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Winston-Salem
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**Underground Storage Tank Closure Report
Baptist Hospital
Ambulatory Care Unit
Winston-Salem, North Carolina
Project No.: 94-140-E**

Prepared by:

**ENGINEERING TECTONICS, P.A.
Winston-Salem, North Carolina**

October 28, 1994

Introduction

On August 12, 1994 Engineering Tectonics, P.A. personnel mobilized to the Ambulatory Care Unit of the Bowman Gray Medical Center located on Medical Center Boulevard in Winston-Salem, North Carolina to assess the removal and closure of one underground storage tank (UST) (see Figure 1). One 1000 gallon diesel UST was removed from the site (see table 1). A Notice of Intent: UST Permanent closure or change-in-service form (GW/UST-3) was filed on March 1, 1994 and is included as Attachment B. A site plan is included as Figure 2.

Underground Storage Tank Removal

On August 12, 1994 Dunn, Foster and Spainhour Inc. excavated and removed the above mentioned UST along with the associated piping. No dispenser was present or used with the above mentioned UST. The UST was examined; no perforations were noted. The UST was transferred to Mr. Tim W. Barns and has been put into service at Crump Creek Farm in Davie County. A certificate of transfer of the UST is included as Attachment A. A Site Investigation Report for Permanent Closure or Change-in-Service (GW-UST 2) form was completed, and a copy of that form is included as Attachment C.

Subsequent to the excavation, two (2) soil samples were taken from beneath the UST (see figure 2). The soil samples were split into representative duplicates, one half screened with an Organic Vapor Analyzer (OVA) for the presence of Volatile Organic Compounds (VOCs) and the other half placed in laboratory provided glassware for laboratory analysis. To minimize the risk of accidental contamination, new, disposable latex gloves were worn during the transfer of soil. OVA readings are presented in Table 2.

The soil samples were placed in a chilled cooler to maintain a temperature of approximately 4°C. Samples were transported using EPA approved chain-of-custody procedures to Hydrologic, Inc. in Frankfort, Kentucky for analysis of Total Petroleum Hydrocarbons (TPH), and Total Petroleum Fuel Hydrocarbons (TPFH) by EPA Methods 3550/5030, respectively.

Laboratory Results

Laboratory analytical results indicated TPFH and TPH levels to be below method detection limits. Laboratory results are summarized in Table 2, and documented in Attachment D.

LIMITATIONS

This report has been prepared for the exclusive use of Baptist Hospital for specific application to the subject site. The report was prepared in accordance with generally accepted standards of practice for environmental services. No other warranty, either expressed or implied, is made. This report is not to be reproduced, either in whole or in part, without written consent from ENGINEERING TECTONICS, P.A.

Our on-site observations pertain only to specific locations, at specific times, on specific dates. Our observations and conclusions do not reflect variations in unverified and/or subsurface conditions that may exist at or between sampling and/or observation locations, or at times other than those represented by our observations.

In providing this report, ENGINEERING TECTONICS, P.A. does not assume any responsibilities of the party, or parties, deemed legally responsible for the subject site. It is not the responsibility of ENGINEERING TECTONICS, P.A. to report our findings to any other person or persons, including conditions that may present a potential danger to public health, safety, or the environment, as may be required by law.

CERTIFICATION

I certify this 31st day of October, 1994 that this report was prepared by me or under my direct supervision.

by:

Dan Bowser
Dan Bowser
Geologist

reviewed by:

Tony Gillispie
Tony Gillispie
Environmental Manager

certified by:

John M. Riley
John M. Riley, P.E.
President





Tables

Table 1

UST Data

Tank #	Construction	Dimensions (D x L)	Volume (gallons)	Product
1	Fiberglass	74"x46"	1000	Diesel

Table 2

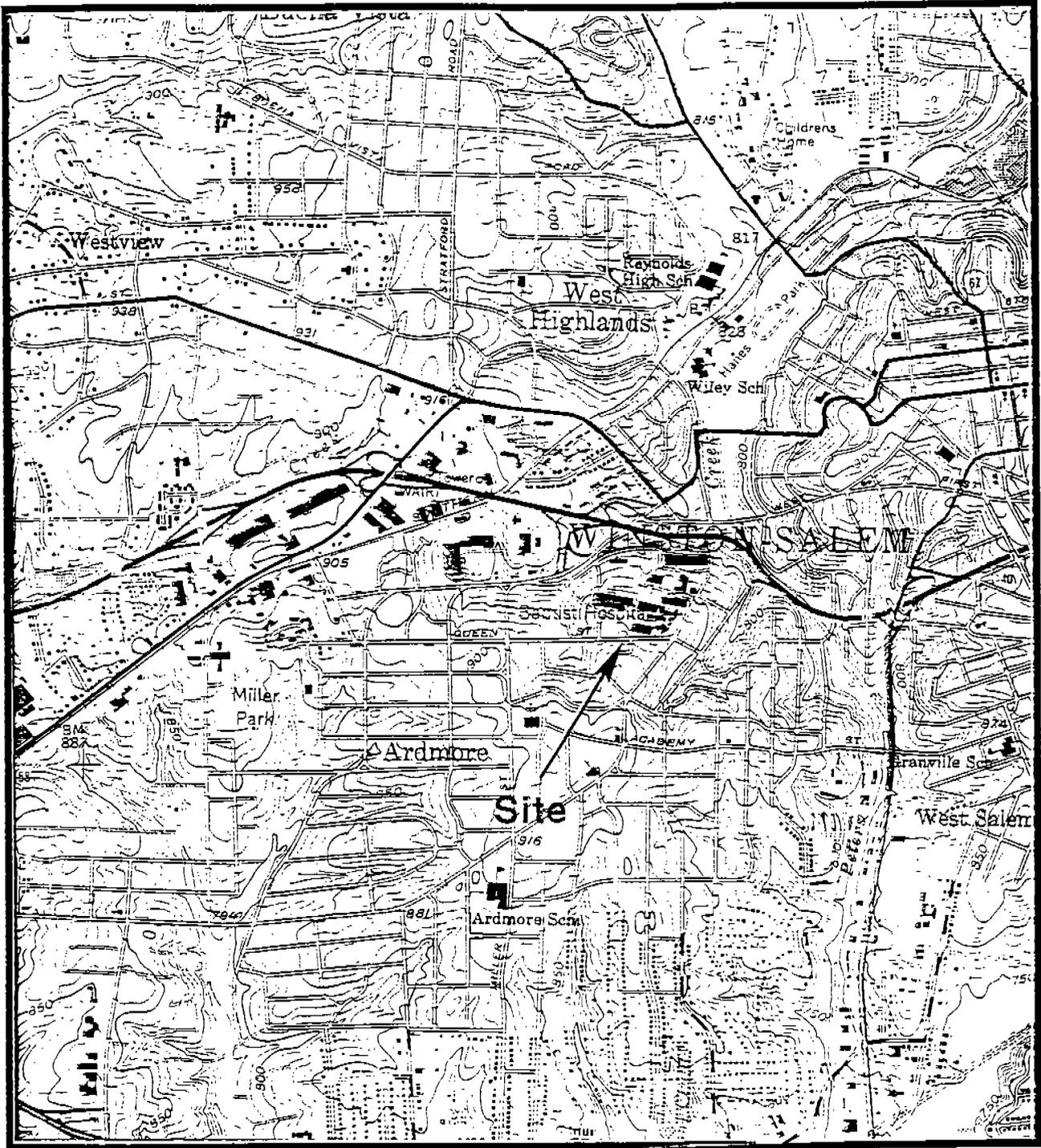
**UST Closure Soil Samples
OVA Readings and Laboratory Results of Soil Samples**

Sample	Sample Depth (Feet)	OVA Reading (ppm)	TPFH 5030 (ppm)	TPH 3550 (ppm)
S-1	7	0	BDL	BDL
S-2	7	0	BDL	BDL

ppm = parts per million

BDL Below Detectable Limit

Figures



ENGINEERING TECTONICS, P.A.
 Winston-Salem, N.C (919)
 724-6994

Baptist Hospital UST

94-140

Site Location Map

Feet

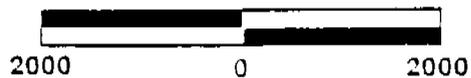


Figure 1

Cafeteria

Boiler Room

S1 S2

Former 1000 gallon diesel UST

To Queen Street

Legend

• Soil sample location

□ Former UST excavation

Baptist Hospital



TITLE: Site Plan

PROJECT: Baptist Hospital

Location: Winston-Salem, NC

Drawn by: DB

PROJ. # 94-140 DATE: 8/94

Approved by: TG

ENGINEERING TECTONICS, P.A.

GEOTECHNICAL / ENVIRONMENTAL ENGINEERS & SCIENTISTS

P. O. BOX 1 WINSTON-SALEM, NC, 27088

Scale 20

Figure 2

Attachment A

Certificate of UST Transfer

Crump Creek Farm
222 Crump Trail
Advance, N. C. 27006

September 13, 1994

Mr. John Klimkosky
Plant Engineer
N. C. Baptist Hospital
Winston-Salem, NC

Dear Mr. Klimkosky:

This is to advise you that the 1000 gallon fiberglass tank removed from the Ambulatory Care Center by Dunn-Foster-Spainhour has been put into farm service at Crump Creek Farm in Davie County.

The tank contained fuel and is being used to store fuel for farm use at this time.

Thank you,

Tim W. Barnes

Tim W. Barnes

Attachment B
GW-UST-3 Form

(GW/UST-3)

Notice of Intent: UST Permanent Closure or Change-In-Service

FOR TANKS IN NC

Return Completed Form To: The appropriate DEM Regional Office according to the county of the facility's location. [SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].

State Use Only I. D. Number Date Received

INSTRUCTIONS

Complete and return thirty (30) days prior to closure or change-in-service.

I. OWNERSHIP OF TANK(S)

Tank Owner Name: Baptist Hospital (Corporation, Individual, Public Agency, or Other Entity) Street Address: Medical Center Blvd. County: Forsyth City: Winston-Salem State: NC Zip Code: 27157 Tele. No. (Area Code): (910) 716-2011

II. LOCATION OF TANK(S)

Facility Name or Company: Baptist Hospital Facility ID # (if available) Street Address or State Road: Medical Center Blvd. County: Forsyth City: Winston-Salem Zip Code: 27157 Tele. No. (Area Code): (910) 716-2011

III. CONTACT PERSON

Name: John Klimkowski Job Title: Engineer Telephone Number: (910) 716-2011

IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN-SERVICE

- 1. Contact Local Fire Marshall. 2. Plan the entire closure event. 3. Conduct Site Soil Assessments. 4. If Removing Tanks or Closing in Place refer to API Publications. 2015 "Cleaning Petroleum Storage Tanks" & 1604 "Removal & Disposal of Used Underground Petroleum Storage Tanks". 5. Provide a sketch locating piping, tanks and soil sampling locations. 6. Fill out form GW/UST-2 "Site Investigation Report for Permanent Closure" and return within 30 days following the site investigation. 7. Keep records for 3 years.

V. WORK TO BE PERFORMED BY:

(Contractor) Name: Dunn, Foster, & Spainhour Address: 2809 Hall Lane, Winston-Salem State: NC Zip Code: 27102 Contact: Walt Foster Phone: (910) 768-8586

VI. TANK(S) SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

Table with columns: TANK ID#, TANK CAPACITY, LAST CONTENTS, PROPOSED ACTIVITY (CLOSURE: Removal, Abandonment In Place; CHANGE-IN-SERVICE: New Contents Stored). Includes data for Tank ID# 6 and 40240 with Diesel contents.

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Print name and official title: Dan Bowser Staff Geologist *Scheduled Removal Date: 3/28/94 Signature: [Signature] Date Submitted: 3/1/94

*If scheduled work date changes, notify your appropriate DEM Regional Office 48 hours prior to originally scheduled date.

Attachment C
GW-UST-2 Form

FOR TANKS IN NC	Return Completed Form To: The appropriate DEM Regional Office according to the county of the facility's location. [SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].	State Use Only I.D. Number _____ Date Received _____
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INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)

II. Location of Tank(s)

Owner Name (Corporation, Individual, Public Agency, or Other Entity) <u>Baptist Hospital</u> Street Address <u>Medical Center Blvd</u> <u>Forsyth</u> County <u>Winston-Salem, NC 27157</u> City State Zip Code <u>(910) 716-2011</u> Area Code Telephone Number	Facility Name or Company <u>Same</u> Facility ID # (if available) <u>Same</u> Street Address or State Road County City Zip Code <u>(910) 716-2011</u> Area Code Telephone Number
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III. Contact Person

Name	<u>John Kimkowski</u>	Job Title	<u>Engineer</u>	Telephone No. (Area Code)	<u>(910) 716-2011</u>
Closure Contractor (Name)	<u>Dunn, Foster, and Spainhour</u>	(Address)		Telephone No. (Area Code)	<u>(910) 768-8586</u>
Lab (Name)	<u>Hydrologic</u>	(Address)	<u>Frankfort, KY</u>	Telephone No. (Area Code)	<u>(502) 223-0251</u>

IV. U.S.T. Information

V. Excavation Conditions

VI. Additional Information Required

Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water in Excavation		Free Product		Notable Color or Visible Soil Contamination	
				Yes	No	Yes	No	Yes	No
1	1000	74"x46"	Diesel		x		x		x

See reverse side of pink copy (owner's copy) for additional information required by N.C. - DEM in the written report and sketch.

VII. Check List

Check the activities completed.

- Contact local fire marshal
 - Notify DEM Regional Office before abandonment.
 - Drain & flush piping into tank.
 - Remove all product and residuals from tank
 - Excavate down to tank.
 - Clean and inspect tank.
 - Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
 - Cap or plug all lines except the vent and fill lines.
 - Purge tank of all product & flammable vapors.
 - Cut one or more large holes in the tanks.
 - Backfill the area.
- Date Tank(s) Permanently closed: August 12, 1994
Date of Change-in-Service: _____

- ABANDONMENT IN PLACE**
- Fill tank until material overflows tank opening;
 - Plug or cap all openings;
 - Disconnect and cap or remove vent line
 - Solid inert material used - specify: _____

- REMOVAL**
- Create vent hole
 - Label tank
 - Dispose of tank in approved manner
- Final tank destination: Crump Creek farm
222 Crump TRAIL
Advance, NC 27006

VIII. Certification (Print and Sign)

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

Print name and official title of owner or owner's authorized representative	Signature	Date Signed
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Attachment D

Laboratory Results

August 10, 1994

REPORTING:

Engineering TecTonics
1720 Vargrave Street
Winston Salem, NC 27107

Attention: Dan Bowser

INVOICING:

Engineering TecTonics
P.O. Box I
Winston Salem, NC 27108

PROJECT NUMBER: FL94-10225

DATE COMPLETED: August 10, 1994

DATE RECEIVED: August 6, 1994

PROJECT DESCRIPTION:

#94-140/Baptist--2 soil samples for 3550/5030, sampled on 08/05/94.

Enclosed is the laboratory report for the project described above. If you have any questions or if we can be of further assistance, please feel free to contact Jamie Fore. We appreciate your business and look forward to serving you again soon.

Respectfully,


Benjamin Carl Esterle
Laboratory Director

H Y D R O L O G I C , I N C .

COMPANY NAME: Engineering TecTonics
COMPANY PROJECT NUMBER: #94-140/BAPTIST

HYDROLOGIC PROJECT NUMBER: FL94-10225
HYDROLOGIC SAMPLE NUMBER: 10225
HYDROLOGIC LAB I.D.#: 399
SAMPLE IDENTIFICATION: S-1
DATE SAMPLED: 8/5/94
DATE EXTRACTED: 8/8/94
DATE/TIME ANALYZED: 8/9/94 8/9/94

METHOD TPH 3550/5030

<u>ANALYSIS</u>	<u>CAS NO.</u>	<u>SDL</u> (mg/kg)	<u>RESULT</u> (mg/kg)
Diesel		1.3	BDL
Gasoline		2.0	BDL

BDL = Below Sample Detection Limit
SDL = Sample Detection Limit

COMMENTS: _____

H Y D R O L O G I C , I N C .

COMPANY NAME: Engineering TecTonics
COMPANY PROJECT NUMBER: #94-140/BAPTIST

HYDROLOGIC PROJECT NUMBER: FL94-10225
HYDROLOGIC SAMPLE NUMBER: 10226
HYDROLOGIC LAB I.D.#: 399
SAMPLE IDENTIFICATION: S-2
DATE SAMPLED: 8/5/94
DATE EXTRACTED: 8/8/94
DATE/TIME ANALYZED: 8/9/94 8/9/94

METHOD TPH 3550/5030

<u>ANALYSIS</u>	<u>CAS NO.</u>	<u>SDL</u> (mg/kg)	<u>RESULT</u> (mg/kg)
Diesel		1.2	BDL
Gasoline		2.0	BDL

BDL = Below Sample Detection Limit
SDL = Sample Detection Limit

COMMENTS: _____



COMPANY NAME Engineering Technics CONTACT NAME Dan Bowser TELEPHONE NO. 910 724-6994

SAMPLE ID	SAMPLE LOCATION	Composites	Grab	Date	Time	Sample Type			No. of Containers	REMARKS
						Water	Liquid	Solid		
S-1			X	8/5	12:00			X	1	91-10225
S-2			X	8/5	12:30				1	

COMMENTS: OVA readings BDL

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Dispatched by: (Signature)	Received for Laboratory by: <u>Christy Buxton</u>	Date	Time
Method of Shipment: <u>Fed Ex 5168268276</u>		Date	Time