705SERBSF10,639

705SERBSF10,639

Site Name (Subject):	USA RESERVE XVIII AIRBORNE CORPS
Site ID (Document ID):	NC5210022047
Document Name (DocType):	Preliminary Assessment/Site Inspection (PA/SI)
Report Segment:	
Description:	Preliminary Assessment II (PA II)
Date of Document:	3/16/2006
Date Received:	
Box: *Enter SF and # with no spaces*	SF10,639
Access Level:	PUBLIC
Division:	WASTE MANAGEMENT
Section:	SUPERFUND
Program (Document Group):	SERB (SERB)
Document Category:	FACILITY

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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

March 16, 2006

Ms. Jennifer Wendel
Superfund Site Evaluation Section
US EPA Region IV Waste Division
61 Forsyth Street SW, 11th Floor
Atlanta, GA 30303

Subject: Preliminary Assessment II (PA II)
USA Reserve XVIII Airborne Corps. Salisbury
Salisbury, Rowan County, NC
US EPA ID: NC5 210 022 047

Dear Ms. Wendel:

Enclosed is the Preliminary Assessment II (PA II), completed by the North Carolina Department of Environment and Natural Resources (NCDENR), Superfund Section for the USA Reserve XVIII Airborne Corps Site located just northwest of downtown Salisbury, Rowan County, NC. The NC Superfund Section recommends that this site be assigned a No Further Remedial Action Planned status under CERCLIS.

Under the authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the North Carolina Superfund Section conducted this PA II to evaluate updated data regarding environmental conditions at the site in order to determine the need for any further CERCLA action. Information about the site was obtained through the review of available file documents and interviews with US Army personnel and contractors who manage the site.

The USA Reserve XVIII Airborne Corps Site (AKA Uriah G. Lucas USAR Center) in Salisbury, NC is located on 1835 Jake Alexander Blvd W, Salisbury, NC 28147. This location is about 2.0 miles northwest of the central business district of downtown Salisbury, near the southwest corner of the intersection with Dan Street (Refs. 1;2).

Corresponding geographic coordinates for the facility are 35.6882 north latitude and 80.5105 west longitude (Ref. 1). This site consists of a 5-acre parcel with an approximate 14,200 square foot training and assembly building, a 2,500 square foot

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vehicle maintenance shop and a storage building (Refs. 2;3). The site is surrounded by residential areas to its north and east. A commercial area lies to the south and west beyond a forested parcel (Ref. 2).

This center has been active since its construction in 1960. Vehicle maintenance procedures such as oil changes, antifreeze changes, axle lubrication, and battery replacements were reportedly performed at this site in years prior to this renovation. No major spills were reported for this center. This center uses city water and city sewers (Ref. 3). A Preliminary Assessment was completed in August of 1990 (Ref. 4). A request for updated information was submitted by EPA in order to complete the revised Hazard Ranking System in August of 1991 (Ref. 5). This PA II is intended to serve as the response to that request.

Documents regarding the site's regulatory history were found dating back to about 1985. This center is classified as a conditionally exempt small quantity generator by the NC Hazardous Waste Section. All spent petroleum products were temporarily stored on the premises and were removed by a commercial contractor and transported off-site for reclamation. This center is periodically inspected by a contractor of the Department of the Army to insure compliance with the military's Environmental Regulation regarding the storage and proper disposal of hazardous waste (Ref. 3).

A 550-gallon heating oil underground storage tank was excavated in December of 1989. This tank was located behind the Vehicle maintenance shop. The trench soil was visibly contaminated (Ref. 6). Soil samples obtained at a depth of 10-12 feet contained total petroleum hydrocarbon (TPH) levels at 260 ppm (Ref. 7). About 120 cubic yards (150 tons) of soil was excavated and stockpiled (Ref. 8). About 115 tons of this soil was disposed of via delivery to a brick company in Sanford, NC (Ref. 8,p. 25). No volatile organic compounds were detected in the excavated soil. Analytical results from confirmational soil samples (S1 and S2) collected by SPATCO Environmental in October of 1990 from the base of the excavation (depth of 18 to 21 feet) indicated no detectable TPH compounds (Ref. 8,p. 3). A monitoring well with a 31 foot depth was installed at about 25 feet downgradient of the former tank location (Ref. 9). Analytical results failed to detect any volatile or semi-volatile organic compounds. Based on these results, a No Further Action letter was granted by the NC Underground Storage Tank Section in February 1992 (Ref. 10).

Current information indicates that the site's operations have been limited to the generation of small quantities of spent petroleum products. The petroleum-based contaminated soil due to the heating oil tank leak has been removed and shipped off site. There are no detectable residual petroleum compounds in the soils nor have any volatile or semi-volatile organic contaminants been detected in the groundwater. Based on these known facts, the NC Superfund Section recommends that this site be assigned a No Further Remedial Action Planned status under CERCLIS. If you have any questions about this PA II, please call Serafino Franch at (919) 508-8455, or by email at serafino.franch@ncmail.net.

Sincerely,

Serafino Franch
Environmental Chemist
NC Superfund Section

Jim Bateson, Head
Site Evaluation and Removal Branch
NC Superfund Section

cc: File
Charlotte Jesneck (letter only)

Attachments: APA Checklist
Rowan County GIS Property Aerial Image (taken 2002) (Reference 1)
NCDENR GIS Topo Map Viewer: Address Locator (1998 aerial) (Reference 2)
Memorandum dated May 16, 2005 with Email Attachment (Reference 3)
Letter dated August 11, 1990 (Reference 4)
Letter dated August 27, 1991 (Reference 5)
Letter dated January 8, 1990 (Reference 6)
Letter dated July 24, 1990 (Reference 7)
Excerpts from UST Soil Cleanup Report (Reference 8)
Letter dated may 29, 1991 (Reference 9)
Letter dated February 7, 1992 from UST (NFA letter) (Reference 10)

ABBREVIATED PRELIMINARY ASSESSMENT CHECKLIST

This checklist can be used to help the site investigator determine if an Abbreviated Preliminary Assessment (APA) is warranted. This checklist should document the rationale for the decision on whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer:	**Serafino Franch, Environmental Chemist**	**March 6, 2006**
	Name/Title	Date
	NCDENR-Superfund Section	**919-508-8455**
	Address	Phone
	Serafino.franch@ncmail.net	
	E-mail Address	

Site Name:	**USA-Reserve XVIII Airborne Corps-Salisbury**		
Previous Names (if any):			
EPA ID #	**NC5 210 022 047**		
Site Location:	**1835 Jake Alexander Blvd W, Salisbury, Rowan County, NC**		
Latitude:	**35.6882° N**	**Longitude:**	**80.5105° W**

Describe the release (or potential release) and its probable nature:

Part 1 - Superfund Eligibility Evaluation

If all answers are no go on to Part 2, otherwise proceed to Part 3.	**YES**	**NO**
1. Is the site currently in CERCLIS or an alias of another site?	X	
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?		X
3. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	X	
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		X
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, previous HRS score determined, or an EPA approved risk assessment completed)?		X

Please explain all yes answers.

1. The site was added to CERCLIS based on a potential for accidental spills of petroleum-based hazardous substances and the potential to impact nearby human and environmental targets.

3. A small release from a 550 gallon underground storage tank containing heating oil was discovered following the excavation of this tank. This release contaminated (260 ppm TPH) a soil area at a 10-12 depth below the tank. About 115 tons out of 150 tons of excavated soil were removed to an off site location. Confirmational soil sampling from a depth of 18 to 21 feet failed to detect neither any TPH compounds nor any volatile organics. A monitoring well (drilled to a 31 foot depth) was installed 25 feet downgradient of the former tank location. Groundwater from this well was free of volatiles and semi-volatile organic compounds.

Part 2 - Initial Site Evaluation

Use Exhibit 1 of the APA fact sheet to make site assessment decisions based on the answers below:	YES	NO
1. Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?		X
2. Is there an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site?	X	
3. Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but there are nearby targets (e.g., targets within 1 mile)?		X
4. Is there no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site?		X
5. Does the site lack documented on-site, adjacent, or nearby targets?		X
6. Does the site lack releases or potential to release?	X	
7. Does the site lack uncontained sources containing CERCLA eligible substances are present on site?	X	

Please explain all yes answer(s).

2. **The petroleum release was subsurface, at least at a depth of 10 feet. There is a residential neighborhood (on Dan Street) whose backyards border the northwest perimeter of the site. Since the contaminated soil has been removed, there should be no effect to the receptors.**

6. **Documented on-site sub-surface contamination consisting of 260 ppm TPH is regulated under a statutory exclusion. No known CERCLA eligible substances have been released.**

7. **Based on known releases, the hazardous substances released at the site are regulated under a statutory exclusion (petroleum products). The release consisted of heating oil.**

Part 3 - State Site Assessment Recommendation

Check the box that applies based on the conclusions of the APA:

- [X] NFRAP
- [ ] Higher Priority SI
- [ ] Lower Priority SI
- [ ] Defer to RCRA Subtitle C
- [ ] Defer to NRC
- [ ] Refer to Removal Program - further site assessment needed
- [ ] Refer to Removal Program – NFRAP
- [ ] Site is being addressed as part of another CERCLIS site
- [ ] Other: Transfer from CERCLIS List to Archived Sites List

State Reviewer: **Serafino Franch** S Franch — **03/06/06**

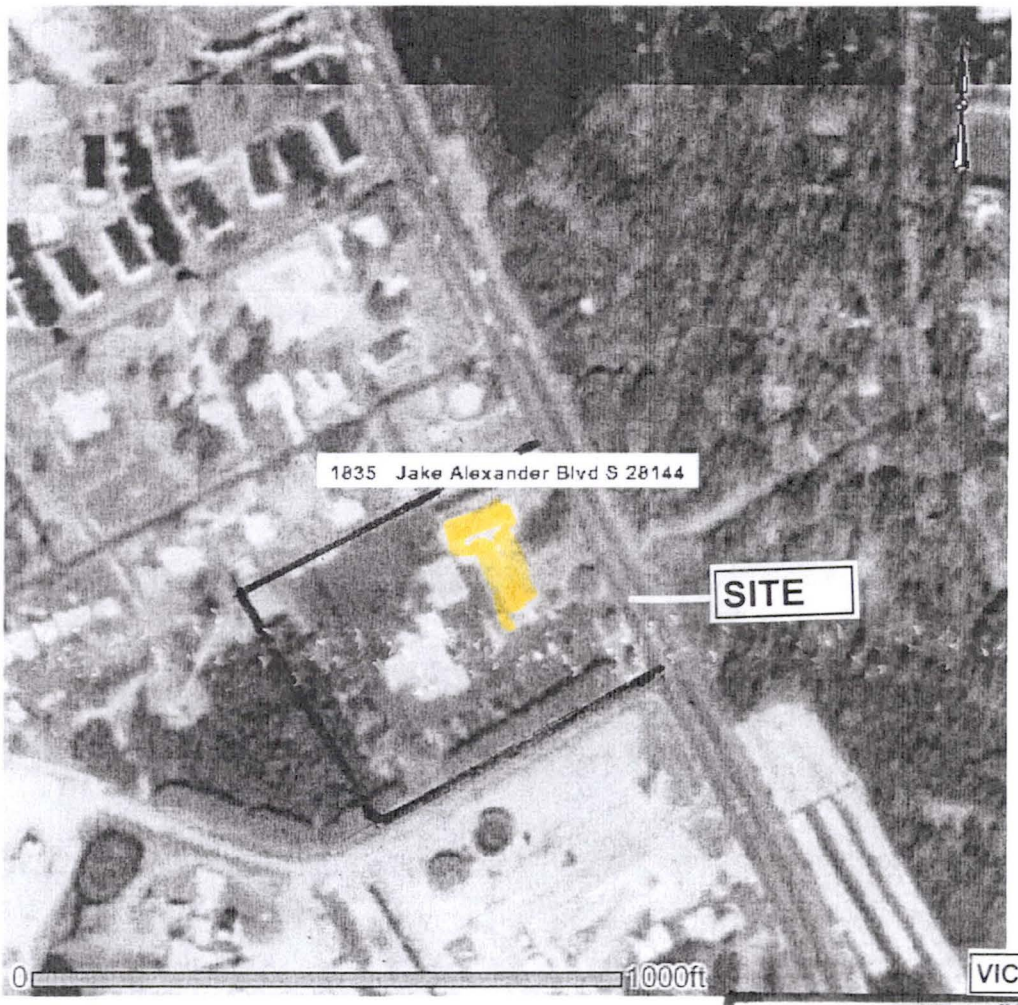
Print Name/Signature — Date

REFERENCE 1

USA Reserve XVIII Airborne Corps-Salisbury
NC5 210 022 047

Map for 1835 Jake Alexander Blvd S 28144

Location of 1835 Jake Alexander Blvd S 28144



1:4,000

1998 AERIAL

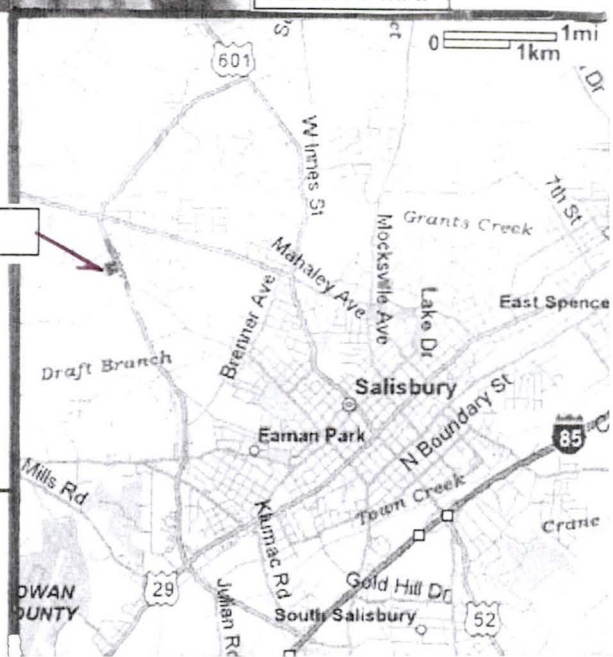
Rowan Mills

7.5-minute Quadrangle

NC SPCS E: 472897.1, N:216045.0 meters (NAD83)
Long: -80.5104615 W, Lat: 35.6881806 N (NAD83)

Site reference point: Northernmost corner of Main Building

VICINITY MAP



REFERENCE 2

Rowan County GIS

USA Reserve XVIII Airborne Corps-Salisbury
NC5 210 022 047

pe Search

Netscape

owan Co, NC

ers Apply Changes

s Legend

s

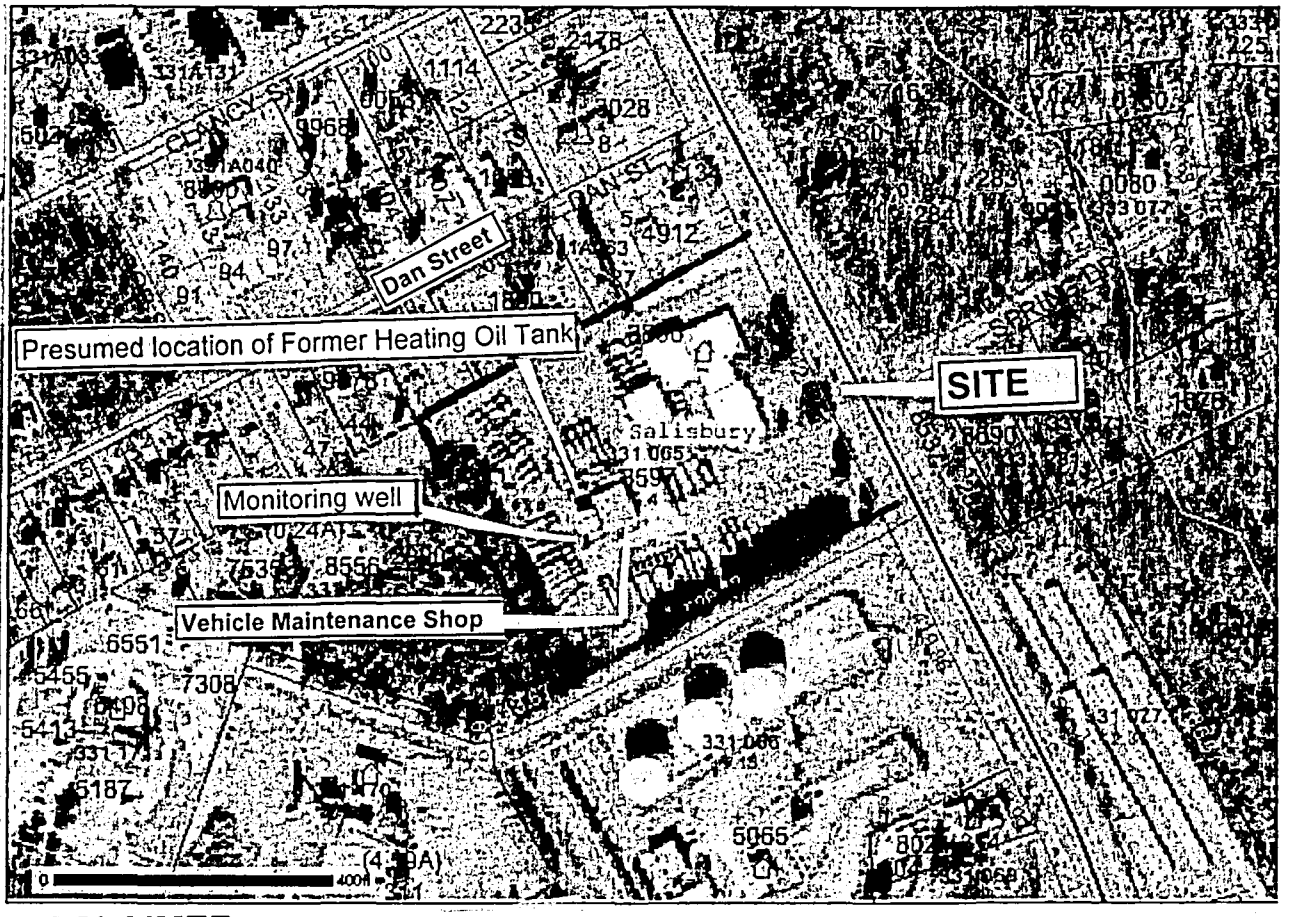
bel Name

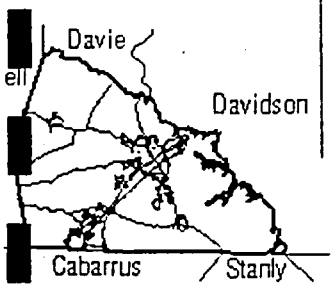
- Contours
- County Boundary
- Jurisdiction
- Major Roads
- Old Lines and Easements
- Parcel Annotation
- Parcel Deed Acres
- Parcels
- Railroad
- Roads
- Streams
- Structures
- Zoning (County)

ys

Label Name

- Aerial Imagery (2002
- Soils
- Townships





DISCLAIMER:

This information was prepared from the Rowan County, NC Geographic Information System. Rowan County has made substantial efforts to ensure the accuracy of location and labeling information contained on this site. The information provided is a representation of various City and County data sources and does not serve as an official map. Rowan County promotes and recommends the independent verification of any information contained on this site by the user.

Rowan County makes no warranty or other assertion as to the fitness of the maps for any particular purpose and neither Rowan County nor it's agents or employees shall be liable for any claim alleged to have resulted from any use thereof.

REFERENCE 3

MEMORANDUM

TO: File

FROM: S. Franch, Environmental Chemist, NC Superfund Section

DATE: May 16, 2005 S Franch

SUBJECT: Status of U.S. Army Reserve Centers in North Carolina

SITE: USA Reserves XVIII Airborne Corps Sites in North Carolina (see attached email, dated 5-12-05, with list of sites)

Summary from telecommunications of April 7 and May 5, 2005 with Michelle Hook (803 751-6757). She is the Environmental Manager that oversees the reserve centers in both North and South Carolina. Ms. Hook is a contractor to the US Army 81st Regional Readiness Command (RRC), Installation Management, employed by Bregman & Company and based in Fort Jackson, SC. The RRC's environmental division chief is Mr. Steven Francis (205 912-6957) who is based in Alabama.

Michelle Hook has visited all of the NC sites in the capacity of an environmental auditor. She has been in this position since 1999 and doesn't have many records prior to 1992. Prior to 1992, military bases were not required to comply with local environmental regulations or keep records of spent solvents, nor did they have an Environmental Program. They did have guidelines on handling of hazardous substances such as Army Regulations 200-1 and 200-2. The Federal Facilites Compliance act was passed in 1992 that required the military to abide by local regulations and keep records of spent chemicals. All of these reserve centers are conditionally exempt from RCRA.

As auditor she examines the sites for dead vegetation, inquires about any spills, reviews handling procedures for various solvents and reviews their recycling program. The Defense Reutilization Marketing Office (DRMO) manages recyleable and non-recyled generated products at military installations. This program selects a contractor to retrieve and redistribute for reprocessing or reuse as a fuel additive in boilers elsewhere. All spent solvents (used oil, antifreeze, lubricants, and batteries) are collected by a contractor (Safety Kleen) and transported off site. The contractor also removes such items as any leftover paint cans, oil soaked vermiculite, and greasy rags.

The original administrator of these centers --Director of Engineering and Housing-- was based under the 18th Airborne Corps at Fort Bragg. None of the reserve centers have gasoline pumps on site. Fuel is obtained at nearby civilian gas stations and nearby military installations. All of the centers had heating oil tanks, mainly above

ground. These have been removed during the coversion to natural gas. Both the Hickory (NC6 210 021 626) and the Wilmington (NC0 210 021 929) centers had underground storage tanks for heating oil. Contractors that removed the oil tanks would determine whether samples should be obtained if they saw any suspected leaks or soil discoloration. Several of the centers have only administration buildings with no facilities for vehicle maintenance. None of the centers were on well water. Because the reserve centers are mostly located within the city, all are connected to city sewers.

Two of the centers are in the process/or have been sold. These are the Greenville center (NC8 210 022 044) and the Durham Center (NC9 210 022 787) on Foster Street. The Greenville center is undergoing an EBS (Environmental Baseline Study) prior to being sold. The Durham Center on Foster Street has been sold to the City of Durham. A Durham Reserve Center still remains on Carol Street (NC4 210 021 891).

The Rocky Mount center (NC8 210 021 624) had a non-reportable quantity spill of hydraulic fluid. The Morehead City Reserve center (NC5 210 022 906) has been undergoing a site investigation. This was initiated since there had been construction plans to add more piers to accommodate additional landing boats. This project has been delayed following September 2001. This harbor area had been used for shipbuilding periodically since the 1860s.

Attachment: Email from Michelle Cook dated 5-12-05 (USA Reserve Centers in NC).

Subject: Status of NC USAR Centers listed on CERCLIS
From: "Hook, Michelle Ms 81 RRC INSTL MGMT" <michelle.hook@usar.army.mil>
Date: Thu, 12 May 2005 15:50:36 -0400
To: <serafino.franch@ncmail.net>

Mr. Franch,

Below is a brief description of NC USAR facilities you inquired about. Some of the facilities are administrative facilities only and have never had any vehicle maintenance activities conducted on site. Some of the facilities have small vehicle maintenance shops that handle minor maintenance activities and there is one that is a larger vehicle maintenance shop which handles minor and major maintenance activities. With reference to the administrative-only facilities, I cannot explain the rationale of the Environmental Manager before me obtaining EPA ID numbers for these sites since these facilities do not generate any HW. However, the paperwork was submitted to NCDENR and EPA ID numbers were generated for these facilities. Please note all USAR Centers in NC are classified as CESQG.

The 81st RRC has an Environmental Regulation in place that details how HM items should be stored and how HW items are to be properly disposed. Facility personnel are also required to inform the Environmental Division of any spills of petroleum products. You had asked for copies of Preliminary Assessments for each of these facilities yet I was only able to locate the PA for one, NC6210022905. This is the location of the larger vehicle maintenance shop and I assume the person that held my position during that time period understood the requirement to only involve that type of facility and not facilities that have the smaller vehicle maintenance shops or the administrative –only facilities.

1. NC6210022046. The Jesse F. Niven USAR Center, constructed in 1958, is situated on a 3.92-acre parcel located at 1816 East Main Street, Albemarle NC 28001. The center consists of a 11,392 ft^2 training and assembly building and a 2,619 ft^2 vehicle maintenance shop. Minor maintenance activities such as oil changes are conducted at the maintenance shop. Numerous internal inspections have been conducted at the facility dating back to 1992 that indicate no signs of contamination. One 500-gallon heating oil UST was removed on 28 September 1994 by Environmental Technology of North America, Inc. The Closure Report was submitted to the NCDENR 27 December 1994. Heating oil USTs are not regulated in the state of North Carolina and no additional documentation from the state is available. No Preliminary Assessment was completed for this facility.

2. NC4210020042. The Walter Hatch Lee USAR Center, constructed in 1950, is situated on a 9-acre parcel located at 224 Louisiana Avenue, Asheville NC 28806. The center consists of a 29,164 ft^2 training and assembly building and a 2,300 ft^2 vehicle maintenance shop. Minor maintenance activities such as oil changes are conducted at the vehicle maintenance shop. Numerous internal inspections have been conducted at the facility dating back to 1992 that indicate no signs of contamination. No Preliminary Assessment was completed for this facility.

3. NC7210022045. The Miller Duckett USAR Center, constructed in 1959, is situated on a 4.06-acre parcel located at 306 East French Broad Avenue, Brevard NC 28712. The center consists of a 4,316 ft^2 training and assembly building, a 4,000 ft^2 utility building used for training and supply storage and a 1325 ft^2 vehicle maintenance shop. No maintenance activities are conducted in the maintenance shop, the building is used for storage. No Preliminary Assessment was completed for this facility.

4. NC6210022905. The Charlotte USAR Center and Area Maintenance Support Activity (AMSA) 122(G) is situated on a 14-acre parcel located at 1330 Westover Street, Charlotte NC 28205. The USAR Center consists of three training and assembly buildings; a 28,402 ft^2 two story building, a 23,287 ft^2 two story building, and an 8,180 ft^2 one story building. There is also a 7,598 ft^2 vehicle maintenance shop that is utilized by the AMSA 122(G). The AMSA 122(G) performs minor and major vehicle maintenance activities on military equipment. Numerous internal inspections have been conducted at the facility dating back to 1992 that indicate no signs of contamination. Attached is a copy of the 14 June 1990 Preliminary Assessment.

11. NC3210022486. The High Point USAR Center, constructed in 1960, is situated on a 3.8-acre parcel located at 156 East Parris Avenue, High Point NC 27262. The center consists of a 3.700 ft² training and assembly building, a 5,000 ft² storage building and a 1,100 ft² vehicle maintenance shop. The facility is an administrative facility only, no maintenance activities are conducted in the maintenance shop and the building is used as a storage building. No Preliminary Assessment was completed for this facility.

12. NC9210022043. The Thomas Erwin Allen USAR Center, constructed in 1989, is situated on a 3.1-acre parcel located at 1400 Carthage Road, Lumberton NC 28358. The center consists of a 14,380 ft² training and assembly building and a 1,325 ft² vehicle maintenance shop that was constructed in 1959. The facility is an administrative facility only, no maintenance activities are conducted in the maintenance shop and the building is used as a storage building. When the previous USAR Center located at this site, a 4,316 ft² building, was demolished in 1989 to allow for the construction of a larger facility, a 1000-gallon UST that housed fuel oil was removed from the site. Numerous internal inspections have been conducted at the facility dating back to 1992 that indicate no signs of contamination. No Preliminary Assessment was completed for this facility.

13. NC9210020732. The Otis Gray Rucker USAR Center, constructed in 1962, is situated on a 4.14-acre parcel located at 3115 Western Boulevard, Raleigh NC 27606. The center consists of a 22,180 ft² training and assembly building, a 3,500 ft² storage building and a 3,854 ft² vehicle maintenance shop. Minor maintenance activities such as oil changes are conducted at the maintenance shop. Numerous internal inspections have been conducted at the facility dating back to 1992 that indicate no signs of contamination. No Preliminary Assessment was completed for this facility.

14. NC8210021624. The Rocky Mount USAR Center, constructed in 1956, is situated on a 5.2-acre parcel located at 804 Fairview Road, Rocky Mount NC 27801. The center consists of 16,700 ft² training and assembly building and a 3,400 ft² vehicle maintenance shop. Minor maintenance activities such as oil changes are conducted at the maintenance shop. Numerous internal inspections have been conducted at the facility dating back to 1993 that indicate no signs of contamination. Four Seasons Industrial Services, Inc. removed a 1500-gallon heating oil UST in FY90. Contamination resulted from leaks in the tanks. Remediation was completed and a Phase I Environmental Investigation Report dated March 1993 was submitted to NCDENR and the 81st Regional Readiness Command requested a finding of NFA at that time. The NCDENR issued a letter 15 July 1996 stating the site had been classified at the lowest priority level and NFA was required. No Preliminary Assessment was completed for this facility.

15. NC5210022047. The Uriah G. Lucas USAR Center, constructed in 1960, is situated on a 5.03-acre parcel located at 1835 Jake Alexander Boulevard, Salisbury NC 28144. The center consists of a 14,286 ft² training and assembly building, a 500 ft² storage building and a 2,528 ft² vehicle maintenance shop. Minor maintenance activities such as oil changes are conducted at the maintenance shop. Numerous internal inspections have been conducted at the facility dating back to 1992 that indicate no signs of contamination. No Preliminary Assessment was completed for this facility.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

REFERENCE 4

RECEIVED
AUG 1 1990
SUPERFUND SECTION

AUG 1 4 1990

4WD-RCRA & FF

Colonel K.W. Crissman
Director of Engineering & Housing
Headquarters, XVIII Airborne Corps & Fort Bragg
Fort Bragg, North Carolina 28307-5000

Re: Preliminary Assessments
U.S. Army Reserve Centers in North Carolina

Dear Colonel Crissman:

The Preliminary Assessment forms for potential hazardous waste sites at U.S. Army Reserve Centers in North Carolina, submitted by letter of June 21, 1990, have been reviewed by the U.S. Environmental Protection Agency. Based upon the information submitted and a telephone verification by Mr. William A. Kern of your Directorate, we have concluded that no further action is needed at this time.

If any releases of hazardous substances to the environment should occur in the future or any information on any past releases should be found, these should be reported to EPA. If you have questions concerning this review, please contact Mr. J.C. Meredith, P.E., Remedial Project Manager, at (404) 347-3016.

Sincerely yours,

James H. Scarbrough

James H. Scarbrough, P.E., Chief
RCRA & Federal Facilities Branch
Waste Management Division

cc: Lee Crosby, NCDEHNR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

REFERENCE 5

AUG 27 1991

RECEIVED

SEP 09 1991

HAZARDOUS WASTE SECTION

WD-RCRA & FF

Certified Mail
Return Receipt Requested

Commander
Directorate of Engineering and Housing
Attention: AFZA-DE-RJ (Mr. Robert Turner)
Fort Bragg, NC 28307

RE: Updating Preliminary Assessments for the Revised Hazard Ranking System
U. S. Army Reserve Centers

Dear Sir:

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), requires the U.S. Environmental Protection Agency (EPA) to establish a Federal Agency Hazardous Waste Compliance Docket to provide information on the status and compliance of federal facilities that may have releases of hazardous substances. Section 120 specifically addresses federal agency compliance with requirements on response actions, site evaluations, and hazard ranking procedures for facilities on the Docket. The U. S. Army Reserve Centers on the enclosed list are on the Docket.

EPA Region IV is currently contacting each federal facility on the Docket but not on the National Priorities List (NPL) to request updated information required by the revised Hazard Ranking System (HRS2) of the National Contingency Plan (NCP), which became effective March 14, 1991. Our records indicate that a Preliminary Assessment (PA) report or its equivalent was submitted previously for the reserve centers and that it was determined that no further action was needed at that time. We are writing to request updated information on any releases of hazardous substances that may have occurred or been discovered since that time.

We are enclosing the basic guidelines for a Preliminary Assessment. If the EPA determines from the updated PA information that a release has occurred or there is a potential for release, we may require further investigation later in the form of a Site Inspection (SI). We are also enclosing guidelines on the requirements of HRS2, generally to be utilized following an SI; however, we are not requesting that level of investigation at this time. Both PA and SI are defined in the NCP (40 CFR 300).

Printed on Recycled Paper

We are requesting submittal of the updated PA information within 60 days of receipt of this letter. If that is not feasible, we request submittal of a timetable for compliance within 30 days of receipt of this letter.

If you have questions regarding the updating of PA information, please contact Mr. J. C. Meredith of this office at (404) 347-3016.

Sincerely yours,

for James H. Scarbrough, P.E., Chief
RCRA & Federal Facilities Branch
Waste Management Division

Enclosure

cc: Mr. William L. Meyer, Director
Division of Solid Waste Management
North Carolina Department of Environment,
Health & Natural Resources
Post Office Box 27687
Raleigh, NC 27611-7687

Commander
U. S. Army Toxic & Hazardous Materials Agency
CETHA-IR-S (Conrad Swann)
Aberdeen Proving Ground, MD 21010-5401

cc: Jack Butler
Superfund

REFERENCE 6

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

January 5, 1990

RECEIVED
DIVISION OF ENVIRONMENTAL MANAGEMENT
JAN 8 1990
MOORESVILLE
REGIONAL OFFICE

IN REPLY REFER TO
Construction Branch

Ms. Barbara Christian
North Carolina Department of Environment,
Health and Natural Resources
Mooresville Regional Office, Groundwater
Section
Post Office Box 950
Mooresville, North Carolina 28115

Dear Ms. Christian:

On December 14, 1989, your offfice was contacted by Mr. Tom Must from our Safety Office. You were informed of a leaking underground storage tank found at the U.S. Army Reserve Center at Salisbury, North Carolina. This letter is a followup to that telephone conversation.

The particulars of the tank are as follows:

a. The tank is a steel, unprotected, 550-gallon tank. It was used to hold heating oil for On Premise Use.

b. The tank is approximately 30 years old. As part of a refurbishing project, the tank was excavated on December 4-5, 1989. At that time several small holes were noticed. The holes were located at the bottom of the tank. The soil in the trench was visibly contaminated.

Our office has been contracted by the U.S. Army Directorate of Engineering and Housig at Fort Bragg to do construction contract management at the Salisbury site. We have also been asked to further study and investigate the discovered situation. Contract amendments are presently being made. We plan to study the problem, investigate the contaminated situation, and to formulate a plan of action. The plan of action will include abatement options.

If you have further questions, I can be reached at (919) 251-4464.

Sincerely,

Philip S. Kadala
Chief, Construction Branch

REFERENCE 7

State of North Carolina
Department of Environment, Health, and Natural Resources
Mooresville Regional Office

James G. Martin, Governor
William W. Cobey, Jr., Secretary

Albert F. Hilton, Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT

July 24, 1990

Mr. Phillip S. Kadala
Department of the Army
Corps of Engineers - Construction Branch
Post Office Box 1890
Wilmington, North Carolina 28402-1890

RE: Review of Proposed Remedial Actions
U.S. Army Reserve Training Center
Rowan County, N.C.

Dear Mr. Kadala:

The staff of the Mooresville Regional Office Groundwater Section has reviewed your proposed remedial action plan for the U.S. Army Reserve Training Center in Salisbury, North Carolina. The following comments are made in reference to that plan:

1. The Ova field meter may be used as a screening tool in the excavation of the contaminated soils. However, laboratory analysis of soil samples is required to confirm that all contaminated soils have been removed. The Ova is also much more sensitive to lower boiling point fuels than it is to heating oil or diesel, which is the contaminant at this site.

2. Soil samples taken at a depth of 10 to 12 feet contained total petroleum hydrocarbon (TPH) levels as high as 260 parts per million (ppm). Soil borings indicate that the water table has been found at approximately 16 feet below the surface in the past. Due to the proximity of the water table to the contaminated soils, the installation of a monitor well near the excavation pit in the downgradient direction is required. A groundwater sample should be analyzed for semi-volatile organic compounds using EPA Method 625 per the attached guidelines.

919 North Main Street, Mooresville, N.C. 28115 • Telephone 704-663-1699 • FAX 704-663-6040

An Equal Opportunity Affirmative Action Employer

3. If the soil results show TPH levels to be less than 10 ppm and the groundwater results do not detect any compounds in exceedance of North Carolina groundwater standards, you can proceed as proposed in paragraphs b and c of your July 12, 1990 letter.

If you have any questions concerning this matter, please contact me at (704) 663-1699.

Sincerely,

Chris DeRoller
Hydrogeologist

Attachment: Laboratory Analysis for Groundwater

CMD/pl

REFERENCE 8

Report of:

Site Assessment for
Excavation of Petroleum Contaminated Soil
U.S. Army Reserve
Salisbury, North Carolina
WO #66296

Prepared for:

Mr. David White
Archie White and Sons, Inc.
119-B West Marion Street
Shelby, North Carolina 28150

RECEIVED
DEC 12 1990
CE/EPA CHARLOTTE

Prepared by:

Ms. Karen K. Reid
SPATCO Environmental
5100 North I-85, Suite 6
Charlotte, North Carolina 28206

November 1990

Project Background

SPATCO Environmental was contracted by Archie White and Sons, Inc. to excavate as much contaminated soil horizontally and vertically as possible at the U.S. Army Reserve Center located on Jake Alexander Boulevard in Salisbury, North Carolina. It is our understanding that the contaminated soil is a result of the former existence of a 2,000 gallon #2 fuel oil underground storage tank. The contaminated soil was excavated by SPATCO Environmental on September 19, 1990.

Soil Removal

During the excavation of the contaminated soil, SPATCO Environmental personnel obtained soil samples of the residual material to determine the absence/presence of soil contamination. Each soil sample obtained was placed in a zip lock plastic bag, sealed, and allowed to volatilize for a period of five to ten minutes. These samples were then screened with an Organic Vapor Analyzer (OVA) by inserting the OVA probe into the sealed bag and recording a head-space reading. Due to the presence of high organic vapor analyzer (OVA) readings, approximately 120 cubic yards (150 tons) of soil was removed from the excavation and stockpiled on plastic and bermed with hay bales. The pile was then covered with plastic to prevent rain infiltration.

Soil Sampling

Two soil samples (S1 and S2) were obtained from the base of the excavation at the approximate locations shown on the attached site map (Figure 1).

The soil samples were obtained from the base of the tank excavations using a decontaminated stainless steel hand auger. The hand auger borings were advanced manually

by twisting the auger into the ground. The auger was removed from the borehole after penetrating approximately six inches below the base of the excavation.

In addition, four composite soil samples (CS-1, CS-2, CS-3, and CS-3-1) were obtained from the stockpiled soil. Each composite sample was obtained by combining four individual samples which were taken to best represent the stockpiled soil. The samples were obtained using a decontaminated stainless steel hand auger.

Each soil sample obtained for chemical testing was divided into two representative portions. The first portion was placed in the appropriate laboratory glass container and sealed with a teflon lined cap. These samples were immediately placed in a chilled cooler for shipment to IEA's laboratory in Cary, North Carolina for analysis of total petroleum hydrocarbons (TPH) in the mid-boiling and gasoline ranges (EPA methods 3550 and 5030). Of the four composite samples obtained, two samples were analyzed for TPH by EPA methods 3550 and 5030, one for hazardous metals (TCLP with 8 RCRA metals) and PCB's, and one for volatile organics by EPA method 8240.

The second portion of each sample was placed in a zip-lock freezer bag and allowed to volatilize for a period of five to ten minutes. These samples were then screened with an Organic Vapor Analyzer (OVA) by inserting the OVA probe into the sealed bag and recording a head-space reading. The results of the OVA screenings are included in Table I.

In addition, prior to obtaining each soil sample for chemical testing, the metal hand auger was decontaminated in the field. Decontamination consisted of a laboratory soap and tap water wash, tap water rinse, isopropyl alcohol rinse, and finally a deionized water rinse. New disposable latex gloves were worn during sampling to reduce the chances of cross-contamination.

Laboratory Results

Laboratory results for the six soil samples are included in the Appendix and in the following table:

TPH Laboratory Results

Soil Sample	Approximate Depth (ft.)	TPH (diesel)	TPH (gas)
S1	21.5	ND	ND
S2	18.5	ND	ND
CS-1	----	260	ND
CS-2	----	ND	ND
CS-3	----	NT	NT
CS-3-1	----	NT	NT

All results given in parts per million (ppm).
ND = Not detected.
NT = Not tested.

Comments and Recommendations

It is our understanding that the North Carolina Division of Environmental Management (NCDEM) currently requires further assessment/remedial action on soils exhibiting total petroleum hydrocarbons (TPH) levels exceeding 10 parts per million (ppm).

No total petroleum hydrocarbons were detected in the soil samples obtained at the base of the excavation (S1 and S2).

Based on this analytical information, no further assessment is required at this time.

The composite soil samples obtained in preparation for the disposal of the contaminated soils stockpiled on site were analyzed for all the required parameters. The only parameters

detected above the NCDEM action level was total petroleum hydrocarbons at 260 ppm in CS-1. Based on these analytical results, the stockpiled soil is acceptable for disposal. It is our recommendation that these stockpiled soils be properly disposed of in a timely manner.

Federal regulations, specifically 40 CFR 280.50 (a), require that you notify the NCDEHNR of these findings.

GL-48

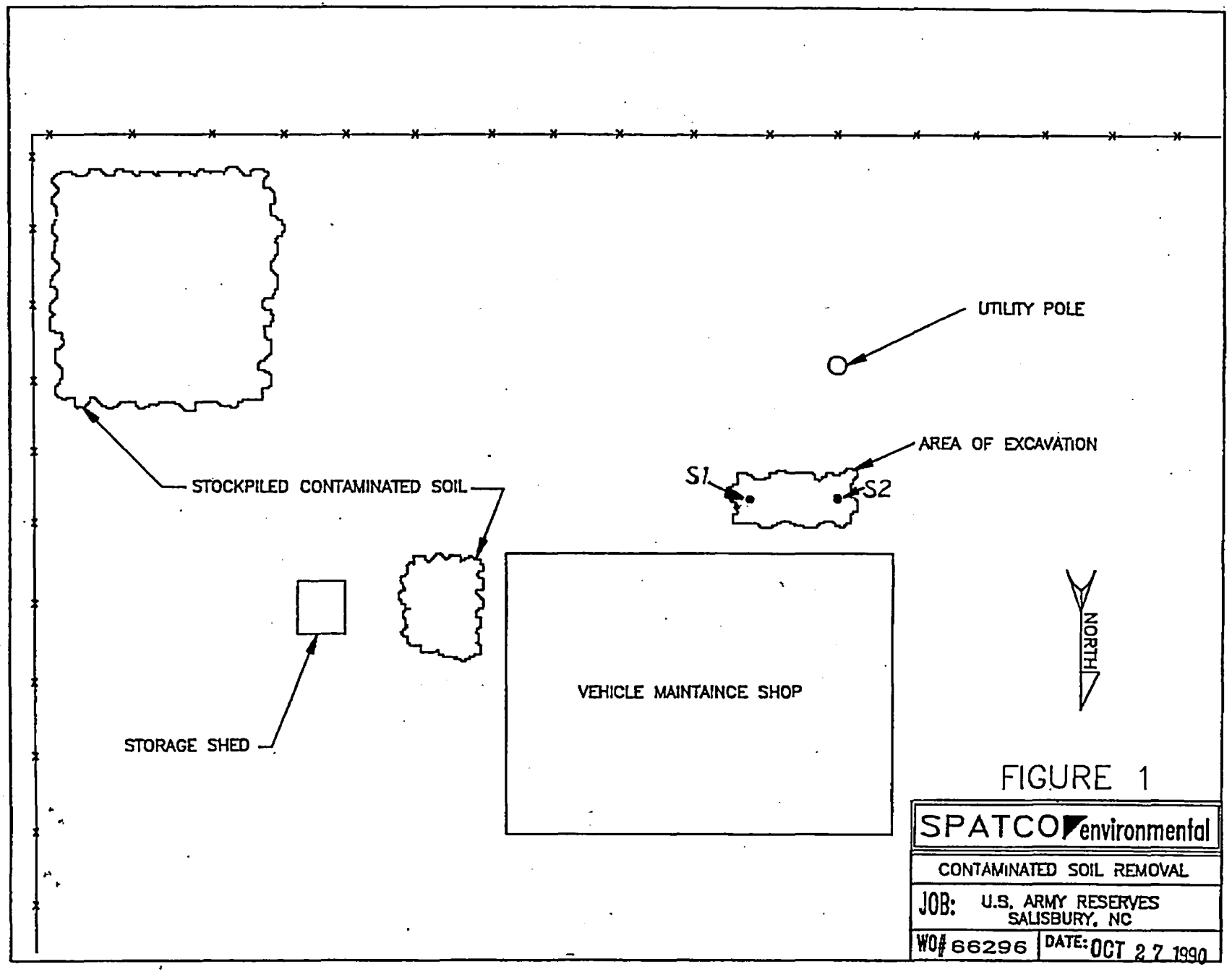


FIGURE 1

SPATCO environmental

CONTAMINATED SOIL REMOVAL

JOB: U.S. ARMY RESERVES SALISBURY, NC

WO# 66296 DATE: OCT 27 1990

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Table I
Organic Vapor Analyzer (OVA) Monitoring Results
U.S. Army Reserve
Jake Alexander Boulevard
Salisbury, North Carolina
WO #66296

Soil Sample	Approximate Depth (ft.)	OVA Readings Soil Sample (ppm)	Ambient Air	Closure Samples Taken
S1	8	52	<1	No
S2	10	900	2	No
S1	11	410	<2	No
S2	10	1000+	1	No
S2	12	0	1	No
S1	14	360	<1	No
S1	16.5	38	<2	No
S1	18	20	<1	No
S1	20.5	3	<1	No
S2	18.5	0	<1	No
S1	21.5	0	<1	Yes
S2	18.5	0	1	Yes

Total Petroleum Hydrocarbon Analysis

IEA Sample No:	800-015(0)-1	Date Received:	10-23-90
Client Sample No:	S1	Date Extracted:	10-25-90
Client Project No:	66296		

Extraction (SW 846 - 3550) / GC-FID analysis (for #2 fuel oil,kerosene,varsol)
Date Analyzed: 10-27-90

The sample does not contain a petroleum hydrocarbon blend in the distillation range referenced above. The quantitation limit is 2.0 mg/kg.

Comment:

==========

Purge and Trap (SW 846 - 5030) / GC-FID analysis (for gasoline only)
Date Analyzed: 10-29-90

The sample does not contain a petroleum hydrocarbon blend with a distillation range similar to gasoline. The quantitation limit is 2.0 mg/kg.

Comment:

Total Petroleum Hydrocarbon Analysis

IEA Sample No: 800-015(0)-2 Date Received: 10-23-90

Client Sample No: S2 Date Extracted: 10-25-90

Client Project No: 66296

Extraction (SW 846 - 3550) / GC-FID analysis (for #2 fuel oil,kerosene,varsol)
Date Analyzed: 10-27-90

The sample does not contain a petroleum hydrocarbon blend in the distillation range referenced above. The quantitation limit is 2.0 mg/kg.

Comment:

==========

Purge and Trap (SW 846 - 5030) / GC-FID analysis (for gasoline only)
Date Analyzed: 10-29-90

The sample does not contain a petroleum hydrocarbon blend with a distillation range similar to gasoline. The quantitation limit is 2.0 mg/kg.

Comment:

Total Petroleum Hydrocarbon Analysis

IEA Sample No: 800-015-1 Date Received: 10-23-90

Client Sample No: CS-1 Date Extracted: 10-24-90

Client Project No: 66296

Extraction (SW 846 - 3550) / GC-FID analysis (for #2 fuel oil,kerosene,varsol)
Date Analyzed: 10-25-90

The sample contains a petroleum hydrocarbon blend with a distillation range similar to #2 fuel oil. The concentration is 260 mg/kg. The quantitation limit is 2.0 mg/kg.

Comment:

Purge and Trap (SW 846 - 5030) / GC-FID analysis (for gasoline only)
Date Analyzed: 10-26-90

The sample does not contain a petroleum hydrocarbon blend with a distillation range similar to gasoline. The quantitation limit is 2.0 mg/kg.

Comment:

IEA LABORATORY RESULTS

IEA Project #: 800-015(1)
Client Name: SPATCO Environmental

Sample #	Client ID	Parameter	Results		Date Analyzed
		TCLP METALS:			
1	CS-3	Arsenic	<0.50	mg/L	11/01/90
1	CS-3	Barium	<10	mg/L	11/04/90
1	CS-3	Cadmium	<0.10	mg/L	11/04/90
1	CS-3	Chromium	<0.50	mg/L	11/04/90
1	CS-3	Lead	<0.50	mg/L	11/02/90
1	CS-3	Mercury	<0.0005	mg/L	11/06/90
1	CS-3	Selenium	<0.10	mg/L	11/02/90
1	CS-3	Silver	<0.50	mg/L	11/04/90

GC/MS PURGEABLES
SW-846 METHOD 8240

IEA Sample Number: 800-015(1)-2
Sample Identification: CS-3-1
Date Analyzed: 11/02/90 By: Casto

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acetone	100	BQL
2	Benzene	5	BQL
3	Bromodichloromethane	5	BQL
4	Bromoform	5	BQL
5	Bromomethane	10	BQL
6	2-Butanone	100	BQL
7	Carbon disulfide	5	BQL
8	Carbon tetrachloride	5	BQL
9	Chlorobenzene	5	BQL
10	Dibromochloromethane	5	BQL
11	Chloroethane	10	BQL
12	2-Chloroethylvinyl ether	10	BQL
13	Chloroform	5	BQL
14	Chloromethane	10	BQL
15	1,1-Dichloroethane	5	BQL
16	1,2-Dichloroethane	5	BQL
17	1,1-Dichloroethene	5	BQL
18	1,2-Dichloroethene (total)	5	BQL
19	1,2-Dichloropropane	5	BQL
20	cis-1,3-Dichloropropene	5	BQL
21	trans-1,3-Dichloropropene	5	BQL
22	Ethylbenzene	5	BQL
23	2-Hexanone	50	BQL
24	Methylene chloride	5	BQL
25	4-Methyl-2-pentanone	50	BQL
26	Styrene	5	BQL
27	1,1,2,2-Tetrachloroethane	5	BQL
28	Tetrachloroethene	5	BQL
29	Toluene	5	BQL
30	1,1,1-Trichloroethane	5	BQL
31	1,1,2-Trichloroethane	5	BQL
32	Trichloroethene	5	BQL
33	Vinyl acetate	50	BQL
34	Vinyl chloride	10	BQL
35	Xylenes (total)	5	BQL

Comments:

BQL = Below Quantitation Limit

PCB IN SOIL

IEA Sample Number: 800-017-1
Sample Identification: CS-3
Date Extracted: 10/31/90
Date Analyzed: 11/06/90 By: Hedrick

Number	Compound	Quantitation Limit (mg/kg)	Results Concentration (mg/kg)
1	Aroclor 1016	0.2	BQL
2	Aroclor 1221	0.2	BQL
3	Aroclor 1232	0.2	BQL
4	Aroclor 1242	0.2	BQL
5	Aroclor 1248	0.2	BQL
6	Aroclor 1254	0.2	BQL
7	Aroclor 1260	0.2	BQL
8	TOTAL AROCLORS	0.2	BQL

Comments:

BQL = Below Quantitation Limit

FORM PCBS Rev. 061589

CESAW-CO-CE

December 7, 1990

SUBJECT: Contract Number DACA54-89-C-0014, Replace Plumbing and Miscellaneous Repairs, U.S.A.R. Center, Salisbury, North Carolina, Provisional ID No. NC TMP0001824

CESAW-CO-CE/Moore/sgf/8015
CESAW-CO-C/Kadala
Mail 12/7/90
a:12-07-01.1tr

Mr. Jerome H. Rhodes, Chief
Hazardous Waste Section
Solid Waste Management Division
Department of Environment, Health
and Natural Resources
P.O. Box 27687
Raleigh, North Carolina 27611-7687

Dear Mr. Rhodes:

The underground fuel (#2 fuel oil) storage tank removal operation at the Salisbury U.S. Army Reserve Center has been completed. A total of 114.675 tons of contaminated soil was removed and disposed of at Lee Brick and Tile Company in Sanford, North Carolina. A copy of the disposal manafest is attached.

Sincerely,

Brian F. Moore
Authorized Representative of
the Contracting Officer

Encl
as

25

TRUCK LOG SUMMARY
SOIL RECLAIMING, INC.
Associate of
LEE BRICK & TILE COMPANY, INC.
P. O. Box 1027
Sanford, N. C. 27331

WILLIAM U. WORNOM
(919) 774-3077

LEE BRICK & TILE COMPANY
(919) 774-4800

CUSTOMER:

SPATCO Environmental

5100 North I-85 Suite 6

Charlotte, N. C. 28206

JOB LOCATION:

US Army Reserve

1835 Jake Alexander Blvd.

Salisbury, N. C. 28144

TRUCKING HANDLED BY: E.R. Ellis Contract Hauling, 5322 Rozzells Ferry Rd., Charlotte, N. C. 28210

DATE	TRUCK NO.	TARE	GROSS	NET	TONS
11-26-90	E1	37,290	86,440	49,150	24.575
11-26-90	E9	20,990	55,810	34,820	17.410
11-26-90	E10	21,270	56,450	35,180	17.590
11-26-90	E14	35,210	65,900	30,690	15.345
11-26-90	MT19	23,080	58,190	35,110	17.555
11-27-90	E1	37,290	81,690	44,400	22.200
			Total	229,350	114.675

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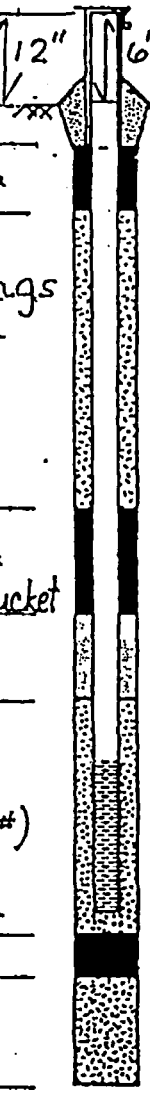
CE/EPA CHARLOTTE

28

PROJECT NAME: Salisbury ARC NO. _____

WELL NO. ~~#~~ 1

DATE INSTALLED 10/05/90



ELEV. (T.O.C.) _____

GROUND SURF. ELEV. _____ Steel csng. 12" 6" PVC Stick Up

DEPTH FROM GROUND SURFACE 0 FT.

BENTONITE PELLETS/GRANULAR/POWDER _____ FT.

BACKFILL MATERIAL: Auger Turnings

20 FT. LENGTH OF SOLID PIPE

BACKFILL METHOD: PIPE TREMIE/AUGER TREMIE GRAVITY FILLED: Gravity

BOREHOLE DIA. 6 5/8 IN.

3 FT.

BENTONITE PELLETS/GRANULAR/POWDER: Pellets 1/2 bucket

15 FT.

SILICA SAND _____ 17.5 FT.

FILTER PACK MATERIAL: Sand 00 2 3/4 Sacks (100#) 19.5 FT.

10' FT. WELL SCREEN LENGTH

WELL BOTTOM ~~ELEV.~~ Depth 31.5' 29.5 FT.

SEAL MATERIAL: None _____ FT.

2 FT.

BACKFILL MATERIAL: Sand 31.5 FT.

1) CASING DETAILS

A) TYPE OF PIPE:

PVC, STAINLESS, TEFLON, OTHER PVC

PIPE SCHEDULE 40

B) TYPE OF PIPE JOINTS:

COUPLINGS, THREADED (W/TAPE?), OTHER Threaded

C) WAS SOLVENT USED? YES OR NO

D) TYPE OF WELL SCREEN:

PVC, STAINLESS, TEFLON, OTHER PVC

E) WELL SCREEN SLOT SIZE .010

F) PIPE DIA: ID IN. 2 OD IN. 2 3/16

G) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO

PROTECTOR PIPE DIA. 3 5/8 IN.

2) WELL DEVELOPMENT

A) METHOD

BAILING, PUMPING, SURGING, COMPRESSED AIR

OTHER _____

(NOTE ADDITIONAL COMMENTS BELOW)

B) TIME SPENT FOR DEVELOPMENT? 40 min.

C) APPROXIMATE WATER VOLUME: REMOVED _____

ADDED _____

D) WATER CLARITY BEFORE DEVELOPMENT?

CLEAR, TURBID, OPAQUE

E) WATER CLARITY AFTER DEVELOPMENT?

CLEAR, SLIGHTLY TURBID, TURBID, OPAQUE

F) ODOR? YES OR NO

3) WATER LEVEL SUMMARY

A) DEPTH FROM TOP OF CASING AFTER DEVELOPMENT?

29.2 FT. OR DRY

B) OTHER MEASUREMENTS (T.O.C.):

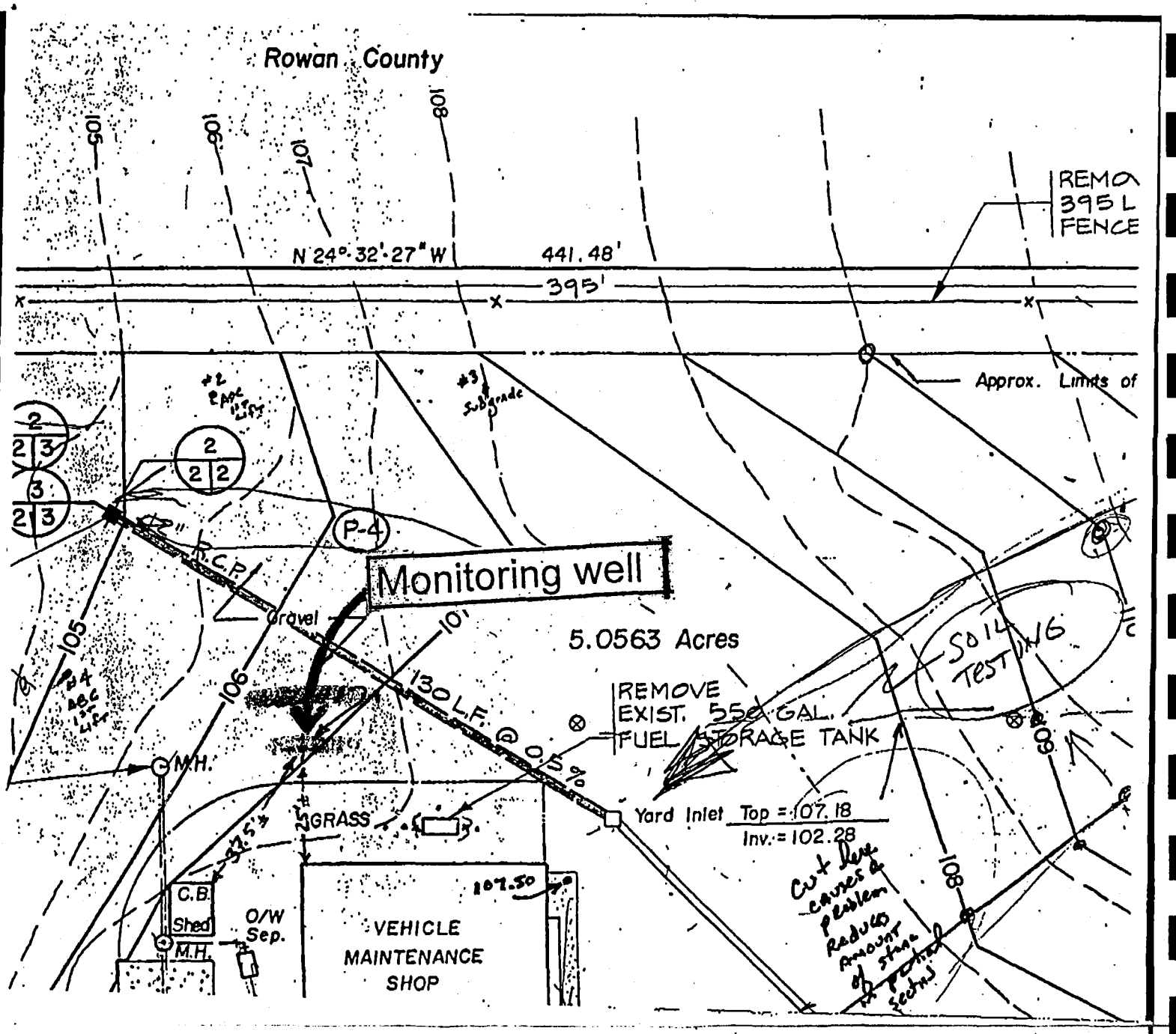
DATE/TIME _____ FT.

DATE/TIME _____ FT.

DATE/TIME _____ FT.

DRAFT

ADDITIONAL COMMENTS: Start work @ 3:30 PM. Drilled total depth 4:25
Developed 5:25 to 5:32 PM - Dry 5:40 - 42 - Dry 5:45 - 5:51
Wt. Depth @ 6:00 PM - 29.2' 6:05 PM - 22.5'



SUBJECT: Contract #DACA54-89-C-0014, Salisbury USARC, Salisbury, North Carolina

I took two water samples from the well behind the Maintenance Bldg. at the Salisbury U.S.A.R. Center. Approximately three volumes of water were pulled from the well before taking the samples. Before taking the samples, the bailer and the two sample jars were rinsed with distilled water. The two samples were forwarded to the SAD lab for analysis.

The water in the well was approximately 13 feet below pavement elevation. Using the elevations shown on the contract plans, the water elevation would be 94.0.

Brian F. Moore
Authorized Representative of the
Contracting Officer

REFERENCE 9

DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION LABORATORY, CORPS OF ENGINEERS
611 SOUTH COBB DRIVE (GA. HWY. 280)
MARIETTA, GEORGIA 30060-3112

CESAD-EN-FL (1110-1-8100C) 29 May 1991

MEMORANDUM FOR Commander, Wilmington District, ATTN: Brian F. Moore, 4530 Park Road, Suite 450, Charlotte, NC 28209

SUBJECT: Chemical Test Results on Groundwater Sample, USARC, Salisbury, NC, Requisition No. CESAW-CO-CE-91-0010, W. O. No. 6370

1. Enclosed are the following reports:

a. Enclosure 1 is the full report from Law Environmental, Inc. for Semi-Volatiles (EPA Method 625) on one (1) groundwater sample taken on 18 April 1991 from the USARC, Salisbury, NC site.

b. Enclosure 2 is our report giving additional sample identification information.

2. The report for Volatile Aromatics (EPA Method 602) was sent on 14 May 1991.

3. If you have any questions, please call Mr. Walter Boyd at 404/421-5270 or the undersigned at 404/421-5296.

FOR THE COMMANDER

for Walter L. Boyd
WILLIAM L. TISON, P. E.
Director

Encls

LAW ENVIRONMENTAL, INC.
112 TOWNPARK DRIVE
KENNESAW, GEORGIA 30144-5599
404-421-3400

May 24, 1991

Department of the Army
South Atlantic Division Laboratory
Corps of Engineers
611 South Cobb Drive (GA. HWY. 280)
Marietta, GA 30060-3112

Attention: Tom Billings

Subject: Chemical analysis of samples received on 05/19/91.

Dear Mr. Billings:

Law Environmental National Laboratories has completed its analysis of your samples and reports the results on the following pages. These results relate only to the contents of the samples as submitted. This report shall not be reproduced except in full without the approval of Law Environmental National Laboratories.

If there are any questions, please do not hesitate to contact us.

Sincerely,

LAW ENVIRONMENTAL NATL LABS

w Paul Stafford, for

Clifford H. McBride
QC/Coordinator

Attachment: Data Report
Invoice

Encl. #1

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LAW ENVIRONMENTAL NATIONAL LABORATORIES
TEST DATA REPORT

Date 05/24/91
Page 1

--- Project Information ---

Lab Number : 91-8532-01
Project No. : 03390
Project Name : DEPARTMENT OF THE ARMY

Cust. No. :

Manager: WENDY WOLFE

--- Sample Information ---

Monitoring well

Station ID : GROUND WATER SAMPLE (11361)
Matrix : W
Type : GRAB
Collector : C

Sampled Date/Time : 04/18/91 11:00
Received Date/Time : 04/19/91 16:20
Received From/By : GS/SE
Chain of Custody : 0
Number of Containers : 2

Remarks :

--- Test Data ---

Parameter	Method	Units	PQL	Results	Test Date	Analy
-- ORGANIC PREP RESULTS --						
Ext/Acid/W	3510/8270			N/A	04/22/91	CSH
Ext/Base Neutral/W	3510/8270			N/A	04/22/91	CSH
-- GC/MS ORGANIC ANALYSIS RESULTS --						
2-Chlorophenol	EPA 625	ug/l	10	ND	05/18/91	ZG
2-Nitrophenol	EPA 625	ug/l	10	ND	05/18/91	ZG
Phenol	EPA 625	ug/l	10	ND	05/18/91	ZG
2,4-Dimethylphenol	EPA 625	ug/l	10	ND	05/18/91	ZG
2,4-Dichlorophenol	EPA 625	ug/l	10	ND	05/18/91	ZG
2,4,6-Trichlorophenol	EPA 625	ug/l	10	ND	05/18/91	ZG
4-Chloro-3-methylphenol	EPA 625	ug/l	20	ND	05/18/91	ZG
2,4-Dinitrophenol	EPA 625	ug/l	50	ND	05/18/91	ZG
2-Methyl-4,6-dinitrophenol	EPA 625	ug/l	50	ND	05/18/91	ZG
Pentachlorophenol	EPA 625	ug/l	50	ND	05/18/91	ZG
4-Nitrophenol	EPA 625	ug/l	50	ND	05/18/91	ZG
1,3-Dichlorobenzene	EPA 625	ug/l	10	ND	05/18/91	ZG
1,4-Dichlorobenzene	EPA 625	ug/l	10	ND	05/18/91	ZG
Hexachloroethane	EPA 625	ug/l	10	ND	05/18/91	ZG
bis(2-Chloroethyl) ether	EPA 625	ug/l	10	ND	05/18/91	ZG
1,2-Dichlorobenzene	EPA 625	ug/l	10	ND	05/18/91	ZG
bis(2-Chloroisopropyl) ether	EPA 625	ug/l	10	ND	05/18/91	ZG
N-Nitrosodi-n-propylamine	EPA 625	ug/l	10	ND	05/18/91	ZG
Nitrobenzene	EPA 625	ug/l	10	ND	05/18/91	ZG
Hexachlorobutadiene	EPA 625	ug/l	10	ND	05/18/91	ZG
1,2,4-Trichlorobenzene	EPA 625	ug/l	10	ND	05/18/91	ZG
Isophorone	EPA 625	ug/l	10	ND	05/18/91	ZG
Naphthalene	EPA 625	ug/l	10	ND	05/18/91	ZG
bis(2-Chloroethoxy)methane	EPA 625	ug/l	10	ND	05/18/91	ZG

Signed Paul Bafford

35 3

LAW ENVIRONMENTAL NATIONAL LABORATORIES
TEST DATA REPORT

Date 05/24/91
Page 2

Lab Number : 91-8532-01
Project No. : 03390

--- Test Data ---

Parameter	Method	Units	PQL	Results	Test Date	Analy
-- GC/MS ORGANIC ANALYSIS RESULTS --						
Hexachlorocyclopentadiene	EPA 625	ug/l	10	ND	05/18/91	ZG
2-Chloronaphthalene	EPA 625	ug/l	10	ND	05/18/91	ZG
Acenaphthylene	EPA 625	ug/l	10	ND	05/18/91	ZG
Acenaphthene	EPA 625	ug/l	10	ND	05/18/91	ZG
Dimethyl phthalate	EPA 625	ug/l	10	ND	05/18/91	ZG
2,6-Dinitrotoluene	EPA 625	ug/l	10	ND	05/18/91	ZG
Fluorene	EPA 625	ug/l	10	ND	05/18/91	ZG
4-Chlorophenylphenyl ether	EPA 625	ug/l	10	ND	05/18/91	ZG
2,4-Dinitrotoluene	EPA 625	ug/l	10	ND	05/18/91	ZG
Diethyl phthalate	EPA 625	ug/l	10	ND	05/18/91	ZG
N-Nitrosodiphenylamine	EPA 625	ug/l	10	ND	05/18/91	ZG
Hexachlorobenzene	EPA 625	ug/l	10	ND	05/18/91	ZG
4-Bromophenylphenyl ether	EPA 625	ug/l	10	ND	05/18/91	ZG
Phenanthrene	EPA 625	ug/l	10	ND	05/18/91	ZG
Anthracene	EPA 625	ug/l	10	ND	05/18/91	ZG
Dibutyl phthalate	EPA 625	ug/l	10	ND	05/18/91	ZG
Fluoranthene	EPA 625	ug/l	10	ND	05/18/91	ZG
Pyrene	EPA 625	ug/l	10	ND	05/18/91	ZG
Benzidine	EPA 625	ug/l	50	ND	05/18/91	ZG
Butylbenzyl phthalate	EPA 625	ug/l	10	ND	05/18/91	ZG
bis(2-Ethylhexyl) phthalate	EPA 625	ug/l	10	ND	05/18/91	ZG
Chrysene	EPA 625	ug/l	10	ND	05/18/91	ZG
Benzo(a)anthracene	EPA 625	ug/l	10	ND	05/18/91	ZG
3,3-Dichlorobenzidine	EPA 625	ug/l	20	ND	05/18/91	ZG
Di-n-octyl phthalate	EPA 625	ug/l	10	ND	05/18/91	ZG
Benzo(b)fluoranthene	EPA 625	ug/l	10	ND	05/18/91	ZG
Benzo(k)fluoranthene	EPA 625	ug/l	10	ND	05/18/91	ZG
Benzo(a)pyrene	EPA 625	ug/l	10	ND	05/18/91	ZG
Indeno(1,2,3-c,d)pyrene	EPA 625	ug/l	10	ND	05/18/91	ZG
Dibenzo(a,h)anthracene	EPA 625	ug/l	10	ND	05/18/91	ZG
Benzo(ghi)perylene	EPA 625	ug/l	10	ND	05/18/91	ZG
N-Nitrosodimethylamine	EPA 625	ug/l	10	ND	05/18/91	ZG

Signed Paul Byford

CESAW-CO-CE

18 April 1991

MEMORANDUM TO: CESAW-CO-CE/File

SUBJECT: Contract #DACA54-89-C-0014, Salisbury USARC, Salisbury, North Carolina

I took two water samples from the well behind the Maintenance Bldg. at the Salisbury U.S.A.R. Center. Approximately three volumes of water were pulled from the well before taking the samples. Before taking the samples, the bailer and the two sample jars were rinsed with distilled water. The two samples were forwarded to the SAD lab for analysis.

The water in the well was approximately 13 feet below pavement elevation. Using the elevations shown on the contract plans, the water elevation would be 94.0.

Brian F. Moore
Authorized Representative of the
Contracting Officer

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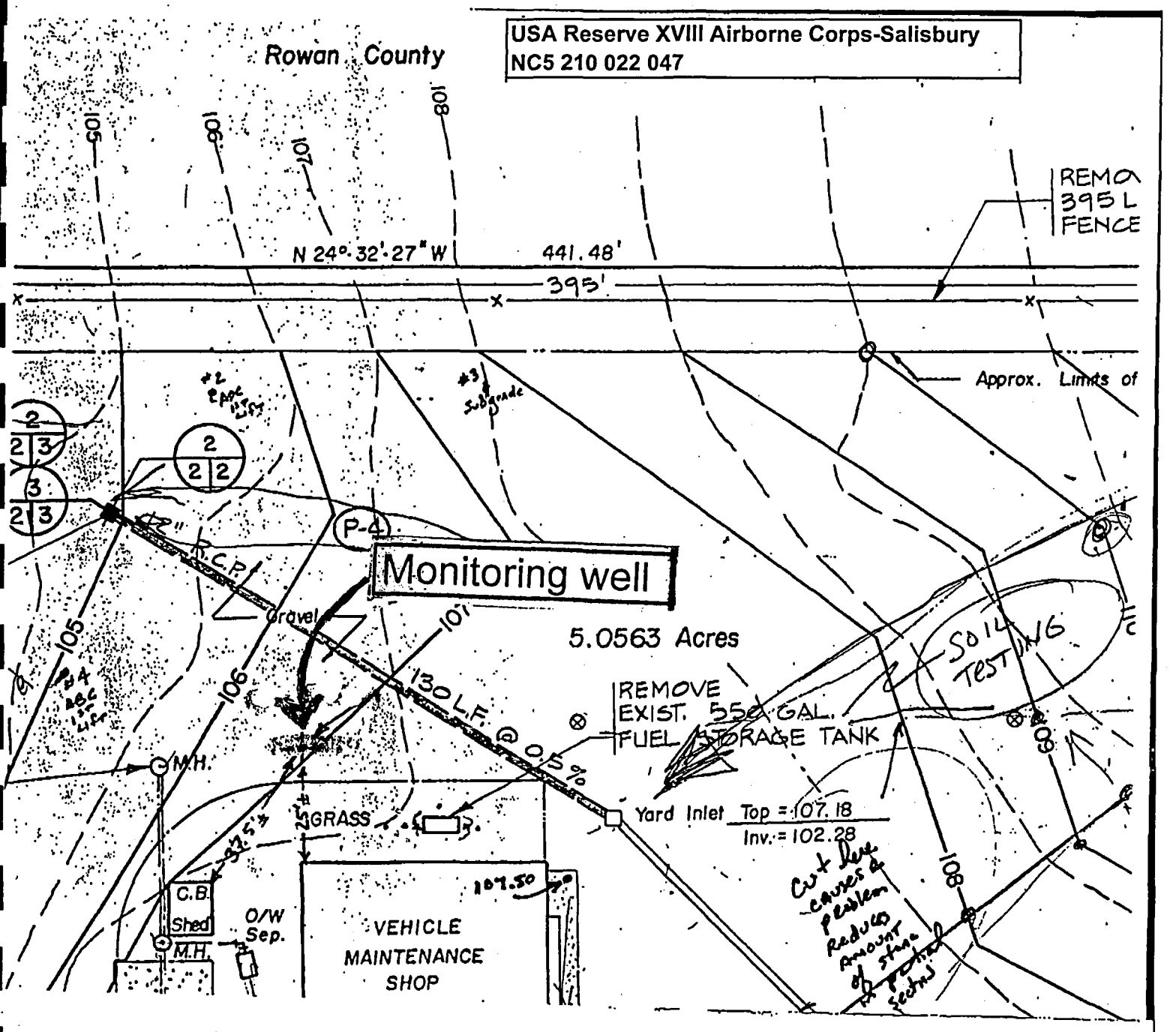
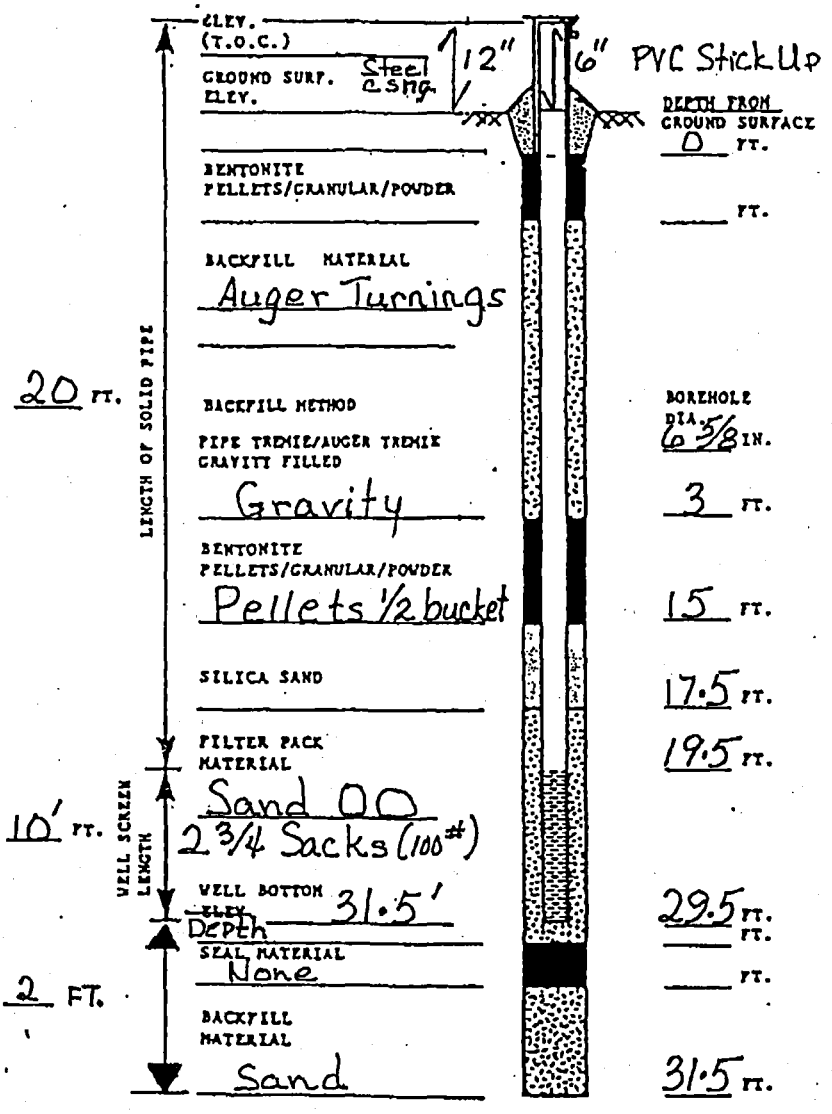

USA Reserve XVIII Airborne Corps-Salisbury
NC5 210 022 047
Rowan County
105
106
107
108
N 24°-32'-27" W
441.48'
395'
REMO
395 L
FENCE
Approx. Limits of
#2
#3
Subgrade
P-4
Monitoring well
R.C.P.
Gravel
101'
5.0563 Acres
130 L.F. @ 0.5%
REMOVE
EXIST. 550 GAL.
FUEL STORAGE TANK
SOIL
TESTING
M.H.
GRASS
Yard Inlet Top = 107.18
Inv. = 102.28
C.B.
Shed
M.H.
O/W
Sep.
107.50
VEHICLE
MAINTENANCE
SHOP

PROJECT NAME: Salisbury ARC NO. _____

WELL NO. ~~#~~ 1

DATE INSTALLED 10/05/90



1) CASING DETAILS

A) TYPE OF PIPE:

PVC, STAINLESS, TEFLON, OTHER PVC

PIPE SCHEDULE 40

B) TYPE OF PIPE JOINTS;

COUPLINGS, THREADED (W/TAPE?), OTHER Threaded

C) WAS SOLVENT USED? YES OR NO

D) TYPE OF WELL SCREEN:

PVC, STAINLESS, TEFLON, OTHER PVC

E) WELL SCREEN SLOT SIZE .010

F) PIPE DIA: ID IN. 2 OD IN. 2 3/16

G) INSTALLED PROTECTOR PIPE W/LOCK? YES OR NO

PROTECTOR PIPE DIA. 3 5/8 IN.

2) WELL DEVELOPMENT

A) METHOD

BAILING, PUMPING, SURGING, COMPRESSED AIR

OTHER _____

(NOTE ADDITIONAL COMMENTS BELOW)

B) TIME SPENT FOR DEVELOPMENT? 40 min.

C) APPROXIMATE WATER VOLUME: REMOVED _____

ADDED _____

D) WATER CLARITY BEFORE DEVELOPMENT?

CLEAR, TURBID, OPAQUE

E) WATER CLARITY AFTER DEVELOPMENT?

CLEAR, SLIGHTLY TURBID, TURBID, OPAQUE

F) ODOR? YES OR NO

3) WATER LEVEL SUMMARY

A) DEPTH FROM TOP OF CASING AFTER DEVELOPMENT?

29.2 FT. OR DRY

B) OTHER MEASUREMENTS (T.O.C.):

DATE/TIME _____ FT.

DATE/TIME _____ FT.

DATE/TIME _____ FT.

DRAFT

ADDITIONAL COMMENTS: Start work @ 3:30 PM. Drilled total depth 4:25
Developed 5:25 to 5:32 PM - Dry 5:40 - 42 - Dry 5:45 - 5:51
Wt. Depth @ 6:00 PM - 29.2' 6:05 PM - 22.5'

7 pages

REFERENCE 10

State of North Carolina
Department of Environment, Health, and Natural Resources
Mooresville Regional Office

James G. Martin, Governor
William W. Cobey, Jr., Secretary

Albert F. Hilton, Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT

February 7, 1992

Mr. Phillip S. Kadala
Department of the Army
Corps of Engineers - Construction Branch
Post Office Box 1890
Wilmington, North Carolina 28402-1890

RE: Soil Sample Results from
Underground Storage Tank Closure
U. S. Army Reserve Training Center
Rowan County, N.C.

Dear Mr. Kadala:

The Groundwater Section of the Division of Environmental Management at the Mooresville Regional Office has received the additional report from the subject site. The report arrived on January 6, 1992. Based on the reported results, no further action is required at this time.

Should you have any questions, please do not hesitate to call me.

Sincerely,

David Eudy
Hydrogeological Technician

DDE:fk

P.O. Box 950, 919 North Main Street, Mooresville, N.C. 28115-0950 • Telephone 704-663-1699 • FAX 704-663-6040

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DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

December 30, 1991

IN REPLY REFER TO
Construction Branch

N. C. DEPT. OF NATURAL
RESOURCES AND
COMMUNITY DEVELOPMENT

JAN 3 1992

DIVISION OF ENVIRONMENTAL MANAGEMENT
MOORESVILLE REGIONAL OFFICE

Mr. Chris DeRoller
North Carolina Department Of Environment,
Health and Natural Resources
Mooresville Regional Office, Groundwater Section
Post Office Box 950
Mooresville, North Carolina 28115

Dear Mr. DeRoller:

Reference your letter of July 24, 1990 concerning the remedial actions necessary at the U.S. Army Reserve Center at Salisbury, North Carolina.

Laboratory test results of soil samples taken below the area of excavated material indicate there was no further contamination. The enclosed Site Assessment Report prepared by SPATCO Environmental outlines the sampling and testing procedures that were followed. Also enclosed is a copy of a letter forwarding the manifest for the disposal of the contaminated soil to the Division of Solid Waste Management.

I have enclosed the boring log for the sampling well that was developed downgradient of the contaminated area, and the test results from water samples taken from the sampling well.

Based on the negative laboratory test results on the soil samples, as well as groundwater samples, it is the conclusion of this office that the site has been satisfactorily remediated and no further action is required. If you should have any questions, please contact me at (919) 251-4464.

Sincerely,

Philip S. Kadala
Chief, Construction Branch

Enclosures

Copy furnished:

Mr. Bruce Coram, Facility Manager
U. S. Army Reserve Center
1835 Jake Alexander Boulevard
Salisbury, North Carolina 28144-6378