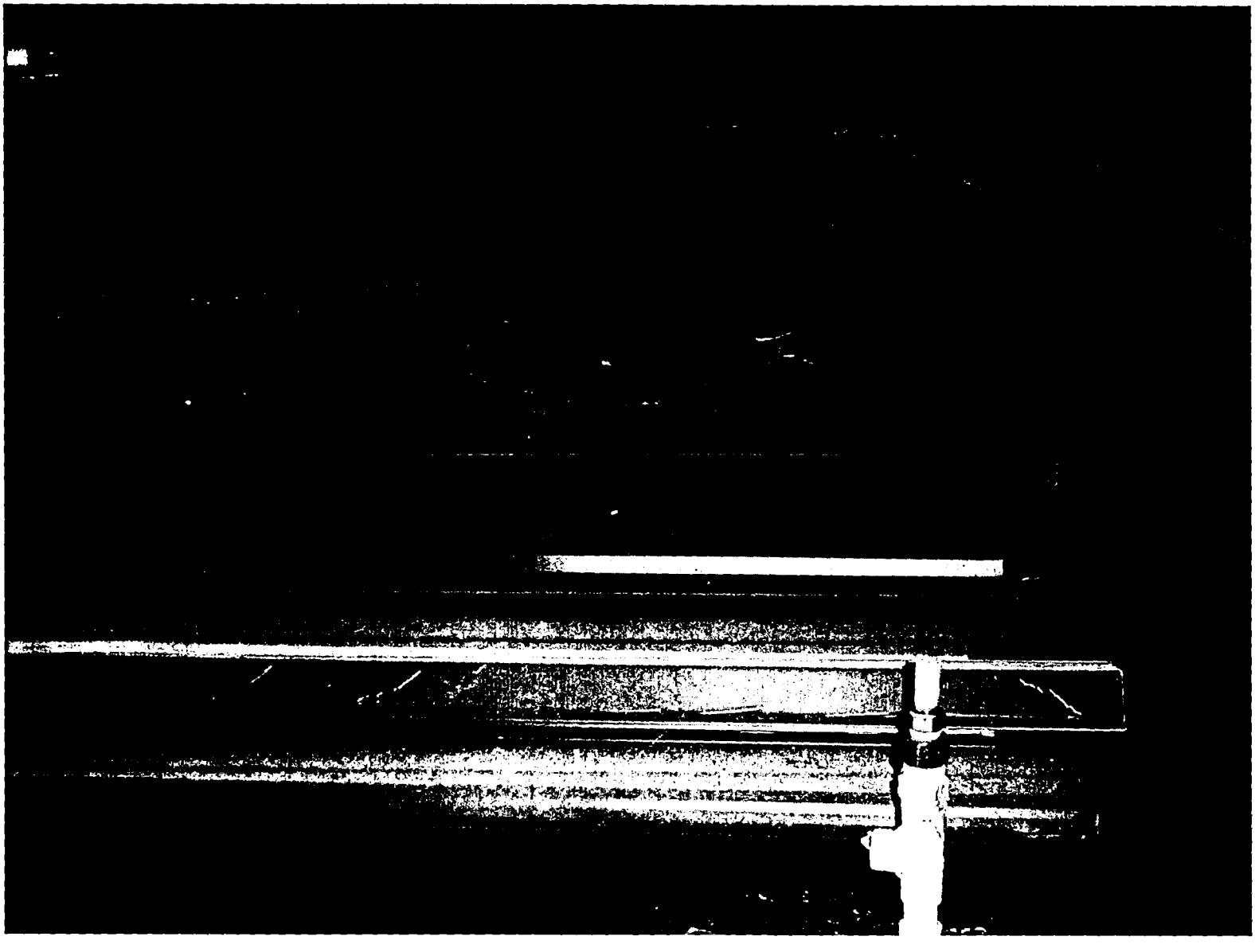


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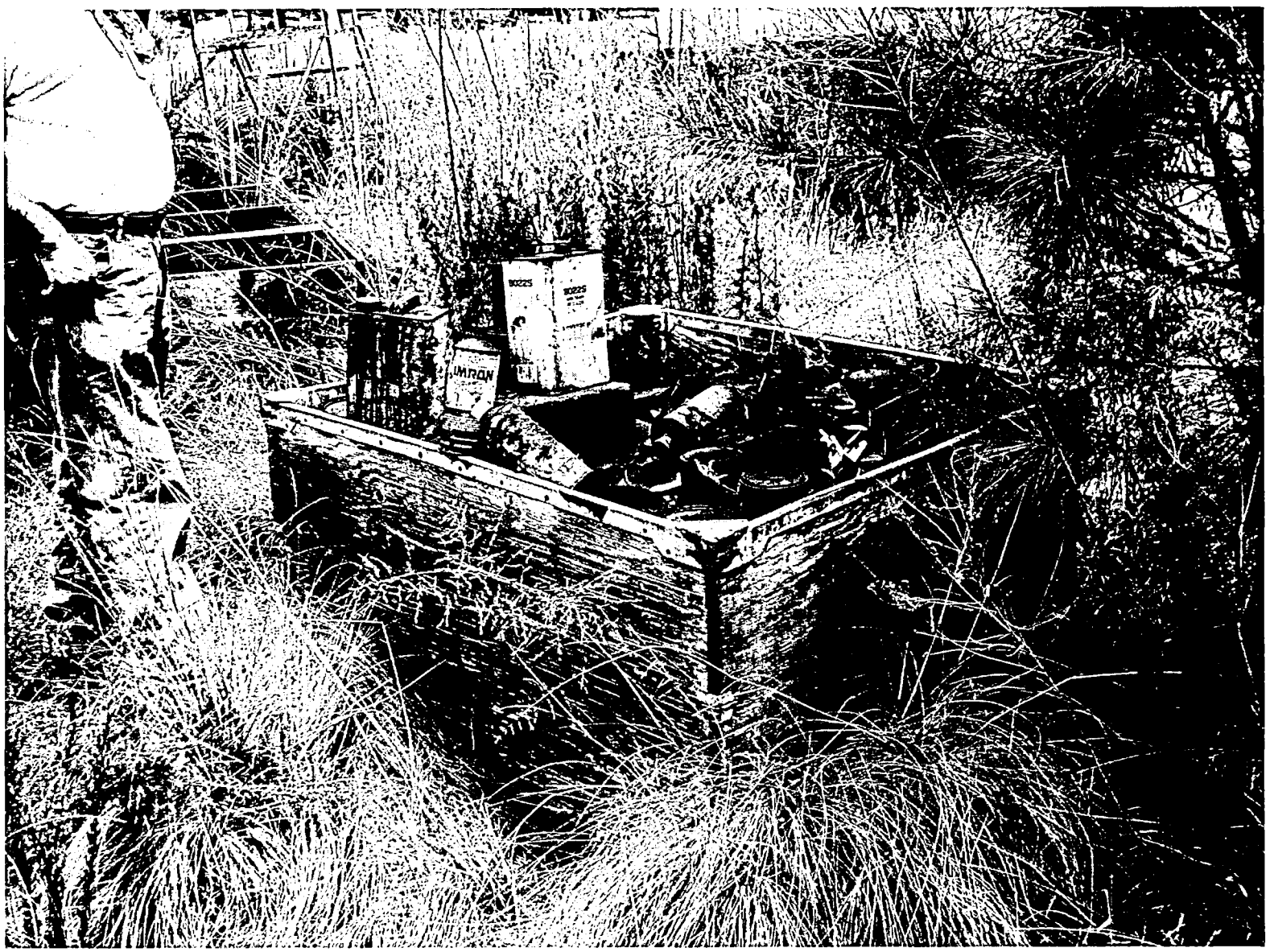
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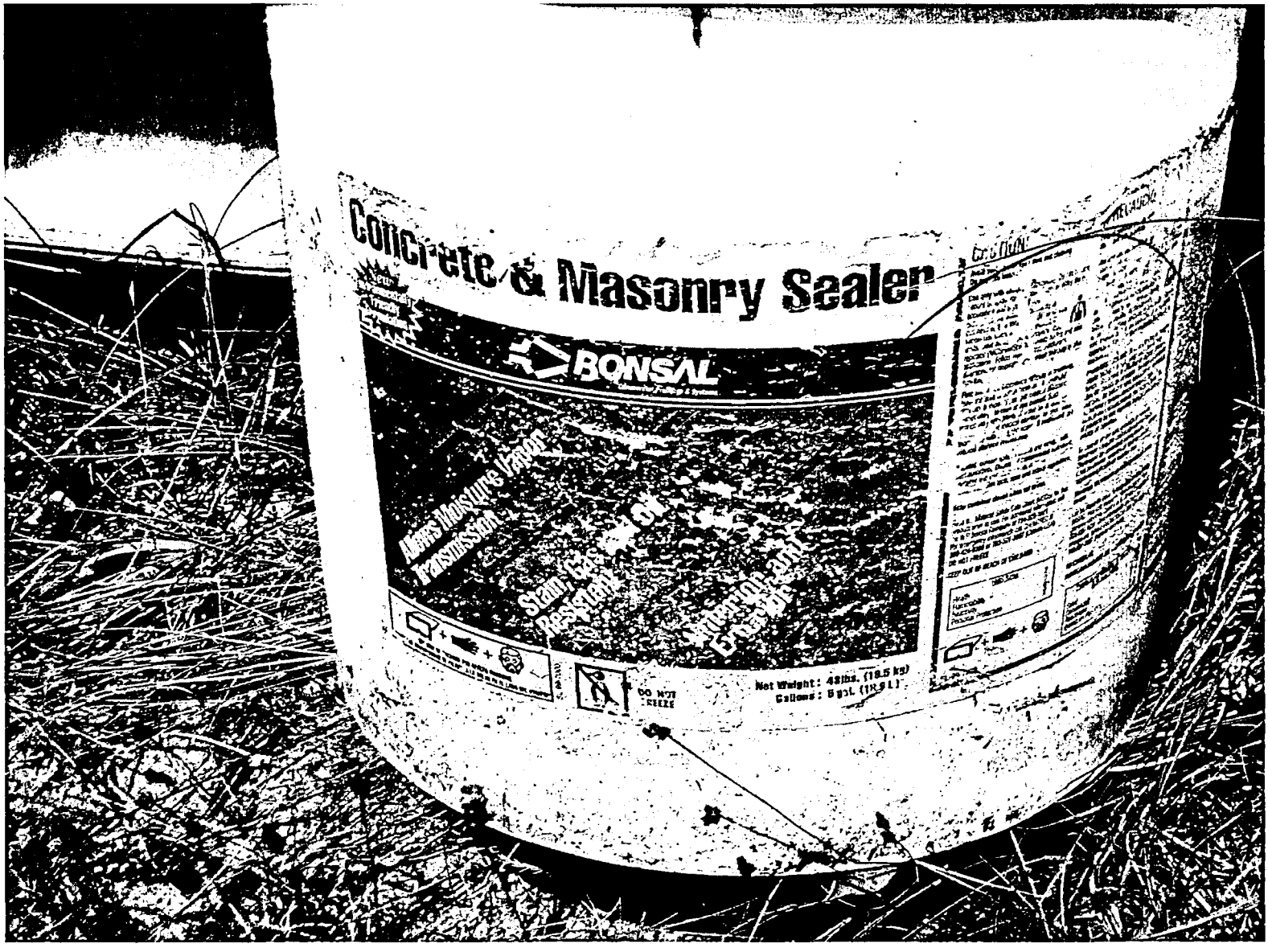
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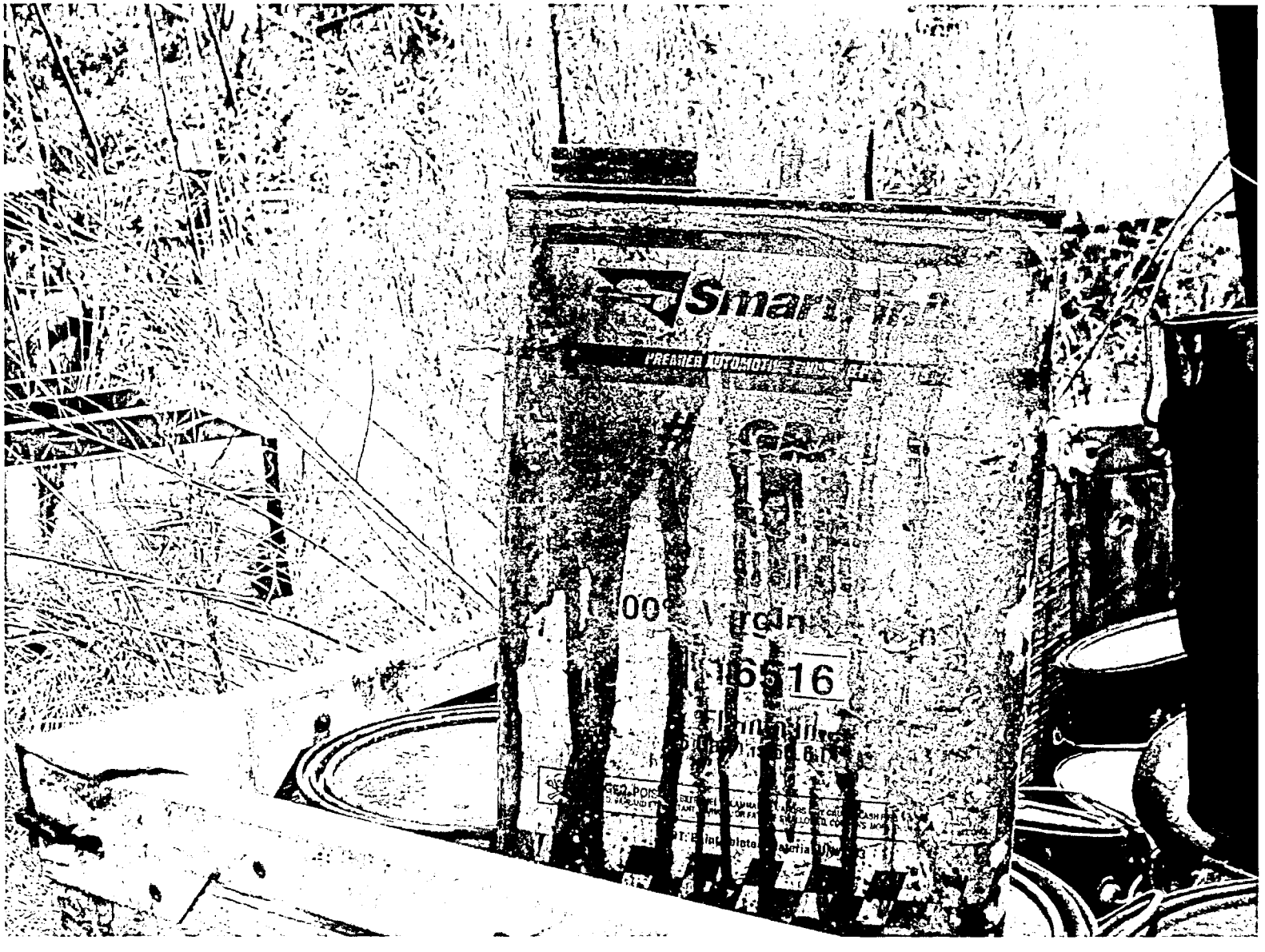
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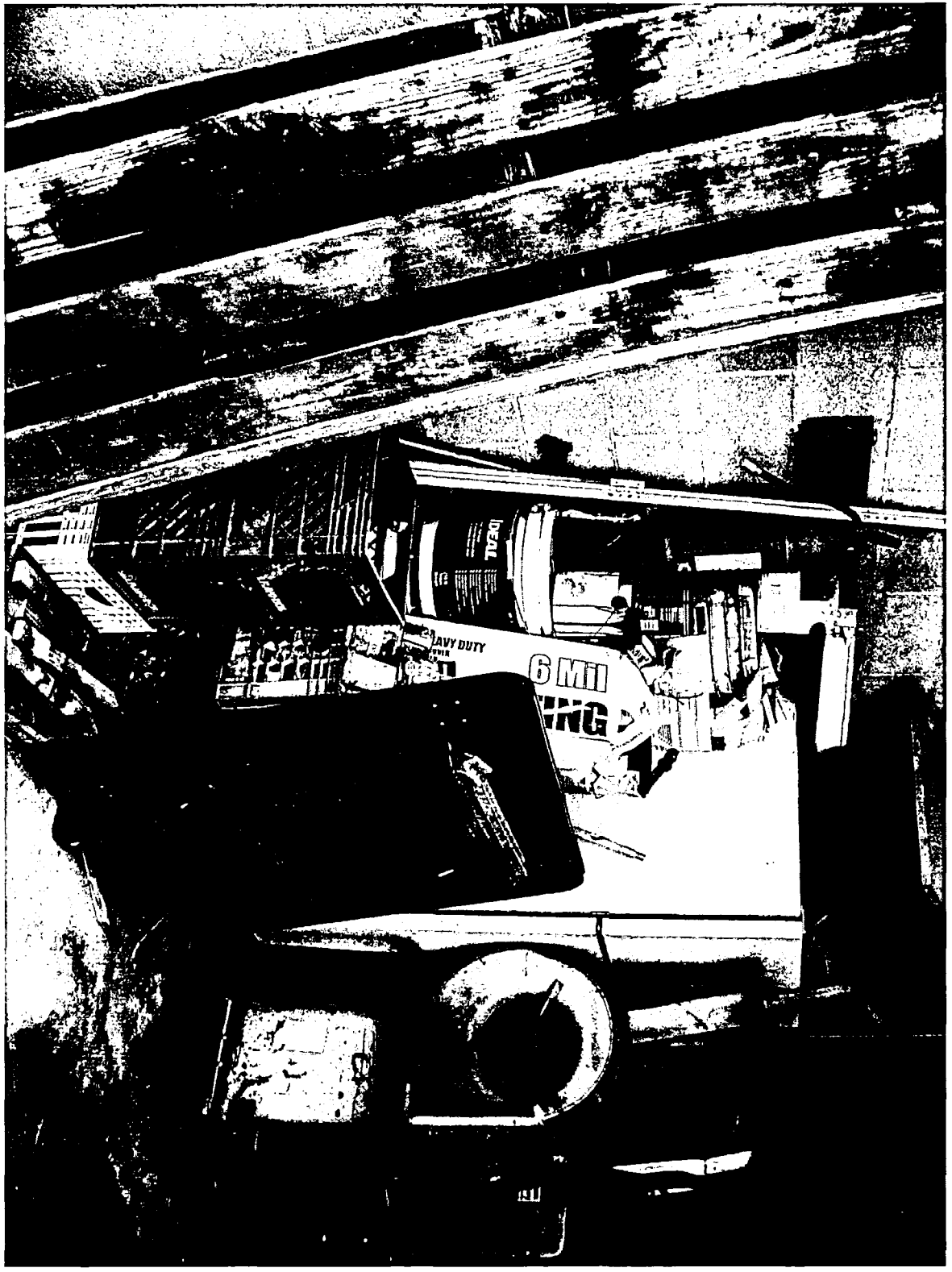
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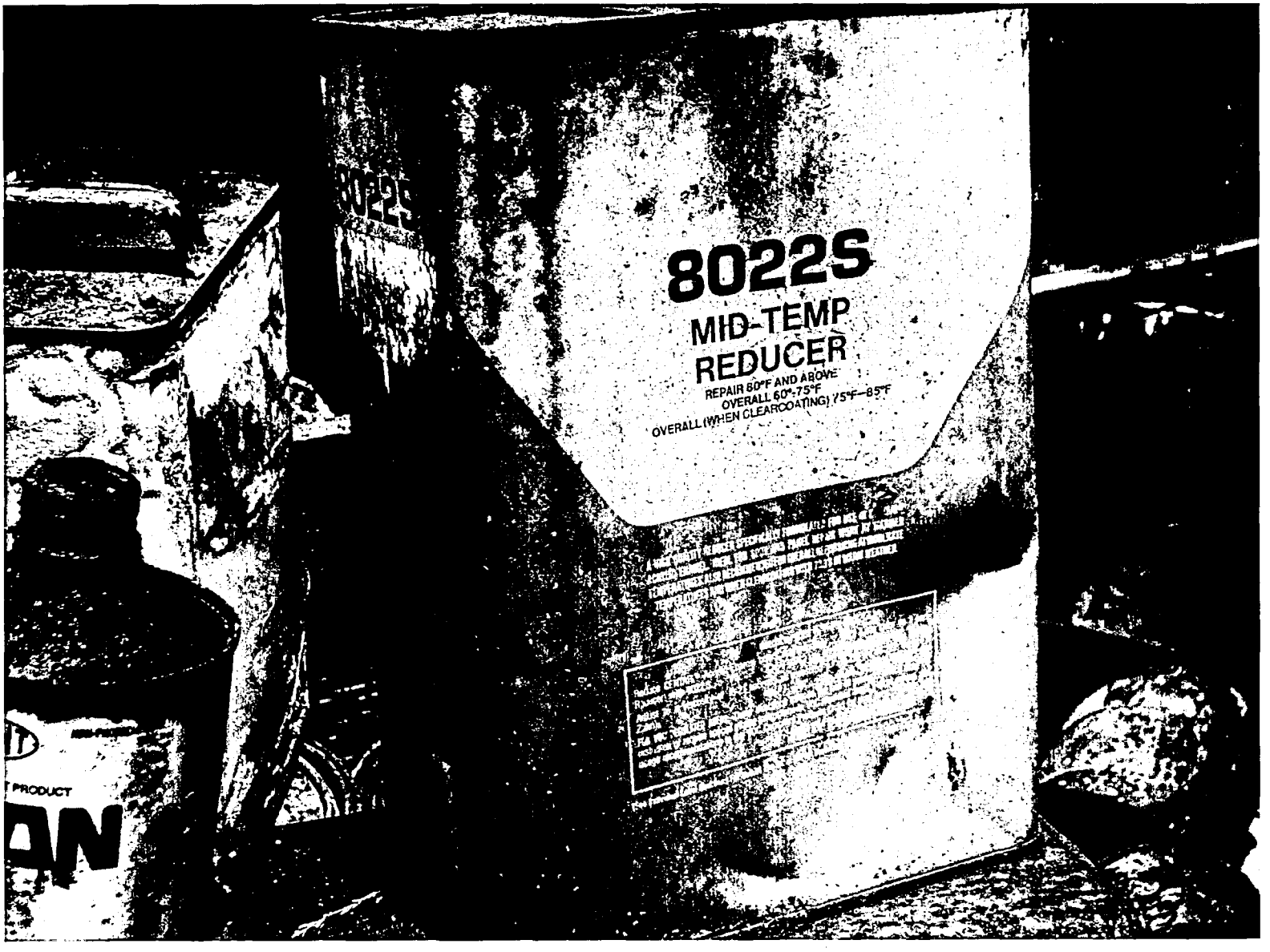
6 Mil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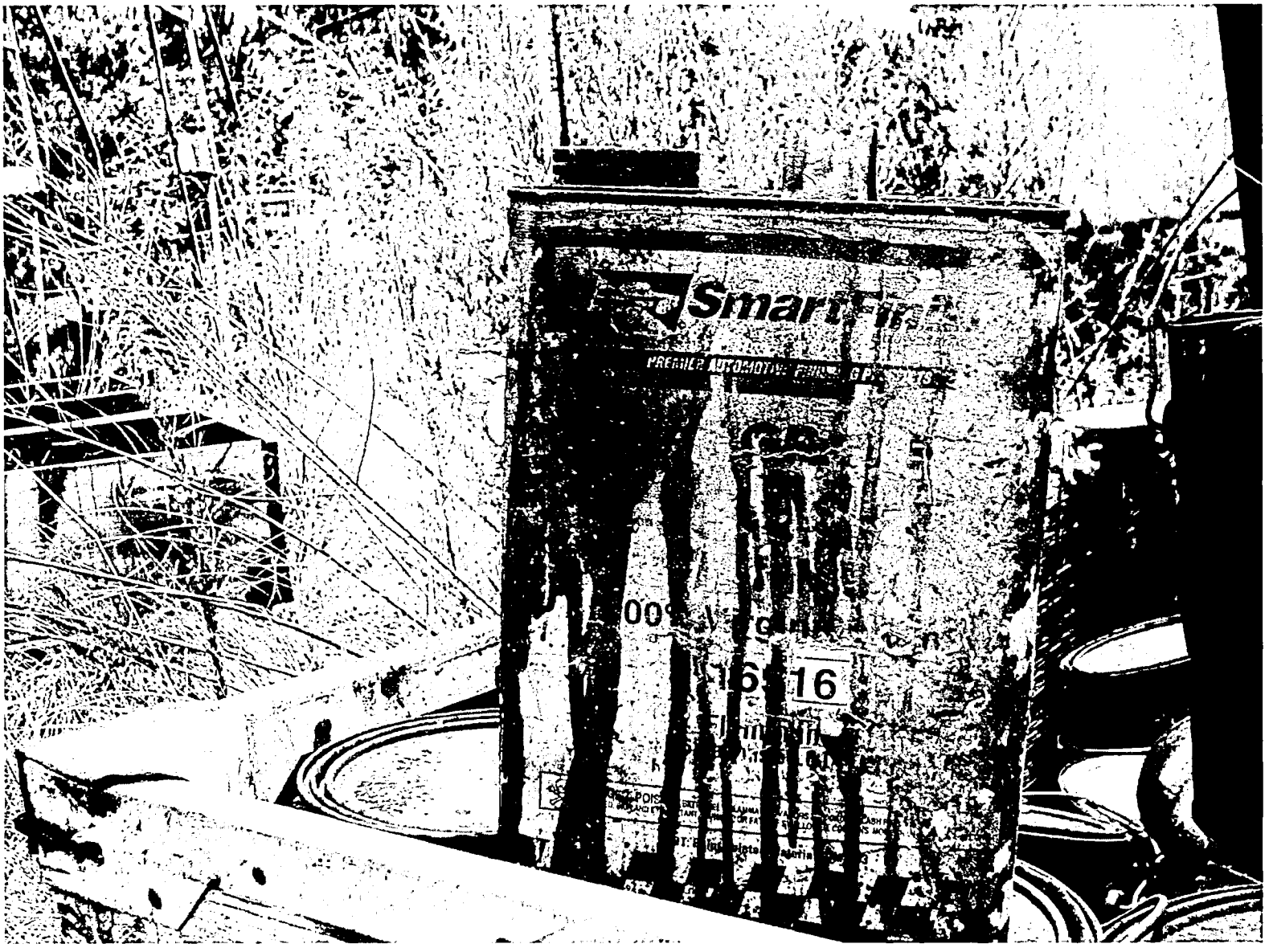
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SAFETY:
READ and UNDERSTAND the Material Safety Data Sheet (MSDS) before using this product. WARNING: Wear protective clothing and equipment. See HMIS block. For emergency information, call CHEMTREC at 800-424-9300 or 703-527-3887 (outside USA). KEEP OUT OF REACH OF CHILDREN.

PREPARATION:
Curing:
When used as a curing compound don't apply if the temperature is below 50° F (10° C), or if rain, dew or fog is forecast within 24 hours.
Sealer:
When used as a sealer, remove all loose and foreign material such as oil and dirt. Do not apply as a sealer if rain, dew, fog or temperatures below 50° F (10° C) are forecast within 4 hours.

PLACEMENT:
Curing:
When used as a curing agent, apply undiluted after the new concrete has hardened and the surface water and sheen have disappeared, usually about 4 to 6 hours after placing. In hot weather, the time to apply may be reduced to 2 to 3 hours after the concrete is placed. For best results, apply in 2 even, thin applications at right angles to each other, using a pump-up pressure sprayer. Apply at the rate of 200 sq. ft. per gal (4.9 sq. m/L). Do not puddle the Cure 'n Seal. Even application is particularly important when applying over colored concrete.

Sealer:
When used as a sealer, remove all loose and foreign materials such as oil and dirt. Do not apply as a sealer if rain, dew, fog or temperatures below 50° F (10° C) are forecast within 4 hours. Clean tools with soapy water immediately after application.
Drying time: Cure 'n Seal dries by evaporation. Under most conditions it will dry in about 1 hour, but cool, damp weather or hot, humid weather will extend the drying time. Do not cover the area treated with Cure 'n Seal for at least 24 hours. VOC LIMIT: 700 g/l

Curing: Reduces the need for wet curing in warm, dry, windy weather. Improves strength, wear resistance and durability, while reducing shrinkage.

STORAGE:
STORAGE: Store in a tightly closed container off the floor in a dry place. KEEP FROM FREEZING.

COVERAGE:
Approximately 200 sq. ft. per gallon

PACKAGING:
1 Gallon (3.8 L) UPC: 7-64661-19064-6

ENVIRONMENTAL ADVISORY:
Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.

FIRST AID: In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get prompt medical attention; for skin, wash thoroughly with plenty of soap and water. If irritation persists, get medical attention. If vapors or fumes are inhaled, remove person to fresh air. If swallowed, give plenty of water and call a Physician immediately. DO NOT INDUCE VOMITING.

CAUTION: Vapors may cause irritation of eyes, nose and throat. May cause skin sensitization or other allergic responses. HARMFUL IF SWALLOWED. Do not breathe vapors. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Close container after each use. Do not transfer to unmarked container.

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Centari® Acrylic Enamel can be mixed using one of the following options:

With Centari® 8105S™ Ultra Activator	With Centari® 793S™ Overall Gloss Hardener	Without Activator
See Centari® with Ultra Performance Pak Technical Data Sheet.	8:1:2 8 parts color 1 part Centari® 793S™ 2 parts Centari® 8022S™, 8034S™, 8093S™, or 8096S™	See Centari® with Ultra 1K Pak Technical Data Sheet.

Paks can be blended to meet shop conditions.

INDUCTION TIME

- None required

POT LIFE

- 3-4 hrs at 70°F (21°C) with Centari® 793S™ Hardener

ADDITIONAL COMMENTS

- Heating activated material above 110°F (43°C) will cause gelation.
- Centari® Acrylic Enamel may be recoated after 4 hours under normal drying conditions.
- For tinting purposes, up to 15% Centari® Mixing Enamel can be used.
- Use DuPont™ 259S™ Paint Additive (up to 1 oz/gal) to eliminate fish eyes.

APPLICATION CONDITIONS

Do not apply if material, substrate or ambient temperature is less than 50°F (10°C) or above 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%.

APPLICATION

- Thoroughly mix Centari® Acrylic Enamel prior to use. The use of a cyclone paint shaker is recommended.
- To 8 parts Centari® color add 1 part Centari® 793S™ Overall Gloss Hardener and 2 parts Centari® 8034S™, 8022S™, 8093S™ or 8096S™ Reducer
- For Siphon gun application, set air pressure to 50-65 psi at the gun.
- Apply three full wet coats. No additional flash is required between passes.
- If mist-coating is required for metallics, mist coat while coating is still wet.

CLEARCOAT

- Allow the last coat of Centari® Single Stage solid or metallic color to cure overnight before applying ChromaClear® 7900S™ Multi-Use Urethane or ChromaClear® 7779S™ Multi-Mix™ Clearcoats. Follow clearcoat recommendations for activation and application.

Note: Centari® Single Stage can be cleacoated up to 48 hours after the final coat without the need to sand the Centari® Single Stage Color.

CURE TIME AT RECOMMENDED THICKNESS – 77°F (25°C) & 50% RH

	With Centari® 793S™
Tack Free	1-2 hours
Tape Free	4 hours

Product may be force dried 30 min at 150-180°F (66-82°C).

APPLICATION EQUIPMENT

- Pressure Pot (recommended)
- Air Assisted Airless
- Gravity Feed
- Suction Spray
- HVLP

ENVIRONMENTAL

VOC content (lbs/gal)	LE	AP
Centari®	5.4	5.4
RTS mixed 8:1:2 w/ Centari® 793S™ & Centari® Reducer	5.0	5.0

FOR VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in your area. Follow recommendations in the DuPont Compliant Products Chart for your area.

CENTARI®

ACRYLIC ENAMEL

TYPE
Acrylic enamel

DESCRIPTION
A versatile system, Centari® Acrylic Enamel is designed to deliver the quality panel and overall refinish job no matter what the color. Centari® with Centari® 793S™ Overall Gloss Hardener delivers Centari® colors at 5.0 lbs/gal or less.

SUGGESTED USES
A high-gloss, durable, air dry enamel that is available in both solid and metallic colors. It is an extremely versatile product and is recommended for use on commercial vehicles, trucks, trailers, fleets, passenger cars, and other applications where good performance and appearance are expected.

NOT RECOMMENDED FOR
- Immersion service
- Do not sandwich between lacquer undercoat or topcoat systems.
- Do not stack panels or wrap panels tightly until they are thoroughly dry.
- Do not expose to solvent or gasoline for first two weeks after spray unless hardener is used.

COMPATIBILITY WITH OTHER COATINGS
- Centari® is compatible with all DuPont OEM/Fleet primer systems and original finishes that are in good condition, with the exception of lacquers.

DRY FILM CHARACTERISTICS

Chemical Resistance	VERY GOOD
Weatherability	EXCELLENT
Humidity Resistance	EXCELLENT
Acid Resistance	VERY GOOD
Solvent Resistance	VERY GOOD
Abrasion Resistance	VERY GOOD
Flexibility	EXCELLENT

MAXIMUM SERVICE TEMPERATURE
- 200° F (92°C) in continuous service
- 300° F (148°C) in intermittent heat

VOLUME SOLIDS – WILL VARY WITH COLOR SELECTED
- 34.1% average unactivated
- 31.6% average RTS mixed 8:1:2 w/Centari® 793S™ & DuPont™ 8022S™ Mid-Temp Reducer

WEIGHT SOLIDS – WILL VARY WITH COLOR SELECTED
- 43.7% average unactivated
- 39.0% average RTS mixed 8:1 w/Centari® 793S™ & DuPont™ 8022S™

GALLON WEIGHT
- 8.21 lbs/gal average unactivated

SUGGESTED FILM THICKNESS
- 1.9 – 2.2 mils dry film thickness

THEORETICAL COVERAGE PER GALLON
- 506 sq. ft./gal average @1mil DFT

GLOSS
- High

COLOR
- Available in solid or metallic colors

FLASH POINT (CLOSED CUP)
- Below 80°F (27°C)

SHELF LIFE
- 12 months minimum

APPLICATION SOLVENTS
- Centari® 8034S™ Reducer 65-75°F (18-24°C)
- Centari® 8022S™ Reducer 70-85°F (21-29°C)
- Centari® 8093S™ Reducer 70-90°F (21-32°C)
- Centari® 8096S™ Reducer over 90°F (32°C)
- Centari® 8100S™ Acrylic Enamel Retarder

CLEANUP SOLVENTS
- DuPont™ 3602S™ Thinner

ACTIVATION (MIX RATIO)
- Mix 8 parts Centari® color with 1 part Centari® 793S™ Overall Gloss Hardener and 2 parts Centari® Reducer.
- Stir thoroughly to secure uniform mixture. Strain reduced material prior to application.

CENTARI®

ACRYLIC ENAMEL

SAFETY AND HANDLING

DuPont is committed to helping you develop and maintain a safe working environment. Carefully read the specific warnings and precautions printed on the labels of all DuPont products before handling and using. These products are for industrial us by trained professional painters only.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

01/07

MATERIAL SAFETY DATA SHEET

BASALITE® CONCRETE PRODUCTS VANCOUVER, ULC.

Product Identifier:

Cure ' N Seal

SECTION 1 PRODUCT IDENTIFICATION AND USE

Product identification: **Cure 'n Seal**			
PIN/ UN No: **N/AV**	MSDS Number: **3101OC.**	Molecular Weight: **N/AV**	
Chemical Name: **N/AV**			
Chemical Family: **N/AV**		Chemical Formula: **Sealer**	
Pest Control Product (PCP #) : **N/AV**	Stock Number: **N/AV**	Product Group: **N/AV**	
Product Use: **Seal concrete**		Synonyms: **Sealer**	
WHMIS Classification: **B2, D2a**		Means of Classification: **Class. By Manufacturer**	
Manufacturers Name: **Insul-Mastic / Websen**		Suppliers Name: **Basalite Concrete Products, Vancouver, ULC.**	
Street Address: **861 Derwent Way, Annacis Island**		Street Address: **1280 West 77th Avenue**	
City: **New Westminster**	Province: **BC**	City: **Vancouver**	Province: **BC**
Postal Code: **V3M 5R4**	Emergency Telephone No. **604 – 522 - 2811**	Postal Code: **V6P 3G8**	Emergency Telephone No. **604 – 269 – 2120**

SECTION 2 HAZARDOUS INGREDIENTS

Hazardous Ingredients	% Ratio	CAS Number: PIN Number:	Test: Related Information:	Value:
Xylene	**50 – 80 W/W**	**1330-20-7**	**LD 50: 4.0 g/kg: Oral, Rat.** **LC 50: 6500 ppm, Rat.**	**100 ppm.** **40 ppm.**
Light Aliphatic Naptha	**10 – 30 W/W**	**64742-89-8**	**N/AV**	

SECTION 3 PHYSICAL DATA

Odour & Appearance: **Water white liquid/ Solvent odour**			
Physical State: **Liquid**		Odour Threshold: **N/AV**	
Freezing Point (°C): **-48 deg C**		Boiling Point (°C): **137 - 143° C**	
Vapour pressure (mm Hg): **N/AV**	Vapour Density (Air=1): **3.7**	Percent Volatile: **N/AV**	Evaporation Rate: **N/AV**
pH: **N/AV**	Specific Gravity: **0.88**	Coeff. Water/ Oil Distribution: **N/AV**	Percent Soluble: **N/AV**

N/AV and NV = Not Available N/AP and NP = Not Applicable

BASALITE® CONCRETE PRODUCTS VANCOUVER, ULC.

MATERIAL SAFETY DATA SHEET

Product Identifier:

Cure ' N Seal

SECTION 4 FIRE AND EXPLOSION DATA

Flammability: YES ☒ NO ☐	If yes, under which conditions? **Pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources. Vapours from this product may travel or be moved by air currents and ignited at locations distant from the point of handling.**

Extinguishing Media: **Dry chemical, CO2, foam or water fog.**

Special Fire Fighting Procedures: **Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapours. Either allow fire to burn out undercontrolled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Respiratory and eye protection required for fire fighting personnel. Avoid spraying water directly into storage containers due t danger of boil over. A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required.**

Unusual Fire and Explosion Hazards: **N/AV**		Auto-Ignition temperature (°C): **527° C**
Flashpoint (°C) and method: **12° C (TCC)**	Upper flammability limit (% by volume): **7.0%**	Lower flammability limit (% by volume): **1.1%**

Hazardous Combustion Products: **Toxic gases will form upon combustion consisting of smoke, fumes and carbon oxides.**

Explosion data: Sensitivity to impact: **Not sensitive**	Sensitivity to static discharge: **Ground all spraying and pumping equipment to avoid static build up.**

SECTION 5 REACTIVITY DATA

Chemical stability: YES ☒ NO ☐	If no, under which conditions?
Incompatibility with other substances: YES ☒ NO ☐	If so, which ones? **Strong oxidizing agents. Strong acids.**

Reactivity, and under what conditions: **Reacts violently with oxidizing materials. Attacks some plastics and rubber. Not corrosive to metals.**

Hazardous decomposition products: **Oxides of Carbon with black smoke produced upon combustion.**

N/AV and NV = Not Available N/AP and NP = Not Applicable

BASALITE® CONCRETE PRODUCTS VANCOUVER, ULC.

MATERIAL SAFETY DATA SHEET

Product Identifier:

Cure ' N Seal

SECTION 6 TOXICOLOGICAL PROPERTIES

Route of Entry: Skin Contact ☒	Skin Absorption: ☒	Eye Contact: ☒	Inhalation: ☒	Ingestion: ☒

Effects of exposure to product: **Skin contact: Frequent or prolonged contact may irriatate the skin and cause a skin rash (dermatitis).**
Skin absorption: See above.
Eye contact: Solvent content is irritatiog.
Acrylic content may be a hazard if allowed to dry or set up.
Inhalation: High vapour concentrations are irritating to the nose, throat and lungs and may cause headaches dizziness. It may be anaesthetic and have other central nervous system effects.
Ingestion: Small amounts of this liquid drawn into the lungs from swallowing or vomiting may have severe health effects such as bronchopneumonia of pulmonary edema. Low oral toxicity.

Effects of chronic exposure to product: **This product contains Xylene which has been classified as an embryotoxin. Other toxicity tests carried out for chronic effects and mutagenicity have been negative. Available data is insufficient to classify further according to WHMIS criteria.**

Exposure Limits: **N/AV**

TWA:

Other:

STEL:

C:

OSHA PEL:

ACGIH TLV:

Carcinogen by NTP: **N/AV**	Carcinogen by IARC: **N/AV**	OSHA Controlled: **N/AV**

Irritancy: **This product is expected to be a skin and eye irritant but not to be a skin sensitizer.**

Sensitization: **This product is expected to be a skin and eye irritant but not to be a skin senitizer.**

Carcinogenicty: **N/AV**

Teratogenicity: **N/AV**	Reproductive Toxicity: **N/AV**
Mutagenicity: **N/AV**	Synergistic Products: **N/AV**

Medical Conditions Aggravated by Exposure: **N/AV**

N/AV and NV = Not Available N/AP and NP = Not Applicable

BASALITE® CONCRETE PRODUCTS VANCOUVER, ULC.

MATERIAL SAFETY DATA SHEET

Product Identifier:

Cure ' N Seal

SECTION 7 PREVENTATIVE MEASURES

Personal Protective Equipment:		
Gloves (specify): **Wear solvent resistant types. (Viton, nitrile, PVC)**	Respirator (specify) **Wear suitable respirator protection if TLV. exceeds the specified ppm.**	Eye (specify) **Wear chemical safety goggles.**
Footwear (specify): **As required**	Clothing (specify) **As required**	Other (specify) **As required**

Engineering controls: **The use of local exhaust ventilation is recommend to control emissions near the sorce. Provide mechanical ventilation to confined spaces. Use explosion-proof equipment.**

Leak & Spill Procedures: **Stop leak, eliminate any ignition sources and ventilate area. Pick up with a mineral absorbent, place into disposal container and remove to outdoors. Prevent spills from entering sewers, watercourses or low areas.**

Waste Disposal: **Ensure disposal is in compliance with all Government regulations. Notify the appropriate authorities immediately. Take all action necessary to remedy the adverse effects of the spill.**

Handling Procedures and Equipment: **Keep container closed when product is not in use. Store in a cool, well ventilated place away from incompatible materials. DO NOT handle or store near sources of heat or ignition. Material will accumulate static charges which may cause an electrical spark – ignition source. Use proper grounding procedures. Empty product containers may contain product residue. DO NOT reuse empty containers without commercial cleaning or reconditioning.**

Storage Requirements: **Same as above**

Special Shipping Information: **Flammable Liquids NOS (Naphtha petroleum) Class 3, UN 1993, PG 11.**

SECTION 8 FIRST AID MEASURES

Specific Measures: **Eye Contact: Flush with plenty of water for 5 minutes. If irritation persists, get medical attention.**

Inhalation: Remove the affected person from exposure. Administer artificial respiration as required. Keep at rest. Call for prompt medical attention.

Skin Contact: Wash well with plenty of soap and water. If irritaion develops contact a physician. Remove severely contaminated clothing, including shoes, and clean before re-use.

Ingestion: If swallowed, DO NOT induce vomiting. Keep at rest. Obtain medical attention immediately.

N/AV and NV = Not Available N/AP and NP = Not Applicable

MATERIAL SAFETY DATA SHEET

Product Identifier:

Cure ' N Seal

SECTION 9 PREPARATION DATE OF MSDS		
Prepared By: (Group, Department, Etc.) **Rocky D. Pantiluk, A.Sc.T.** **Basalite Concrete Products, Vancouver, ULC.** **1280 West 77th Avenue** **Vancouver, BC V6P 3G8**	Phone Number: **(604) 269 – 2120**	Date: **09 / 03 / 05** (yr / mm / dd)
Workplace MSDS Transcribed by: **Laura Voci** **Basalite Concrete Products, Vancouver, ULC.** **1280 West 77th Avenue** **Vancouver, BC V6P 3G8**	Phone Number: **(604) 269 – 2120**	Date: **09 / 03 / 05** (yr / mm / dd)

The information in the MSDS is believed to be accurate at the time of preparation, but no guarantees are given.

N/AV and NV = Not Available N/AP and NP = Not Applicable

SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Mary Chappell ID # NONCD 000 2832

Location 1061 North NC Hwy 177, Hamlet, Richmond County, NC

Proposed Date of Investigation 6/24/10 to 7/24/10

Date of Briefing 6/23/10

Date of Debriefing 7/26/10

Nature of Visit (check one):

On-Site Reconnaissance	X
Off-Site Reconnaissance	
Sampling	
Sampling Overview	
Remediation Overview	

Health Department Official Contacted Mike Norton

Date of Contact 6/23/10

Site Investigation Team: All site personnel have read the Site Health and Safety Plan and are familiar with its provisions.

Personnel	Responsibilities	Signature
Team 1 Keith Snavely	team leader, recon	Keith Snavely
Team 1 Dave Brown	recon	
Team 2 Sean Boyles	recon	
Team 2 John Walch	recon	John Walch

Plan Preparation:

Prepared By: David Lilley, Industrial Hygiene Consultant

Reviewed By: Jack Butler, Superfund Section Chief

Jack Butler

B. SITE/WASTE CHARACTERISTICS

Waste Type(s) __X__Liquid _____Solid __X__Sludge _____Gas
Characteristics _____Corrosive _____Ignitable _____Radioactive
__X__Volatile __X__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
Trichloroethylene	Odor Threshold	OT = 28 ppm	10 ppm

UNDERGROUND UTILITIES CHECKLIST

Utility	Locator/Contact Person	Phone #	Date of Location
Power	NA	NA	NA
Telephone	NA	NA	NA
Gas	NA	NA	NA
Water	NA	NA	NA
Sewer	NA	NA	NA

ID # NONCD 000 2832

Facility Description: Size unknown Buildings unknown

Disposal Methods Being Investigated Spraying of pesticides on an orchard near the site.

Unusual Features on Site (dike integrity, power lines, terrain, etc.):
None known

History of the Site: An orchard near the site was sprayed with pesticides.

C. HAZARD EVALUATION

The site can be toured and sampled in level D protection.
Chemically resistant knee length boots will be worn on site if the potential for surface soil contamination exists.

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 _____

ID # NONCD 000 2832

Surveillance Equipment:

_____ HNU	_____ Detector Tubes and Pumps
_____ OVA	_____ 02 Meter
_____ Explosimeter	_____ 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. Goggles will be worn while washing field equipment.

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. No sampling will be conducted by Superfund personnel at this time.

EMERGENCY PRECAUTIONS

Route of Exposure	First Aid
Eyes	irrigate immediately
Skin	soap and water wash
Inhalation	fresh air and artificial respiration
Ingestion	get medical attention immediately

ID # NONCD 000 2832

Location of Nearest Phone: unknown (nearby residences?)

Hospital (Address and Phone Number)

FirstHealth Richmond Memorial Hospital, 925 Long Drive, Rockingham, NC (336) 625-5151

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital See next page.

EQUIPMENT CHECKLIST

	Air purifying respirator	X	First Aid Kit
	Cartridges for respirator		3 gal. Deionized H20
	Eye Wash Unit	X	Rain suit
	HNU	X	Gloves (PE/PVC/nitrile/cloth)
	OVA	X	Boots/Boot Covers
	Explosimeter	X	Coveralls (tyvek/saranex)
	Radiation Monitor	X	Eye Protection (goggles/shield)
X	Decontamination Materials	X	Hard Hat

STATE POISON CONTROL CENTER
1-800-848-6946

North Carolina OSHA
1-800-LABOR-NC

TO BE COMPLETED BY PROJECT MANAGER

PROJECT MANAGER: Keith Snavely PROJECT: Mary Chappell

INVESTIGATION DATE: 6/24/10 to 7/24/10

RECONNAISSANCE X SAMPLING VISIT _____ REMEDIATION/SAMPLING OVERVIEW

Respirator Worn By Approximate Time in Respirator

Air Monitoring Data

PID: (circle one) Mini Rae, HNU
Serial Number _____
Calibration Reading
Notes

_____
_____
_____

OVA
Serial Number _____
Notes

_____
_____
_____

CGI/Oxygen Meter
Serial Number _____
Calibration Reading
Notes

_____
_____
_____

Radiation Meter
Serial Number _____
Notes

_____
_____
_____

Were there any injuries? _____ If yes, explain:

Signature

MAPQUEST.

Trip to 925 S Long Dr

Rockingham, NC 28379-4835
5.05 miles - about 8 minutes

Notes

A 1061 N Nc Highway 177, Hamlet, NC 28345-4376

START	1. Start out going **NORTHEAST** on **NC-177 / MARLBORO ST** toward **HAMILTON ST**.		go 0.9 mi
WEST 74 BR	2. Turn **LEFT** onto **US-74 BR W / W HAMLET AVE**. Continue to follow **US-74 BR W**.		go 3.8 mi
	3. Turn **RIGHT** onto **S LONG DR**.	Map	go 0.3 mi
END	4. **925 S LONG DR** is on the **RIGHT**.		go 0.0 mi

B 925 S Long Dr, Rockingham, NC 28379-4835

Total Travel Estimate : 5.05 miles - about 8 minutes

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Trichloroethylene

I. PHYSICAL/CHEMICAL PROPERTIES

Reference

Chemical Formula C2 HC13 _____ 1

Natural Physical State at 25EC liquid _____ 1

Vapor Pressure 58 mm Hg at 20EC 2

Melting Point -99 EF/EC Boiling Point 189 EF/EC 2

Flash Point (open or closed cup) 32EC/EF 3

Solubility - H^2O 0.1% at 77EF 2

Other Ether, alcohol, chloroform _____ 1

Physical Features: (odor, color, etc.) Colorless liquid (unless dyed) with a sweet odor like chloroform 1P = 9.45 eV (2) OVA Relative Response = 70%

II. TOXICOLOGICAL DATA

Standards: 10 ppm (4) TLV 100 ppm (5) PEL potential human carcinogen(2) IDLH

Routes of Exposure: Inhalation, ingestion, skin and/or eye contact (2)

Acute/Chronic Symptoms: Acute: Headache, vertigo, visual disturbance, tremors,drowsiness, nausea, vomiting, eye irritation, dermititis, irregular heartbeat,skin irritation; chronic: carcinogenic (2)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Trichloreothylene

III. HAZARDOUS CHARACTERISTICS Reference

A. Combustibility Yes X No ____ 2
Toxic by-products _____

B. Flammability LEL 12.5% UEL 90% 3

C. Reactivity Hazard Incompatible with strong caustics: 2
when acidic reacts with aluminum, chemically active metals,
barium, lithium, sodium, magnesium, titanium.

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) Pocket Guide to Chemical Hazards, NIOSH, 1990
(3) Chemical and Engineering News, December 12, 1988.
(4) Threshold Limit Values and Biological Exposure Indices for 2007 ACGIH
(5) 29 CFR 1910.1000

CORVEL

WC Authorization | Physician's Report | Pharmacy Guide

MAILING ADDRESS: P.O. Box 77880, Charlotte, NC 28271
800-365-5998 www.corvel.com

EMPLOYER: Please complete the top section and give to the injured employee to take with them to their authorized treating physician. If you already have transitional duty job descriptions available, please attach a copy for the treating physician's review.

Name of Employee: **Last:**	**First:**
Date of Injury:	
Name of Employer: NCDENR- Division	
Employer Signature:	Treating Physician:

EMPLOYEE: Please take this form with you to an authorized treating physician. Please have the physician complete the middle section and return this immediately to your employer. The bottom section is for you to show the pharmacist should you need to have any prescriptions filled as prescribed by your authorized treating physician for this work related injury.

AUTHORIZED PHYSICIAN, PLEASE COMPLETE

Diagnosis: _____

A post accident drug test (check one) ( ) **has** been completed ( ) **has not** been completed

In accordance with this patient's physical capability, check all that apply:

( ) May resume work immediately, no restriction.
( ) May resume work immediately with the following restrictions:
- ( ) Sedentary work (sitting, occasional walking, standing, lifting less than 10 pounds)
- ( ) Light work (lifting less than 20 pounds)
- ( ) Medium work (lifting less than 50 pounds)
- ( ) Heavy work (lifting less than 100 pounds)
- ( ) Normal shift
- ( ) Limited hours: ____ hrs, _____hrs, _____hrs per day
- ( ) Other: _____

( ) Repetitive Motion Restrictions (specific to hand/arm injuries):

Frequency	Left	Right
No Use		
Occasional <33% of time		
Frequent 34-66% of time		
Regular 67-100% of time		

( ) Patient may return to work at full duty on (date) _____
( ) Patient has a return appointment on (date) _____at (time) _____

Please indicate any referrals that are required: _____

_____	_____	_____
Physician's Signature	**Date**	**Physician's Name (type or print)**

Physician Offices – Be sure to contact CorVel's Claim Department at 800-365-5998 for authorization for the referral.

PHARMACIST: Process all prescriptions on-line through ***CorVel's CorCareRx*** for this patient. Contact CorVel's CorCareRx Help Desk at (800) 563-8438 to establish eligibility prior to processing on-line from 8 AM thru 9 PM Eastern. After hours, please contact (800) 213-5640.

DO NOT CHARGE THE PATIENT FOR THE PRESCRIPTION.

CHAIN NAME	CHAIN NAME	CHAIN NAME	CHAIN NAME
Bi-Lo Pharmacy	Horizon Pharmacy	Revco drugs	VIX Pharmacy
Bi-Mart	HyVee Drugtown	Rite-Aid drugs	Walgreen's
Brooks Drugs	J & J Pharmacy	RX Discount Pharmacy	Wal-Mart Pharmacy
Brookshire Brothers	Joel & Jerry's	Sack-n-Save	Wegman Pharmacy
Cub Pharmacy	Kash N Karry	Sav-A-Lot	Winn-Dixie
CVS Drugs	Kerr Drugs	Sams Club Pharmacy	
Drug Emporium	K-mart phcy	Save Mart	
Eckerds(all others)	Long's Phcy	Stop N Shop	
Franck's Pharmacy	Medicine Shoppe	Super D	
Fred Meyer	Medistat Phcy	Super Valu	
Fred's Pharmacy	Milner-Rushing Drugs	Super X (HSI)	
Giant Pharmacy	Pathmark Pharmacy	Tom Thumb Phcy	
Goodings	Perry Drg Str	Tops Pharmacy	
Hannaford Food &	Phar-Mor	Tri Daly Drugs	Revision date: 6/25/2009

CORVEL

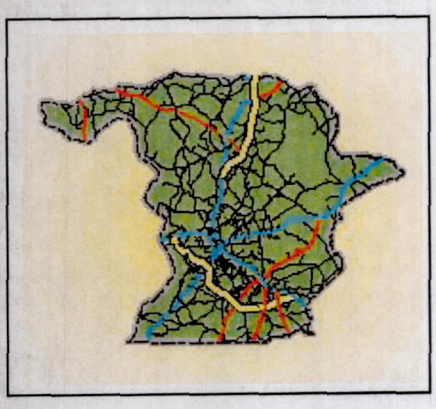
* All participating pharmacies have not been included on this list. Please have your pharmacy call CCRx regarding any questions/ authorizations 800-563-8438.

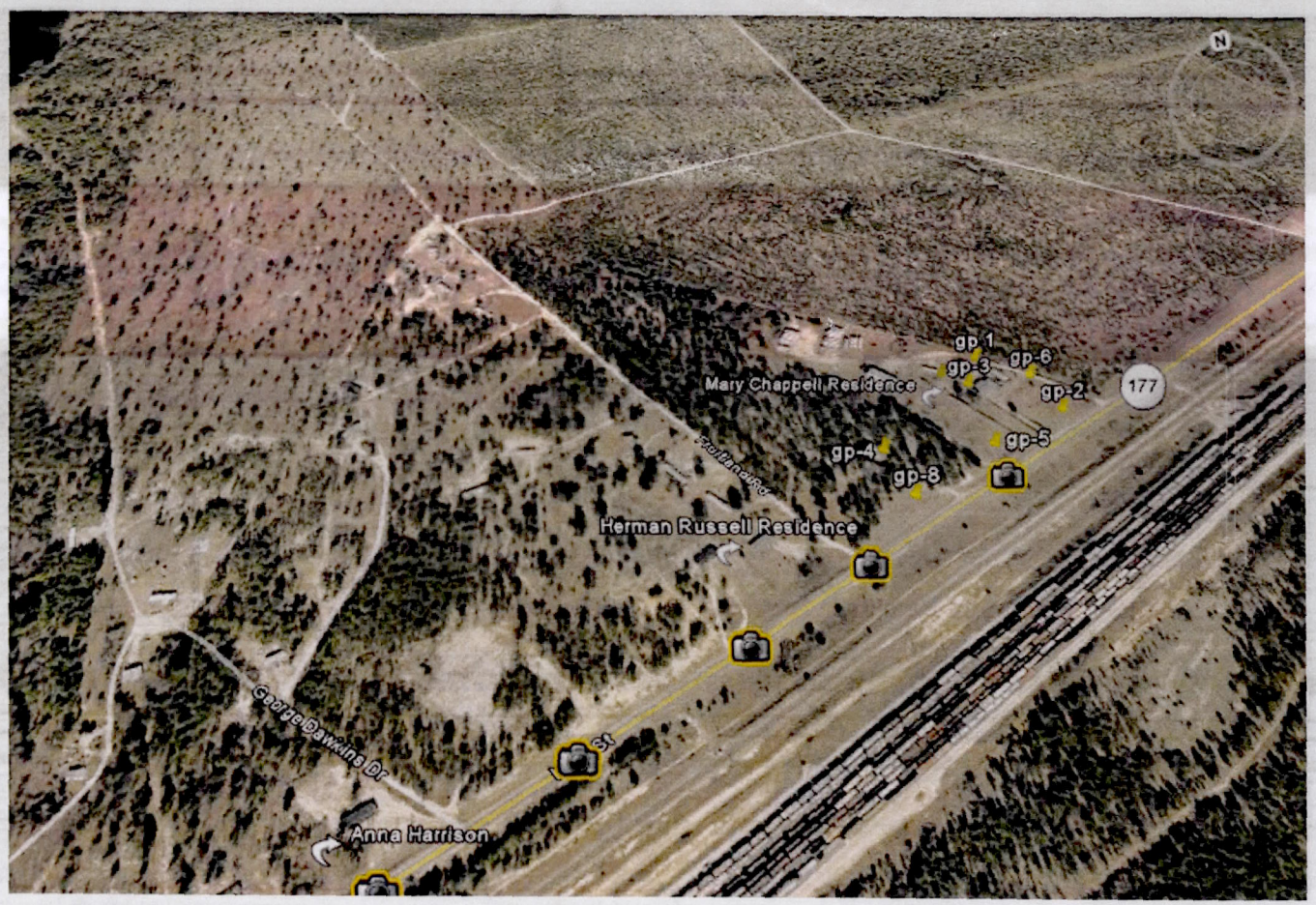
RICHMOND COUNTY

NORTH CAROLINA

Printed On:
5/26/2010

Disclaimer: *All information on this map is prepared for the inventory of real property found within Richmond County. All data, including maps, is compiled from recorded deeds, plats, and other public records and data. Users of this data are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information. All information contained herein was created for the County 's internal use. Richmond County, its agents and employees make no warranty as to the correctness or accuracy of the information set forth on this media whether express or implied, in fact or in law, including without limitation the implied warranties of merchantability and fitness for a particular use. Any resale of this data is strictly prohibited in accordance with North Carolina General Statute 132-10. Grid is based on North Carolina State Plane NAD83.*




N
gp-1
gp-3
gp-6
gp-2
177
Mary Chappell Residence
gp-5
gp-4
gp-8
Herman Russell Residence
George Dawkins Dr
Anna Harrison

OWNERSHIP 03122009 25710 301	PROPERTY DESCRIPTION	TAX SUBDIVISIONS	MAP NUMBER	CARD NO
CHAPPELLS AUTO SALES INC	LOTS U S 74	MARKS CREEK	748112975243	2
		CITY OF HAMLET	RECORD NUMBER:. 40813	
1061 N NC HWY 177			ROUTE 7481 12 227 2	
HAMLET, NC 28345			LISTER:_____	
			REVIEW:_____	

.....35.....

TOPO	STREET	UTILITY	ZONING

NOTES:

#	LAND CLASS	SIZE	BASERATE*FRNT*DPTH*ADJ=ADJRATE*UNITS=LND-VALUE

LAND VALUE: 0

#	OTHER FEAT	SIZE	BASERATE*COND =ADJRATE*UNITS=OFB-VALUE

7
0 A- 0
WAREHOUS

OTHER VALUE: 0

FNDATION	XTRFNISH	ROOFTYPE	ROOFMTRL	SIZE/QTY	DPRT:8-C&I AVG
CCSLAB	METAL	GABLE	METAL	1.00STHT	

WALLFNSH	FLOORS	HEAT&AIR	HEATFUEL
PLASTER UNFINISH	CONCRETE	HTG & AC UNITS	GAS 1.00LFUF

@.....35.....:

COMMRCIL D-10 B1986 FAIR CONDITION

DIMENSIONS:A-CU70R35D70L35H

#	STRUCTURE	SKTCH-SF*STHT=	AREA	RATE*GRDF+HEAT+EXWL*WLHT=ADJRAT*	AREA=	RPCN*	DEPF*CNDF=STR-VALUE
A	37DWAREHOUS	2450 1.00	2450	22.65 0.90 2.10 22.48	2450	55076	0.70 38553
	2 FIXTURES						0

2450HSF, 2450TSF RPCN- 22.48/HSF 55076 VALU- 15.74/HSF 38553

STRUCTURE VALUE: 38553

CARD 2 VALUE 38553

OWNERSHIP 03122009 25710 301	PROPERTY DESCRIPTION	TAX SUBDIVISIONS	MAP NUMBER	CARD NO
CHAPPELLS AUTO SALES INC	LOTS U S 74	MARKS CREEK	748112975243	1
		CITY OF HAMLET	RECORD NUMBER:. 25710	
1061 N NC HWY 177			ROUTE 7481 12 227 1	
HAMLET, NC 28345	305 F 23,30		LISTER:2/6/96MB	

```
                                  |HAMLET AVE                  |                    |REVIEW:RL062006
.......40...........28.........30..... |TOPO    |STREET  |UTILITY |ZONING                    FRFT:1-ALTERNAT
:             :         :           : |LEVEL   |PAVED   |PUBWATER|
:             :         :           : |        |        |PUBSEWER|       NOTES:DBA THE PERSONAL TOUCH
2             2         2           2 |        |        |        |            :
4      B-     4    A-   4     C-    4 |#|LAND CLASS |  SIZE  |BASERATE*FRNT*DPTH*ADJ=ADJRATE*UNITS=LND-VALUE
:      WAREHOUS: TYPOFFCE:   WAREHOUS: |1|71ICOMMERC |168F 200D| 211.00|1.00|1.21|    |255.31|  168|    42892
:             :         :           : |
:......40......@....28...:.....30....:.|
:                                     :|
2                                     2|
2                 D-                  2|
:                 CANOPY              :|LAND  VALUE:                                                42892
:                                     :|#|OTHER FEAT |  SIZE  |BASERATE*COND        =ADJRATE*UNITS=OFB-VALUE
:................100.................:|1|17DCHAINLKF|   6* 900|   1.03|0.50         |   0.51| 5400|     2754
                                      |2|14DASPHPAVG28000*   1|   0.96|0.50         |   0.48|28000|    13440
                                      |
                                      |
                                      |
                                      |
                                      |
                                      |
                                      |OTHER VALUE:                                                 16194
                                      |FNDATION|XTRFNISH|ROOFTYPE|ROOFMTRL|SIZE/QTY| DPRT:8-C&I AVG
                                      |CONCBLCK|FRAME   |GABLE   |ASPHSHNG|        |
                                      |        |CC BLOCK|        |        |1.00STHT|
                                      |        |        |        |        |        |
                                      |WALLFNSH|FLOORS  |HEAT&AIR|HEATFUEL|        |
                                      |UNFINISH|CONCRETE|FHA     |OIL     |        |
                                      |PANEL   |TILE    |PCKAGEAC|        |        |
                                      |        |        |        |        |1.00LFUF|
                                      |
                                      |
COMMRCIL          D-10 B1980E1987      GOOD      CONDITION
DIMENSIONS:A-CU24R28D24L28 B-CL40U24R40D24 C-R28CU24R30D24L30 D-L40CD22R100U22L100H
#|STRUCTURE|SKTCH-SF*STHT=   AREA   RATE*GRDF+HEAT+EXWL*WLHT=ADJRAT*   AREA=    RPCN*     DEPF*CNDF=STR-VALUE
A|22DTYPOFFCE|   672|1.00|    672| 65.96|0.90-2.00-1.70|     | 55.66|    672|   37404|     0.66|     |    24687
 | 2 FIXTURES|     |    |      |      |    |    |    |     |      |      |        |      |     |        0
B|37 WAREHOUS|   960|1.00|    960| 22.70|0.90|    |    |     | 20.43|    960|   19613|     0.66|     |    12945
C|37 WAREHOUS|   720|1.00|    720| 22.70|0.90|    |    |     | 20.43|    720|   14710|     0.66|     |     9709
D|95 CANOPY  |  2200|1.00|   2200|  8.19|0.90|    |    |     |  7.37|   2200|   16214|     0.66|     |    10701
                2352HSF,    4552TSF                    RPCN-  37.39/HSF       87941 VALU-  24.68/HSF   58042

                                  STRUCTURE VALUE:                                                    58042
VALUATION|THIS CARD+CARD 2-NN=    VALUE|PREV-VAL.|P-N%|        |    |                CARD NO. 1    117128
LAND     |    42892|        0|    42892|    36590|117%|        |    |                CARD NO. 2     38553
OTHERFEAT|    16194|        0|    16194|    14524|111%|        |    |                TOTAL VALUE   155681
STRUCTURE|    58042|    38553|    96595|    78784|122%|        |    |     49TV/HSF
TOTAL    |   117128|    38553|   155681|   129898|119%|        |    |     49TV/HSF
                                                                                APPRAISED-VALUE:  155681
```

Richmond County GIS

ESRI ESRI Support Center Help

Tasks

Search Parcel By PIN
Search Parcel By Mailing Address
Search Parcel By Owner Name

Results

Map Contents

Navigation

Overview

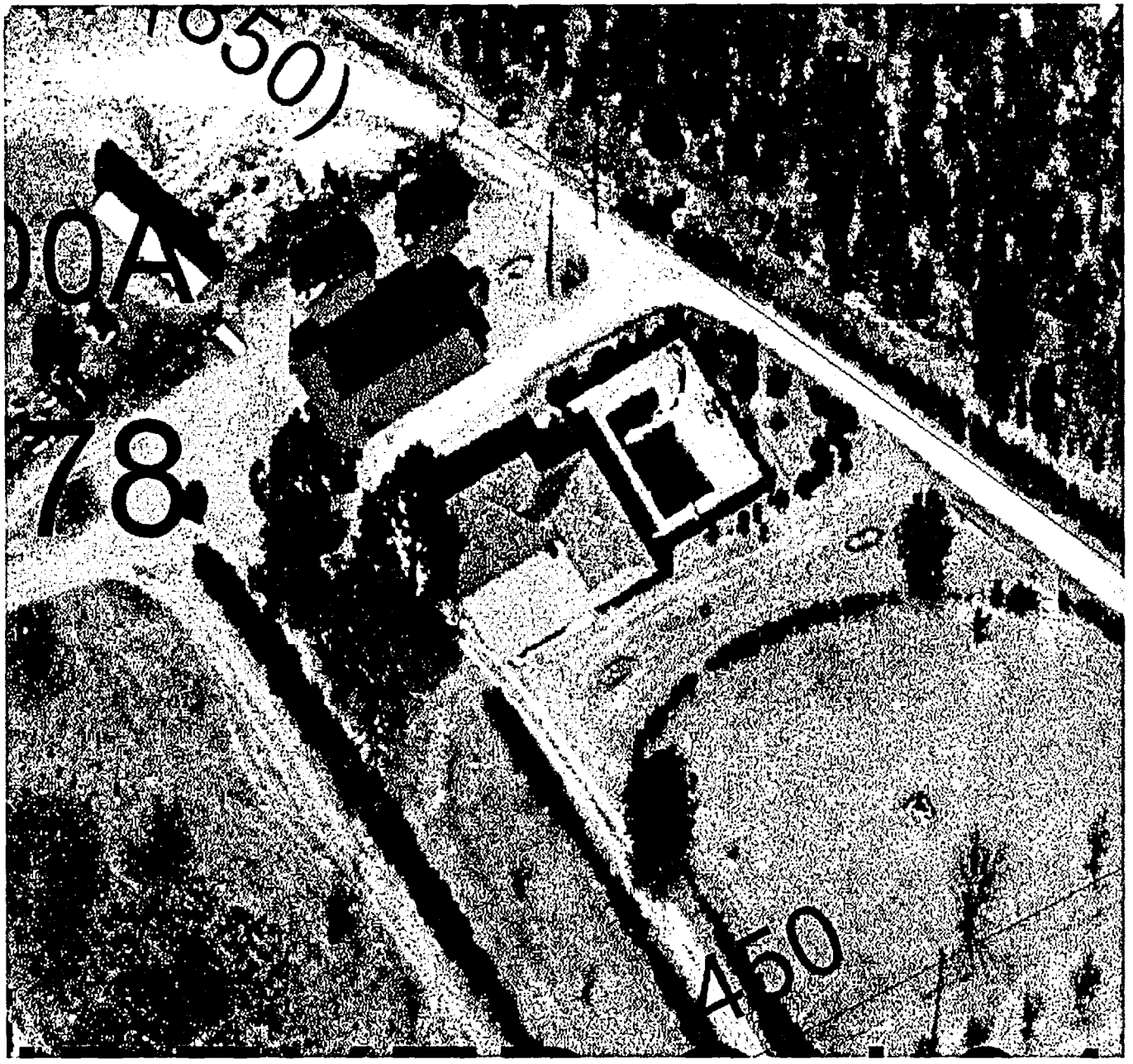
Print

Print Map: Click the button below to create a printer-friendly version of the current map.

Create Print Page

Print Property Card: Use the identify button on the toolbar to select a parcel, then click on the parcels PIN number in the identify results.

About



Richmond County GIS

ESRI ESRI Support Center Help

Tasks

Search Parcel By PIN
Search Parcel By Mailing Address
Search Parcel By Owner Name

Results

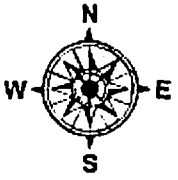
Results:
- Parcels
  - 23830

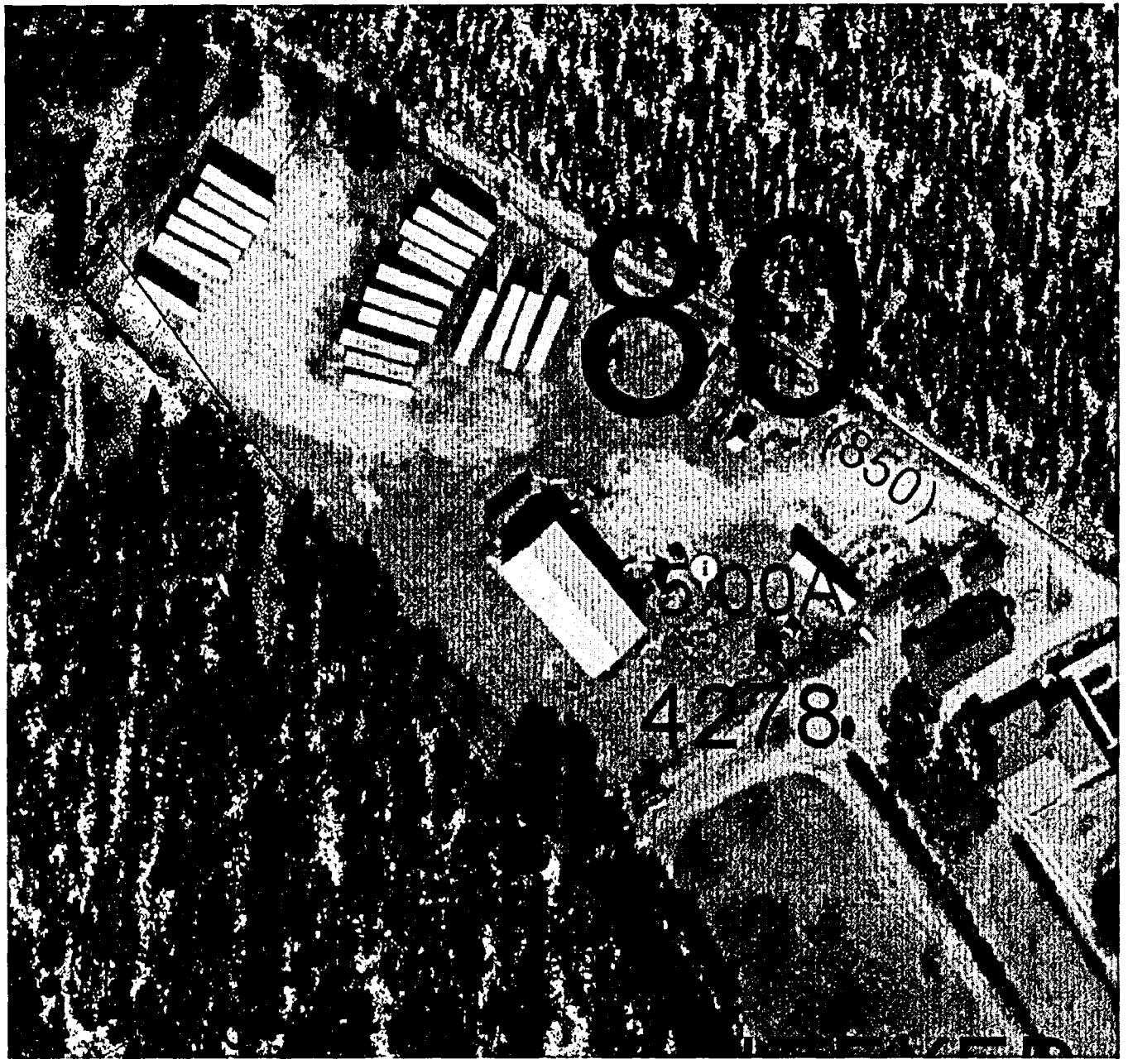
FID	23830
CALACRES	5.25640
PLATNUM	
PIN2	8403008

Map Contents

RICHMOND_IMS
- County
- Parcels
- Parcel Annotation
- Contour-10 feet
- Contour - 2 Foot
- Streams
- County Zoning

Navigation





```
OWNERSHIP 03122009   5863 305      |PROPERTY DESCRIPTION          |TAX SUBDIVISIONS    |MAP NUMBER    CARD NO
CHAPPELL MARY L                    |AC & DWELLING HWY 177         |MARKS CREEK         |840300804278        1
                                   |INF HEARING CHANGE FOR 09     |                    |RECORD NUMBER:. 26332
1061 HWY 177 N                     |                              |HAMLET FIRE         |ROUTE 8403 00 109
HAMLET, NC            28345        |                              |                    |LISTER:8/30/95SR
DEED: 670 859 09191984             |KO8  46 1                     |                    |REVIEW:3/10/09TV

.....17........14.....7..            |TOPO     |STREET   |UTILITY |ZONING        5.00 ACRES
:         :       :   :              |LEVEL    |PAVED    |PUBWATER|
:         8   D-  8   8              |         |         |SEPTIC  |       NOTES:DBA RICHMOND MULCH CO INC
:         :ENCPORCH:  :              |         |         |        |            :
:         :...14...:  :......20......|#|LAND CLASS |  SIZE  |BASERATE*FRNT*DPTH*ADJ=ADJRATE*UNITS=LND-VALUE
:         :                         :|1| 1GBLD SITE|  1.00AC|  6720|     |     |   |  6720| 1.00|    6720
:         :                         :|2|21GCLEAR   |  3.00AC|  3276| 0.70ACF|    |  2293| 3.00|    6879
:         :                         :|3|11GROADFTG |  1.00AC|  5040| 0.70ACF|    |  3528| 1.00|    3528
:         :                         :|
:         :                         :|
:         :                         :|
:         :                         :|LAND  VALUE:                                              17127
5         3                         :|#|OTHER FEAT |  SIZE  |BASERATE*COND        =ADJRATE*UNITS=OFB-VALUE
1   C-    5        A-               :|1| 6CSHOP    |  30*  54|  11.16|0.30|        |   3.35| 1620|    5427
:  SNG FAML:       SNG FAML         4|2| 1DUNFFRGAR|  16*  30|  14.96|0.10|        |   1.50|  480|     720
:         :                         3|3| 7DSHED    |  40*  60|   6.72|0.10|        |   0.67| 2400|    1608
:         :                         :|4|12CPOOL    |  20*  40|  21.50|0.50|        |  10.75|  800|    8600
:         :                         :|5|17DCHAINLKF|1300*   6|   1.01|0.30|        |   0.30| 7800|    2340
:         :                         :|6|11BUTILBLDG|  12*  20|   8.33|0.30|        |   2.50|  240|     600
:         :                         :|7|11DUTILBLDG|  20*  37|   5.26|0.50|        |   2.63|  740|    1946
:         :                         :|
:         :                         :|OTHER VALUE:                                              21241
:         @........28........       :|FNDATION|XTRFNISH|ROOFTYPE|ROOFMTRL|SIZE/QTY|
:         :                 :       :|BRICK   |BRICK   |HIP     |ASPHSHNG|        |
:         8        B-       8       :|        |        |        |        |1.00STHT|
:         :        OPNPORCH :       :|        |        |        |        |        |
:....17....:........28.......:...13...:|WALLFNSH|FLOORS  |HEAT&AIR|HEATFUEL|        |
                                     |PANEL   |TILE    |HTG & AC|ELECTRIC|        |
                                     |DRY WALL|CARPET  |        |        |  5 ROOM|
                                     |        |        |        |        |1.00LFUF|
                                     |
                                     |
DWELLING          C    B1968E1975      AVERAGE   CONDITION

DIMENSIONS:A-CU35R14U8R7D8R20D43L13U8L28 B-CD8R28U8L28 C-D8CL17U51R17D51 D-U35CR14U8L14D8H

#|STRUCTURE|SKTCH-SF*STHT=   AREA   RATE*GRDF+HEAT+EXWL*WLHT=ADJRAT*   AREA=    RPCN*     DEPF*CNDF=STR-VALUE
A| 1CSNG FAML|  1595|1.00|   1595| 56.48|    |2.50|2.50|    | 61.48|   1595|   98061|     0.67|    |    65701
 | 2.00 BATHS|      |    |       |      |    |    |    |    2210.00|       |    4420|     0.67|    |     2961
 | 1 FIREPLACE|     |    |       |      |    |    |    |   1795.30|       |    1795|     0.67|    |     1203
 | 1 CHIMNEYS|      |    |       |      |    |    |    |   966.70|        |     967|     0.67|    |      648
B|85 OPNPORCH|   224|1.00|    224| 21.16|    |    |    |   21.16|    224|    4740|     0.67|    |     3176
C| 1 SNG FAML|   867|1.00|    867| 56.48|    |2.50|2.50|    | 61.48|    867|   53303|     0.67|    |    35713
```

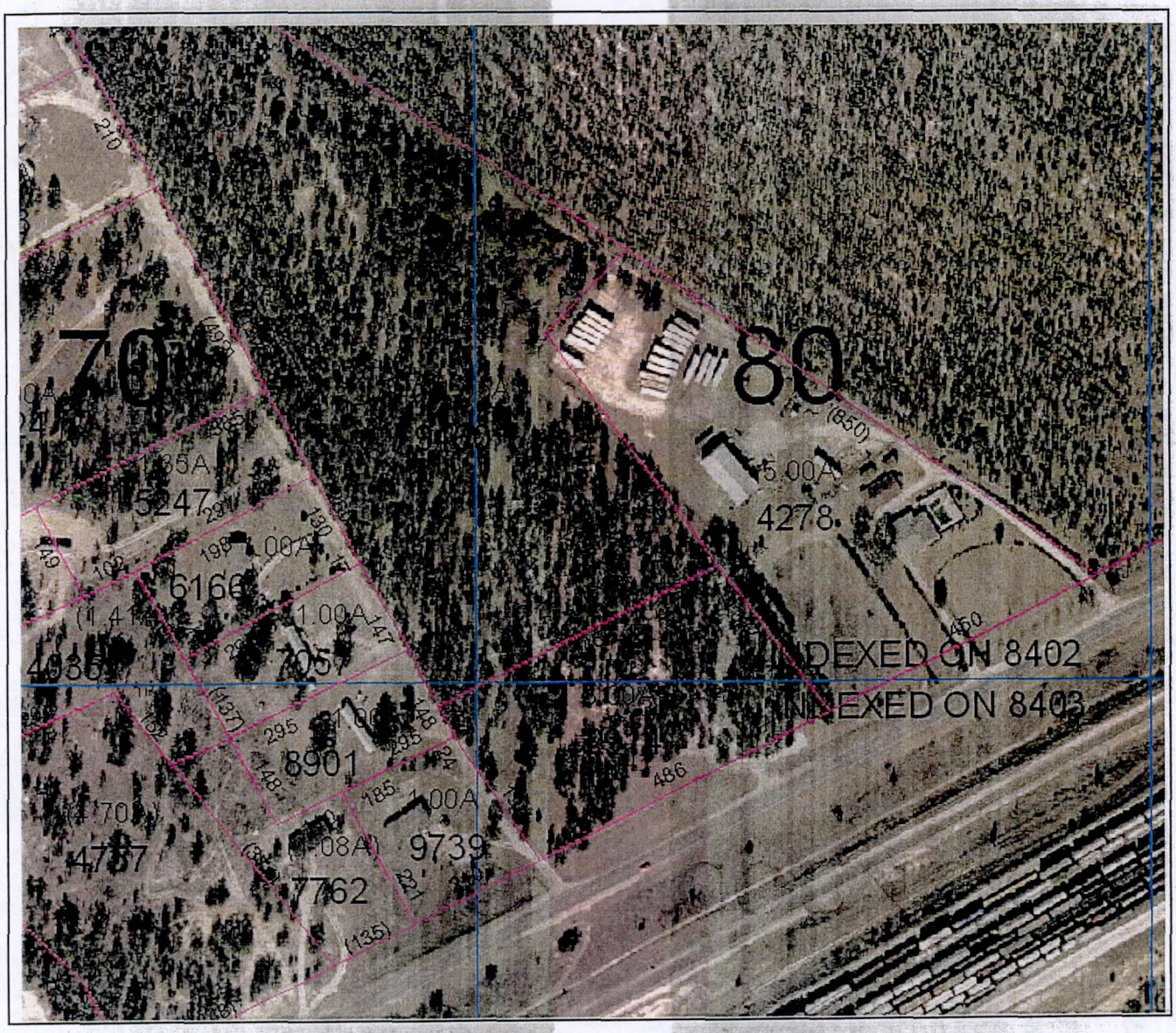
D|86 ENCPORCH|	112|1.00|	112| 31.79|	|	|	|	| 31.79|	112|	3560|	0.67|	|	2385
	2462HSF,	2798TSF				RPCN-	67.77/HSF		166846	VALU-	45.40/HSF		111787

STRUCTURE VALUE: 111787

VALUATION|			VALUE|	PREV-VAL.|	P-N%|				TOTAL VALUE	150155
LAND |	|	|	17127|	13170|	130%|	|	|	3425LV/AC		
OTHERFEAT|	|	|	21241|	33081|	64%|	|	|			
STRUCTURE|	|	|	111787|	97484|	114%|	|	|	60TV/HSF		
TOTAL |	|	|	150155|	143735|	104%|	|	|	60TV/HSF		
											APPRAISED-VALUE:	150155

RICHMOND COUNTY
NORTH CAROLINA

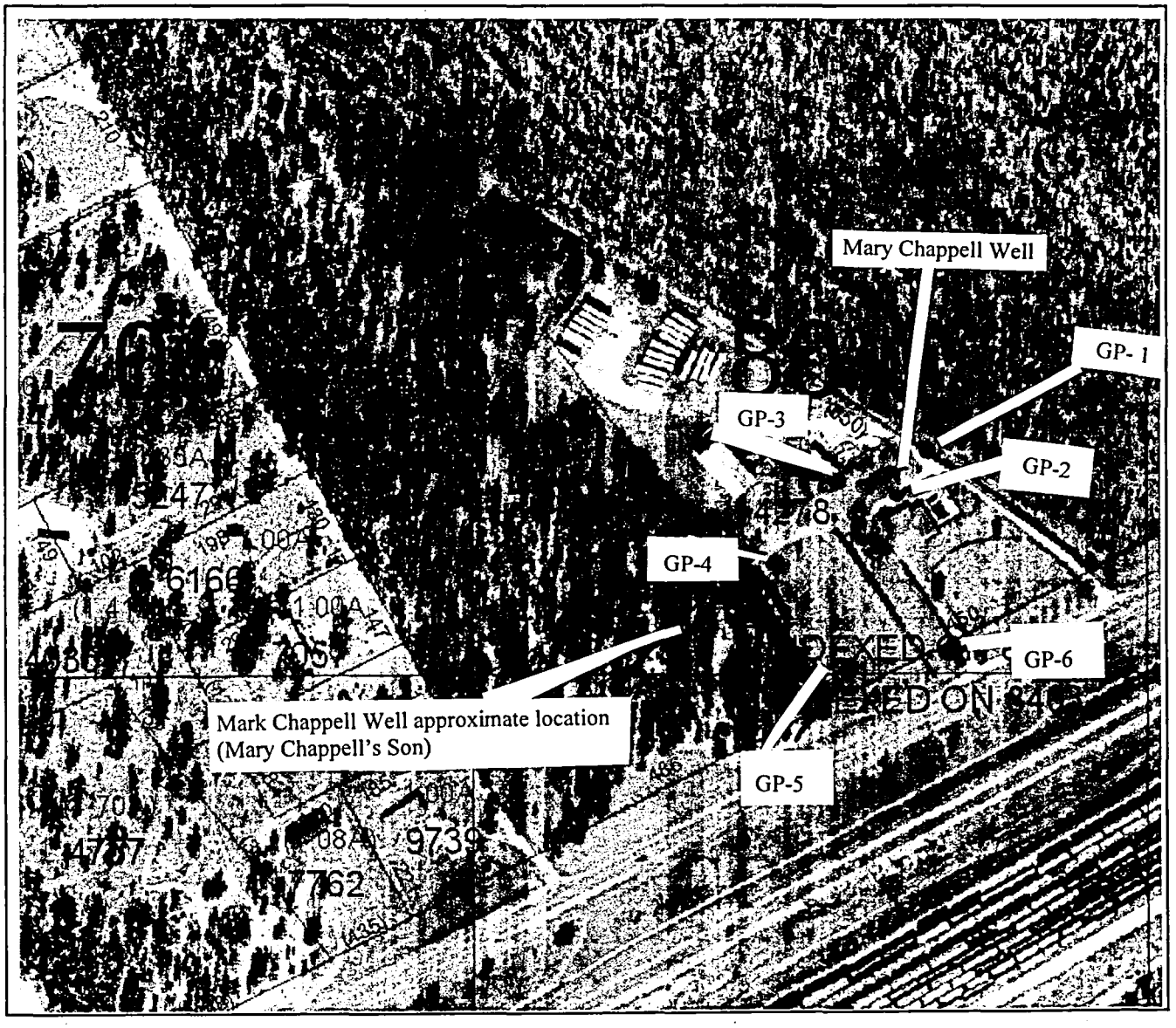
Printed On:
5/26/2010



Disclaimer: All information on this map is prepared for the inventory of real property found within Richmond County. All data, including maps, is compiled from recorded deeds, plats, and other public records and data. Users of this data are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information. All information contained herein was created for the County 's internal use. Richmond County, its agents and employees make no warranty as to the correctness or accuracy of the information set forth on this media whether express or implied, in fact or in law, including without limitation the implied warranties of merchantability and fitness for a particular use. Any resale of this data is strictly prohibited in accordance with North Carolina General Statute 132-10. Grid is based on North Carolina State Plane NAD83.

RICHMOND COUNTY
NORTH CAROLINA

Printed On:
5/26/2010



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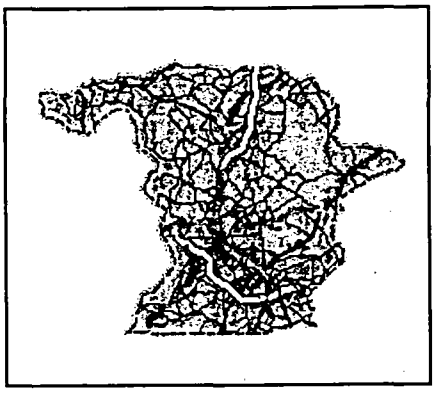


SEAN BOYLES
/HS/DWM

Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen Sullins, Director
Division of Water Quality

October 27, 2008

To: Owner /Resident
Re: Water Sample Lab No. AB36357

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

[✓] Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[ ] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. **If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.**

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

JIM BARBER

FOR Stephen A. Barnhardt

One NorthCarolina *Naturally*

North Carolina DWQ/Aquifer Protection Section 225 Green St./ Suite 714 Fayetteville, NC 28301 Phone (910) 433-3300
FAX (910) 486-0707 Internet: h2o.enr.state.nc.us Customer Service 1-877-623-6748

NC DWQ Laboratory Section Results

County: RICHMOND
River Basin
Report To FROAP
Collector: B TODD
Region: FRO
Sample Matrix: GROUNDWATER
Loc. Type: WATER SUPPLY
Emergency Yes/No YES
COC Yes/No YES

RECEIVED
OCT 27 2008
DENR-FAYETTEVILLE REGIONAL OFFICE

DIVISION OF WATER QUALITY DWQ

VisitID

Loc. Descr.: HERMAN RUSSELL

Sample ID: AB36357
PO Number # 8G1388
Date Received: 10/08/2008
Time Received: 07:45
Labworks LoginID SMATHIS
Date Reported: 10/10/08
Report Generated: 10/23/2008

QC 10/24/08

Location ID: 6I077127FLR	Collect Date: 10/07/2008	Collect Time:: 16:00	Sample Depth

Sample Qualifiers and Comments

?

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

I AR

NC DWQ Laboratory Section Results

Location ID: 6I077127FLR
Loc. Descr.: HERMAN RUSSELL
Visit ID

Sample ID: AB36357
Collect Date: 10/07/2008
Collect Time:: 16:00

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
LAB							
	Sample temperature at receipt by lab Method Reference		1.9		°C	DSAUNDERS 10/8/08	SMATHIS 10/8/08
VOL							
	Volatile Organics in liquid Method Reference EPA5030/624/8260		_TITLE_		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-78-1	Dichlorodifluoromethane Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
74-87-3	Chloromethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-01-4	Vinyl Chloride Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
74-83-9	Bromomethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-00-3	Chloroethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-69-4	Trichlorofluoromethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-35-4	1,1-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-09-2	Methylene Chloride Method Reference EPA5030/624/8260	10	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
156-60-5	trans-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
1634-04-4	Methyl Tert-Butyl Ether Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-34-3	1,1-Dichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
156-59-4	cis-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
74-97-5	Bromochloromethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
67-66-3	Chloroform Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
590-20-7	2,2-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08

NC DWQ Laboratory Section Results

Location ID: 6I077127FLR
Loc. Descr.: HERMAN RUSSELL
Visit ID

Sample ID: AB36357
Collect Date: 10/07/2008
Collect Time:: 16:00

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
107-06-2	1,2-Dichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
71-55-6	1,1,1-Trichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
563-58-6	1,1-Dichloropropene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
56-23-5	Carbon Tetrachloride Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
71-43-2	Benzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
74-95-3	Dibromomethane Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
78-87-5	1,2-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
79-01-6	Trichloroethene Method Reference EPA5030/624/8260	0.25	0.30		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-27-4	Bromodichloromethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
10061-01-5	cis-1,3-Dichloropropene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
10061-02-6	trans-1,3-Dichloropropene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
79-00-5	1,1,2-Trichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-88-3	Toluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
142-28-9	1,3-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
124-48-1	Dibromochloromethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
106-93-4	(EDB)1,2-Dibromoethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
127-18-4	Tetrachloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-90-7	Chlorobenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08

NC DWQ Laboratory Section Results

Location ID: 6I077127FLR
Loc. Descr.: HERMAN RUSSELL
Visit ID

Sample ID: AB36357
Collect Date: 10/07/2008
Collect Time:: 16:00

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
100-41-4	Ethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-25-2	Bromoform Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-38-3	m,p-Xylene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
100-42-5	Styrene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
79-34-5	1,1,2,2-Tetrachloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
630-20-6	1,1,1,2-Tetrachloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
95-47-6	o-Xylene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
96-18-4	1,2,3-Trichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
98-82-8	Isopropylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-86-1	Bromobenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
103-65-1	n-Propylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
95-49-8	2-Chlorotoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
106-43-4	4-Chlorotoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-67-8	1,3,5-Trimethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
98-06-6	tert-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
95-63-6	1,2,4-Trimethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
135-98-8	sec-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
543-73-1	m-Dichlorobenzene (1,3) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08

NC DWQ Laboratory Section Results

Location ID: 6I077127FLR
Loc. Descr.: HERMAN RUSSELL
Visit ID

Sample ID: AB36357
Collect Date: 10/07/2008
Collect Time:: 16:00

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
106-46-7	p-Dichlorobenzene (1,4) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
95-50-1	o-Dichlorobenzene (1,2) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
99-87-6	p-Isopropyltoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
104-51-8	n-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
96-12-8	1,2-Dibromo-3-Chloropropane Method Reference EPA5030/624/8260	2.0	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
120-82-1	1,2,4-Trichlorobenzene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
91-20-3	Naphthalene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
87-68-3	Hexachlorobutadiene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
87-61-6	1,2,3-Trichlorobenzene Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08

GROUNDWATER FIELD/LAB FORM

COC

North Carolina
Department of Environment and Natural Resources
DIVISION OF WATER QUALITY-GROUNDWATER SECTION

Location code [redacted] 6I077127FLR

SAMPLE TYPE	SAMPLE PRIORITY
☑ Water	☐ Routine
☐ Soil	☑ Emergency
☐ Other	
☑ Chain of Custody	

127FLR

861388

Lab Number AB36357

County Richmond

Quad No. _____ Serial No. _____

Lat. _____ Long. _____

Date Received 10-8-08 Time: 0745

Rec'd By: _____ From: Bus, Courier, Hand Del.,

Other: kp

Data Entry By: _____ Ck: _____

Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____

Shipped by: Bus, Courier, Hand Del., Other: _____

Collector(s): BillTodd

Date 10/7/08 Time 4:00 Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: _____ (circle one)

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C

Temp. 10 _____ °C Odor _____

Appearance _____

Field Analysis By: BillTodd

Owner Herman Russell

Location or Site 127 Fruitland Rd

Description of sampling point Outside tap

Sampling Method pump (Pump, bailer, etc.) Sample Interval _____

Remarks _____ (Pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC 680	mg/L
	Turbidity 76	NTU
	Residue, Suspended 530	mg/L
	pH 403	units
	Alkalinity to pH 4.5 410	mg/L
	Alkalinity to pH 8.3 415	mg/L
	Carbonate 445	mg/L
	Bicarbonate 440	mg/L
	Carbon dioxide 405	mg/L
	Chloride 940	mg/L
	Chromium: Hex 1032	ug/L
	Color: True 80	CU
	Cyanide 720	mg/L

	Diss. Solids 70300	mg/L
	Fluoride 951	mg/L
	Hardness: Total 900	mg/L
	Hardness (non-carb) 902	mg/L
	Phenols 32730	ug/l
	Specific Cond. 95	uMhos/cm
	Sulfate 945	mg/L
	Sulfide 745	mg/L
	Oil and Grease	mg/L
	NH_3 as N 610	mg/L
	TKN as N 625	mg/L
	$NO_2 + NO_3$ as N 630	mg/L
	P: Total as P 665	mg/L
	Nitrate (NO_3 as N) 620	mg/L
	Nitrite (NO_2 as N) 615	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadmium 46559	ug/L
	Cr-Chromium 46559	ug/L
	Cu-Copper 46562	ug/L
	Fe-Iron 46563	ug/L
	Hg-Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg-Magnesium 46554	mg/L
	Mn-Manganese 46565	ug/L
	Na-Sodium 46556	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn-Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	PCBs
	Semivolatile Organics
	TPH-Diesel Range
X	Volatile Organics (VOA bottle)
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

LAB USE ONLY
Temperature on arrival (°C): 1.9

Lab Comments _____

GW-54 REV 7/03 For Dissolved Analysis-submit filtered sample and write "DIS" in block.

DEAN DOYLE> IHS/DWM

Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen Sullins, Director
Division of Water Quality

October 20, 2008

To: Owner /Resident
Re: Water Sample Lab No. AB36343

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

[✓] Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[ ] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. **If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.**

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Jim Barber

FOR Stephen A. Barnhardt

One NorthCarolina *Naturally*

North Carolina DWQ/Aquifer Protection Section 225 Green St./ Suite 714 Fayetteville, NC 28301 Phone (910) 433-3300
FAX (910) 486-0707 Internet: h2o.enr.state.nc.us Customer Service 1-877-623-6748

NC DWQ Laboratory Section Results

County: RICHMOND
River Basin
Report To FROAP
Collector: B TODD
Region: FRO
Sample Matrix: GROUNDWATER
Loc. Type: WATER SUPPLY
Emergency Yes/No YES
COC Yes/No YES

DIVISION OF WATER QUALITY DWQ

VisitID

Loc. Descr.: JOHN RUSSELL

Sample ID: AB36343
PO Number # 8G1374
Date Received: 10/08/2008
Time Received: 07:45
Labworks LoginID SMATHIS
Date Reported: 10/10/08
Report Generated: 10/10/2008

gc 10/10/08

Location ID: 6I077289FR	Collect Date: 10/07/2008	Collect Time:: 11:34	Sample Depth

Sample Qualifiers and Comments

RECEIVED
OCT 20 2008
DENR-FAYETTEVILLE REGIONAL OFFICE

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

I AR

NC DWQ Laboratory Section Results

Location ID: 6I077289FR
Loc. Descr.: JOHN RUSSELL
Visit ID

Sample ID: AB36343
Collect Date: 10/07/2008
Collect Time:: 11:34

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
LAB							
	Sample temperature at receipt by lab Method Reference		1.9		°C	DSAUNDERS 10/8/08	SMATHIS 10/8/08
VOL							
	Volatile Organics in liquid Method Reference EPA5030/624/8260		_TITLE_		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-78-1	Dichlorodifluoromethane Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
74-87-3	Chloromethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-01-4	Vinyl Chloride Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
74-83-9	Bromomethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-00-3	Chloroethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-69-4	Trichlorofluoromethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-35-4	1,1-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-09-2	Methylene Chloride Method Reference EPA5030/624/8260	10	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
156-60-5	trans-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
1634-04-4	Methyl Tert-Butyl Ether Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-34-3	1,1-Dichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
156-59-4	cis-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
74-97-5	Bromochloromethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
67-66-3	Chloroform Method Reference EPA5030/624/8260	0.25	1.8		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
590-20-7	2,2-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08

NC DWQ Laboratory Section Results

Location ID: 6I077289FR
Loc. Descr.: JOHN RUSSELL
Visit ID

Sample ID: AB36343
Collect Date: 10/07/2008
Collect Time:: 11:34

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
107-06-2	1,2-Dichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
71-55-6	1,1,1-Trichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
563-58-6	1,1-Dichloropropene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
56-23-5	Carbon Tetrachloride Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
71-43-2	Benzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
74-95-3	Dibromomethane Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
78-87-5	1,2-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
79-01-6	Trichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-27-4	Bromodichloromethane Method Reference EPA5030/624/8260	0.25	1.3		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
10061-01-5	cis-1,3-Dichloropropene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
10061-02-6	trans-1,3-Dichloropropene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
79-00-5	1,1,2-Trichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
108-88-3	Toluene Method Reference EPA5030/624/8260	0.25	0.23	N3	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
142-28-9	1,3-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
124-48-1	Dibromochloromethane Method Reference EPA5030/624/8260	0.25	1.4		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
106-93-4	(EDB)1,2-Dibromoethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
127-18-4	Tetrachloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
108-90-7	Chlorobenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08

NC DWQ Laboratory Section Results

Location ID: 6I077289FR
Loc. Descr.: JOHN RUSSELL
Visit ID

Sample ID: AB36343
Collect Date: 10/07/2008
Collect Time:: 11:34

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
100-41-4	Ethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
75-25-2	Bromoform Method Reference EPA5030/624/8260	1.0	0.73	N3	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
108-38-3	m,p-Xylene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
100-42-5	Styrene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
79-34-5	1,1,2,2-Tetrachloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
630-20-6	1,1,1,2-Tetrachloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
95-47-6	o-Xylene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
96-18-4	1,2,3-Trichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
98-82-8	Isopropylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
108-86-1	Bromobenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
103-65-1	n-Propylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
95-49-8	2-Chlorotoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
106-43-4	4-Chlorotoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
108-67-8	1,3,5-Trimethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
98-06-6	tert-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
95-63-6	1,2,4-Trimethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
135-98-8	sec-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
543-73-1	m-Dichlorobenzene (1,3) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08

NC DWQ Laboratory Section Results

Location ID: 6I077289FR
Loc. Descr.: JOHN RUSSELL
Visit ID

Sample ID: AB36343
Collect Date: 10/07/2008
Collect Time:: 11:34

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
106-46-7	p-Dichlorobenzene (1,4) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
95-50-1	o-Dichlorobenzene (1,2) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
99-87-6	p-Isopropyltoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
104-51-8	n-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
96-12-8	1,2-Dibromo-3-Chloropropane Method Reference EPA5030/624/8260	2.0	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
120-82-1	1,2,4-Trichlorobenzene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
91-20-3	Naphthalene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
87-68-3	Hexachlorobutadiene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08
87-61-6	1,2,3-Trichlorobenzene Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	ATERRY 10/8/08	RKELLING 10/9/08

GROUNDWATER FIELD/LAB FORM

COC

North Carolina
Department of Environment and Natural Resources
DIVISION OF WATER QUALITY-GROUNDWATER SECTION

Location code [redacted] 61077289FR

County Richmond

Quad No _____ Serial No. _____

Lat. _____ Long. _____

SAMPLE TYPE	SAMPLE PRIORITY
☑ Water	☐ Routine
☐ Soil	☑ Emergency
☐ Other	
☑ Chain of Custody	

289FR

Lab Number 8G1374 AB36343

Date Received 10-08-08 Time: 0745

Rec'd By: From: Bus, Courier, Hand Del.,

Other: HP

Data Entry By: _____ Ck: _____

Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____

Shipped by: Bus, Courier, Hand Del., Other: _____

Collector(s): BillTodd

Date 10/7/08 Time 11:34

Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: _____ (circle one)

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C

Temp. 10 _____ °C Odor _____

Appearance _____

Field Analysis By: BillTodd

Owner John Russell

Location or Site 289 Fox Road

Description of sampling point outside tap

Sampling Method pump (Pump, bailer, etc.) Sample Interval _____

Remarks New construction (Pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC 680	mg/L
	Turbidity 76	NTU
	Residue, Suspended 530	mg/L
	pH 403	units
	Alkalinity to pH 4.5 410	mg/L
	Alkalinity to pH 8.3 415	mg/L
	Carbonate 445	mg/L
	Bicarbonate 440	mg/L
	Carbon dioxide 405	mg/L
	Chloride 940	mg/L
	Chromium: Hex 1032	ug/L
	Color: True 80	CU
	Cyanide 720	mg/L

	Diss. Solids 70300	mg/L
	Fluoride 951	mg/L
	Hardness: Total 900	mg/L
	Hardness (non-carb) 902	mg/L
	Phenols 32730	ug/l
	Specific Cond. 95	uMhos/cm
	Sulfate 945	mg/L
	Sulfide 745	mg/L
	Oil and Grease	mg/L
	NH_3 as N 610	mg/L
	TKN as N 625	mg/L
	$NO_2 + NO_3$ as N 630	mg/L
	P: Total as P 665	mg/L
	Nitrate (NO_3 as N) 620	mg/L
	Nitrite (NO_2 as N) 615	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadmium 46559	ug/L
	Cr-Chromium 46559	ug/L
	Cu-Copper 46562	ug/L
	Fe-Iron 46563	ug/L
	Hg-Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg-Magnesium 46554	mg/L
	Mn-Manganese 46565	ug/L
	Na-Sodium 46556	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn-Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	PCBs
	Semivolatile Organics
	TPH-Diesel Range
X	Volatile Organics (VOA bottle)
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

LAB USE ONLY
Temperature on arrival (°C): 1.9

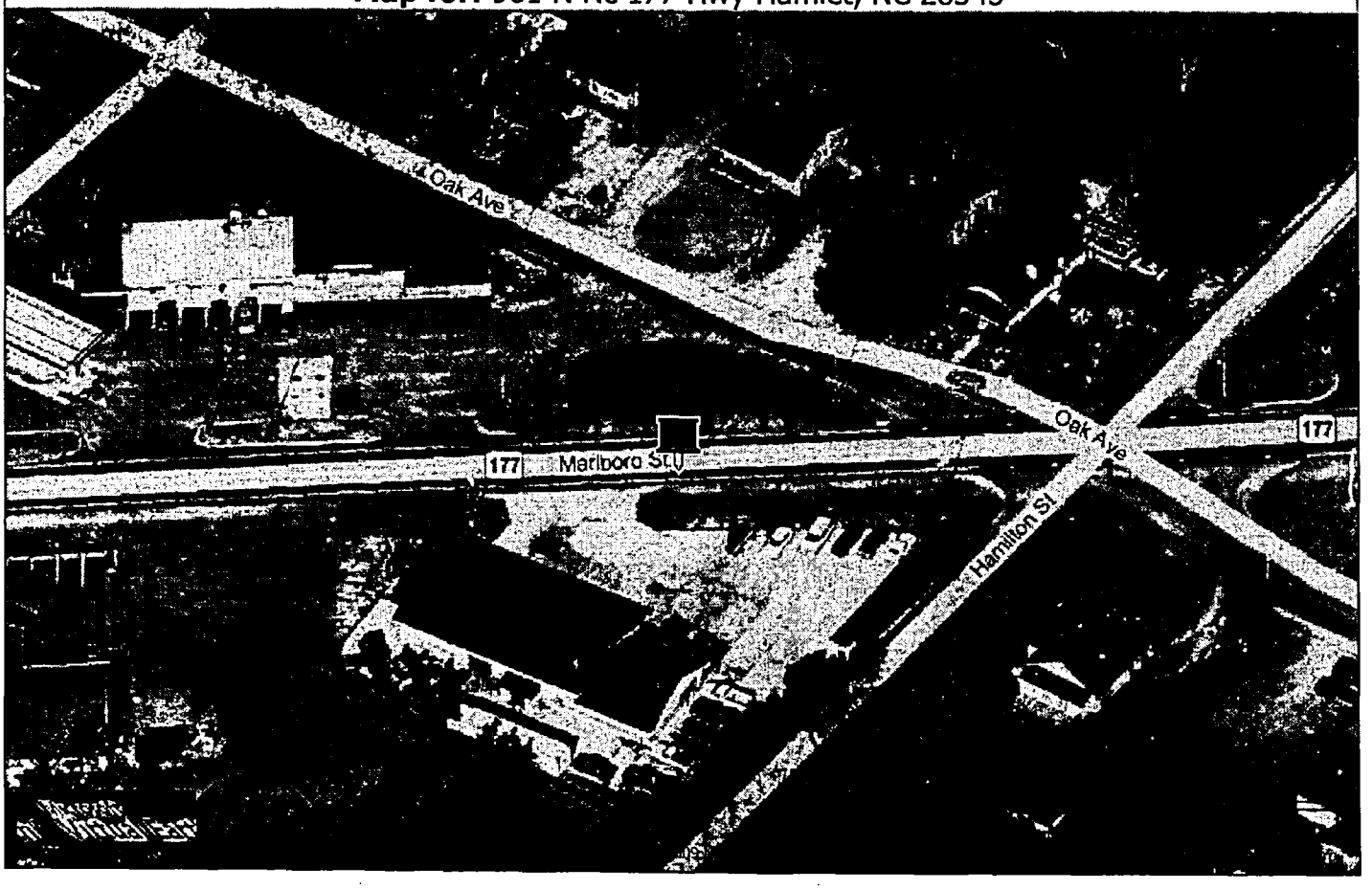
Lab Comments _____

GW-54 REV. 7/03 For Dissolved Analysis-submit filtered sample and write "DIS" in block.

Switchboard® Your Digital Directory

Find a Business | Find a Person | Maps & Directions | Search by Phone | Area & Zip Codes | Web Search

Map for: 961 N Nc 177 Hwy Hamlet, NC 28345



Find A Map

Address: 961 N Nc 177 Hwy

City: Hamlet

State: North Carolina

Zip: 28345

Search

Get Driving Directions

Route Type: (•) Fastest ( ) Shortest Distance

Start Address:

Address:

City:

State

Zip:

End Address:

Address: 961 N Nc 177 Hwy

City: Hamlet

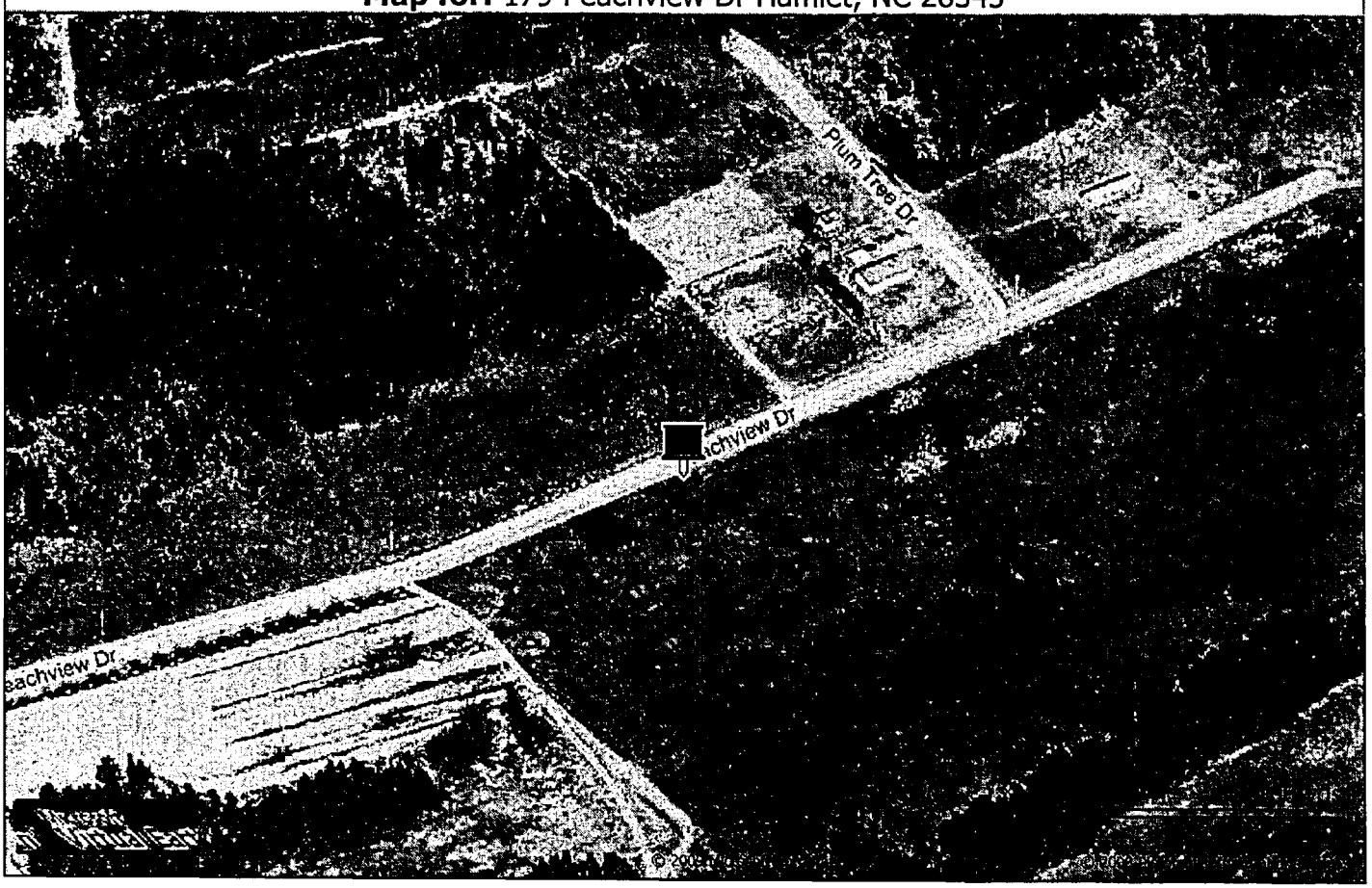
State:

Zip:

Switchboard® Your Digital Directory

Find a Business | Find a Person | Maps & Directions | Search by Phone | Area & Zip Codes | Web Search

Map for: 179 Peachview Dr Hamlet, NC 28345



Find A Map

Address: 179 Peachview Dr

City: Hamlet

State: North Carolina

Zip: 28345

Search

Get Driving Directions

Route Type: (•) Fastest ( ) Shortest Distance

Start Address:

Address:

City:

State

Zip:

End Address:

Address: 179 Peachview Dr

City: Hamlet

State:

Zip:

October 3, 2008

MEMORANDUM

TO: Hanna Assefa, Industrial Hygienist
Superfund Section, Inactive Hazardous Site Branch (IHSB)

FROM: Sean Boyles
Fayetteville Regional Office, IHSB

RE: Health Risk Evaluation Request
Anna Harrison Residence, 961 N. Hwy 177
Hamlet, Richmond County, North Carolina

This sample was collected from a private residential supply well as part of investigation for pesticides around peach orchards. An analysis for volatile organic compounds was performed and the following constituents were detected:

Analyte	Detected Concentration	Units	2L Groundwater Standard
Trichloroethene	0.12	ug/L	2.8 ug/L
Naphthalene	0.32	ug/l	21 ug/l
1,4-dichlorobenzene	0.26	ug/l	1.4 ug/l

If you have any questions, please give me a call at 910.433.3345.

DIVISION OF WATER QUALITY
DWQ

SEAN BOYCE-
IHS/DWM

Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen Sullins, Director
Division of Water Quality

October 29, 2008

To: Owner /Resident
Re: Water Sample Lab No. AB37049 (Richmond County/Chavis)

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

[✓] Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[ ] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. **If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.**

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

JIM BARBER

FOR Stephen A. Barnhardt

One NorthCarolina *Naturally*

North Carolina DWQ/Aquifer Protection Section 225 Green St./ Suite 714 Fayetteville, NC 28301 Phone (910) 433-3300
FAX (910) 486-0707 Internet: h2o.enr.state.nc.us Customer Service 1-877-623-6748

NC DWQ Laboratory Section Results

County: RICHMOND
River Basin
Report To FROAP
Collector: B TODD
Region: FRO
Sample Matrix: GROUNDWATER
Loc. Type: WATER SUPPLY
Emergency Yes/No Yes
COC Yes/No Yes

Sample ID: AB37049
PO Number # 8G1446
Date Received: 10/24/2008
Time Received: 08:00
Labworks LoginID HPARKER
Date Reported: 10/27/08
Report Generated: 10/27/2008

VisitID

Loc. Descr.: 179 PEACH VIEW HAMLET

Location ID: FROAPNLC	Collect Date: 10/23/2008	Collect Time:: 13:43	Sample Depth

Sample Qualifiers and Comments

RECEIVED
OCT 29 2008
DENR-FAYETTEVILLE REGIONAL OFFICE

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

I AR

NC DWQ Laboratory Section Results

Location ID: FROAPNLC
Loc. Descr.: 179 PEACH VIEW HAMLET
Visit ID

Sample ID: AB37049
Collect Date: 10/23/2008
Collect Time:: 13:43

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
LAB							
	Sample temperature at receipt by lab Method Reference		1.5		°C	DSAUNDERS 10/24/08	HPARKER 10/24/08
VOL							
	Volatile Organics in liquid Method Reference EPA5030/624/8260		_TITLE_		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-78-1	Dichlorodifluoromethane Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
74-87-3	Chloromethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-01-4	Vinyl Chloride Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
74-83-9	Bromomethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-00-3	Chloroethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-69-4	Trichlorofluoromethane Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-35-4	1,1-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-09-2	Methylene Chloride Method Reference EPA5030/624/8260	10	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
156-60-5	trans-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
1634-04-4	Methyl Tert-Butyl Ether Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-34-3	1,1-Dichloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
156-59-4	cis-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
74-97-5	Bromochloromethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
67-66-3	Chloroform Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
590-20-7	2,2-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08

NC DWQ Laboratory Section Results

Location ID: FROAPNLC
Loc. Descr.: 179 PEACH VIEW HAMLET
Visit ID

Sample ID: AB37049
Collect Date: 10/23/2008
Collect Time:: 13:43

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
107-06-2	1,2-Dichloroethane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
71-55-6	1,1,1-Trichloroethane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
563-58-6	1,1-Dichloropropene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
56-23-5	Carbon Tetrachloride	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
71-43-2	Benzene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
74-95-3	Dibromomethane	1.0	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
78-87-5	1,2-Dichloropropane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
79-01-6	Trichloroethene	0.25	0.14	N3	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
75-27-4	Bromodichloromethane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
10061-01-5	cis-1,3-Dichloropropene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
10061-02-6	trans-1,3-Dichloropropene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
79-00-5	1,1,2-Trichloroethane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
108-88-3	Toluene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
142-28-9	1,3-Dichloropropane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
124-48-1	Dibromochloromethane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
106-93-4	(EDB)1,2-Dibromoethane	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
127-18-4	Tetrachloroethene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						
108-90-7	Chlorobenzene	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
	Method Reference EPA5030/624/8260						

NC DWQ Laboratory Section Results

Location ID: FROAPNLC
Loc. Descr.: 179 PEACH VIEW HAMLET
Visit ID

Sample ID: AB37049
Collect Date: 10/23/2008
Collect Time:: 13:43

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
100-41-4	Ethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-25-2	Bromoform Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
108-38-3	m,p-Xylene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
100-42-5	Styrene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
79-34-5	1,1,2,2-Tetrachloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
630-20-6	1,1,1,2-Tetrachloroethane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
95-47-6	o-Xylene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
96-18-4	1,2,3-Trichloropropane Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
98-82-8	Isopropylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
108-86-1	Bromobenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
103-65-1	n-Propylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
95-49-8	2-Chlorotoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
106-43-4	4-Chlorotoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
108-67-8	1,3,5-Trimethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
98-06-6	tert-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
95-63-6	1,2,4-Trimethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
135-98-8	sec-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
543-73-1	m-Dichlorobenzene (1,3) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08

NC DWQ Laboratory Section Results

Location ID: FROAPNLC
Loc. Descr.: 179 PEACH VIEW HAMLET
Visit ID

Sample ID: AB37049
Collect Date: 10/23/2008
Collect Time:: 13:43

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
106-46-7	p-Dichlorobenzene (1,4) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
95-50-1	o-Dichlorobenzene (1,2) Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
99-87-6	p-Isopropyltoluene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
104-51-8	n-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
96-12-8	1,2-Dibromo-3-Chloropropane Method Reference EPA5030/624/8260	2.0	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
120-82-1	1,2,4-Trichlorobenzene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
91-20-3	Naphthalene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
87-68-3	Hexachlorobutadiene Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08
87-61-6	1,2,3-Trichlorobenzene Method Reference EPA5030/624/8260	1.0	Not detected		ug/L	ATERRY 10/25/08	RKELLING 10/27/08

GROUNDWATER FIELD/LAB FORM

COC, EMER

North Carolina
Department of Environment and Natural Resources
DIVISION OF WATER QUALITY-GROUNDWATER SECTION

Location code [redacted] 61077179 PV

County Richmond

Quad No _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE TYPE	SAMPLE PRIORITY
☑ Water	☐ Routine
☐ Soil	☑ Emergency
☐ Other	
☑ Chain of Custody	

179PV

Lab Number 8G1446 AB37049
Date Received 10-24-08 Time: 0800
Rec'd By: _____ From: Bus, Courier, Hand Del.,
Other: HP
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): BillTodd
Date 10/23/08 Time 1:43
Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: _____ (circle one)

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C
Temp. 10 _____ °C Odor _____
Appearance _____
Field Analysis By: BillTodd

Owner Marshall Chavis
Location or Site 179 Peach View Hamlet
Description of sampling point outside tap
Sampling Method pump (Pump, bailer, etc.) Sample Interval _____
Remarks _____ (Pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD 310	mg/L		Diss. Solids 70300	mg/L		Ag-Silver 46566	ug/L		Organochlorine Pesticides
	COD High 340	mg/L		Fluoride 951	mg/L		Al-Aluminum 46557	ug/L		Organophosphorus Pesticides
	COD Low 335	mg/L		Hardness: Total 900	mg/L		As-Arsenic 46551	ug/L		Nitrogen Pesticides
	Coliform: MF Fecal 31616	/100ml		Hardness (non-carb) 902	mg/L		Ba-Barium 46558	ug/L		Acid Herbicides
	Coliform: MF Total 31504	/100ml		Phenols 32730	ug/l		Ca-Calcium 46552	mg/L		PCBs
	TOC 680	mg/L		Specific Cond. 95	uMhos/cm		Cd-Cadmium 46559	ug/L		
	Turbidity 76	NTU		Sulfate 945	mg/L		Cr-Chromium 46559	ug/L		
	Residue, Suspended 530	mg/L		Sulfide 745	mg/L		Cu-Copper 46562	ug/L		
							Fe-Iron 46563	ug/L		Semivolatile Organics
				Oil and Grease	mg/L		Hg-Mercury 71900	ug/L		TPH-Diesel Range
	pH 403	units					K-Potassium 46555	mg/L		
	Alkalinity to pH 4.5 410	mg/L					Mg-Magnesium 46554	mg/L		
	Alkalinity to pH 8.3 415	mg/L					Mn-Manganese 46565	ug/L	X	Volatile Organics (VOA bottle)
	Carbonate 445	mg/L		NH_3 as N 610	mg/L		Na-Sodium 46556	mg/L		TPH-Gasoline Range
	Bicarbonate 440	mg/L		TKN as N 625	mg/L		Ni-Nickel	ug/L		TPH-BTEX Gasoline Range
	Carbon dioxide 405	mg/L		$NO_2 + NO_3$ as N 630	mg/L		Pb-Lead 46564	ug/L		
	Chloride 940	mg/L		P: Total as P 665	mg/L		Se-Selenium	ug/L		
	Chromium: Hex 1032	ug/L		Nitrate (NO_3 as N) 620	mg/L		Zn-Zinc 46567	ug/L		
	Color: True 80	CU		Nitrite (NO_2 as N) 615	mg/L					
	Cyanide 720	mg/L								

LAB USE ONLY
Temperature on arrival (°C): 1.5

Lab Comments _____

GW-54 REV 7/03 For Dissolved Analysis-submit filtered sample and write "DIS" in block.

ID #	SITE NAME	ADDRESS	CITY
Number of Sites: 31			
COUNTY: RICHMOND			
NCD000616219	GA-PACIFIC CORP	HWY 177 S	HAMLET
NONCD0002164	NCDOT ASPHALT SITE #3/BROWN PAVING	INTERSECTION OF SR 1305 AND HW	ROCKINGHAM
NONCD0002400	RICHMOND APPAREL/FRUIT OF THE LOOM	HWY 74 WEST	ROCKINGHAM
NCD980602791	SALVAGE OIL OF AMERICA	1227 MCLEOD STREET	ROCKINGHAN
NCD000828566	TARTAN MARINE PROPERTY	NC HIGHWAY 77 & SR 2032	HAMLET
NONCD0002741	WIND BLOW PRIVATE SUPPLY WELLS	2691 DERBY ROAD	ELLERBE
Number of Sites: 6			
COUNTY: ROBESON			
NONCD0001236	ALAMNAC KNIT PRODUCTS, INC.	1885 ALAMAC ROAD (SR 2289)	LUMBERTON
NCD986209575	CARDINAL CHEMICAL WAREHOUSE FIRE	NC 211 & NC 72	LUMBERTON
NCD000830620	CAROLINA P&L CO. WEATHERSPOON STEAM	74 EAST	LUMBERTON
NONCD0001466	CATES PICKLE--PARKTON	REX RD., BOX 146	PARKTON
NONCD0001540	CONGENTRIX-LUMBERTON	HESTERTOWN ROAD (SR 2202)	LUMBERTON
NONCD0001947	KAYSER-ROTH	3707 W. 5TH ST	LUMBERTON
NONCD0002049	MAXTON OIL & FERT. CO.		MAXTON
NONCD0002250	OXENDINE PORK FARM	SR 1318	SHANNON
NONCD0002444	SANFATEX	HIGHWAY 211	RED SPRINGS
NCD980503106	SANITATION SERV LAND	SR 1743	SAINT PAULS
NONCD0002542	STEPHENS CLEANERS	IONA AND MAIN STREET	FAIRMONT
NCD045924032	WEST POINT PEPPERELL LUMBERTON	CHESTNUT ST EXTN	LUMBERTON
Number of Sites: 12			
COUNTY: ROCKINGHAM			
NONCD0001256	AMERICAN TOBACCO CO. - NONUST	301 N.SCALES STREET	REIDSVILLE
NONCD0001348	BIG APPLE FARM SUPPLY - SOLVENTS	407 SW MARKET STREET	REIDSVILLE
NONCD0001390	BROWN, FRANCES AND LARRY SOMERS WELLS	3089 NC 150	REIDSVILLE
NONCD0001400	BURLINGTON HOUSE REIDSVILLE PLANT	2362 HOLIDAY LOOP ROAD	REIDSVILLE

October 3, 2008

MEMORANDUM

TO: Hanna Assefa, Industrial Hygienist
Superfund Section, Inactive Hazardous Site Branch (IHSB)

FROM: Sean Boyles
Fayetteville Regional Office, IHSB

RE: Health Risk Evaluation Request
William Brown Residence, 115 Fruitland Road
Hamlet, Richmond County, North Carolina

This sample was collected from a private residential supply well as part of investigation for pesticides around peach orchards. An analysis for volatile organic compounds was performed and the following constituents were detected:

Analyte	Detected Concentration	Units	2L Groundwater Standard
Trichloroethene	1.2	ug/L	2.8 ug/L

If you have any questions, please give me a call at 910.433.3345.

DWM
IHS

Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen Sullins, Director
Division of Water Quality

September 29, 2008

To: Owner /Resident
Re: Water Sample Lab No. AB35629

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

[✓] Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[ ] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. **If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.**

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Jim Barber

FOR Stephen A. Barnhardt

NC DWQ Laboratory Section Results

County:	RICHMOND	Sample ID:	AB35629
River Basin		PO Number #	8G1286
Report To	FROAP	Date Received:	09/18/2008
		Time Received:	08:00
Collector:	B TODD	Labworks LoginID	SMATHIS
Region:	FRO	Date Reported:	9/23/08
Sample Matrix:	GROUNDWATER		
Loc. Type:	WATER SUPPLY	Report Generated:	09/23/2008
Emergency Yes/No	YES		
COC Yes/No	YES		

VisitID

Loc. Descr.: WILLIAM BROWN

9/25/08

Location ID:	6I077115FR	Collect Date:	09/17/2008	Collect Time::	13:04	Sample Depth

Sample Qualifiers and Comments

SEP 25 2008

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

LAB

NC DWQ Laboratory Section Results

Location ID: 6I077115FR
Loc. Descr.: WILLIAM BROWN
Visit ID

Sample ID: AB35629
Collect Date: 09/17/2008
Collect Time:: 13:04

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
	Sample temperature at receipt by lab		1.6		°C	HPARKER	SMATHIS
	Method Reference					9/18/08	9/18/08
VOL							
	Volatile Organics in liquid		_TITLE_		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-78-1	Dichlorodifluoromethane	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-87-3	Chloromethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-01-4	Vinyl Chloride	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-83-9	Bromomethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-00-3	Chloroethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-69-4	Trichlorofluoromethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-35-4	1,1-Dichloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-09-2	Methylene Chloride	10	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
156-60-5	trans-1,2-Dichloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
1634-04-4	Methyl Tert-Butyl Ether	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-34-3	1,1-Dichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
156-59-4	cis-1,2-Dichloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-97-5	Bromochloromethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
67-66-3	Chloroform	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
590-20-7	2,2-Dichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
107-06-2	1,2-Dichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08

NC DWQ Laboratory Section Results

Location ID: 6I077115FR
Loc. Descr.: WILLIAM BROWN
Visit ID

Sample ID: AB35629
Collect Date: 09/17/2008
Collect Time:: 13:04

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
71-55-6	1,1,1-Trichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
563-58-6	1,1-Dichloropropene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
56-23-5	Carbon Tetrachloride	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
71-43-2	Benzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-95-3	Dibromomethane	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
78-87-5	1,2-Dichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
79-01-6	Trichloroethene	0.25	1.2		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-27-4	Bromodichloromethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
10061-01-5	cis-1,3-Dichloropropene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
10061-02-6	trans-1,3-Dichloropropene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
79-00-5	1,1,2-Trichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-88-3	Toluene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
142-28-9	1,3-Dichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
124-48-1	Dibromochloromethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
106-93-4	(EDB)1,2-Dibromoethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
127-18-4	Tetrachloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-90-7	Chlorobenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
100-41-4	Ethylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08

NC DWQ Laboratory Section Results

Location ID: 6I077115FR
Loc. Descr.: WILLIAM BROWN
Visit ID

Sample ID: AB35629
Collect Date: 09/17/2008
Collect Time:: 13:04

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
75-25-2	Bromoform	1.0	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
108-38-3	m,p-Xylene	0.50	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
100-42-5	Styrene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
79-34-5	1,1,2,2-Tetrachloroethane	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
630-20-6	1,1,1,2-Tetrachloroethane	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
95-47-6	o-Xylene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
96-18-4	1,2,3-Trichloropropane	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
98-82-8	Isopropylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
108-86-1	Bromobenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
103-65-1	n-Propylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
95-49-8	2-Chlorotoluene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
106-43-4	4-Chlorotoluene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
108-67-8	1,3,5-Trimethylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
98-06-6	tert-Butylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
95-63-6	1,2,4-Trimethylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
135-98-8	sec-Butylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
543-73-1	m-Dichlorobenzene (1,3)	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
106-46-7	p-Dichlorobenzene (1,4)	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						

NC DWQ Laboratory Section Results

Location ID: 6I077115FR
Loc. Descr.: WILLIAM BROWN
Visit ID

Sample ID: AB35629
Collect Date: 09/17/2008
Collect Time:: 13:04

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
95-50-1	o-Dichlorobenzene (1,2)	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
99-87-6	p-Isopropyltoluene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
104-51-8	n-Butylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
120-82-1	1,2,4-Trichlorobenzene	0.50	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
91-20-3	Naphthalene	0.50	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
87-68-3	Hexachlorobutadiene	0.50	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
87-61-6	1,2,3-Trichlorobenzene	1.0	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						

Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen Sullins, Director
Division of Water Quality

September 29, 2008

To: Owner /Resident
Re: Water Sample Lab No. AB35625

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

[ ] Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[ ] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. **If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.**

This well was sampled by the North Carolina Division of Water Quality.. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

One NorthCarolina *Naturally*

North Carolina DWQ/Aquifer Protection Section 225 Green St./ Suite 714 Fayetteville, NC 28301 Phone (910) 433-3300
FAX (910) 486-0707 Internet: h2o.enr.state.nc.us Customer Service 1-877-623-6748

NC DWQ Laboratory Section Results

County:	RICHMOND	Sample ID:	AB35625
River Basin		PO Number #	8G1282
Report To	FROAP	Date Received:	09/18/2008
Collector:	B TODD	Time Received:	08:00
Region:	FRO	Labworks LoginID	SMATHIS
Sample Matrix:	GROUNDWATER	Date Reported:	9/23/08
Loc. Type:	WATER SUPPLY	Report Generated:	09/23/2008
Emergency Yes/No	YES		
COC Yes/No	YES		

VisitID

Loc. Descr.: ANNA HARRISON

QC 9/25/08

Location ID:	6I077961NC177	Collect Date:	09/17/2008	Collect Time::	13:16	Sample Depth

Sample Qualifiers and Comments

SEP 29 2008

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

LAB

NC DWQ Laboratory Section Results

Location ID: 6I077961NC177
Loc. Descr.: ANNA HARRISON
Visit ID

Sample ID: AB35625
Collect Date: 09/17/2008
Collect Time:: 13:16

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
	Sample temperature at receipt by lab		1.6		°C	HPARKER	SMATHIS
	Method Reference					9/18/08	9/18/08
VOL							
	Volatile Organics in liquid		_TITLE_		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-78-1	Dichlorodifluoromethane	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-87-3	Chloromethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-01-4	Vinyl Chloride	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-83-9	Bromomethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-00-3	Chloroethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-69-4	Trichlorofluoromethane	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-35-4	1,1-Dichloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-09-2	Methylene Chloride	10	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
156-60-5	trans-1,2-Dichloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
1634-04-4	Methyl Tert-Butyl Ether	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-34-3	1,1-Dichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
156-59-4	cis-1,2-Dichloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-97-5	Bromochloromethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
67-66-3	Chloroform	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
590-20-7	2,2-Dichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
107-06-2	1,2-Dichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08

NC DWQ Laboratory Section Results

Location ID: 6I077961NC177
Loc. Descr.: ANNA HARRISON
Visit ID

Sample ID: AB35625
Collect Date: 09/17/2008
Collect Time:: 13:16

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
71-55-6	1,1,1-Trichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
563-58-6	1,1-Dichloropropene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
56-23-5	Carbon Tetrachloride	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
71-43-2	Benzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
74-95-3	Dibromomethane	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
78-87-5	1,2-Dichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
79-01-6	Trichloroethene	0.25	0.12	N3	ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
75-27-4	Bromodichloromethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
10061-01-5	cis-1,3-Dichloropropene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
10061-02-6	trans-1,3-Dichloropropene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
79-00-5	1,1,2-Trichloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-88-3	Toluene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
142-28-9	1,3-Dichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
124-48-1	Dibromochloromethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
106-93-4	(EDB)1,2-Dibromoethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
127-18-4	Tetrachloroethene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-90-7	Chlorobenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
100-41-4	Ethylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08

NC DWQ Laboratory Section Results

Location ID: 61077961NC177
Loc. Descr.: ANNA HARRISON
Visit ID

Sample ID: AB35625
Collect Date: 09/17/2008
Collect Time:: 13:16

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
75-25-2	Bromoform	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-38-3	m,p-Xylene	0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
100-42-5	Styrene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
79-34-5	1,1,2,2-Tetrachloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
630-20-6	1,1,1,2-Tetrachloroethane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
95-47-6	o-Xylene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
96-18-4	1,2,3-Trichloropropane	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
98-82-8	Isopropylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-86-1	Bromobenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
103-65-1	n-Propylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
95-49-8	2-Chlorotoluene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
106-43-4	4-Chlorotoluene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
108-67-8	1,3,5-Trimethylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
98-06-6	tert-Butylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
95-63-6	1,2,4-Trimethylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
135-98-8	sec-Butylbenzene	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
543-73-1	m-Dichlorobenzene (1,3)	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08
106-46-7	p-Dichlorobenzene (1,4)	0.25	0.26		ug/L	VANDREWS	RKELLING
	Method Reference EPA5030/624/8260					9/18/08	9/23/08

NC DWQ Laboratory Section Results

Location ID: 6I077961NC177
Loc. Descr.: ANNA HARRISON
Visit ID

Sample ID: AB35625
Collect Date: 09/17/2008
Collect Time:: 13:16

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
95-50-1	o-Dichlorobenzene (1,2)	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
99-87-6	p-Isopropyltoluene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
104-51-8	n-Butylbenzene	0.25	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
120-82-1	1,2,4-Trichlorobenzene	0.50	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
91-20-3	Naphthalene	0.50	0.32	N3	ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
87-68-3	Hexachlorobutadiene	0.50	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						
87-61-6	1,2,3-Trichlorobenzene	1.0	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
	Method Reference EPA5030/624/8260						

NC DWQ Laboratory Section Results

County:	RICHMOND	Sample ID:	AB35625
River Basin		PO Number #	8G1282
Report To	FROAP	Date Received:	09/18/2008
Collector:	B TODD	Time Received:	08:00
Region:	FRO	Labworks LoginID	SMATHIS
Sample Matrix:	GROUNDWATER	Date Reported:	9/23/08
Loc. Type:	WATER SUPPLY	Report Generated:	09/23/2008
Emergency Yes/No	YES		
COC Yes/No	YES		

VisitID

Loc. Descr.: ANNA HARRISON

QC 9/25/08

Location ID:	6I077961NC177	Collect Date:	09/17/2008	Collect Time::	13:16	Sample Depth

Sample Qualifiers and Comments

RECEIVED SEP 29 2008

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

LAB

861282

GROUNDWATER FIELD/LAB FORM

North Carolina
Department of Environment and Natural Resources
DIVISION OF WATER QUALITY-GROUNDWATER SECTION

Location code [redacted] 61077961 NC 177

County Richmond

Quad No. _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE TYPE	SAMPLE PRIORITY
☑ Water	☐ Routine
☐ Soil	☑ Emergency
☐ Other	
☑ Chain of Custody	

961 NC177

Lab Number AB35625
Date Received 9/18/08 Time: 0800
Rec'd By: HP From: Bus, Courier, Hand Del.,
Other: _____
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): BillTodd
Date 09/17/08 Time 1:16
Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: _____ (circle one)

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C
Temp. 10 _____ °C Odor _____
Appearance _____
Field Analysis By: BillTodd

Owner Anna Harrison
Location or Site 961 N Hwy 177
Description of sampling point outside tap
Sampling Method pump (Pump, bailer, etc.) Sample Interval _____
Remarks control # 124 (Pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC 680	mg/L
	Turbidity 76	NTU
	Residue, Suspended 530	mg/L
	pH 403	units
	Alkalinity to pH 4.5 410	mg/L
	Alkalinity to pH 8.3 415	mg/L
	Carbonate 445	mg/L
	Bicarbonate 440	mg/L
	Carbon dioxide 405	mg/L
	Chloride 940	mg/L
	Chromium: Hex 1032	ug/L
	Color: True 80	CU
	Cyanide 720	mg/L

	Diss. Solids 70300	mg/L
	Fluoride 951	mg/L
	Hardness: Total 900	mg/L
	Hardness (non-carb) 902	mg/L
	Phenols 32730	ug/l
	Specific Cond. 95	uMhos/cm
	Sulfate 945	mg/L
	Sulfide 745	mg/L
	Oil and Grease	mg/L
	NH_3 as N 610	mg/L
	TKN as N 625	mg/L
	$NO_2 + NO_3$ as N 630	mg/L
	P: Total as P 665	mg/L
	Nitrate (NO_3 as N) 620	mg/L
	Nitrite (NO_2 as N) 615	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadmium 46559	ug/L
	Cr-Chromium 46559	ug/L
	Cu-Copper 46562	ug/L
	Fe-Iron 46563	ug/L
	Hg-Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg-Magnesium 46554	mg/L
	Mn-Manganese 46565	ug/L
	Na-Sodium 46556	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn-Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	PCBs
	Semivolatile Organics
	TPH-Diesel Range
X	Volatile Organics (VOA bottle) V
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

LAB USE ONLY
Temperature on arrival (°C): 1.6

Lab Comments _____

GW-54 REV. 7/03 For Dissolved Analysis-submit filtered sample and write "DIS" in block.

8G1286

GROUNDWATER FIELD/LAB FORM

North Carolina
Department of Environment and Natural Resources
DIVISION OF WATER QUALITY-GROUNDWATER SECTION

Location code [redacted] 61077115 FR

County Richmond

Quad No _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE TYPE
- [x] Water
- [ ] Soil
- [ ] Other
- [x] Chain of Custody

SAMPLE PRIORITY
- [ ] Routine
- [x] Emergency

115FR

Lab Number A335629
Date Received 9/18/08 Time: 0800
Rec'd By: HP From: Bus, Courier, Hand Del.,
Other: _____
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): BillTodd Date 09/17/08 Time 1:04

Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: _____ (circle one)

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C
Temp. 10 _____ °C Odor _____
Appearance _____
Field Analysis By: BillTodd

Owner William Brown
Location or Site 115 Fruitland Road
Description of sampling point outside tap
Sampling Method pump (Pump, bailer, etc.) Sample Interval _____
Remarks control # 131 (Pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC 680	mg/L
	Turbidity 76	NTU
	Residue, Suspended 530	mg/L
	pH 403	units
	Alkalinity to pH 4.5 410	mg/L
	Alkalinity to pH 8.3 415	mg/L
	Carbonate 445	mg/L
	Bicarbonate 440	mg/L
	Carbon dioxide 405	mg/L
	Chloride 940	mg/L
	Chromium: Hex 1032	ug/L
	Color: True 80	CU
	Cyanide 720	mg/L

	Diss. Solids 70300	mg/L
	Fluoride 951	mg/L
	Hardness: Total 900	mg/L
	Hardness (non-carb) 902	mg/L
	Phenols 32730	ug/l
	Specific Cond. 95	uMhos/cm
	Sulfate 945	mg/L
	Sulfide 745	mg/L
	Oil and Grease	mg/L
	NH_3 as N 610	mg/L
	TKN as N 625	mg/L
	$NO_2 + NO_3$ as N 630	mg/L
	P: Total as P 665	mg/L
	Nitrate (NO_3 as N) 620	mg/L
	Nitrite (NO_2 as N) 615	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadmium 46559	ug/L
	Cr-Chromium 46559	ug/L
	Cu-Copper 46562	ug/L
	Fe-Iron 46563	ug/L
	Hg-Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg-Magnesium 46554	mg/L
	Mn-Manganese 46565	ug/L
	Na-Sodium 46556	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn-Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	PCBs
	Semivolatile Organics
	TPH-Diesel Range
X	Volatile Organics (VOA bottle)
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

LAB USE ONLY
Temperature on arrival (°C): 1.6

Lab Comments _____

GW-54 REV. 7/03 For Dissolved Analysis-submit filtered sample and write "DIS" in block.

OWNERSHIP 03122009 22473 301	PROPERTY DESCRIPTION	TAX SUBDIVISIONS	MAP NUMBER	CARD NO
RUSSELL HERMAN M & LINDA	AC & DWIDE 1027 177 N	MARKS CREEK	840200799739	1
			RECORD NUMBER:. 22473	
PO BOX 1445		HAMLET FIRE	ROUTE 8402 00 001	
HAMLET, NC 28345			LISTER:9,28,95SR	
	KO8 44		REVIEW:RL062006	

.....68.....

TOPO	STREET	UTILITY	ZONING	1.00 ACRES
LEVEL	PAVED	PUBWATER		
ROLLING		SEPTIC	RV05/00NOTES:NEW DWIDE HERE FOR 2000	
			:NO NEW CONST FOR 2001	

#	LAND CLASS	SIZE	BASERATE*	FRNT*	DPTH*	ADJ=	ADJRATE*	UNITS=	LND-VALUE
1	1HBLD SITE	1.00AC	7280				7280	1.00	7280

2
8 A-
: MANFHOME

LAND VALUE: 7280

@.....68.....

#	OTHER FEAT	SIZE	BASERATE*COND	=ADJRATE*	UNITS=	OFB-VALUE
1-11	UTILBLDG	0				200

1 1
0 B- 0
: DECK :
:....17...:

OTHER VALUE: 200

FNDATION	XTRFNISH	ROOFTYPE	ROOFMTRL	SIZE/QTY	DPRT:6-MFG DW/T
PIERS	AL/VYN	GABLE	ASPHSHNG	1.00STHT	

WALLFNSH	FLOORS	HEAT&AIR	HEATFUEL
DRY WALL	TILE	FHA	ELECTRIC
	CARPET	PCKAGEAC	5 ROOM
			1.00LFUF

DWELLING C-10 B1999 GOOD CONDITION

DIMENSIONS:A-CU28R68D28L68 B-R25CD10R17U10L17H

#	STRUCTURE	SKTCH-SF*	STHT=	AREA	RATE*	GRDF+	HEAT+	EXWL*	WLHT=	ADJRAT*	AREA=	RPCN*	DEPF*	CNDF=	STR-VALUE
A	4CMANFHOME	1904	1.00	1904	32.39	0.90	3.08			32.23	1904	61366	0.80	0.95	46638
	2.00 BATHS									1579.00		3158	0.80	0.95	2400
B	93 DECK	170	1.00	170	7.96	0.90				7.16	170	1217	0.80	0.95	925

1904HSF, 2074TSF RPCN- 34.53/HSF 65741 VALU- 26.24/HSF 49963

STRUCTURE VALUE: 49963

VALUATION	VALUE	PREV-VAL.	P-N%			TOTAL VALUE	57443

LAND			7280	6500	112%			7280LV/AC
OTHERFEAT			200					
STRUCTURE			49963	50832	98%			30TV/HSF
TOTAL			57443	57332	100%			30TV/HSF

APPRAISED-VALUE: 57443

OWNERSHIP 03122009 22473 301	PROPERTY DESCRIPTION	TAX SUBDIVISIONS	MAP NUMBER	CARD NO
RUSSELL HERMAN M & LINDA	AC & DWIDE 1027 177 N	MARKS CREEK	840200799739	1
			RECORD NUMBER:. 22473	
PO BOX 1445		HAMLET FIRE	ROUTE 8402 00 001	
HAMLET, NC 28345			LISTER:9,28,95SR	
	KO8 44		REVIEW:RL062006	

.....68.....

TOPO	STREET	UTILITY	ZONING	1.00 ACRES
LEVEL	PAVED	PUBWATER		
ROLLING		SEPTIC	RV05/00NOTES:NEW DWIDE HERE FOR 2000	
			:NO NEW CONST FOR 2001	

#	LAND CLASS	SIZE	BASERATE*	FRNT*	DPTH*	ADJ=	ADJRATE*	UNITS=	LND-VALUE
1	1HBLD SITE	1.00AC	7280				7280	1.00	7280

2
8 A-
MANFHOME

LAND VALUE: 7280

@.....68.....

1 1
0 B- 0
: DECK :
:....17...:

#	OTHER FEAT	SIZE	BASERATE*	COND	=ADJRATE*	UNITS=	OFB-VALUE
1-11	UTILBLDG	0					200

OTHER VALUE: 200

FNDATION	XTRFNISH	ROOFTYPE	ROOFMTRL	SIZE/QTY	DPRT:6-MFG DW/T
PIERS	AL/VYN	GABLE	ASPHSHNG	1.00STHT	

WALLFNSH	FLOORS	HEAT&AIR	HEATFUEL	
DRY WALL	TILE	FHA	ELECTRIC	
	CARPET	PCKAGEAC		5 ROOM
				1.00LFUF

DWELLING C-10 B1999 GOOD CONDITION

DIMENSIONS:A-CU28R68D28L68 B-R25CD10R17U10L17H

#	STRUCTURE	SKTCH-SF*	STHT=	AREA	RATE*	GRDF+	HEAT+	EXWL*	WLHT=	ADJRAT*	AREA=	RPCN*	DEPF*	CNDF=	STR-VALUE
A	4CMANFHOME	1904	1.00	1904	32.39	0.90	3.08			32.23	1904	61366	0.80	0.95	46638
	2.00 BATHS									1579.00		3158	0.80	0.95	2400
B	93 DECK	170	1.00	170	7.96	0.90				7.16	170	1217	0.80	0.95	925

1904HSF, 2074TSF RPCN- 34.53/HSF 65741 VALU- 26.24/HSF 49963

STRUCTURE VALUE: 49963

VALUATION	VALUE	PREV-VAL.	P-N%			TOTAL VALUE	57443

LAND			7280	6500	112%			7280LV/AC
OTHERFEAT			200					
STRUCTURE			49963	50832	98%			30TV/HSF
TOTAL			57443	57332	100%			30TV/HSF

APPRAISED-VALUE: 57443

OWNERSHIP 03122009 5863 305	PROPERTY DESCRIPTION	TAX SUBDIVISIONS	MAP NUMBER	CARD NO
CHAPPELL MARY L	AC & DWELLING HWY 177	MARKS CREEK	840300804278	1
	INF HEARING CHANGE FOR 09		RECORD NUMBER:. 26332	
1061 HWY 177 N		HAMLET FIRE	ROUTE 8403 00 109	
HAMLET, NC 28345			LISTER:8/30/95SR	
DEED: 670 859 09191984	KO8 46 1		REVIEW:3/10/09TV	

.....17.....14.....7..

TOPO	STREET	UTILITY	ZONING	5.00 ACRES
LEVEL	PAVED	PUBWATER SEPTIC		NOTES:DBA RICHMOND MULCH CO INC

8 D- 8 8
:ENCPORCH:

:...14...: :.....20.....

#	LAND CLASS	SIZE	BASERATE	FRNT	DPTH	ADJ	ADJRATE	UNITS	LND-VALUE
1	1GBLD SITE	1.00AC	6720				6720	1.00	6720
2	21GCLEAR	3.00AC	3276		0.70ACF		2293	3.00	6879
3	11GROADFTG	1.00AC	5040		0.70ACF		3528	1.00	3528
LAND VALUE:									17127

5 3

#	OTHER FEAT	SIZE	BASERATE	COND	ADJRATE	UNITS	OFB-VALUE
1	6CSHOP	30* 54	11.16	0.30	3.35	1620	5427
4	2 1DUNFFRGAR	16* 30	14.96	0.10	1.50	480	720
3	3 7DSHED	40* 60	6.72	0.10	0.67	2400	1608
	4 12CPOOL	20* 40	21.50	0.50	10.75	800	8600
	5 17DCHAINLKF	1300* 6	1.01	0.30	0.30	7800	2340
	6 11BUTILBLDG	12* 20	8.33	0.30	2.50	240	600
	7 11DUTILBLDG	20* 37	5.26	0.50	2.63	740	1946
OTHER VALUE:							21241

1 C- 5 A-
SNG FAML: SNG FAML

@.....28.....

FNDATION	XTRFNISH	ROOFTYPE	ROOFMTRL	SIZE/QTY
BRICK	BRICK	HIP	ASPHSHNG	1.00STHT

8 B- 8
OPNPORCH

:....17....:.....28.....:...13...:

WALLFNSH	FLOORS	HEAT&AIR	HEATFUEL	
PANEL DRY WALL	TILE CARPET	HTG & AC	ELECTRIC	5 ROOM 1.00LFUF

DWELLING C B1968E1975 AVERAGE CONDITION

DIMENSIONS:A-CU35R14U8R7D8R20D43L13U8L28 B-CD8R28U8L28 C-D8CL17U51R17D51 D-U35CR14U8L14D8H

#	STRUCTURE	SKTCH-SF	STHT=	AREA	RATE	GRDF	HEAT	EXWL	WLHT	ADJRAT	AREA=	RPCN	DEPF	CNDF	STR-VALUE
A	1CSNG FAML	1595	1.00	1595	56.48		2.50	2.50		61.48	1595	98061	0.67		65701
	2.00 BATHS									2210.00		4420	0.67		2961
	1 FIREPLACE									1795.30		1795	0.67		1203
	1 CHIMNEYS									966.70		967	0.67		648
B	85 OPNPORCH	224	1.00	224	21.16					21.16	224	4740	0.67		3176
C	1 SNG FAML	867	1.00	867	56.48		2.50	2.50		61.48	867	53303	0.67		35713
D	86 ENCPORCH	112	1.00	112	31.79					31.79	112	3560	0.67		2385

2462HSF, 2798TSF RPCN- 67.77/HSF 166846 VALU- 45.40/HSF 111787

STRUCTURE VALUE: 111787

VALUATION	VALUE	PREV-VAL.	P-N%			TOTAL VALUE	150155

LAND			17127	13170	130%			3425LV/AC
OTHERFEAT			21241	33081	64%			
STRUCTURE			111787	97484	114%			60TV/HSF
TOTAL			150155	143735	104%			60TV/HSF

APPRAISED-VALUE: 150155

OWNERSHIP 03122009 25710 301	PROPERTY DESCRIPTION	TAX SUBDIVISIONS	MAP NUMBER	CARD NO
CHAPPELLS AUTO SALES INC	LOTS U S 74	MARKS CREEK	748112975243	2
		CITY OF HAMLET	RECORD NUMBER:. 40813	
1061 N NC HWY 177			ROUTE 7481 12 227 2	
HAMLET, NC 28345			LISTER:_____	
			REVIEW:_____	

.....35.....

TOPO	STREET	UTILITY	ZONING

NOTES:

#	LAND CLASS	SIZE	BASERATE*FRNT*DPTH*ADJ=ADJRATE*UNITS=LND-VALUE

LAND VALUE: 0

#	OTHER FEAT	SIZE	BASERATE*COND =ADJRATE*UNITS=OFB-VALUE

7 0 A- WAREHOUS 7 0

OTHER VALUE: 0

FNDATION	XTRFNISH	ROOFTYPE	ROOFMTRL	SIZE/QTY	DPRT:8-C&I AVG
CCSLAB	METAL	GABLE	METAL	1.00STHT	

WALLFNSH	FLOORS	HEAT&AIR	HEATFUEL
PLASTER UNFINISH	CONCRETE	HTG & AC UNITS	GAS 1.00LFUF

@.....35.....:

COMMRCIL D-10 B1986 FAIR CONDITION

DIMENSIONS:A-CU70R35D70L35H

#	STRUCTURE	SKTCH-SF*STHT=	AREA	RATE*GRDF+HEAT+EXWL*WLHT=ADJRAT*	AREA=	RPCN*	DEPF*CNDF=STR-VALUE
A	37DWAREHOUS	2450 1.00	2450	22.65 0.90 2.10 22.48	2450	55076	0.70 38553
	2 FIXTURES						0

2450HSF, 2450TSF RPCN- 22.48/HSF 55076 VALU- 15.74/HSF 38553

STRUCTURE VALUE: 38553

CARD 2 VALUE 38553

```
OWNERSHIP 03122009  25710 301      |PROPERTY DESCRIPTION          |TAX SUBDIVISIONS    |MAP NUMBER    CARD NO
CHAPPELLS AUTO SALES INC           |LOTS U S 74                   |MARKS CREEK         |748112975243        1
                                   |                              |CITY OF HAMLET      |RECORD NUMBER:. 25710
1061 N NC HWY 177                  |                              |                    |ROUTE 7481 12 227 1
HAMLET, NC            28345        |305  F  23,30                 |                    |LISTER:2/6/96MB
                                   |HAMLET AVE                    |                    |REVIEW:RL062006

.......40..........28.........30..... |TOPO    |STREET  |UTILITY |ZONING                    FRFT:1-ALTERNAT
:             :         :          : |LEVEL   |PAVED   |PUBWATER|
:             :         :          : |        |        |PUBSEWER|      NOTES:DBA THE PERSONAL TOUCH
2             2         2          2 |        |        |        |          :

4      B-     4    A-   4     C-    4 |#|LAND CLASS |  SIZE  |BASERATE*FRNT*DPTH*ADJ=ADJRATE*UNITS=LND-VALUE
:      WAREHOUS: TYPOFFCE:   WAREHOUS: |1|71ICOMMERC |168F 200D| 211.00|1.00|1.21|    |255.31|  168|    42892
:             :         :          : |
:......40......@....28...:.....30....:.|
:                                    :|
2                                    2|
2                 D-                 2|
:                 CANOPY             :|LAND  VALUE:                                                    42892

:                                    :|#|OTHER FEAT |  SIZE  |BASERATE*COND         =ADJRATE*UNITS=OFB-VALUE
:................100.................:|1|17DCHAINLKF|   6* 900|   1.03|0.50          |   0.51| 5400|     2754
                                     |2|14DASPHPAVG28000*   1|   0.96|0.50          |   0.48|28000|    13440
                                     |
                                     |
                                     |
                                     |
                                     |
                                     |
                                     |OTHER VALUE:                                                     16194

                                     |FNDATION|XTRFNISH|ROOFTYPE|ROOFMTRL|SIZE/QTY| DPRT:8-C&I AVG
                                     |CONCBLCK|FRAME   |GABLE   |ASPHSHNG|        |
                                     |        |CC BLOCK|        |        |1.00STHT|
                                     |        |        |        |        |        |
                                     |WALLFNSH|FLOORS  |HEAT&AIR|HEATFUEL|        |
                                     |UNFINISH|CONCRETE|FHA     |OIL     |        |
                                     |PANEL   |TILE    |PCKAGEAC|        |        |
                                     |        |        |        |        |1.00LFUF|
                                     |
                                     |
COMMRCIL          D-10 B1980E1987     GOOD      CONDITION

DIMENSIONS:A-CU24R28D24L28 B-CL40U24R40D24 C-R28CU24R30D24L30 D-L40CD22R100U22L100H

#|STRUCTURE|SKTCH-SF*STHT=   AREA   RATE*GRDF+HEAT+EXWL*WLHT=ADJRAT*   AREA=    RPCN*     DEPF*CNDF=STR-VALUE
A|22DTYPOFFCE|   672|1.00|    672| 65.96|0.90-2.00-1.70|     | 55.66|    672|   37404|     0.66|     |    24687
 | 2 FIXTURES|      |    |      |      |    |    |    |     |      |      |        |      |     |        0
B|37 WAREHOUS|   960|1.00|    960| 22.70|0.90|    |    |     | 20.43|    960|   19613|     0.66|     |    12945
C|37 WAREHOUS|   720|1.00|    720| 22.70|0.90|    |    |     | 20.43|    720|   14710|     0.66|     |     9709
D|95 CANOPY  |  2200|1.00|   2200|  8.19|0.90|    |    |     |  7.37|   2200|   16214|     0.66|     |    10701

                2352HSF,    4552TSF                  RPCN-  37.39/HSF        87941 VALU-  24.68/HSF    58042

                                     STRUCTURE VALUE:                                                    58042
```

VALUATION	THIS CARD	CARD 2	-NN= VALUE	PREV-VAL.	P-N%					
LAND	42892	0	42892	36590	117%				CARD NO. 1	117128
OTHERFEAT	16194	0	16194	14524	111%				CARD NO. 2	38553
STRUCTURE	58042	38553	96595	78784	122%			49TV/HSF	TOTAL VALUE	155681
TOTAL	117128	38553	155681	129898	119%			49TV/HSF		

APPRAISED-VALUE: 155681

RICHMOND COUNTY
NORTH CAROLINA

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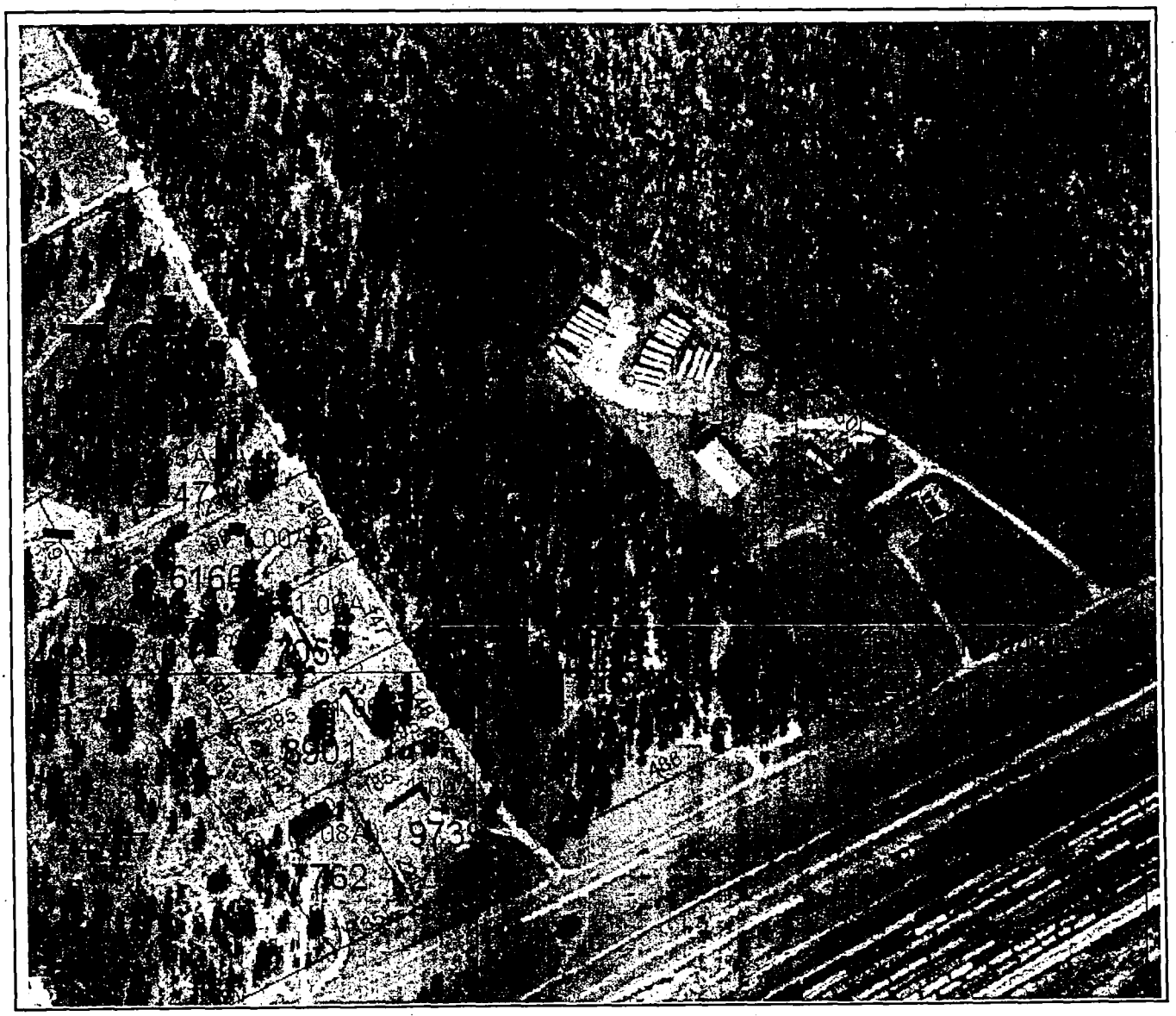

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RICHMOND COUNTY
NORTH CAROLINA

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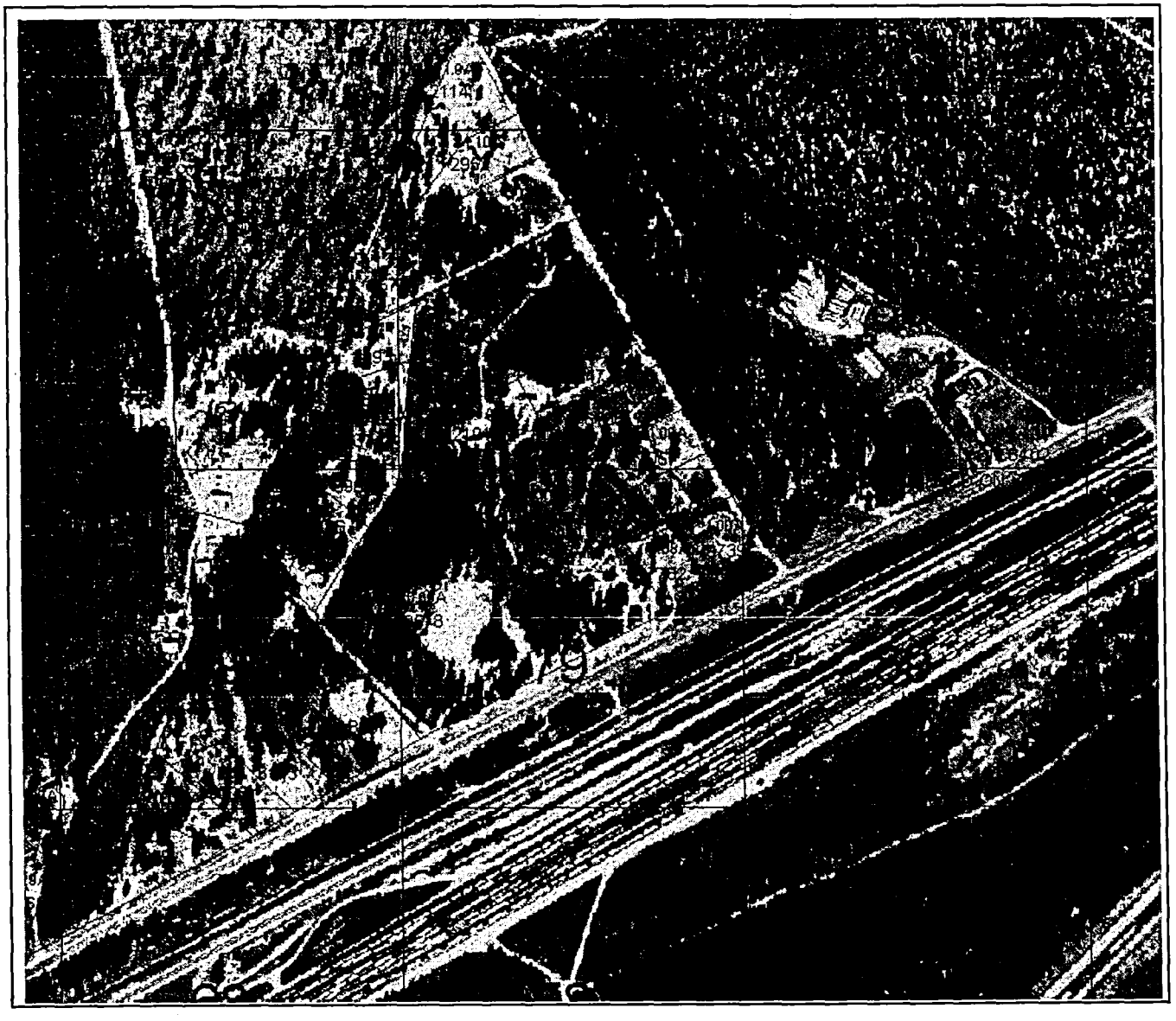

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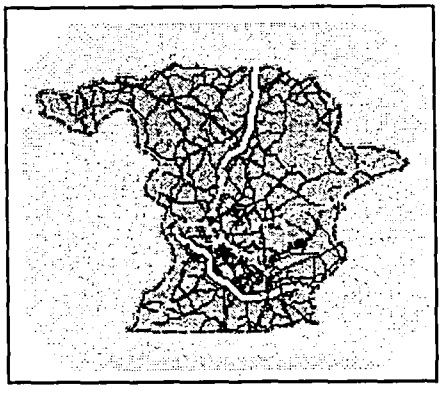

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NORTH CAROLINA

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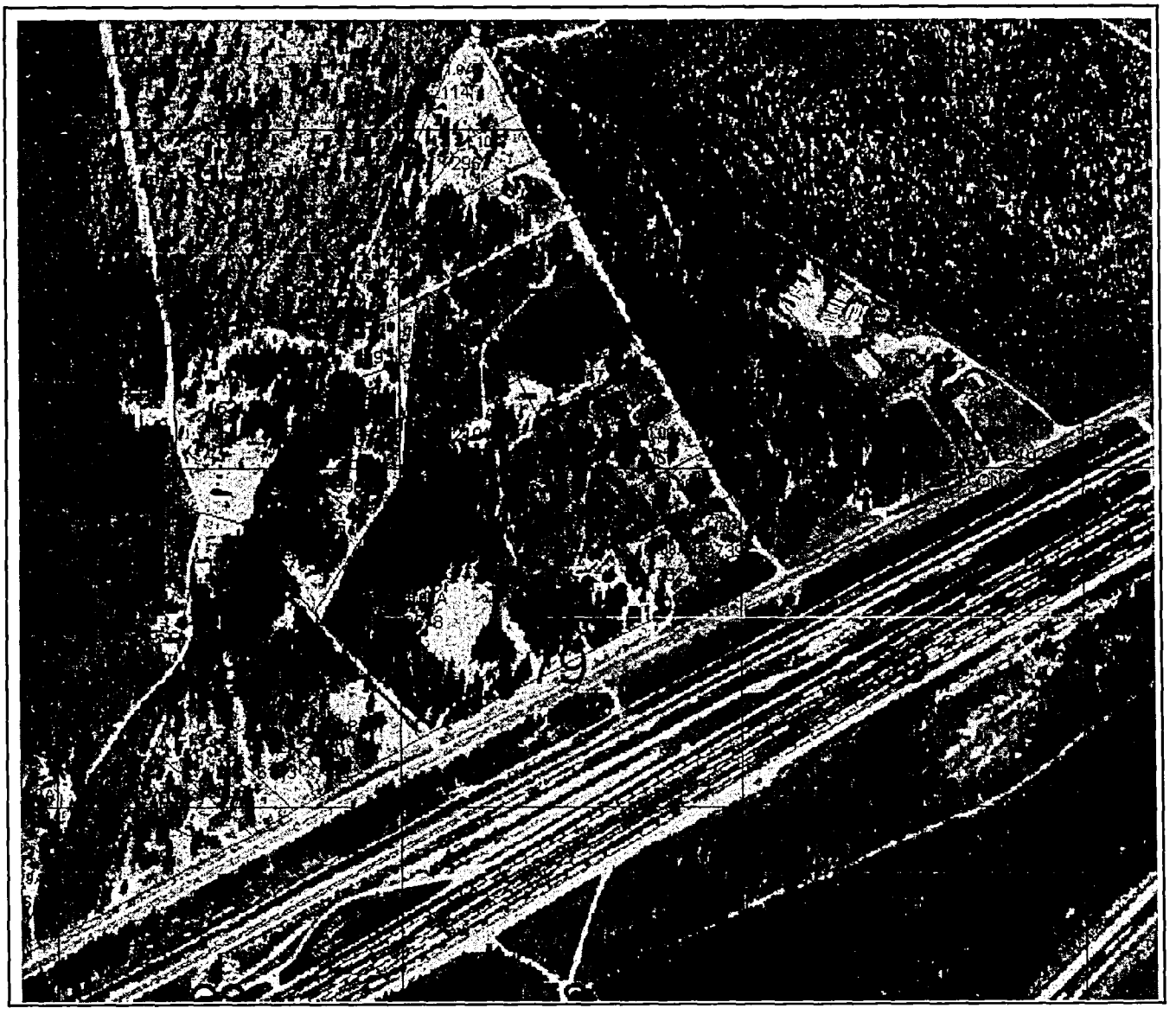

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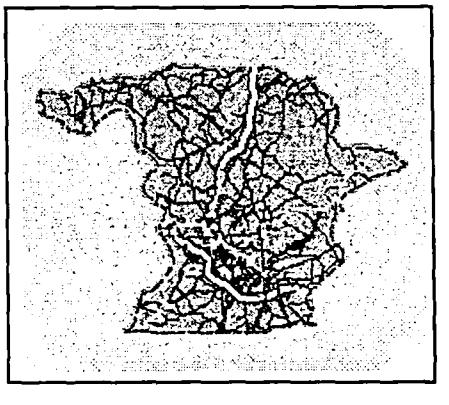

RICHMOND COUNTY
NORTH CAROLINA

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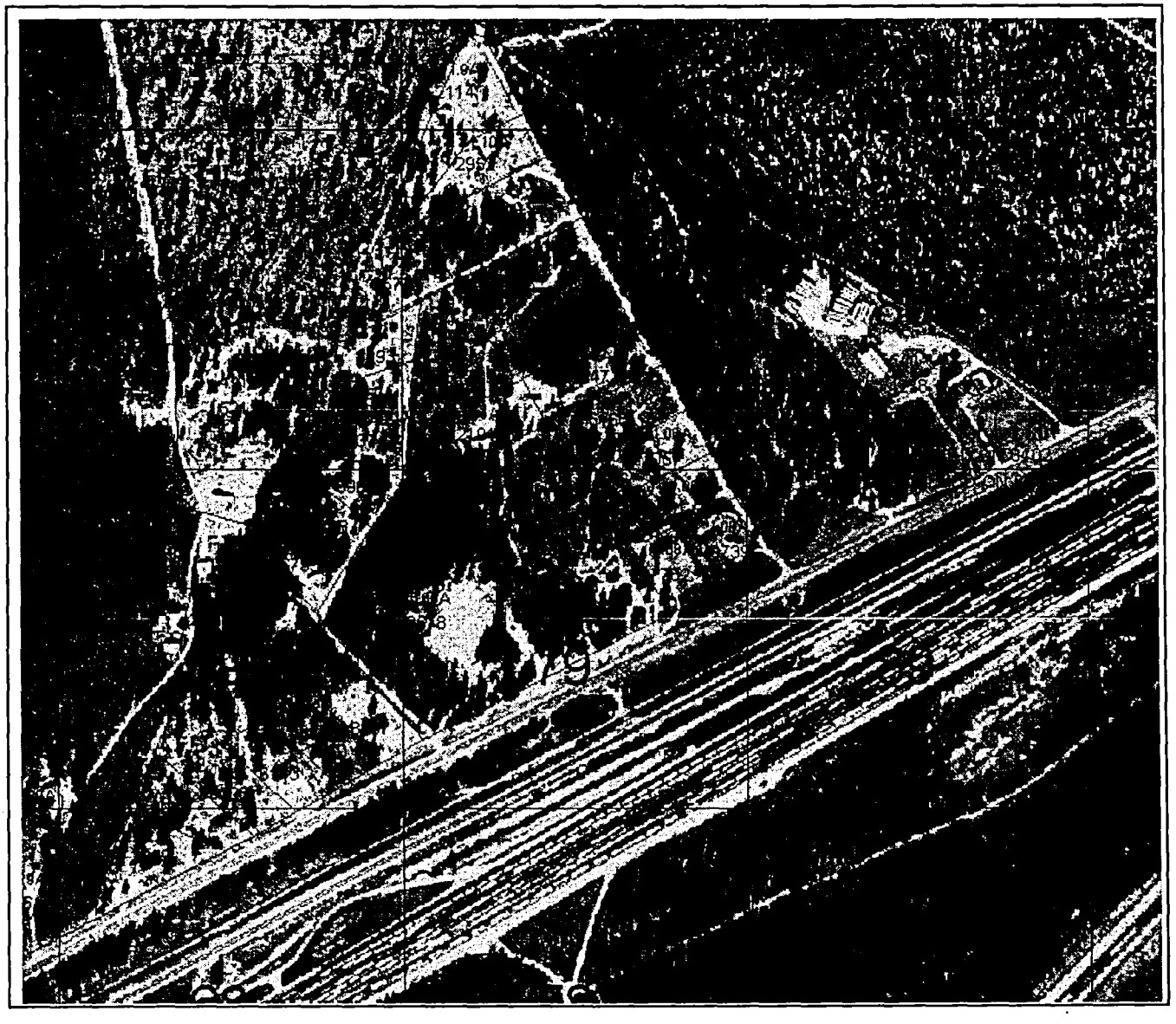
5/26/2010



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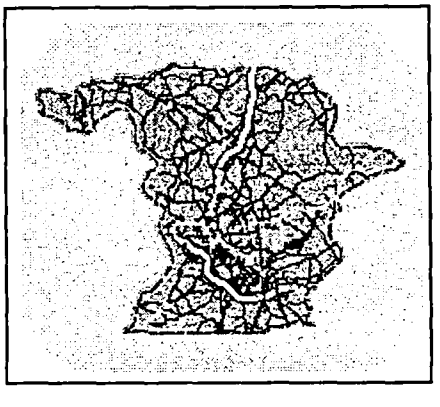

RICHMOND COUNTY
NORTH CAROLINA

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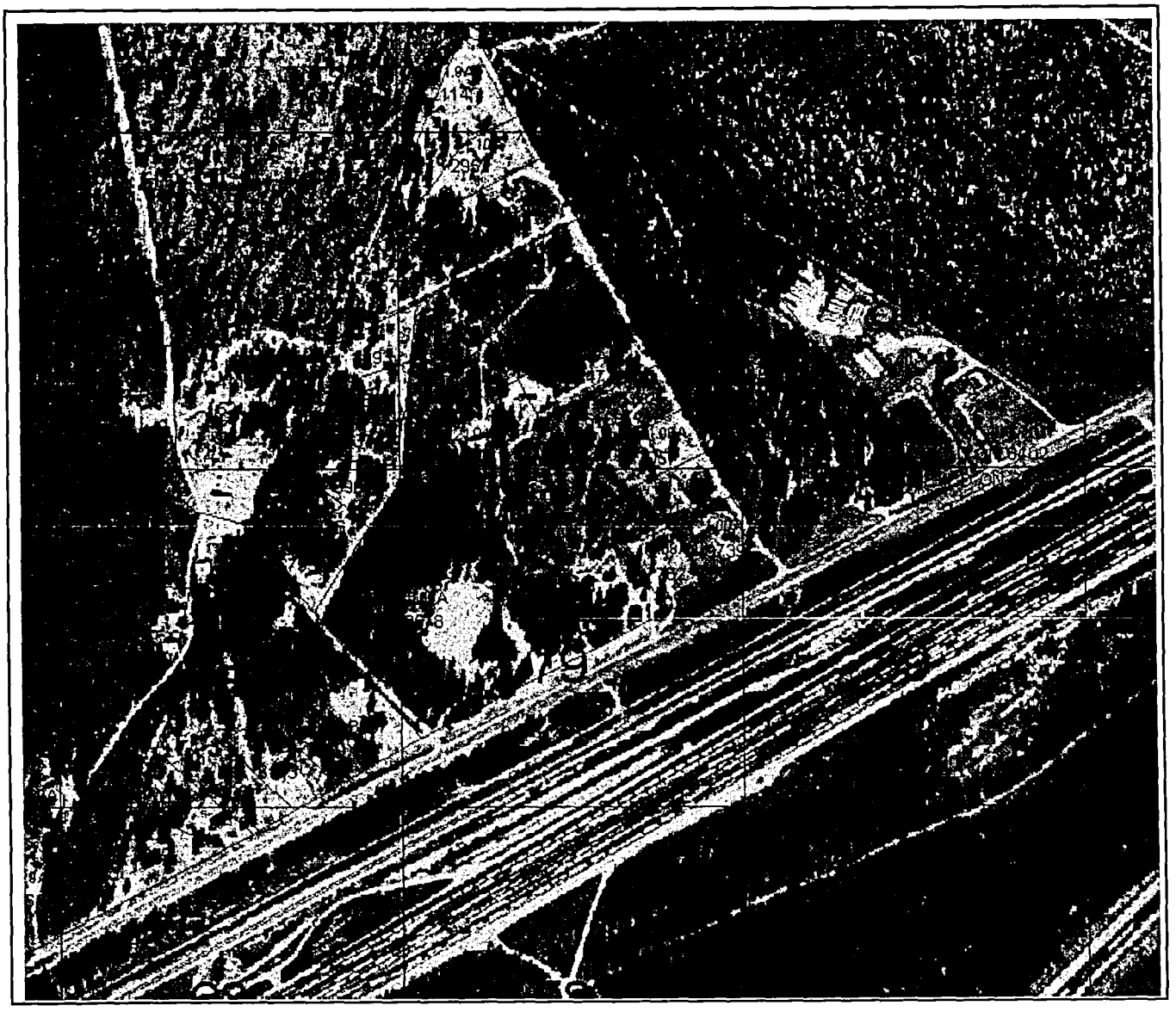

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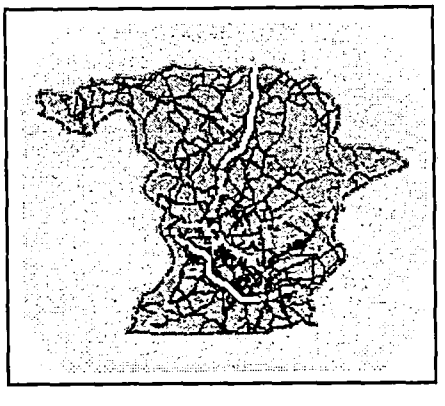


George Dawkins Dr
17
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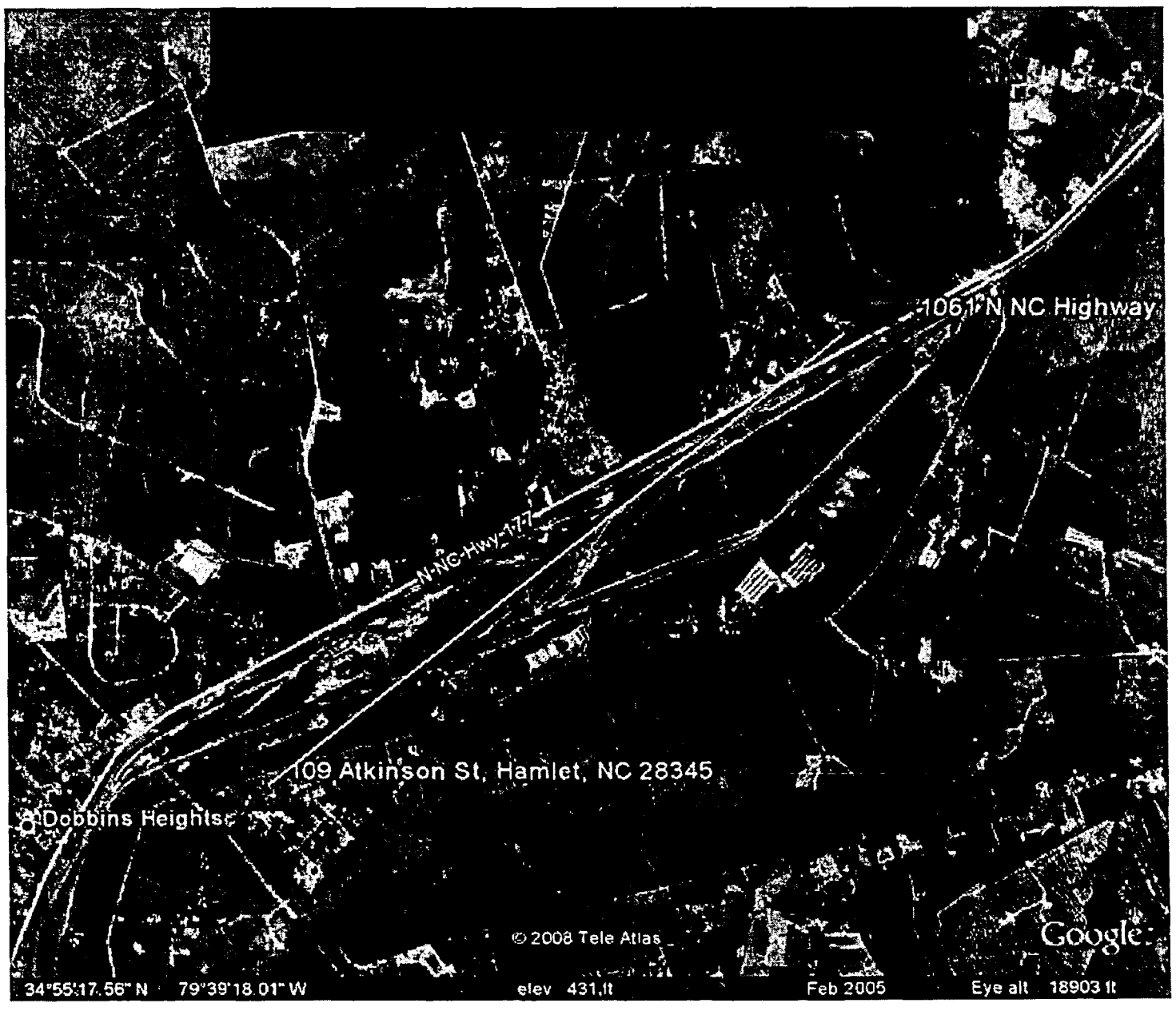
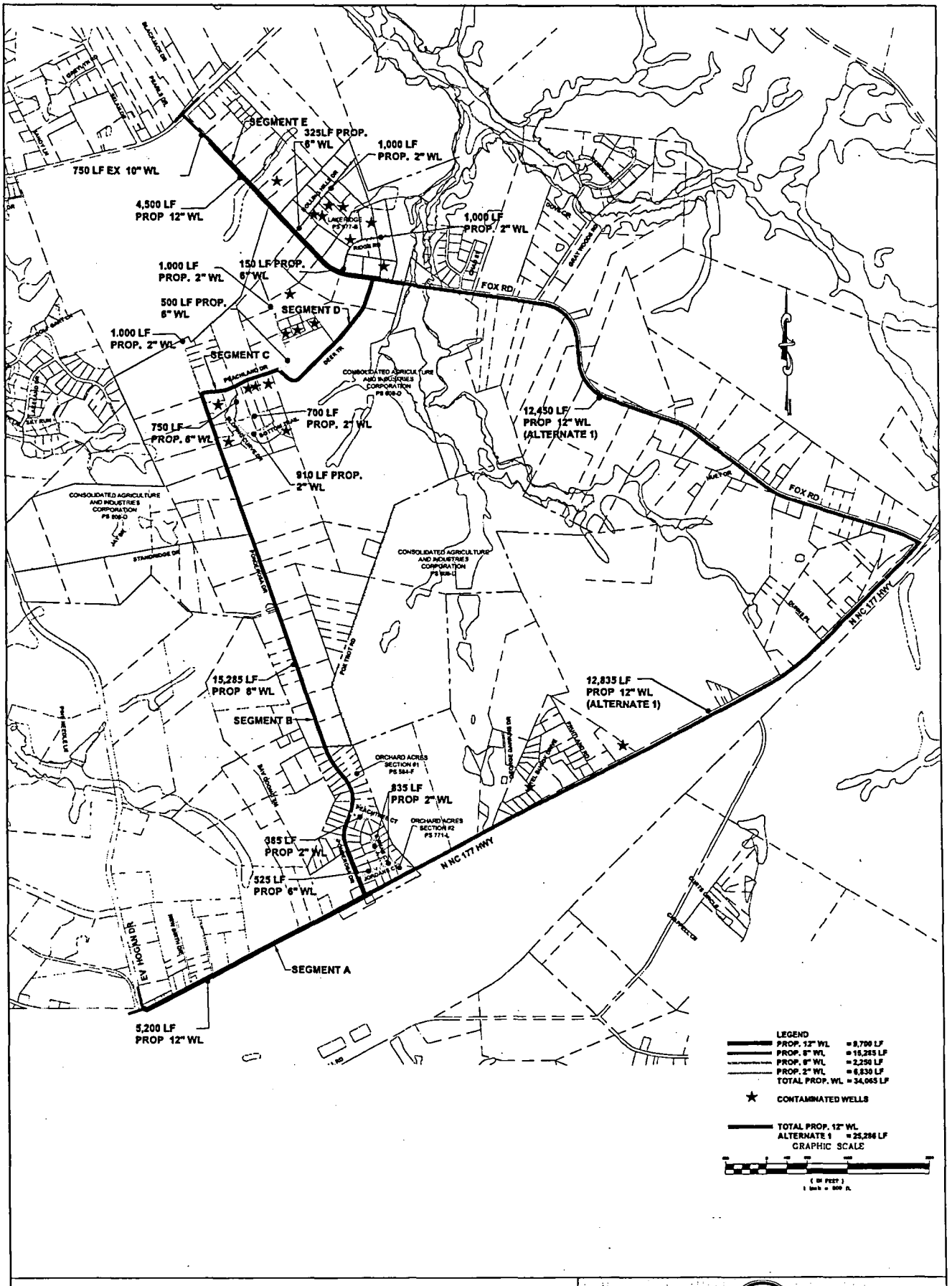
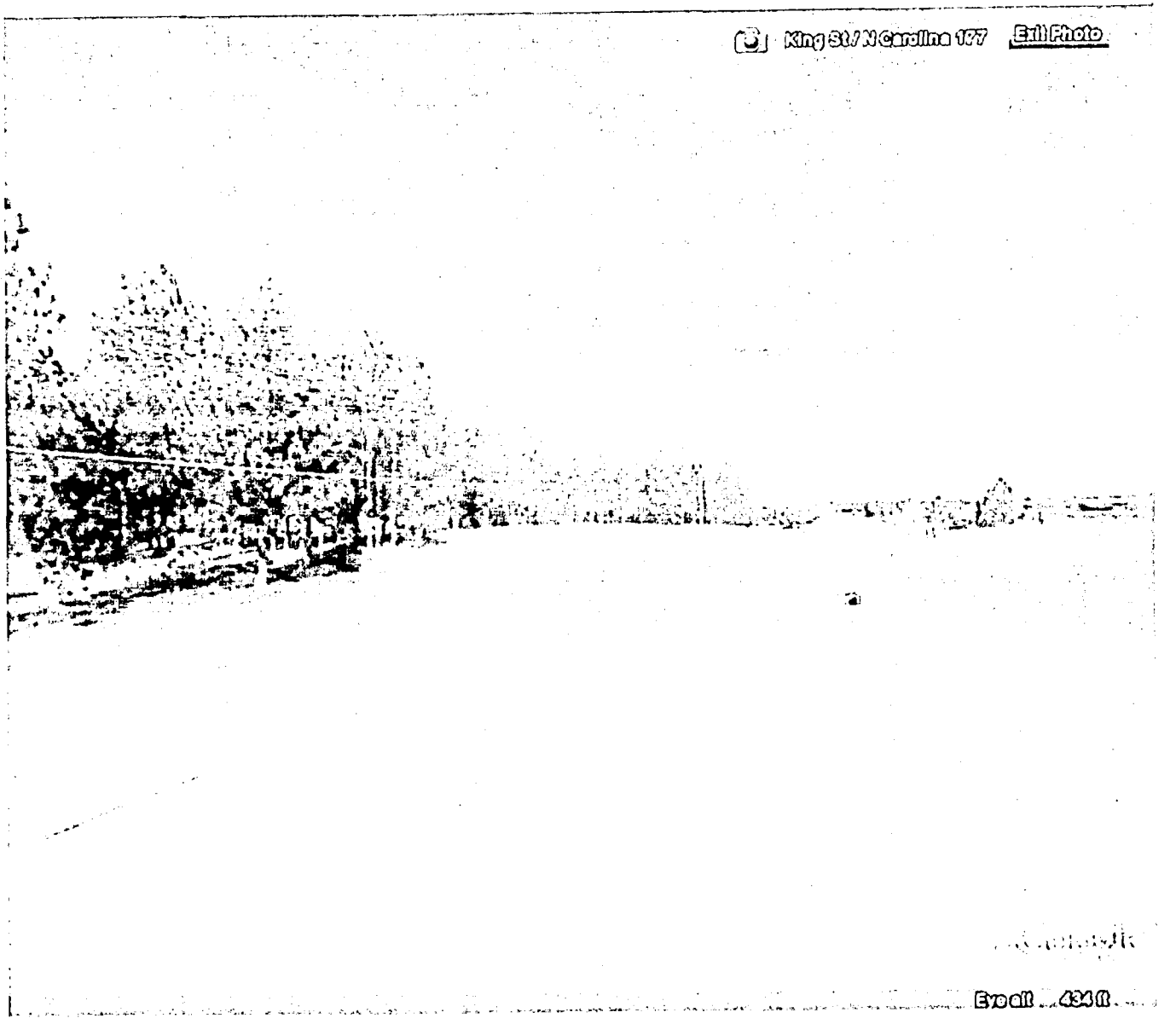
Google


106 N NC Highway
N NC Hwy 177
109 Atkinson St, Hamlet, NC 28345
Dobbins Heights
© 2008 Tele Atlas
Google
34°55'17.56" N 79°39'18.01" W
elev 431 ft
Feb 2005
Eye alt 18903 ft



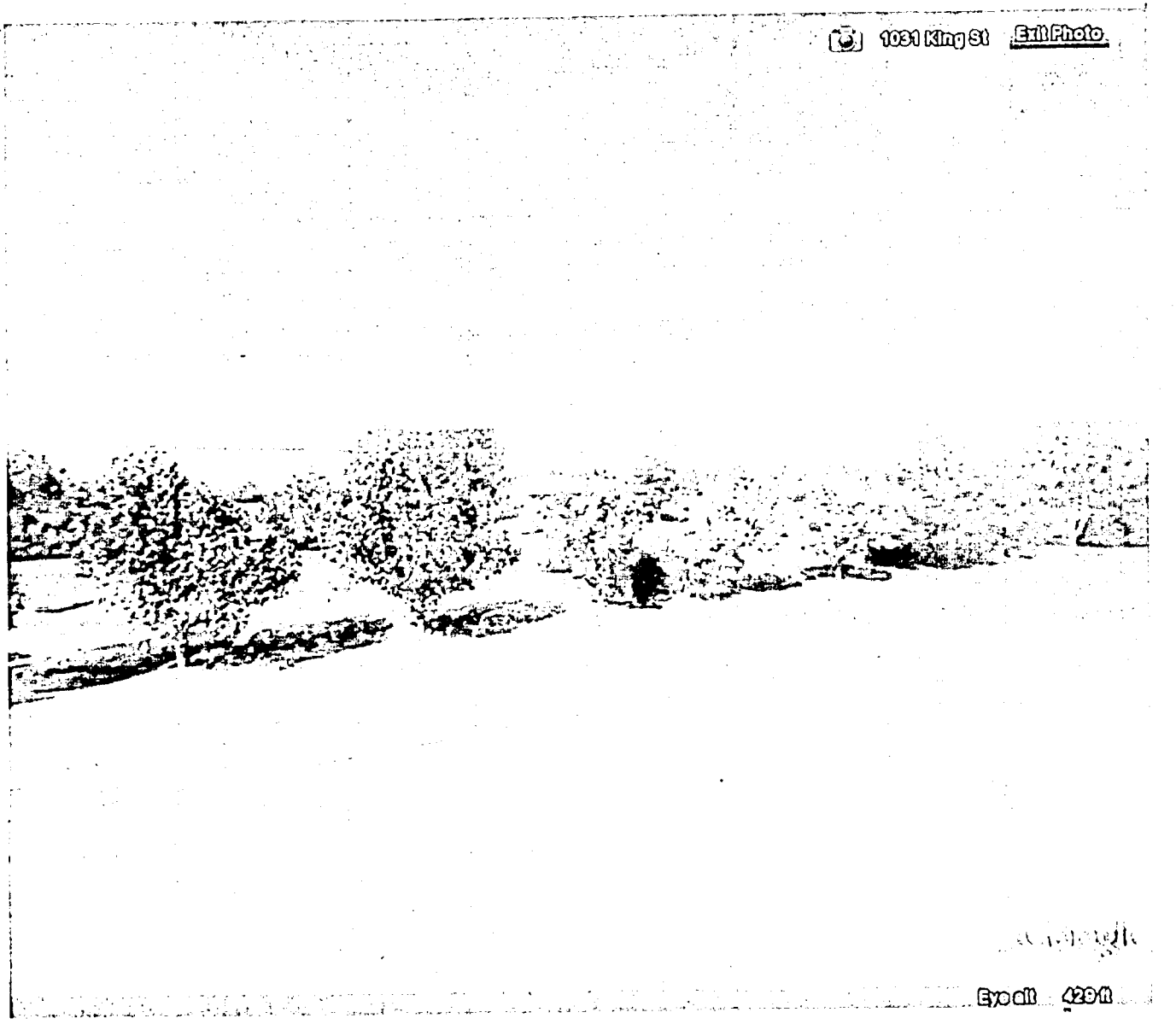
FOX ROAD WATER LINE EXTENSION
RICHMOND COUNTY NORTH CAROLINA
FIGURE 1

Municipal Services Engineering Company, P.A.


King St / N Carolina 177
Exit Photo
Eye alt 434 ft

1019 N Carolina 177 Edit Photo

Eye alt 432 ft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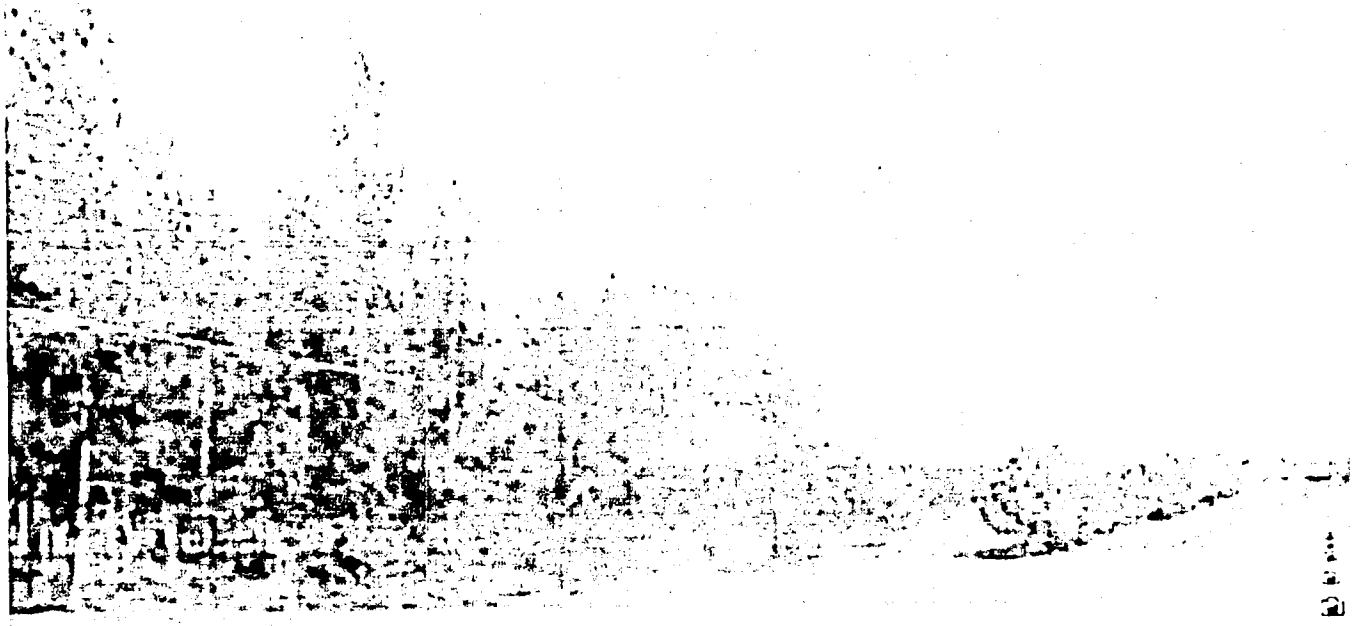
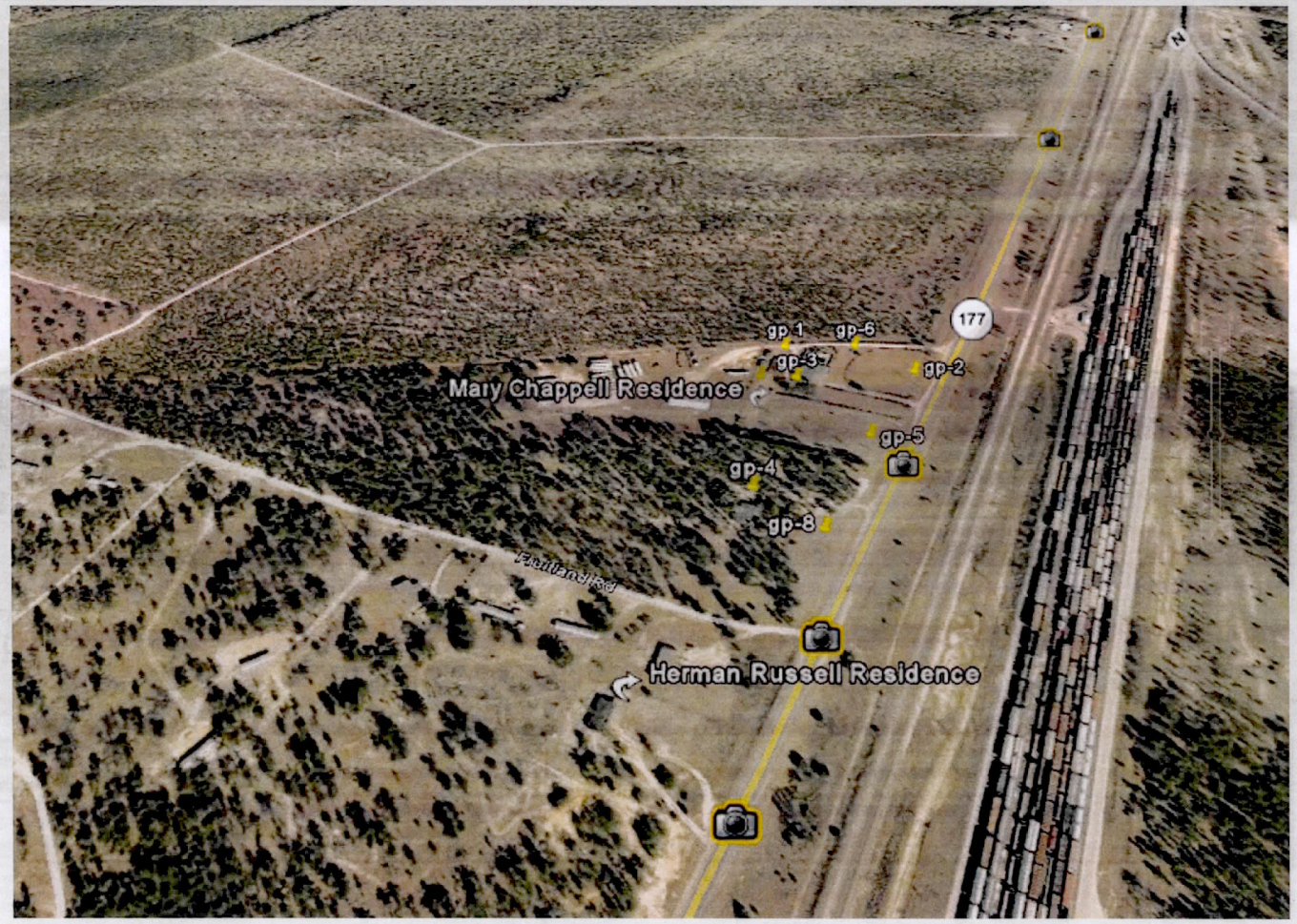
Eye alt 429 ft

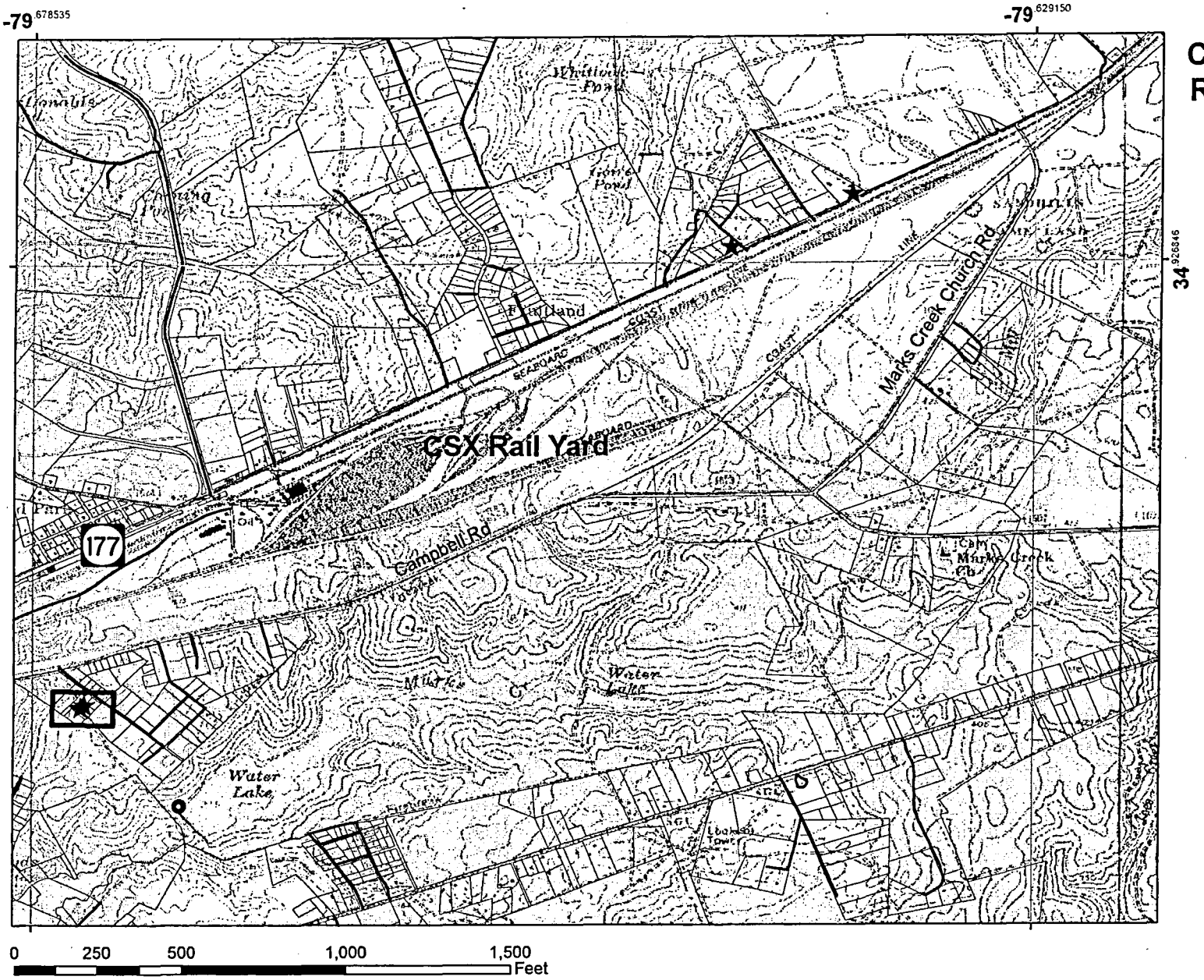
1919 N Carolina 137 Exit Photo



Email 492ft


gp 1
gp-6
gp-3
gp-2
177
Mary Chappell Residence
gp-5
gp-4
gp-8
Herman Russell Residence

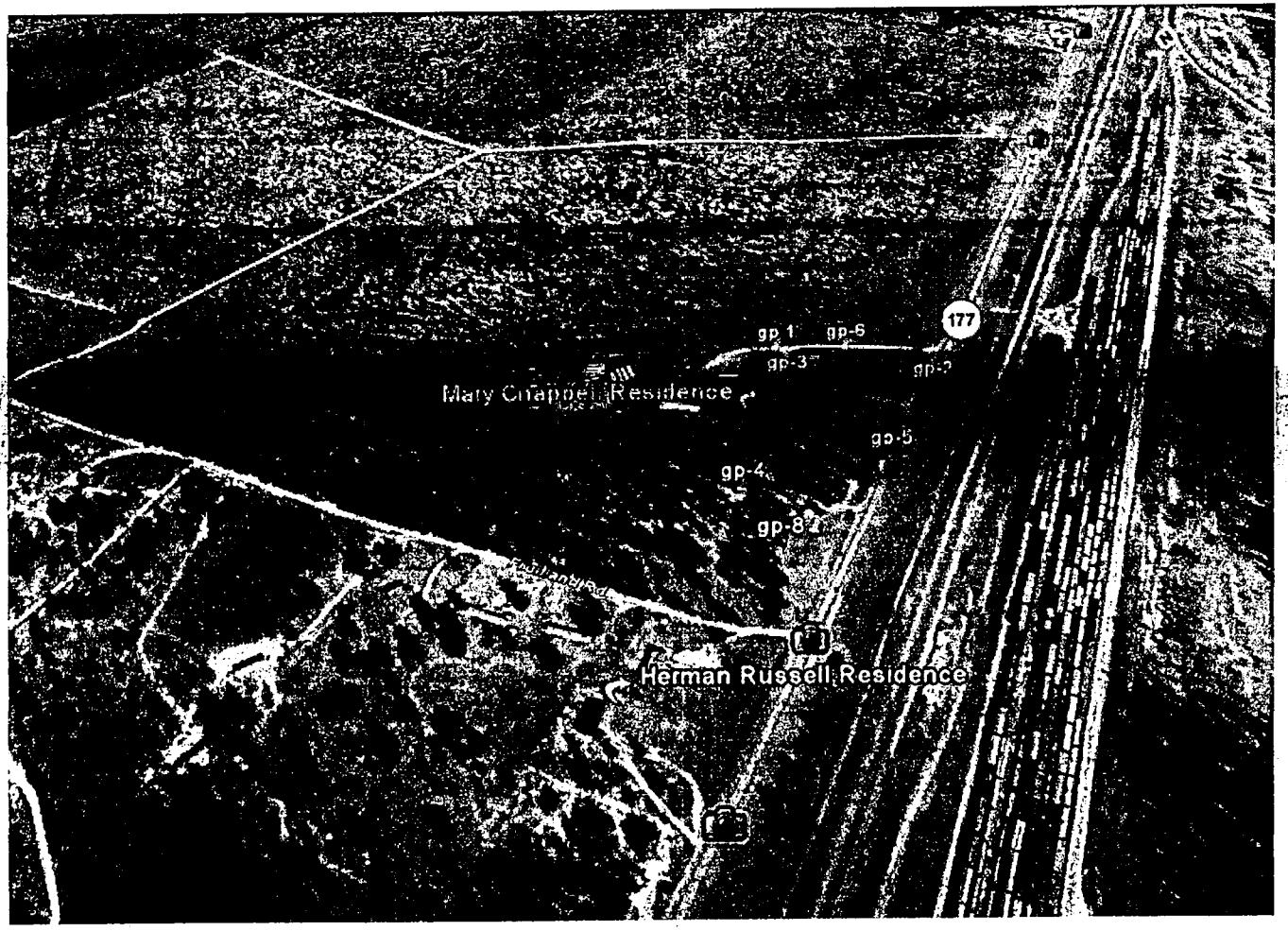
Contaminated Wells of Richmond County, NC Selected Sites

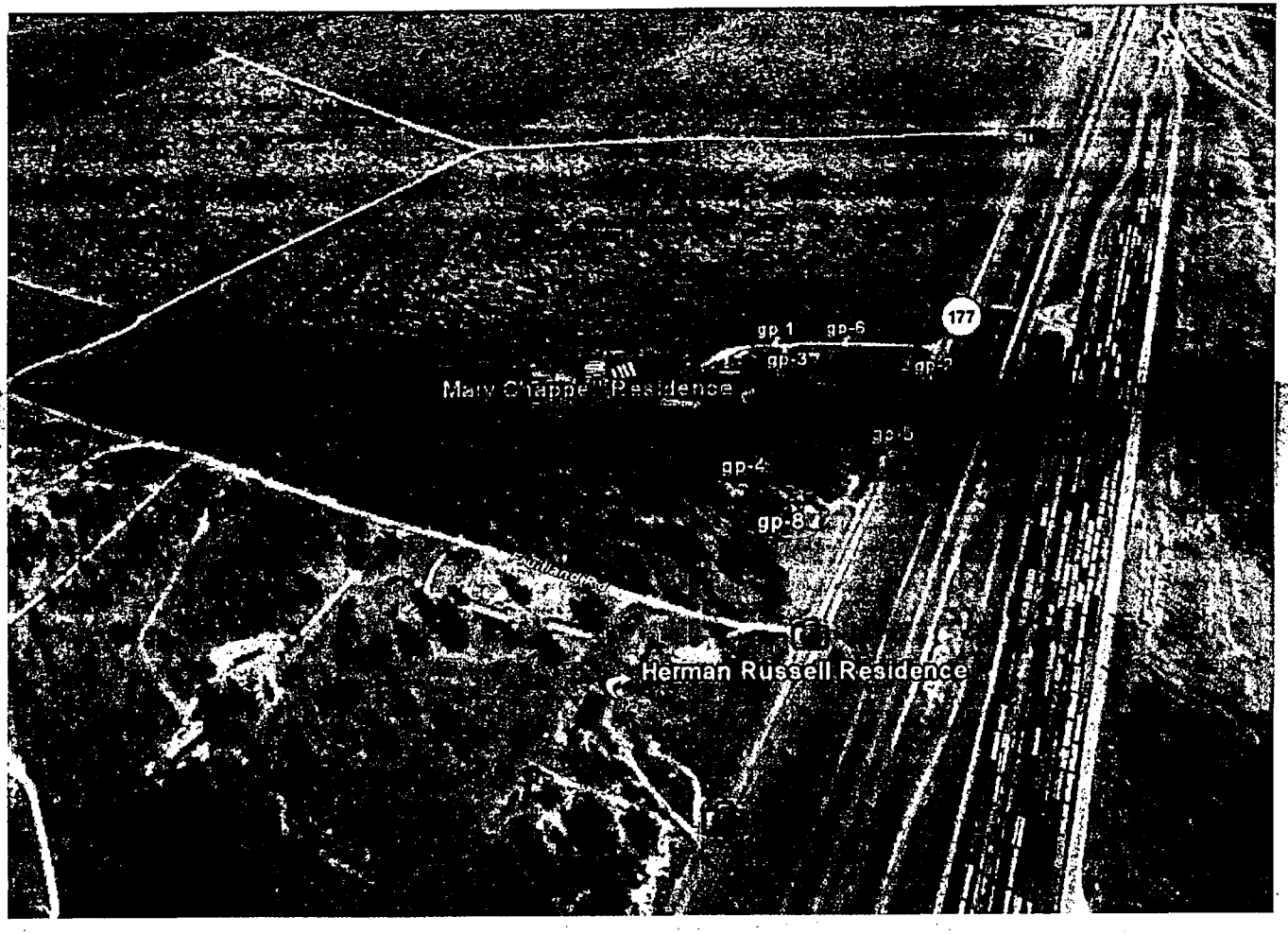


Legend

- ★ DCBP Detected
- ☆ DCP Detected
- ★ DCA Detected
- ★ TCE Detected

N


177
gp-1
gp-6
gp-3
gp-2
Mary Chappell Residence
gp-5
gp-4
gp-8
Herman Russell Residence


177
gp-1
gp-6
gp-3
gp-5
Mary Chappell Residence
gp-5
gp-4
gp-8
Herman Russell Residence

NCDENR
North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

October 3, 2008

Ms. Mary Chapell
1061 Hwy 177 North
Hamlet, North Carolina

Subject: Health Risk Evaluation and Alternate Water Service Request
Mary Chappell Residence, 1061 HWY 177, Hamlet, Richmond County

Dear Ms. Chappell:

This is to inform you that the incident management responsibilities for the above-referenced pollution site have recently changed from the Aquifer Protection Section to the Division of Waste Management's Inactive Sites Branch (IHSB) in the Fayetteville Regional Office. Attached you will find a copy of the health risk evaluation with recommendations concerning the continued use of your supply well. Also attached is an affidavit that should be completed to determine if you qualify for potential assistance in obtaining alternate water service through the Bernard Allen Memorial Drinking Water Fund.

You may already be receiving bottled water service because of an investigation that is being conducted to investigate pesticides and associated chemicals around peach orchards. However, the constituent that is showing up in your supply well is typically related to dry cleaning operations or as solvents used in automotive work. Because the contamination found in your well is not a pesticide, the bottled water service could be discontinued at any time.

Therefore, you should review the attached affidavit to be signed and notarized to determine if you meet the requirements for eligibility. If you do qualify, please return the completed affidavit in the enclosed envelope in order that we may be able to recommend it to the Department of Environment, Health and Natural Resources for potential assistance through the Bernard Allen Fund.

Should you have any questions or concerns about this information, please feel free to call me at 910.433.3345.

Sincerely,

P. Sean Boyles, L.G.
Hydro geologist
Inactive Hazardous Sites Branch

Attachment

cc: Cindy Pearson, 1217 HWY 177 North, Mariston, NC 28363
IHS Files

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone 919-508-8400 \ FAX 919-715-3605 \ Internet http://wastenotnc.org

Memorandum:

Date: September 25, 2008

TO: Sean Boyles
Fayetteville Regional Office
Inactive Hazardous Sites Branch

FROM: Hanna Assefa
Industrial Hygiene Consultant
Inactive Hazardous Sites Branch

RE: Health Risk Evaluation
Mary Chappel Residence
1061 Hwy 177 North,
Hamlet, Richmond County, North Carolina

During this sampling event, one contaminant was detected in the well water. The contaminant, trichloroethene, was detected at a concentration exceeding the applicable water standard. The standards used to determine if the water is suitable for drinking and cooking are the United States Environmental Protection Agency's Maximum Contaminant Levels (MCLs) or, if no MCLs exist, North Carolina Groundwater Standards (2L).

If the contaminant concentration exceeds the applicable standard for using the water for drinking and cooking, the contaminant concentration is further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Based on this evaluation the water from this well should not be used for drinking and cooking. The water from this well can be used for all other purposes described above.** The table below compares the detected contaminant concentration with the applicable standards:

Sample ID	Contaminant	Concentration (ug/l)	MCL (ug/l)	2L (ug/l)
GWO -77142	Trichloroethene	36	5	NA

Shaded boxes indicate a standard has been exceeded.
NA – Not Applicable

GROUNDWATER FIELD/LAB FORM

COC

North Carolina
Department of Environment and Natural Resources
DIVISION OF WATER QUALITY-GROUNDWATER SECTION

Location code [redacted] 6I077 1061/ NC 177

County Richmond

Quad No _____ Serial No. _____
Lat. _____ Long. _____

SAMPLE TYPE
- [x] Water
- [ ] Soil
- [ ] Other
- [x] Chain of Custody

SAMPLE PRIORITY
- [ ] Routine
- [x] Emergency

1061/NC177

Lab Number 8G1222 AB34912
Date Received 8-28-08 Time: 0830
Rec'd By: From: Bus, Courier, Hand Del.,
Other: Hy
Data Entry By: _____ Ck: _____
Date Reported: _____

Report To: ARO, FRO, MRO, RRO, WaRO, WiRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other: _____
Shipped by: Bus, Courier, Hand Del., Other: _____
Collector(s): BillTodd Date 8/28/08 Time 3:46

Purpose: Baseline, Complaint, Compliance, LUST, Pesticide Study, Federal Trust, Other: _____ (circle one)

FIELD ANALYSES

pH 400 _____ Spec. Cond. 94 _____ at 25°C
Temp. 10 _____ °C Odor _____
Appearance _____
Field Analysis By: BillTodd

Owner Mary Chappell
Location or Site 1061 NC Hwy 177 North
Description of sampling point outside tap
Sampling Method pump (Pump, bailer, etc.) Sample Interval _____
Remarks control # 95 ; ~~air type~~ (Pumping time, air temp., etc.)

LABORATORY ANALYSES

	BOD 310	mg/L
	COD High 340	mg/L
	COD Low 335	mg/L
	Coliform: MF Fecal 31616	/100ml
	Coliform: MF Total 31504	/100ml
	TOC 680	mg/L
	Turbidity 76	NTU
	Residue, Suspended 530	mg/L
	pH 403	units
	Alkalinity to pH 4.5 410	mg/L
	Alkalinity to pH 8.3 415	mg/L
	Carbonate 445	mg/L
	Bicarbonate 440	mg/L
	Carbon dioxide 405	mg/L
	Chloride 940	mg/L
	Chromium: Hex 1032	ug/L
	Color: True 80	CU
	Cyanide 720	mg/L

	Diss. Solids 70300	mg/L
	Fluoride 951	mg/L
	Hardness: Total 900	mg/L
	Hardness (non-carb) 902	mg/L
	Phenols 32730	ug/l
	Specific Cond. 95	uMhos/cm
	Sulfate 945	mg/L
	Sulfide 745	mg/L
	Oil and Grease	mg/L
	NH_3 as N 610	mg/L
	TKN as N 625	mg/L
	$NO_2 + NO_3$ as N 630	mg/L
	P: Total as P 665	mg/L
	Nitrate (NO_3 as N) 620	mg/L
	Nitrite (NO_2 as N) 615	mg/L

	Ag-Silver 46566	ug/L
	Al-Aluminum 46557	ug/L
	As-Arsenic 46551	ug/L
	Ba-Barium 46558	ug/L
	Ca-Calcium 46552	mg/L
	Cd-Cadmium 46559	ug/L
	Cr-Chromium 46559	ug/L
	Cu-Copper 46562	ug/L
	Fe-Iron 46563	ug/L
	Hg-Mercury 71900	ug/L
	K-Potassium 46555	mg/L
	Mg-Magnesium 46554	mg/L
	Mn-Manganese 46565	ug/L
	Na-Sodium 46556	mg/L
	Ni-Nickel	ug/L
	Pb-Lead 46564	ug/L
	Se-Selenium	ug/L
	Zn-Zinc 46567	ug/L

	Organochlorine Pesticides
	Organophosphorus Pesticides
	Nitrogen Pesticides
	Acid Herbicides
	PCBs
	Semivolatile Organics
	TPH-Diesel Range
X	Volatile Organics (VOA bottle) ✓
	TPH-Gasoline Range
	TPH-BTEX Gasoline Range

LAB USE ONLY
Temperature on arrival (°C): 2.6

Lab Comments _____

GW-54 REV. 7/03 For Dissolved Analysis-submit filtered sample and write "DIS" in block.

NC DWQ Laboratory Section Results

County: RICHMOND
River Basin
Report To FROAP

Collector: B TODD
Region: FRO
Sample Matrix: GROUNDWATER
Loc. Type: WATER SUPPLY
Emergency Yes/No YES
COC Yes/No YES

RECEIVED
SEP 08 2008
DENR – FAYETTEVILLE REGIONAL OFFICE

DIVISION OF WATER QUALITY DWQ

VisitID

Loc. Descr.: MARY CHAPPELL

Sample ID: AB34912
PO Number # 8G1222
Date Received: 08/29/2008
Time Received: 08:30
Labworks LoginID MMATHIS
Date Reported: 9/3/08

Report Generated: 09/03/2008

QC 9/4/08

Location ID:	Collect Date:	Collect Time::	Sample Depth
6I0771061NC177	08/28/2008	15:46	

Sample Qualifiers and Comments

VOL: P2 - DILx5 (9/2/08)

Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations
B1-Countable membranes with <20 colonies; Estimated
B2- Counts from all filters were zero.
B3- Countable membranes with more than 60 or 80 colonies; Estimated
B4-Filters have counts of both >60 or 80 and < 20; Estimated
B5-Too many colonies were present; too numerous to count (TNTC)
J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated
N1-The component has been tentatively identified based on mass spectral library search and has an estimated value
N3-Estimated concentration is < PQL and >MDL
NE-No established PQL
P-Elevated PQL due to matrix interference and/or sample dilution
Q1-Holding time exceeded prior to receipt at lab.
Q2- Holding time exceeded following receipt by lab
PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
U- Samples analyzed for this compound but not detected
X1- Sample not analyzed for this compound

LAB

NC DWQ Laboratory Section Results

Location ID: 6I0771061NC177
Loc. Descr.: MARY CHAPPELL
Visit ID

Sample ID: AB34912
Collect Date: 08/28/2008
Collect Time:: 15:46

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
	Sample temperature at receipt by lab		2.6		°C	DSAUNDERS	MMATHIS
	Method Reference					8/29/08	8/29/08
VOL							
	Volatile Organics in liquid		_TITLE_		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-78-1	Dichlorodifluoromethane	5.0	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
74-87-3	Chloromethane	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-01-4	Vinyl Chloride	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
74-83-9	Bromomethane	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-00-3	Chloroethane	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-69-4	Trichlorofluoromethane	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-35-4	1,1-Dichloroethene	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-09-2	Methylene Chloride	50	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
156-60-5	trans-1,2-Dichloroethene	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
1634-04-4	Methyl Tert-Butyl Ether	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
75-34-3	1,1-Dichloroethane	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
156-59-4	cis-1,2-Dichloroethene	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
74-97-5	Bromochloromethane	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
67-66-3	Chloroform	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
590-20-7	2,2-Dichloropropane	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
107-06-2	1,2-Dichloroethane	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08

NC DWQ Laboratory Section Results

Location ID: 6I0771061NC177
Loc. Descr.: MARY CHAPPELL
Visit ID

Sample ID: AB34912
Collect Date: 08/28/2008
Collect Time:: 15:46

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
71-55-6	1,1,1-Trichloroethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
563-58-6	1,1-Dichloropropene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
56-23-5	Carbon Tetrachloride	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
71-43-2	Benzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
74-95-3	Dibromomethane	5.0	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
78-87-5	1,2-Dichloropropane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
79-01-6	Trichloroethene	1.2	36	P2	ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
75-27-4	Bromodichloromethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
10061-01-5	cis-1,3-Dichloropropene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
10061-02-6	trans-1,3-Dichloropropene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
79-00-5	1,1,2-Trichloroethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
108-88-3	Toluene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
142-28-9	1,3-Dichloropropane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
124-48-1	Dibromochloromethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
106-93-4	(EDB)1,2-Dibromoethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
127-18-4	Tetrachloroethene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
108-90-7	Chlorobenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
100-41-4	Ethylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						

NC DWQ Laboratory Section Results

Location ID: 6I0771061NC177
Loc. Descr.: MARY CHAPPELL
Visit ID

Sample ID: AB34912
Collect Date: 08/28/2008
Collect Time:: 15:46

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
75-25-2	Bromoform	5.0	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
108-38-3	m,p-Xylene	2.5	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
100-42-5	Styrene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
79-34-5	1,1,2,2-Tetrachloroethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
630-20-6	1,1,1,2-Tetrachloroethane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
95-47-6	o-Xylene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
96-18-4	1,2,3-Trichloropropane	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
98-82-8	Isopropylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
108-86-1	Bromobenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
103-65-1	n-Propylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
95-49-8	2-Chlorotoluene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
106-43-4	4-Chlorotoluene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
108-67-8	1,3,5-Trimethylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
98-06-6	tert-Butylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
95-63-6	1,2,4-Trimethylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
135-98-8	sec-Butylbenzene	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
543-73-1	m-Dichlorobenzene (1,3)	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						
106-46-7	p-Dichlorobenzene (1,4)	1.2	Not detected		ug/L	ATERRY 9/2/08	RKELLING 9/2/08
	Method Reference EPA5030/624/8260						

NC DWQ Laboratory Section Results

Location ID: 6I0771061NC177
Loc. Descr.: MARY CHAPPELL
Visit ID

Sample ID: AB34912
Collect Date: 08/28/2008
Collect Time:: 15:46

CAS #	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
95-50-1	o-Dichlorobenzene (1,2)	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
99-87-6	p-Isopropyltoluene	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
104-51-8	n-Butylbenzene	1.2	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
96-12-8	1,2-Dibromo-3-Chloropropane	10	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
120-82-1	1,2,4-Trichlorobenzene	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
91-20-3	Naphthalene	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
87-68-3	Hexachlorobutadiene	2.5	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08
87-61-6	1,2,3-Trichlorobenzene	5.0	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					9/2/08	9/2/08

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

MICHAEL F. EASLEY, GOVERNOR
WILLIAM G. ROSS, JR., SECRETARY
DEXTER R. MATTHEWS, DIRECTOR

NCDENR

FAX TRANSMITTAL RECORD

DATE: 09/25/08

TO: Sean Boyles.

FAX #: 910 486 0707

FROM: Hanna, Superfund Section

RE:

Number of pages (including cover) 2

Comments: Sean – Scanner problem.

Confirm receipt of document(s):

_____ Superfund Section (919) 733-2801, ext. _____

SF/slb(C:\WPWIN60\WPDOCS\SF\SF-FAX.FRM)

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

Memorandum:

Date: September 25, 2008

TO: Sean Boyles
Fayetteville Regional Office
Inactive Hazardous Sites Branch

FROM: Hanna Assefa
Industrial Hygiene Consultant
Inactive Hazardous Sites Branch

RE: Health Risk Evaluation
Mary Chappel Residence
1061 Hwy 177 North,
Hamlet, Richmond County, North Carolina

During this sampling event, one contaminant was detected in the well water. The contaminant, trichloroethene, was detected at a concentration exceeding the applicable water standard. The standards used to determine if the water is suitable for drinking and cooking are the United States Environmental Protection Agency's Maximum Contaminant Levels (MCLs) or, if no MCLs exist, North Carolina Groundwater Standards (2L).

If the contaminant concentration exceeds the applicable standard for using the water for drinking and cooking, the contaminant concentration is further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Based on this evaluation the water from this well should not be used for drinking and cooking. The water from this well can be used for all other purposes described above.** The table below compares the detected contaminant concentration with the applicable standards:

Sample ID	Contaminant	Concentration (ug/l)	MCL (ug/l)	2L (ug/l)
GWO -77142	Trichloroethene	36	5	NA

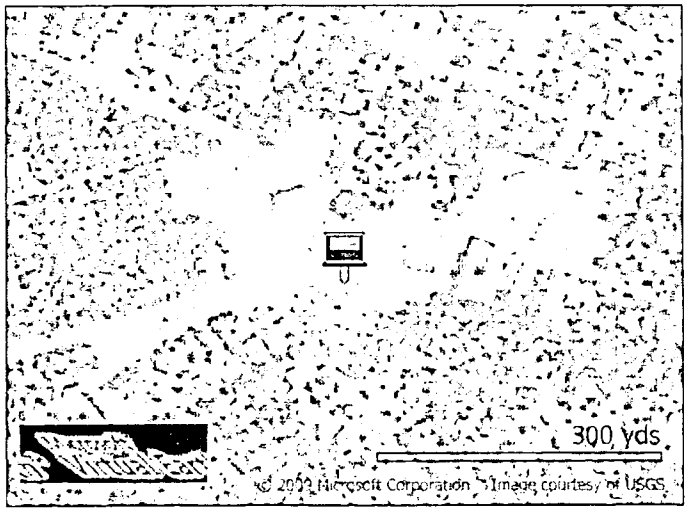
Shaded boxes indicate a standard has been exceeded.
NA – Not Applicable

Switchboard® Your Digital Directory

Find a Business | Find a Person | Maps & Directions | Search by Phone | Area & Zip Codes | Web Search

FIRST: Mary LAST: Chappell CITY: hamlet STATE: North Carolina Search

Mary L Chappell
1061 N Nc Highway #177
Hamlet, NC 28345
(910) 582-6882



Find More Information for Mary L Chappell

Email and Unlisted Phone Lookup
Find Mary L Chappell's Email Address & Unlisted Number.

Get Detailed Background Information
Run a Background Check on Mary L Chappell

Verify Public Records
Does Mary L Chappell Have any civil court records?

View Property & Area Information
What is this property worth?

View Social Network Profile
Find Mary L Chappell online personality

Get Complete Address History
Find Mary L Chappell address history

MORE INFORMATION ON Mary L Chappell

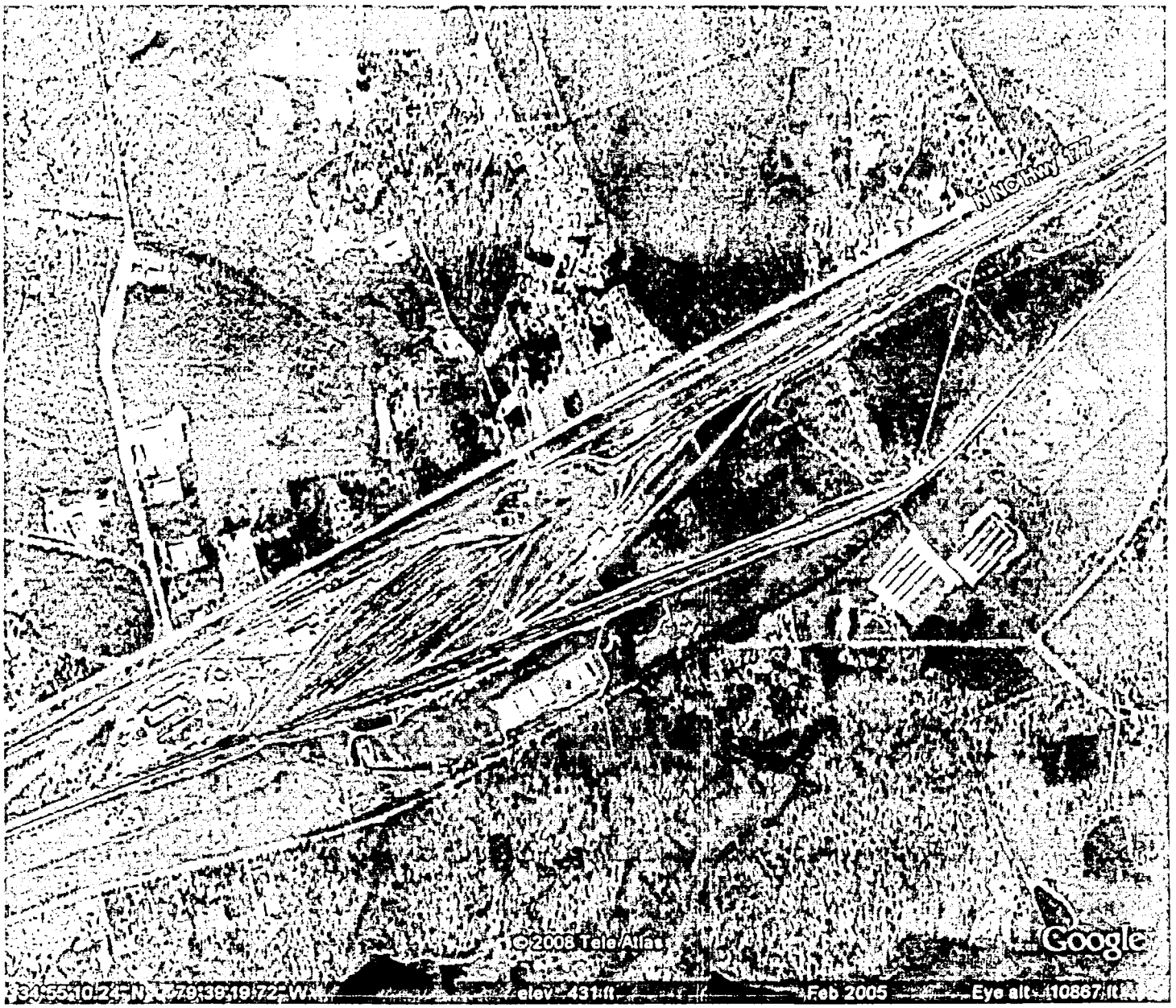
- (910) 582-6882 is a Land Line phone.
- The local time is 11:04 AM.
- Location: Hamlet, NC

Public Record Search

PUBLIC RECORDS FOUND FOR MARY CHAPPELL WITH CURRENT & VERIFIED PHONE & ADDRESS

INTELIUS

FIRST NAME	LAST NAME	CITY	STATE	
Mary	Chappell	hamlet	North Carolina	Search


N NC Hwy 17
© 2008 Tele Atlas
Google
34°55'10.24" N 79°38'19.72" W
elev 431 ft
Feb 2005
Eye alt 10867 ft