

2932 MT HOLLY-HUNTERSVILLE RD

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Groundwater and Wastewater Services File Imaging Project
May 2007
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14631 Project #997 990435

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INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM
APPLICATION FOR SERVICES

Mecklenburg County Health Dept.
Environmental Health Division
c/o Hal Marshall Ctr., Suite 211
700 N. Tryon St.
Charlotte, NC 28202

(704)336-5102

PERSON FILING APPLICATION: CROWN CENTRAL PETROLEUM CORP.

NAME: GILMORE (last) MATTHEW (first) E (mi)

ADDRESS: P.O. Box 1168 PHONE: 410 659-4862

CITY: BALTIMORE STATE: MD ZIPCODE: 21203

Date:

PROPERTY INFORMATION (FROM ENGINEERING FORM):

TAX/PARCEL NUMBER: 031-132-04

STREET ADDRESS: 2932 Mt. Holly-Huntersville Rd.
Charlotte, N.C. 28214

ZONING: B-1

PROPERTY OWNER:

NAME: NEAL (last) JERRY W. & JOAN L. (first) (mi)

ADDRESS: 3301 DARBY AVE PHONE: 704 392-1585

CITY: CHARLOTTE, NC STATE: NC ZIPCODE: 28216

SUBDIVISION OR MOBILE HOME PARK NAME:

Township (check one):
☐ 0 Mecklenburg County ☐ 2 Davidson ☐ 4 Pineville ☐ 6 Huntersville
☒ 1 Charlotte ☐ 3 Cornelius ☐ 5 Matthews ☐ 7 Mint Hill

TYPE APPLICATION (check one):

LOT NUMBER: LOT SIZE (in acres):

☐ SOIL TEST - INDIVIDUAL LOT (D)
☐ NEW CONSTRUCTION ON VACANT LOT - 4 BEDROOMS OR LESS (N)
☐ EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
☐ ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A or M)
☐ COMMERCIAL OR INDUSTRIAL (N)
☐ SOIL TEST DEVELOPMENT (P)
☒ ADDITION - GARAGE OR RENOVATION/NO MAJOR CHANGES (X)
Groundwater Remediation System
☐ MODIFIED /ALTERNATIVE/ OR RESIDENCE > 4 BEDROOMS (Z)
☐ REPAIR TO SYSTEM (R)

RESIDENTIAL PROPERTY (Type Building, check one):
☐ SINGLE MOBILE HOME (S) ☐ HOUSE (H) ☐ MULTIPLE FAMILY (U)
☐ DOUBLE WIDE (D) ☐ MODULAR HOME (M) ☐ OTHER _____ (O)

NUMBER BEDROOMS: NUMBER OCCUPANTS:

SYSTEM CLASSIFICATION:

COMMERCIAL/INDUSTRIAL PROPERTY:
Type Business _____ # Employees ___ Per Shift ___ ___ ___
Industrial Wastes (Y/N) N
Underground Storage Tanks On Property (Y/N) Y Type _____

WATER SUPPLY (check one):
☐ Community (C) ☐ Shared Well (S)
☐ Municipal (M) ☐ Other 'spring' (O)
☒ Private Well (P)

FUTURE ADDITIONS - ALL PLANNED ADDITIONS MUST BE ENTERED (check all that apply):
☐ Swimming Pool ☐ Jacuzzi ☐ Stable/Barn ☐ Workshop ☐ None
☐ Garage ☐ Storage Building ☐ Deck/Patio ☐ Bedrooms ☐ Other

The undersigned, owner, or legal agent for the owner, of the property described above as the "JOB LOCATION" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the MECKLENBURG COUNTY HEALTH DEPARTMENT to enter onto the property for the purpose of processing this request.

Signed: Matt Gilmore Date: 12-13-93

NOTICE:

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws And Rules For Sanitary Sewage Collection, Treatment And Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

...No work shall be conducted on the septic tank system until an Installation, Construction, Alteration and/or Repair approval is granted by this Department.

...This permit is not transferable.

...Existing System not affected by Storage Shed. Storage building is to house filtration equipment for infiltration gallery

☒ IMPROVEMENT PERMIT - VALID 60 MONTHS FROM ISSUANCE
☐ MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE
☒ ADDITION/RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE

Environmentalist Date 12/29/93

Director or Authorized Section Head Date 12/30/93

WATER : 122791

003-422801 800-678-2745 Pafford

14631

INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM
APPLICATION FOR SERVICES

[] CRT

Mecklenburg County Health Dept.
Environmental Health Division
c/o Hal Marshall Ctr., Suite 211
700 N. Tryon St.
Charlotte, NC 28202

(704)336-5102

PERSON FILING APPLICATION:

NAME: _____ (last) (first) (mi)

ADDRESS: _____ PHONE: (__) _____

CITY: STATE: ZIPCODE:

Date:

PROPERTY OWNER:

NAME: CROWN FASTFARE, INC CROWN CENTRAL PETROLEUM (last) (first) (mi)

ADDRESS: 2932 NC Hwy 49 S PHONE: (704) 392-4936

CITY: CHAR STATE: ZIPCODE:

PROPERTY INFORMATION (FROM ENGINEERING FORM):

TAX/PARCEL NUMBER: 031-132-04-10

STREET ADDRESS: 2932 NC Hwy 49 S

ZONING: _____

Township (check one):
[X] 0 Mecklenburg County [] 2 Davidson [] 4 Pineville [] 6 Huntersville
[] 1 Charlotte [] 3 Cornelius [] 5 Matthews [] 7 Mint Hill

SUBDIVISION OR MOBILE HOME PARK NAME:

LOT NUMBER: LOT SIZE (in acres):

TYPE APPLICATION (check one):

[] SOIL TEST - INDIVIDUAL LOT (D)
[] NEW CONSTRUCTION ON VACANT LOT - 4 BEDROOMS OR LESS (N)
[] EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
[] ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A or M)
[] COMMERCIAL OR INDUSTRIAL (N)
[] SOIL TEST DEVELOPMENT (P)
[] ADDITION - GARAGE OR RENOVATION/NO MAJOR CHANGES (X)
[] MODIFIED /ALTERNATIVE/ OR RESIDENCE > 4 BEDROOMS (Z)
[X] REPAIR TO SYSTEM (R)

RESIDENTIAL PROPERTY (Type Building, check one):
[] SINGLE MOBILE HOME (S) [] HOUSE (H) [] MULTIPLE FAMILY (U)
[] DOUBLE WIDE (D) [] MODULAR HOME (M) [] OTHER _____ (O)

NUMBER BEDROOMS: NUMBER OCCUPANTS:

SYSTEM CLASSIFICATION:

COMMERCIAL/INDUSTRIAL PROPERTY:
Type Business _____ # Employees ___ Per Shift ___ ___ ___
Industrial Wastes (Y/N) N
Underground Storage Tanks On Property (Y/N) Y Type GAS

WATER SUPPLY (check one):
[] Community (C) [] Shared Well (S)
[] Municipal (M) [] Other 'spring' (O)
[X] Private Well (P)

FUTURE ADDITIONS - ALL PLANNED ADDITIONS MUST BE ENTERED (check all that apply):
[] Swimming Pool [] Jacuzzi [] Stable/Barn [] Workshop [X] None
[] Garage [] Storage Building [] Deck/Patio [] Bedrooms [] Other

The undersigned, owner, or legal agent for the owner, of the property described above as the "JOB LOCATION" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the MECKLENBURG COUNTY HEALTH DEPARTMENT to enter onto the property for the purpose of processing this request.

Signed: [signature] Date: 4-16-93

NOTICE:

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws And Rules For Sanitary Sewage Collection, Treatment And Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

...No work shall be conducted on the septic tank system until an installation, Construction, Alteration and/or Repair approval is granted by this Department.

...This permit is not transferable.

...

[] IMPROVEMENT PERMIT - VALID 60 MONTHS FROM ISSUANCE
[] MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE
[] ADDITION/RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE

_____ Environmentalist Date

_____ Director or Authorized Section Head Date

WWATER : 122791

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ISSI Operations Center Staff

Date Received 2/6/81

APT No. 14631

T. C. No. 031-132-04

Map Date 11/12/79

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH

APPLICATION FOR SOIL INVESTIGATION

NAME OF OWNER Neal Jerry W. / Lyerly Ned T. / Miles Douglas R.
(LAST / FIRST / MIDDLE)

ADDRESS OF OWNER 3301 Darby Avenue, Charlotte, NC ZIP 28216

PHONE NO. Home _____ Office 394-6371

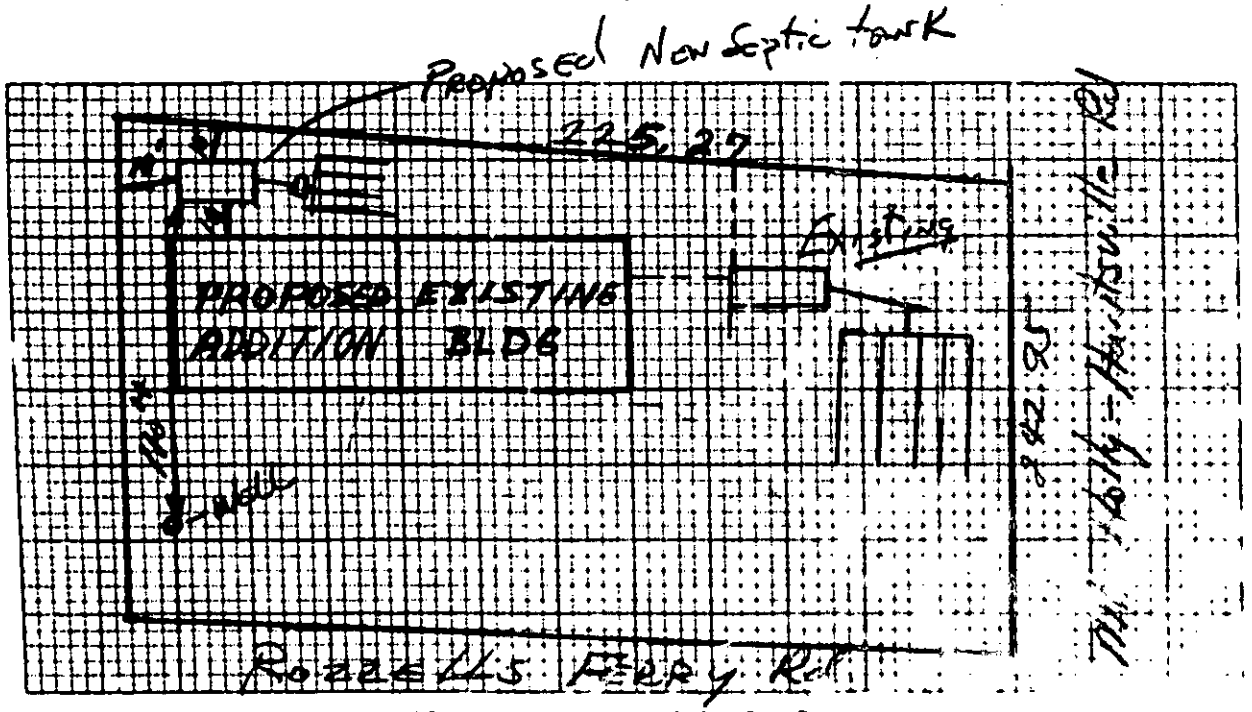
LOCATION OF PROPERTY Corner Hwy. 16 & Mt. Holly Huntersville Rd.
(STREET OR COUNTY ROAD)

SUBDIVISION _____ LOT NO. _____ BLOCK NO. _____

MAP BOOK NO _____ PAGE NO. _____

DEED REFERENCE: DEED BOOK 3544 PAGE NO. 241

Application is hereby made to the Mecklenburg County Department of Environmental Health for the conduct of a soil investigation and an on site inspection of the lot hereinabove described for the purpose of determining if the lot is suitable for the installation of an individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge.



7) ACCURATELY DIAGRAM & DIMENSION

OWNER

ROLINA
NT OF HUMAN RESOURCES
OF HEALTH SERVICES
NORTH CAROLINA

APPENDIX H
SITE EVALUATION

S.I.R. No. 14631
T.C. No. 021-132-00

(Ground Absorption Sewage Disposal)

Douglas A. Niles & others
3301 Derbyavenue
Charlotte, N.C. 28216
OF SITE: Highway 16 & Mt. Holly-Huntersville

DATE REQUESTED:
PLAT NO:
LOT SIZE: Approx 10000 sq. ft. Inv.

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4
PE (%)	(S) PS U 2-8%	(S) PS U 2-8%	S PS U	S PS U
L TEXTURE (12-36 inches) dy, Loamy, Clayey te 2:1 Clay)	S PS (U) 2-1 clay	S PS (U) Mixed	S PS U	S PS U
L STRUCTURE -36 inches)	S (PS) U Weak Blocky	S PS (U) Massive	S PS U	S PS U
L DEPTH (inches)	(S) PS U 48"	S PS (U) Ledge	S PS U	S PS U
TRICTIVE HORIZONS ches) pervious strata, Rock)	(S) PS U None	S PS (U) Compacted Material	S PS U	S PS U
L DRAINAGE/GROUNDWATER ternal and internal)	(S) PS U 76" To ground water	(S) PS U 76" To ground water	S PS U	S PS U
L PERMEABILITY rcolation rate)	S (PS) U Slow → V. slow	S PS (U) Very slow	S PS U	S PS U
IER (specify)	S PS U	S PS U	S PS U	S PS U
E CLASSIFICATION	unsuitable	unsuitable		
L SERIES	Vance-Enon	Apparent Trash hole or other disturbed Area		

S - Suitable PS - Provisionally Suitable U - Unsuitable

e Diagram on Back (includes: soil areas, property lines, roads, streams, gullies, wet areas, fill areas, wells, water bodies, slope)

endations/Comments:

bed By: William A. Martin
Soil Scientist
Date: 2-10-81

rm 2601
ation
9 (2/80)

2

N 30° E 125.00

SEPTIC TANK

FAST FAKE-GOXIO

DUMPSTER PAD 10'X20'

S 37° W 175.00

42'

GAS ISLAND

50'

30'

20

S 53° E 200.00

MT. HOLLY HUNTERSVILLE RD.

4,250

2,500

AT EDGE OF ROAD R/W

OZZELL'S FERRY

NC HWY 16

RD.

Date Issued 4-20-79 Serial No. 2518 C of A (s) No. 1

T C No. 031-132-04

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL HEALTH DIVISION

CERTIFICATE OF APPROVAL
(Individual Septic Tank System with Subsurface, Soil Absorption, Effluent Discharge)

Name of Owner Hickory Woods (FIRST) (MIDDLE) (LAST)

Location of Property Mt. Holly-Huntersville Road - Highway 16

Application Number 14631 Permit Number 14631

Inspection Data:

Liquid Capacity of Tank 1,000 gallons

Tank Material precast concrete

Total Length of Drain Tile 200'

Number of Lines 3

Depth of Filter Material 6" sand + 17" stone

Cover Depth 15"

Water Supply Source well

Distance from Water Source > 50'

Excavation Inspected —— (DATE)

Tank Inspected (DATE)

Nitrification Field Inspected 4-20-79 (DATE)

Washing Machine Line Inspected, If Applicable —— (DATE)

The undersigned has inspected the Individual Septic Tank System with subsurface, soil absorption, effluent discharge as described above and it has been ✓ installed or constructed altered or repaired in accordance with the permit issued and the regulations of the Mecklenburg County Health Commission in effect on the date of issuance of the permit. The issuance of this Certificate of Approval does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This Certificate of Approval is issued subject to those restrictions and conditions shown on the permit(s) in addition to those listed below under comments. This Certificate of Approval shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Comments: poor soil - hit water with the tank
alternate system on file — agreement form signed

Michael G. Foster
Environmentalist

EHD-5-76

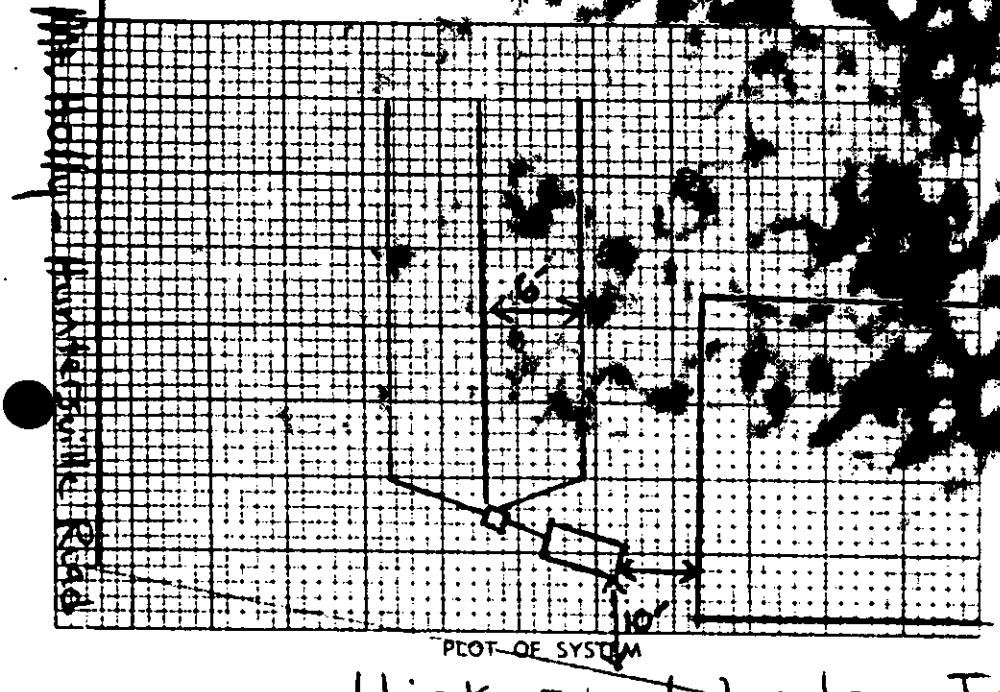
Date Issued April 9, 1979 Serial No. 2533 ICAR(S) Permit No. 14631

T. C. No. 031-132-C

Map Date

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH
INSTALLATION, CONSTUCTION, ALTERATION, AND/OR REPAIR PERMIT
(Individual Septic Tank System with Subsurface Soil Absorption Effluent Discharge)

Permission is hereby given to ✓ Install or Construct ... individual septic tank wastewater treatment system with subsurface soil absorption effluent ... as specified herein at the described location. This permit is granted based upon the ... application 14631 dated 10-10-78 and this permit shall be void and of no effect if the information provided in the application is not true or is erroneous. All work shall be completed on or before 7-9-79, after which date this permit shall be null and void.



Permeability Rate C

Liquid Capacity of Tank 1000 gallon

Tank Construction precast concr

Aerobic and or Nitrification Line

Total Line Length 200'

Distance from Property Line 10'

Distance from Well >50'

NAME OF OWNER Hickory Woods, Inc.

LOCATION OF PROPERTY Hwy. 16 - Mt. Holly - Huntersville Road

The system shall meet all of the construction requirements as set forth in the Regulations of the Mecklenburg County Health Commission which are in effect on the date of the granting of this permit. A certificate of approval must be issued by the Environmental Health Director before any system or any portion thereof is rendered uninspectable or can be used.

THE ISSUANCE OF THIS PERMIT DOES NOT IN ANY WAY GUARANTEE THAT THE SYSTEM ANTICIPATED TO BE CONSTRUCTED WILL OPERATE PROPERLY OR RELIEVE ANY PERSON NOW OR HEREAFTER OWNING, CONTROLLING OR USING SUCH SYSTEM FROM ANY LIABILITY RESULTING FROM THE FAILURE OF THE SYSTEM TO OPERATE PROPERLY.

Comments:
alternate system —
agreement form signed
3 — 3' x 67' trenches with 6" of sand and 17" of ...

Michael A Jetton
Environmentalist

Division or Section Head

* If this permit is for the installation or construction of a new system, it must be ... by the division section head of the Department of Environmental Health in order to be valid. Only the ... Environmentalist is required where an existing system is being altered or repaired.

EHR-C 76

NAME OF OWNER Hickory Woods, Inc.
LAST FIRST MIDDLE

ADDRESS OF OWNER P.O. Box 526, Concord, N.C. ZIP 28025

LOCATION OF LOT corner: Hwy 16 and Mt. Holly-Huntersville Road
STREET ON COUNTY ROAD

SUBDIVISION _____ LOT NO._____ BLOCK NO._____

MAP BOOK NO._____ PAGE NO._____

The above specified lot is approved by the Mecklenburg County Department of Environmental Health for the installation of an individual septic tank system with subsurface, soil absorption, effluent discharge based on the soil investigation, on an on-site inspection of the said lot; and upon the information supplied in the "Application for an Installation, Construction, Alteration, and/or Repair Permit", number 14631 This approval is subject to the following terms and conditions:

1. That the nitrification field be installed, constructed, altered and/or repaired in the same area where the soil investigation was run.

2. That an "Installation, Construction, Alteration, and/or Repair Permit" be issued and in full force and effect when the system is installed, constructed, altred and/or repaired and that the system be installed in accordance with same.

This approval may be revoked and the building inspection department requested to revoke any building permit(s) which have been issued to authorize construction on the said lot if at any time it is determined that any information contained in the "Application for an Installation, Construction, Alteration, and/or Repair Permit" is not correct or is untrue or that the septic-tank system is not being installed, constructed, altered and/or repaired in accordance with a valid Installation, Construction, Alteration, and/or Repair Permit.

John R Atkinson

Environmentalist

Environmental Health Director or Authorized Section Head

EHD-5-76

Environmental Health Department

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

COPY

REGISTRATION

Nov 27 11 22 AM '78

The undersigned, Robert E. & Ruth B. Christenbery, owner of property located at Rozzells Ferry & Mt. Holly Road, ("the site") and described in instrument recorded in Book 3544 at Page 241, Mecklenburg Public Registry, hereby acknowledges that he applied to the Department of Environmental Health for a permit to install a septic tank sewage disposal system on the site; the Department evaluated the site for suitability for such a system in accord with the regulations promulgated by the North Carolina Commission for Health Services as 10 NCAC 10A .1900 et seq; that the Department classified the site as unsuitable and an appropriate permit was issued by the Department.

The undersigned further acknowledges that the proper design, construction and maintenance of such septic tank system is his responsibility and that neither the Department nor its officials, employees, or agents warrant or guarantee that the said system installed pursuant to the permit issued by the Department will function in a satisfactory manner for any given period of time, or that the Department, its officials, employees or agents assume any liability for damages, consequential or direct, which are caused, or which may be caused, by a malfunction of such system.

This document shall be placed on the public records of the Register of Deeds of Mecklenburg County and indexed therein under the Grantor Index in the name or names of the undersigned, and the foregoing acknowledgements shall henceforth be binding on all persons claiming any right, title, or interest in the site.

And the undersigned further agrees for himself, his heirs and assigns, that he shall indemnify and hold harmless the Department and its successors, as well as Mecklenburg County, for any damages or other claims of any person or persons whatsoever arising out of the installation, operation, or failure, of said septic tank system.

And the undersigned further agrees for his heirs and assigns that, in the event any septic tank system installed under authority of the aforesaid permit fails to perform adequately, in any respect, he will take whatever measures are required to correct same; or if such is impossible he will discontinue use of said system immediately.

Use of the singular masculine pronoun forms herein shall be deemed to also include the plural and feminine forms as the context may require.

This 22nd day of Nov., 1978

Robert E. Christenbery (Seal)

Ruth B. Christenbery (Seal)

STATE OF NORTH CAROLINA,
COUNTY OF MECKLENBURG

I, Betty N. Hallman, a Notary Public for said County and State do hereby certify that Robert E. Christenbery & Ruth B. Christenbery personally appeared before me this date and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal, this 22nd day of Nov., 1978

Betty N. Hallman
Notary Public

My Commission Expires: April 23, 1979

STATE OF NORTH CAROLINA,
COUNTY OF MECKLENBURG

I, _____, a Notary Public for said County and State do hereby certify that _____ personally came before me this day and acknowledged that he is _____ of _____, and that by authority duly given and as the act and deed of said corporation, the foregoing instrument was signed in its name by its _____, sealed with its corporate seal and attested by _____ as its _____.

WITNESS my hand and notarial seal, this _____ day of _____, 19__

Date Received 6/11/99

ICAR(S) Application No. 14631

T. C. No. 031-132-04

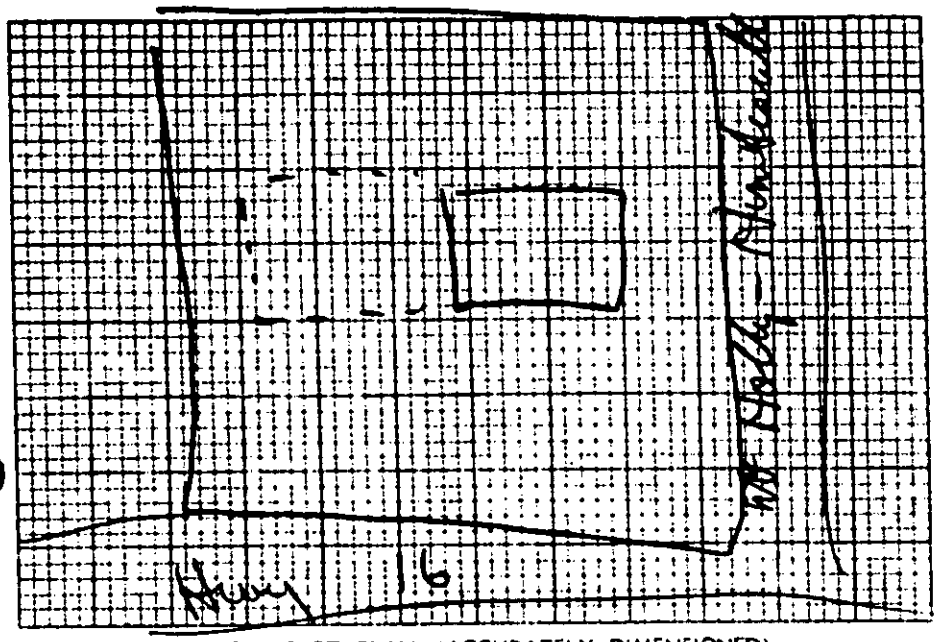
Map Date _____

MECKLENBURG COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH

Application for an
Installation, Construction, Alteration, and/or Repair Permit
(Individual Septic Tank System with Subsurface, Soil Absorption, Effluent Discharge)

The owner of that property described hereinafter hereby applies to the Mecklenburg County Department of Environmental Health for a permit to: adding to building, adding to system

1) ✓ Install or Construct 2) _____ Alter or Repair an individual septic tank wastewater treatment system with a subsurface, soil absorption, effluent discharge.



3) PLOT PLAN (ACCURATELY DIMENSIONED)

Mobile Home ____Yes ____No
Residence ____Yes ____No
4) No. of Bedrooms ✓
5) Business Use (Yes) No
Employees 6
6) Washing Machine ____Yes ____No
7) Garbage Disposal ____Yes ____No
8) Dishwasher ____Yes ____No
9) Water Supply
A) Individual Well _____
B) Governmental System _____
C) Community System:
1. Well source _____
2. Governmental source _____
10) Sewage System:
House located within 200 feet of public sewer ____Yes ____No
House located within 200 feet of community sewer ____Yes ____No
11) FHA Case No. _____
12) VA Case No. _____

13) NAME OF OWNER Neal (LAST), Jerry (FIRST) W. (MIDDLE)

14) ADDRESS OF OWNER 3301 Darby Avenue, Char, 28216

15) PHONE NO. Home _____ Office 394-6371

16) LOCATION OF SYSTEM corner Hwy 16 & Mt. Holly - Huntersville (STREET OR COUNTY ROAD)

17) SUBDIVISION _____ Lot No. _____ Block No. _____

Map Book No. _____ Page No. _____

18) DEED REFERENCE — DEED BOOK _____ AT PAGE _____

19) HAS A SOIL INVESTIGATION BEEN RUN? ✓YES NO DATE RUN

20) PTR NUMBER (See Instructions)

The undersigned person hereby agrees that he has read the foregoing application and that the contents of same are true. It is understood that any permit applied for herein shall be void and of no effect if any of the above facts are not true.

DATE OF APPLICATION _____

OWNER Jerry W. Neal

EHD 5-76

APPENDIX H
SITE EVALUATION

P.O. 031

...RESOURCES
...SERVICES
...CAROLINA

(Ground Absorption Sewage Disposal)

OWNER: Hickory Woods, Inc. DATE REQUESTED: 10-10-78
ADDRESS: P.O. Box 526, Concord, N.C. PLAT NO.:
COUNTY: Mecklenburg LOT SIZE: 20,875 square feet
LOCATION OF SITE: Corner of Hwy. 16 & Mt. Holly-Huntersville Road

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4
1. SLOPE (%)	(S) PS 1% U	S PS U	S PS U	S PS U
2. SOIL TEXTURE (12-36 in.) (Sandy, loamy, clayey, Note 2:1, Clay)	S PS some 2:1 clay U	S PS U	S PS U	S PS U
3. SOIL STRUCTURE (12.36 in.) (Clayey Soils)	S PS massive (U)	S PS U	S PS U	S PS U
4. SOIL DEPTH (In.)	S PS <40" (U)	S PS U	S PS U	S PS U
5. RESTRICTIVE HORIZONS (In.) (Impervious Strata, Rock)	S * see note PS below (U)	S PS U	S PS U	S PS U
6. SOIL DRAINAGE/GROUNDWATER (External & Internal)	S seasonal PS perched (U) water table	S PS U	S PS U	S PS U
7. SOIL PERMEABILITY (Percolation Rate)	S PS slow (U)	S PS U	S PS U	S PS U
8. OTHER (Specify)	S PS U	S PS U	S PS U	S PS U
9. SITE CLASSIFICATION	U			
SOIL SERIES	—			

S - Suitable PS - Provisionally Suitable U - Unsuitable

* See Diagram on Back (Include: Soil areas, property lines, roads, streams, gully, wet areas, fill areas, wells, water bodies, slope patterns,

Recommendations/Comments: * appears to be buried next to ... an existing septic tank.

Described By: Richard D. ...

Title: ... Date: ...

DHS Form 2601 (2/77)
Sanitation

SINCE
1881

FROEHLING & ROBERTSON, INC.
FULL SERVICE LABORATORIES • ENGINEERS & CHEMISTS
"OVER ONE HUNDRED YEARS OF SERVICE"

P.O. Box 34766
Charlotte, NC 28234
(704) 376-1596

May 4, 1993

Mr. Matthew E. Gilmore
Sr. Maintenance Engineer
Crown Central Petroleum Corporation
One North Charles Street
Baltimore, Maryland 21201

N. C. DEPT. OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT
MAY 06 1993
DIVISION OF ENVIRONMENTAL MANAGEMENT
MOORESVILLE REGIONAL OFFICE

Re: Groundwater Sampling and
Analysis at Crown NC-625
Mecklenburg County, North Carolina
F&R Project U-63-007
Crown P.O. 3-0123

Dear Mr. Gilmore:

Froehling & Robertson, Inc. (F&R) is pleased to report on our recent groundwater sampling and analysis at Crown NC-625 in Mecklenburg County, North Carolina.

The results of the laboratory analyses indicate that all of the subject wells either had petroleum hydrocarbon contamination below the State's Action Levels or had no detectable amounts of petroleum hydrocarbon compounds. The complete laboratory reports are attached for your consideration. We have also attached a copy of Groundwater allowable concentrations of substances per EHNR T15A: 2L.0200.

F&R notified Mr. Alan Schiff, of NCDEM as soon as we obtained the laboratory reports and Mr. Schiff indicated to us that the results were satisfactory.

F&R appreciates this opportunity of providing our environmental and laboratory services to Crown Central Petroleum and we look forward to providing our services to you on this and other projects.

Sincerely,
FROEHLING & ROBERTSON, INC.

Sam E. Phifer, P.G.
Environmental Project Manager

William F. Edelen Jr.. P.E.
Branch Manager

cc: Mr. Richard Garvine

SEP/WFE/dtm
UAE/CROWN.429

·SINCE
1881

FROEHLING & ROBERTSON, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS
ENGINEERS • LABORATORIES
"OVER ONE HUNDRED YEARS OF SERVICE"

CERTIFICATE OF ANALYSIS

Report Date: April 28, 1993
Lab #: 7044
F & R Client: F&R Charlotte

Project: Water Sampling NC-625
Project #: U-63-007
Sample Collector: Donald E. Smith
Sample Matrix: Water
Date Sampled: 4-12-93 **Time:** Not Given
Lab Receipt: Date: 4-15-93 **Time:** 12:53 PM

Parameter	Analysis Date	Method
601	4-24-93	EPA 624
602	4-24-93	EPA 624
MTB	4-24-93	EPA 624
EDB	4-24-93	EPA 624
IPE	4-24-93	EPA 624

RESULTS: All results in ug/L unless otherwise specified.

Parameter Purgeable Halocarbons (601)	023 124-42	023 124-33	023 124-32	033 012-05
Bromodichloromethane	<2.2	<2.2	<2.2	<2.2
Bromoform	<4.7	<4.7	<4.7	<4.7
Bromomethane	<10.0	<10.0	<10.0	<10.0
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0
Chloroethane	<10.0	<10.0	<10.0	<10.0
2-Chloroethylvinyl ether	<10.0	<10.0	<10.0	<10.0
Chloroform	1.6	<1.6	<1.6	<1.6
Chloromethane	<10.0	<10.0	<10.0	<10.0
Dibromochloromethane	<3.1	<3.1	<3.1	<3.1
1,2-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,3-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,4-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0

RESULTS: Cont. All results in ug/L unless otherwise specified.

Parameter	023 124-42	023 124-33	023 124-32	033 012-05
Purgeable Halocarbons				
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8
1,1-Dichloroethene	<2.8	<2.8	<2.8	<2.8
trans-1,2-Dichloroethene	<1.6	<1.6	<1.6	<1.6
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	<2.8	<2.8	<2.8	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9
Tetrachloroethene	<4.1	<4.1	<4.1	<4.1
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0
Trichloroethene	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	<10.0	<10.0	<10.0	<10.0
Vinyl chloride	<10.0	<10.0	<10.0	<10.0
	031 132-03	**031 132-12**	**031 182-40**	**031 182-41**
Bromodichloromethane	<2.2	<2.2	<2.2	<2.2
Bromoform	<4.7	<4.7	<4.7	<4.7
Bromomethane	<10.0	<10.0	<10.0	<10.0
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0
Chloroethane	<10.0	<10.0	<10.0	<10.0
2-Chloroethylvinyl ether	<10	<10	<10	<10
Chloroform	<1.6	<1.6	<1.6	<1.6
Chloromethane	<10.0	<10.0	<10.0	<10.0
Dibromochloromethane	<3.1	<3.1	<3.1	<3.1
1,2-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,3-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,4-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8

RESULTS: Cont. All results in ug/L unless otherwise specified.

Parameter

Purgeable Halocarbons

	031 132-03	031 132-12	031 182-40	031 182-41
1,1-Dichloroethene	<2.8	<2.8	<2.8	<2.8
trans-1,2-Dichloroethene	<1.6	<1.6	<1.6	<1.6
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	<2.8	3.4	3.2	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9
Tetrachloroethene	<4.1	<4.1	<4.1	<4.1
1,1,1-trichloroethane	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0
Trichloroethene	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	<10.0	<10.0	<10.0	<10.0
Vinyl chloride	<10.0	<10.0	<10.0	<10.0

	031 182-42	031 132-06	031 132-05	DETC LIMIT
Bromodichloromethane	<2.2	<2.2	<2.2	<2.2
Bromoform	<4.7	<4.7	<4.7	<4.7
Bromomethane	<10.0	<10.0	<10.0	<10.0
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0
Chloroethane	<10.0	<10.0	<10.0	<10.0
2-Chloroethylvinyl ether	<10.0	<10.0	<10.0	<10.0
Chloroform	<1.6	<1.6	<1.6	<1.6
Chloromethane	<10.0	<10.0	<10.0	<10.0
Dibromochloromethane	<3.1	<3.1	<3.1	<3.1
1,2-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,3-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,4-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8

RESULTS: Cont. All results in ug/L unless otherwise specified.

Parameter

Purgeable Halocarbons

	031 132-42	031 132-06	031 132-05	DETC LIMIT
1,1-Dichloroethene	<2.8	<2.8	<2.8	<2.8
trans-1,2-Dichloroethene	<1.6	<1.6	<1.6	<1.6
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0
Methylene Chloride	<2.8	3.0	<2.8	2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9
Tetrachloroethene	<4.1	<4.1	<4.1	<4.1
1,1,1-trichloroethane	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0
Trichloroethene	<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane	<10.0	<10.0	<10.0	<10.0
Vinyl chloride	<10.0	<10.0	<10.0	<10.0

Purgeable Aromatics (602)

	023 124-42	023 124-33	023 124-32	033 012-05
Benzene	<4.4	<4.4	<4.4	<4.4
Chlorobenzene	<6.0	<6.0	<6.0	<6.0
1,2-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,3-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,4-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2
Toluene	<6.0	<6.0	<6.0	<6.0
Xylenes	<5.0	<5.0	<5.0	<5.0

	031 132-03	031 132-12	031 182-40	031 182-41
Benzene	<4.4	<4.4	<4.4	<4.4
Chlorobenzene	<6.0	<6.0	<6.0	<6.0
1,2-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,3-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,4-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2
Toluene	<6.0	<6.0	<6.0	<6.0
Xylenes	<5.0	<5.0	<5.0	<5.0

Purgeable Aromatics (602) Cont.

	031 132-42	031 132-06	031 132-05	DETC LIMIT
Benzene	<4.4	<4.4	<4.4	<4.4
Chlorobenzene	<6.0	<6.0	<6.0	<6.0
1,2-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,3-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
1,4-Dichlorobenzene	<10.0	<10.0	<10.0	<10.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2
Toluene	<6.0	<6.0	<6.0	<6.0
Xylenes	<5.0	<5.0	<5.0	<5.0

Miscellaneous

	023 124-42	023 124-33	023 124-32	033 012-05
MTBE	<5.0	<5.0	151.0	<5.0
IPE	<5.0	<5.0	<5.0	<5.0
EDB	<5.0	<5.0	<5.0	<5.0

	031 132-03	031 132-12	031 182-40	031 182-41
MTBE	<7.2	<5.0	<5.0	5.5
IPE	<5.0	<5.0	<5.0	<5.0
EDB	<5.0	<5.0	<5.0	<5.0

	031 132-42	031 132-06	031 132-05	DETC LIMIT
MTBE	<5.0	<5.0	<5.0	<5.0
IPE	<5.0	<5.0	<5.0	<5.0
EDB	<5.0	<5.0	<5.0	<5.0

Respectfully,

Dan Abbott
Manager, Chemical Services

DA/dd

Director to establish an interim maximum allowable concentration for an unspecified substance, however, the burden of demonstrating those concentrations of the substance which correspond to the levels described in Paragraph (d) of this Rule rests with the petitioner. The petitioner shall submit all toxicological and epidemiological data, study results, and calculations necessary to establish a standard in accordance with the procedure prescribed in Paragraph (d) of this Rule. Within three months after the establishment of an interim maximum allowable concentration for a substance by the Director, the Director shall initiate action to consider adoption of a standard for that substance.

(d) Maximum allowable concentrations for substances in Class GA and Class GSA waters are established as the lesser of:

(1) Systemic threshold concentration calculated as follows: [Reference Dose (mg/kg/day) x 70 kg (adult body weight) x Relative Source Contribution (.10 for inorganics; .20 for organics)] / [2 liters/day (avg. water consumption)];
(2) Concentration which corresponds to an incremental lifetime cancer risk of $1x10^{-6}$;
(3) Taste threshold limit value;
(4) Odor threshold limit value;
(5) Maximum contaminant level; or
(6) National secondary drinking water standard.

(e) The following references, in order of preference, shall be used in establishing concentrations of substances which correspond to levels described in Paragraph (d) of this Rule.

(1) Integrated Risk Information System (U.S. EPA).
(2) Health Advisories (U.S. EPA Office of Drinking Water).
(3) Other health risk assessment data published by U.S. EPA.
(4) Other appropriate, published health risk assessment data.

(f) Water quality standards specified in Paragraphs (g) and (h) of this Rule and interim maximum allowable concentrations established pursuant to Paragraph (c) of this Rule shall be reviewed on a biennial basis. Appropriate modifications to established standards will be made in accordance with the procedure prescribed in Paragraph (d) of this Rule where modifications are considered appropriate based on data published subsequent to the previous review.

(g) Class GA Standards. Where not otherwise indicated, the standard refers to the total concentration in milligrams per liter of any constituent.

(1) acrylamide (propenamide): 0.00001
(2) arsenic: 0.05
(3) barium: 1.0
(4) benzene: 0.001
(5) bromoform (tribromomethane): 0.00019
(6) cadmium: 0.005
(7) carbofuran: 0.036
(8) carbon tetrachloride: 0.0003
(9) chlordane: 2.7×10^{-5}
(10) chloride: 250.0
(11) chlorobenzene: 0.3
(12) chloroform (trichloromethane): 0.00019
(13) 2-chlorophenol: 0.0001
(14) chromium: 0.05
(15) cis-1,2-dichloroethene: 0.07
(16) coliform organisms (total): 1 per 100 milliliters
(17) color: 15 color units
(18) copper: 1.0
(19) cyanide: 0.154
(20) 2, 4-D (2,4-dichlorophenoxy acetic acid): 0.07
(21) 1,2-dibromo-3-chloropropane: 2.5×10^{-5}
(22) dichlorodifluoromethane (Freon-12; Halon): 0.00019
(23) 1,2-dichloroethane (ethylene dichloride): 0.00038
(24) 1,1-dichloroethylene (vinylidene chloride): 0.007
(25) 1,2-dichloropropane: 0.00056

(26) p-dioxane (1,4-diethylene dioxide): 0.007
(27) dioxin: 2.2×10^{-10}
(28) dissolved solids (total): 500
(29) endrin: 0.0002
(30) epichlorohydrin (1-chloro-2,3-epoxypropane): 0.00354
(31) ethylbenzene: 0.029
(32) ethylene dibromide (EDB; 1,2-dibromoethane): 0.05×10^{-5}
(33) ethylene glycol: 7.0
(34) flouride: 2.0
(35) foaming agents: 0.5
(36) gross alpha particle activity (including radium-226 but excluding radon and uranium): 15 pCi/l
(37) heptachlor: 7.6×10^{-5}
(38) heptachlor epoxide: 3.8×10^{-5}
(39) hexachlorobenzene (perchlorobenzene): 0.00002
(40) n-hexane: 14.3
(41) iron: 0.3
(42) lead: 0.05
(43) lindane: 2.65×10^{-5}
(44) manganese: 0.05
(45) mercury: 0.0011
(46) metadichlorobenzene (1,3-dichlorobenzene): 0.62
(47) methoxychlor: 0.1
(48) methylene chloride (dichloromethane): 0.005
(49) methyl ethyl ketone (MEK; 2-butanone): 0.17
(50) methyl tert-butyl ether: 0.2
(51) nickel: 0.15
(52) nitrate: (as N) 10.0
(53) nitrite: (as N) 1.0
(54) orthodichlorobenzene (1,2-dichlorobenzene): 0.62
(55) oxamyl: 0.175
(56) paradichlorobenzene (1,4-dichlorobenzene): 0.0018
(57) pentachlorophenol: 0.22
(58) pH: 6.5 - 8.5
(59) radium-226 and radium-228 (combined): 5 pCi/l
(60) selenium: 0.01
(61) silver: 0.05
(62) styrene (ethenylbenzene): 1.4×10^{-5}
(63) sulfate: 250.0
(64) tetrachloroethylene (perchloroethylene; PCE): 0.0007
(65) toluene (methylbenzene): 1.0
(66) toxaphene: 3.1×10^{-5}
(67) 2, 4, 5,-TP (Silvex): 0.01
(68) trans-1,2-dichloroethene: 0.07
(69) 1,1,1-trichloroethane (methyl chloroform): 0.2
(70) trichloroethylene (TCE): 0.0028
(71) vinyl chloride (chloroethylene): 1.5×10^{-5}
(72) xylenes (o-, m-, and p-): 0.4
(73) zinc: 5.0

(h) Class GSA Standards. The standards for this class shall be the same as those for Class GA except as follows:

(1) chloride: allowable increase not to exceed 100 percent of the natural quality concentration.
(2) total dissolved solids: 1000 mg/l.

(i) Class GC Waters.

(1) The concentrations of substances which, at the time of classification exceed water quality standards, shall not be permitted to increase. For all other substances, concentrations shall not be caused or

SINCE F&R 1881

CHAIN OF CUSTODY RECORD

FROEHLING & ROBERTSON, INC.
P.O. BOX 27524
RICHMOND, VIRGINIA 23261
(804) 264-2701

PROJECT #	PROJECT NAME
V-63-007	Water Sampling Crown NC-625

SAMPLERS: *(SIGNATURE)*

Donald E. Smith

SAMPLE ID	DATE	TIME	GRAB	COMP	STATION LOCATION	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	REQUESTED PARAMETERS: 601, 602 MTBE, EDB	1SO, ETHER
1	4/12			✓	023-124-42	3		✓	✓	✓
2	4/12			✓	023-124-33	3		✓	✓	✓
3	4/12			✓	023-124-32	6		✓	✓	✓
4	4/12			✓	033-012-05	3		✓	✓	✓
5	4/12			✓	031-132-03	3		✓	✓	✓
6	4/13			✓	031-132-12	3		✓	✓	✓
7	4/12			✓	031-182-40	3		✓	✓	✓
8	4/12			✓	031-182-41	3		✓	✓	✓
9	4/13			✓	031-182-42	3		✓	✓	✓
10	4/13			✓	031-132-06	3		✓	✓	✓

RELINQUISHED BY: *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY: *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED FOR LAB BY	DATE	TIME

SHIPPED VIA _____ DATE _____

FIELD REMARKS

FORM NO. 1029

SINCE F&R 1881

CHAIN OF CUSTODY RECORD

FROEHLING & ROBERTSON, INC.
P.O. BOX 27524
RICHMOND, VIRGINIA 23261
(804) 264-2701

PROJECT #	PROJECT NAME
U-63-007	Water Sampling Crew NC-625

SAMPLERS: *(SIGNATURE)*

Donald E. Smith

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	STATION LOCATION	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	REQUESTED PARAMETERS: 601, 602 MTBE, EDB.	REQUESTED PARAMETERS: 150 Ether
11	4/13			✓	031-132-05	3		✓	✓	✓

RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED FOR LAB BY	DATE	TIME

SHIPPED VIA _____ DATE _____

FIELD REMARKS

FORM NO. 1029

SINCE 1881

CHAIN OF CUSTODY RECORD

FROEHLING & ROBERTSON, INC.
P.O. BOX 27524
RICHMOND, VIRGINIA 23261
(804) 264-2701

PROJECT #	PROJECT NAME
U-63-007	CRONN NC 625 WATER SAMPLING

SAMPLERS: (SIGNATURE)

SAMPLE I.D.	DATE	TIME	COMP	GRAB	STATION LOCATION	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	REQUESTED PARAMETERS: 601, 602, MTBE, EDB	REQUESTED PARAMETERS: ISO ETHER	REQUESTED PARAMETERS: RE-RUN
5	4/19/93	1:NPM		✓	031-132-03	3		✓	✓	✓	RE-RUN

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
	4/19/93	3:10			
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY	DATE	TIME

SHIPPED VIA UPS DATE 4/19/93

FIELD REMARKS: Sample re-analyzed due to air bubbles in orig. sample. DR

FORM NO. 1029

ENSCI®
ENVIRONMENTAL, INC.

December 17, 1993

Mecklenburg County Health Department
Environmental Health Division
700 North Tryon Street
Charlotte, NC 28202
Attn.: Ms. Judy Kiser

RE: Application for Improvement Permit
Crown NC-625 Facility
2932 Mt. Holly-Huntersville Rd.
Charlotte, Mecklenburg County, N.C.
ENSCI Project No. E004384

Dear Ms. Kiser:

Enclosed is an application for an Improvement Permit at the captioned location. Enclosed you will find:

- A complete set of plans signed and sealed by a registered N.C. Professional Engineer.
- An application form executed by Mr. Matt Gilmore of Crown Central Petroleum Corporation of Baltimore, Maryland, as legal agent for the property owners.
- A check in the amount of $50.00 covering application fee charges.

We hope the enclosed documents are sufficient to satisfy the permitting process requirements. I will be contacting your office soon to discuss a date for meeting at the project site with representatives from your office. In the meanwhile, please do not hesitate to contact me at (919) 787-8209 if you have any questions or need additional information.

Sincerely,

ENSCI ENVIRONMENTAL, INC.

David Giachini

David Giachini
Project Engineer

Enclosures
cc: Matt Gilmore, Crown Central

1108 Old Thomasville Road
High Point, North Carolina 27260
T(919) 883-7505
F(919) 882-7958

Post Office Box 80275
Raleigh, North Carolina 27623-0275
T(919) 787-8209
F(919) 881-8205

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

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
A. Preston Howard, Jr., P.E., Director

DEHNR

September 3, 1993

Mr. Matt Gilmore
Crown Central Petroleum
Post Office Box 1168
Baltimore, MD 21203

Subject: Permit No. WQ0007304
Crown Central Petroleum
Crown Fast Fare NC-625
Groundwater Remediation
Mecklenburg County

Dear Mr. Gilmore:

In accordance with your application received on November 30, 1992, we are forwarding herewith Permit No. WQ0007304, dated September 3, 1993, to Crown Central Petroleum for the construction and operation of the subject groundwater remediation facilities.

This permit shall be effective from the date of issuance until August 31, 1998, and shall be subject to the conditions and limitations as specified therein. Please pay particular attention to the monitoring requirements in this permit. Failure to establish an adequate system for collecting and maintaining the required operational information will result in future compliance problems.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of North Carolina General Statutes, and filed with the Office of Administrative Hearings, P.O. Drawer 27447, Raleigh, NC 27611-7447. Unless such demands are made this permit shall be final and binding.

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Mr. Randy Jones at 919/ 733-5083, extension 517.

Sincerely,

Carolyn D. McCaskill for

A. Preston Howard, Jr., P.E.

cc: Mecklenburg County Health Department
Mecklenburg Environmental Protection
Mooresville Regional Office, Water Quality Section
Mooresville Regional Office, Groundwater Section
Jack Floyd, Groundwater Section
Applied Environmental Services, Inc.
Facilities Assessment Unit
Training and Certification

NORTH CAROLINA

ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

RALEIGH

INFILTRATION GALLERY PERMIT

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations

PERMISSION IS HEREBY GRANTED TO

Crown Central Petroleum
Mecklenburg County

FOR THE

construction and operation of a 3600 GPD groundwater remediation facility which consists of a recovery well, a 10 GPM diffused aeration stripping device, a particle filter, a dual stage activated carbon adsorption system, an infiltration gallery which consists of four trenches approximately 3 feet by 3 feet by 45 feet, and all other appurtenances to serve the Crown Fast Fare NC-625 with no discharge to the surface waters, pursuant to the application received on November 30, 1992, and in conformity with the project plan, specifications, and other supporting data subsequently filed and approved by the Department of Environment, Health and Natural Resources and considered a part of this permit.

This permit shall be effective from the date of issuance until August 31, 1998, and shall be subject to the following specified conditions and limitations:

I. PERFORMANCE STANDARDS

1. Upon completion of construction and prior to operation of this permitted facility, a certification must be received from a professional engineer certifying that the permitted facility has been installed in accordance with this permit and the approved plans and specifications. Mail the Certification to the Permits and Engineering Unit, P.O. Box 29535, Raleigh, NC 27626-0535.

2. The Mooresville Regional Office, telephone number 704/663-1699, shall be notified at least forty-eight (48) hours in advance of operation of the installed facilities so that an in-place inspection can be made. Such notification to the regional supervisor shall be made during the normal office hours from 8:00 a.m. until 5:00 p.m. on Monday through Friday, excluding State Holidays.

3. This permit shall become voidable if the soils fail to adequately absorb the wastes and may be rescinded unless the facilities are installed, maintained, and operated in a manner which will protect the assigned water quality standards of the surface waters and ground waters.

4. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement treatment or disposal facilities.

5. The issuance of this permit shall not relieve the Permittee of the responsibility for damages to surface or groundwaters resulting from the operation of this facility.

6. Any sludge generated from these treatment facilities must be disposed of in accordance with General Statute 143-215.1 and in a manner approved by the North Carolina Division of Environmental Management.

7. Diversion or bypassing of the untreated groundwater from the treatment facilities is prohibited.

II. OPERATION AND MAINTENANCE REQUIREMENTS

1. The facilities shall be properly maintained and operated at all times.

2. Upon classification of the facility by the Certification Commission, the Permittee shall employ a certified wastewater treatment plant operator to be in responsible charge (ORC) of the wastewater treatment facilities. The operator must hold a certificate of the type and grade at least equivalent to or greater than the classification assigned to the wastewater treatment facilities by the Certification Commission. The Permittee must also employ a certified back-up operator of the appropriate type and grade to comply with the conditions of Title 15A, Chapter 8A, .0202. The ORC of the facility must visit each Class I facility at least weekly and each Class II, III, and IV facility at least daily, excluding weekends and holidays, and must properly manage and document daily operation and maintenance of the facility and must comply with all other conditions of Title 15A, Chapter 8A, .0202. Once the facility is classified, the Permittee must submit a letter to the Certification Commission which designates the operator in responsible charge within thirty days after the wastewater treatment facilities are 50% complete.

3. The facilities shall be effectively maintained and operated as a non-discharge system to prevent the discharge of any wastewater resulting from the operation of this facility.

III. MONITORING AND REPORTING REQUIREMENTS

1. Any monitoring deemed necessary by the Division of Environmental Management to insure surface and ground water protection will be established and an acceptable sampling reporting schedule shall be followed.

2. Noncompliance Notification:

   The Permittee shall report by telephone to the Mooresville Regional Office, telephone number 704/663-1699, as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

   a. Any occurrence at the wastewater treatment facility which results in the treatment of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a basin or tank; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.

b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.

c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.

d. Any time that self-monitoring information indicates that the facility is not in compliance with its permit limitations.

Persons reporting such occurrences by telephone shall also file a written report in letter form within 15 days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

IV. GROUNDWATER REQUIREMENTS

1. Water supply wells 1, 2, and 3 (see figure 6 in CSA) and monitoring wells CP-1, CP-2, CP-3, CP-4, CP-5, CP-6, CP-7, CP-8, CP-9, and PW-1 shall be sampled every January, April, July, and October for the following parameters:

Benzene*	Isopropyl Ether*
Toluene*	pH
Ethylbenzene*	TDS
Xylenes*	Water Level
MTBE*	

*Shall be sampled by EPA Method 602

The measurement of water level must be made prior to sampling for the remaining parameters. The depth of water in each well shall be measured from the surveyed point on the top of the casing.

The measuring points (top of well casing) of all wells shall be surveyed to provide relative elevations of the measuring point for each well.

2. The influent and effluent from the treatment system shall be sampled once every two (2) weeks for the first three (3) months and monthly thereafter for the following parameters using EPA Method 602: Benzene, Toluene, Xylenes, Ethylbenzene, MTBE

3. All water supply and monitoring well data shall be sent to the Groundwater Section, P. O. Box 29535, Raleigh, N. C. 27626 on Form GW-59 every February, May, August, and November.

4. All influent and effluent data shall be submitted quarterly along with the water supply and monitoring well data.

5. The groundwater treatment system must achieve at least a 95% treatment efficiency. If the treatment efficiency falls consistently below 95% then additional treatment facilities may be required.

6. The permittee shall use the BTEX and MTBE concentrations in the monitoring wells to develop an isoconcentration contour map for these constituents. Water level contours shall also be developed. These maps should be developed using the data collected in April and October and should be submitted along with the other monitoring data for those months.

7. Any additional groundwater quality monitoring, as deemed necessary by the Division of Environmental Management, shall be provided.

8. The Compliance Boundary for the disposal system is specified by regulations in 15A NCAC 2L, Groundwater Classifications and Standards. The Compliance Boundary is established at either (1) 250 feet from the waste disposal area, or (2) 50 feet within the property boundary, whichever is closest to the waste disposal area. An exceedance of Groundwater Quality Standards at or beyond the Compliance Boundary is subject to immediate remediation action, in addition to the penalty provisions applicable under General Statute 143-215.6(1)a.

   Also in accordance with 15A NCAC 2L, a REVIEW BOUNDARY is established around the disposal system midway between the Compliance Boundary and the perimeter of the waste disposal area. Any exceedance of standards at the Review Boundary shall require remediation action on the part of the permittee.

9. The groundwater recovery, treatment, and disposal system shall be inspected weekly. If it is determined that the system is malfunctioning, all repairs should be made as soon as possible and reported to the Mooresville Regional Office.

10. All components of the groundwater recovery, treatment and disposal system shall be properly weather-proofed to prevent freezing and failure of the system.

11. All wells that are constructed for the purposes of groundwater monitoring shall be constructed in accordance with 15A NCAC 2C .0108 (Standards of Construction for Wells Other Than Water Supply) and other state and local laws and regulations pertaining to well construction.

12. Within Sixty (60) days of permit issuance, the permittee shall submit two original copies of a scaled topographic map (scale no greater than 1 inch = 100 feet), signed and sealed by a North Carolina Professional Engineer or a North Carolina registered land surveyor, that indicates all of the following information:

    a. the location and identity of each monitor and recovery well,
    b. the location of the waste disposal system,
    c. the location of all property boundaries,
    d. the latitude and longitude of each monitoring well,
    e. the relative elevation of the top of the well casing (which shall be known as the measuring point), and
    f. the depth of water below the measuring point at the time the measuring point is established.

13. For the initial sampling of the well, as specified elsewhere in this permit, the permittee shall submit a copy of the GW-1 form with the Compliance Monitoring Form (GW-59) for that well. Compliance Monitoring Forms that do not include copies of the GW-1 form will be returned to the permittee without being processed. Failure to submit these forms as required by this permit may result in the initiation of enforcement activities, pursuant to NCGS 143-215.6.

V. INSPECTIONS

1. Adequate inspection, maintenance and cleaning shall be provided by the Permittee to insure proper operation of the subject facilities.

2. The Permittee or his designee shall inspect the groundwater recovery and treatment facilities to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment, a threat to human health, or a nuisance. The Permittee shall keep an inspection log or summary including at least the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee. This log of inspections shall be maintained by the Permittee for a period of three years from the date of the inspection and shall be made available upon request to the Division of Environmental Management or other permitting authority.

3. Any duly authorized officer, employee, or representative of the Division of Environmental Management may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the terms and conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.

VI. GENERAL CONDITIONS

1. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans, specifications and other supporting data.

2. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data.

3. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division of Environmental Management accompanied by an application fee, documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.

4. The Permittee shall obtain a well construction permit from the Mooresville Regional Office prior to construction of the recovery wells.

5. A set of approved documents for the subject project must be retained by the Permittee for the life of this project.

6. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the Division of Environmental Management in accordance with North Carolina General Statute 143-215.6A to 143-215.6C.

7. The annual administering and compliance fee must be paid by the Permittee within thirty (30) days after being billed by the Division. Failure to pay the fee accordingly may cause the Division to initiate action to revoke this permit as specified by 15 NCAC 2H .0205 (c)(4).

8. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, and federal) which have jurisdiction.

9. The Permittee, at least six (6) months prior to the expiration of this permit, shall request its extension. Upon receipt of the request, the Commission will review the adequacy of the facilities described therein, and if warranted, will extend the permit for such period of time and under such conditions and limitations as it may deem appropriate.

Permit issued this the 3rd day of September, 1993.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Carolyn D. McCaskill /for

A. Preston Howard, Jr., P.E., Director
Division of Environmental Management
By Authority of the Environmental Management Commission

Permit No. WQ0007304

Permit No. WQ0007304
September 3, 1993

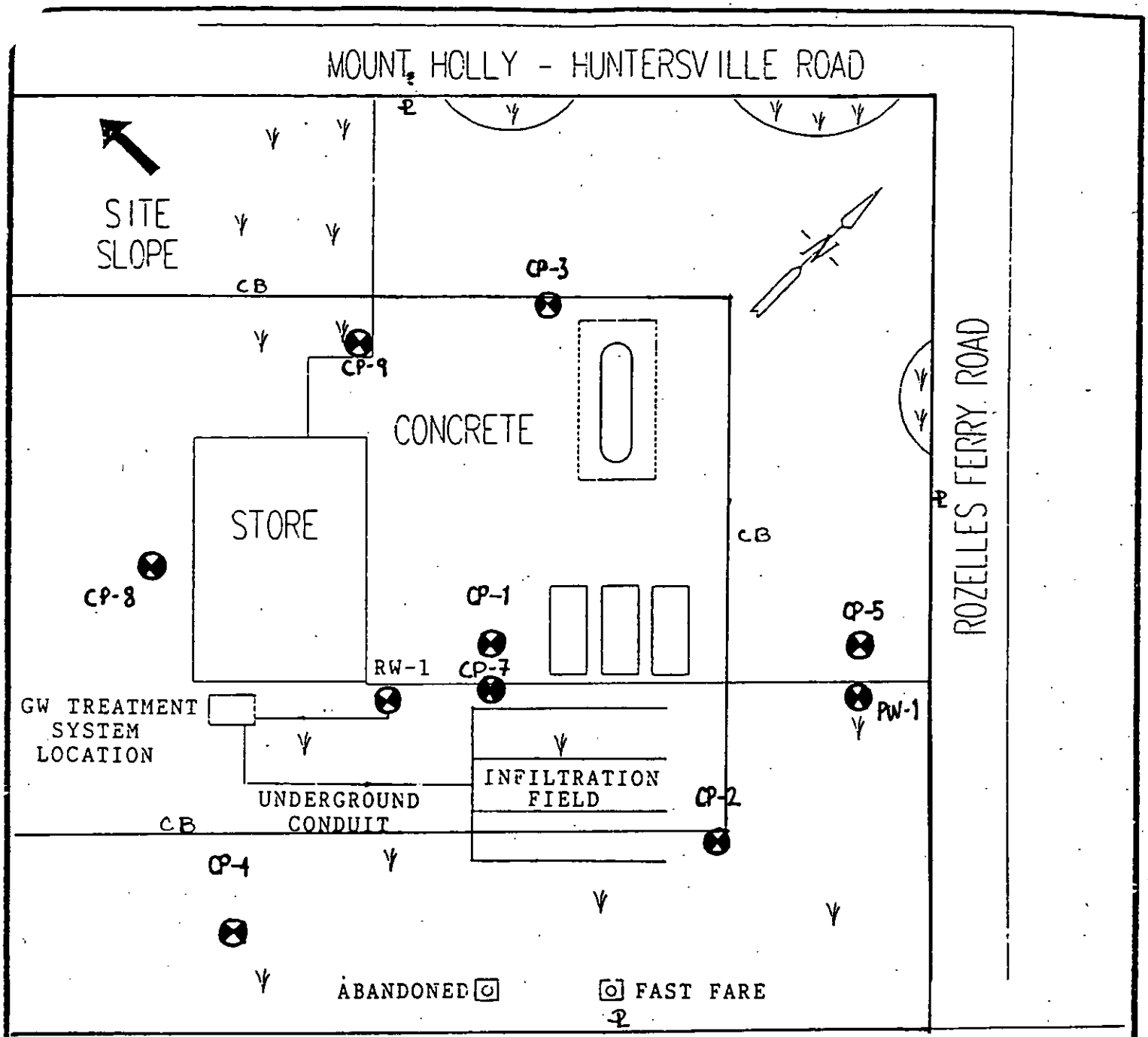
Engineer's Certification

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, _____, _____ for the
Project Name Location

Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the approved plans and specifications.

Signature _____ Registration No._____

Date _____



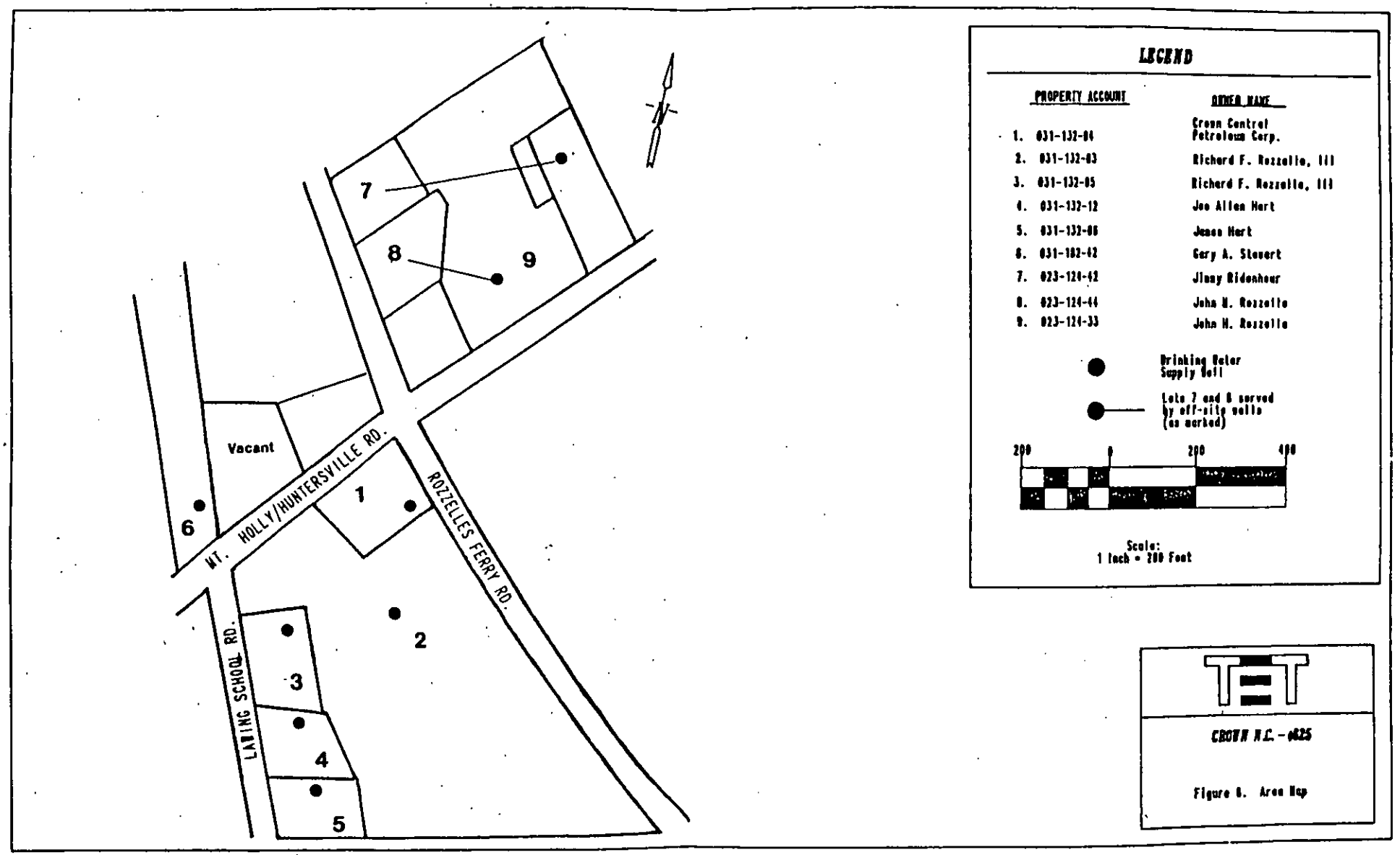
MAP SOURCE: TANK & ENVIRONMENTAL TESTING, INC. 5/27/92 CSA REPORT

Michael T. Stayton 8/5/93

REMEDIAL SYSTEM LAYOUT
CROWN NC-625
CHARLOTTE, N.C.

APPLIED ENVIRONMENTAL SERVICES, INC.

SCALE: 1" = 35'
PROJECT NO.: E124822
FIGURE NO.: 12.



CROWN N.C. - 0825

Figure 6. Area Map

Mecklenburg County
Health Department

Betty S. Snow, R.N., M.A.
Health Director

M E M O R A N D U M

TO: Sylvia Daniel, R.S.
Program Chief

FROM: W. R. Marlin, Soil Scientist

DATE: December 29, 1993

SUBJECT: DEHNR Permit No. WQ0007304
Crown Central Petroleum
Crown Fast Fare
2932 Mt. Holly-Huntersville Road
Charlotte, NC

With regard to the above mentioned permit, it was noted that the permit specifications indicate that 3600 gallons per day (gpd) will be discharged into 180 linear feet of trench, 3 feet wide and 3 feet deep. The application rate per square foot is calculated to be 6.66 gpd.

During a soil investigation conducted in 1981, it was found that the soils on the site were shown to have expansive clay present. I have a high expectation that the discharge of 3600 gpd into soils of this type will prevent the adequate absorption of the waste generated from the treatment unit.

Our records indicate that the original nitrification field for the septic system was installed in 1979. Due to poor conditions of the soils this system was approved for 2 employees only and no public use of toilet facilities. A total of 200 linear feet was installed. The projected maximum load or discharge would be approximately 100 gpd into the 200 feet of drainfield. The loading rate of the present system is calculated to be only .165 gpd per square foot. Even with the restrictive water use this department has been advised by the current tenants that the septic tank is currently being pumped on a routine basis to prevent sewage from discharging to the surface of the ground. Although this department has observed no failure of the septic tank system, should a failure occur a repair must be made to the system within 30 days. There is very limited repair area available. Any remaining area may have to be utilized for such a repair. Please be advised that this repair may be located in the area of the infiltration gallery and may further impact the absorption capability of the soils in that area.

It may be in the best interest of the property owners to advise DEHNR of these issues.

attachment

Mecklenburg County
Health Department

Betty S. Snow, R.N., M.A.
Health Director

MEMORANDUM

TO: A. Preston Howard, Jr., P.E.

FROM: Sylvia D. Daniel, R.S.
Program Chief

DATE: December 29, 1993

SUBJECT: Crown Central Petroleum
Permit No. WQ0007304
Mecklenburg County

Please see the attached memo from Bill Marlin, Soil Scientist regarding The Crown Petroleum property located at 2932 Mt. Holly - Huntersville Road, Charlotte, North Carolina.

This memorandum is being forwarded to you for information purposes and to serve as documentation should further developments occur at the subject location.

It appears that there are some valid issues that need to be addressed. In summary:

- The loading rate for the infiltration gallery appears to be too high for the receiving soils at the site.

- The existing septic tank system serving the facility appears to be under stress and a failure may be imminent.

- Little to no repair area exists to repair the septic tank system.

This department would invite your comments on the above issues. In the future, we would appreciate the opportunity to coordinate with you when such remediation plans are proposed in Mecklenburg County where septic tank systems and private wells serve the facility. We are aware of this situation only because a building permit is required for the construction of the storage shed which will house the filtration equipment.

If you have questions, or would like to discuss this further, please contact me at (704)336-5565.

attachments (2)

ENSCI CORPORATION
919-883-7505

APPLIED ENVIRONMENTAL SERVICES INC.
919-787-8209

Judy, here's the 3rd of 3 plan sheets for the Crown-Fast Fare project. Thanks again for your cooperation and help on this matter.

David Giachino

Printed on Recycled Paper

Mecklenburg County

This page is left in the original file as a placeholder. The following item(s) were removed from the original file prior to scanning and returned post scanning:

↘ **Large-format Drawings**

Original File Number: 14631 / 2932 Mt. Holly-Huntesville Rd.

Box Number: 12

Number of pages associated with file: 3 maps

General Comments: _____

_____

_____

_____

Imaging Solutions and Services, Inc.