N61165.AR.005822
CNC CHARLESTON
5090.3a

LETTER REGARDING SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL APPROVAL OF MONITORING WELL INSTALLATION AT THE ADVANCED FIRE FIGHTING TRAINING FACILITY CNC CHARLESTON SC
4/16/1991
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

South Carolina
DHEC
Department of Health and Environmental Control
2600 Bull Street, Columbia, SC 29201

Commissioner: Michael D. Jarrett

Board: John B. Pate, MD, Chairman
William E. Applegate, III, Vice Chairman
John H. Burriss, Secretary
Toney Graham, Jr., MD
Richard E. Jabbour, DDS
Henry S. Jordan, MD
Currie B. Spivey, Jr.

*Promoting Health, Protecting the Environment*

File

#13349

April 16, 1991

RECEIVED
APR 17 1991
PROTECTION DIVISION

Ms. Theresa Clemmons, P.E.
Saussy Engineering, Inc.
230 Habersham St./P. O. Box 9584
Savannah, GA 31412

**RE: Monitoring Well Request**
**Advanced Fire Fighting Training Facility, Charleston Naval Base**

Dear Ms. Clemmons:

On April 11, 1991, Greg Force with Westinghouse Environmental and Geotechnical Services, Inc., contacted the Department to discuss the proposed well locations per the South Carolina DHEC Monitoring Well Approval dated April 8, 1991, for the referenced facility. Department personnel was informed that due to the relatively shallow groundwater elevation (approximately 2.5 feet) at the site, dewatering would be necessary to construct the Advanced Fire Fighting Training Facility. Consequently, to determine the disposal options available for dewatering the area, groundwater quality information within the landfill waste needed to be collected. Thus, the proposed monitoring wells would need to be constructed within the landfill.

After much discussion between South Carolina DHEC personnel, it was decided that approval could be given for the installation of four (4) monitoring wells to be constructed within/through the abandoned landfill material. The wells are to be advanced by hollow stem augers to a maximum depth of 7.5 feet utilizing a five foot screen interval.

As a result, enclosed is a revised monitoring well approval for the installation of four (4) monitoring well designated CSY-FMW-1 through CSY-FMW-4 to be constructed in the location proposed in the request letter dated April 3, 1991, Clemmons to Sanford-Coker.

If there are any questions, please feel free to contact me at 554-5533.

Sincerely,

Christine M. Sanford-Coker

Christine M. Sanford-Coker
Regional Hydrogeologist
Trident District EQC

CMSC/dl
Enclosure
cc: David Beize, Groundwater Protection Division
Greg Force, Westinghouse Environmental and Geotechnical Services

**Environmental Quality Control Office, Trident District**
2470 Air Park Road, North Charleston, SC 29418 (Phone 554-5533 Fax 554-4615)

South Carolina
DHEC
Department of Health and Environmental Control
2600 Bull Street, Columbia, SC 29201

Commissioner: Michael D. Jarrett

Board: John B. Pate, MD, Chairman
William E. Applegate, III, Vice Chairman
John H. Burriss, Secretary
Toney Graham, Jr., MD
Richard E. Jabbour, DDS
Henry S. Jordan, MD
Currie B. Spivey, Jr.

*Promoting Health, Protecting the Environment*

# MONITORING WELL APPROVAL

Approval is hereby granted to: Westinghouse Environmental and Geotechnical Services, Inc.
840 Low Country Boulevard
Mount Pleasant, SC 29464

RE: Advanced Fire Fighting Training Facility
Charleston Naval Base
Charleston, South Carolina

for the construction of monitoring wells designated CSY-FMW-1 through CSY-FMW-4 in accordance with the construction plans and specifications submitted on April 4, 1991, and discussed on April 11, 1991.

These wells will be constructed to the approximate depth of 7.5 feet below the surface and screened in the uppermost aquifer for the purpose of monitoring groundwater quality.

**Conditions:** That the latitude and longitude and actual construction details for each well be submitted within 30 days after installation. Submit a well location plat within 30 days. Submit a detailed abandonment report within 30 days of well abandonment. Submit all analytical results within 30 days of completion of laboratory work.

Contact the Trident EQC Office 48 hours prior to beginning construction (554-5533).

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71.

Date Issued April 16, 1991 by Christine M. Sanford-Coker
Christine M. Sanford-Coker
Regional Hydrogeologist
Trident District EQC

CMSC/dl

cc: **David Baize**, Groundwater Protection Division

**Environmental Quality Control Office, Trident District**
2470 Air Park Road, North Charleston, SC 29418 (Phone 554-5533 Fax 554-4615)

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

General

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

**A. OWNER OF WELL:** [redacted]
Address: [redacted]
Telephone No.: Charleston, S.C. 803-[illegible]
Engineer: Surrine Environmental Consultants
Address: 2694-A Lake Park Dr. Charleston, S.C. 29[illegible]
Telephone No.: 803-572-[illegible]

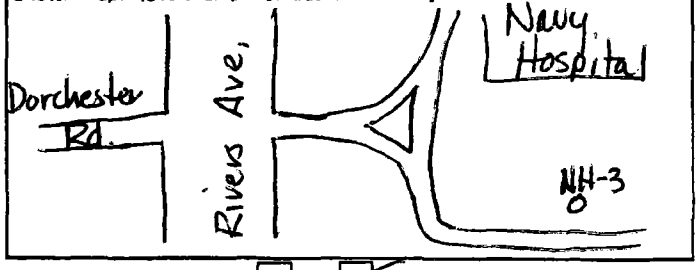
**1. LOCATION OF WELL**

County: Charleston Well Number: NH-3

Distance And Direction from Road Intersections: ~200 ft. East of Rivers Ave

Street address & City of Well Location: Navy Hospital, Charleston

Sketch Map: (See example on back)




**2. CUTTING SAMPLES** ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Formation Description | | |
|---|---|---|
| Net Sand 0'-20' | | |
| | | |
| | | |
|

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

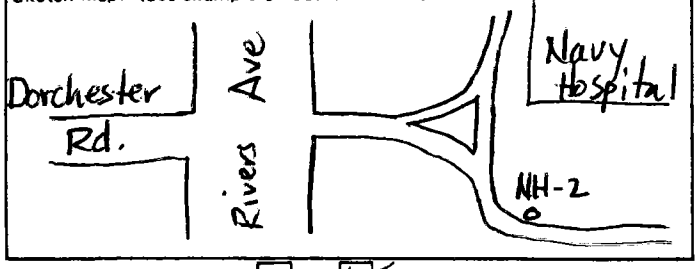
**1. LOCATION OF WELL**

County: Charleston Designation: 269-NH-2

Distance And Direction from Road Intersections: ~100 ft. East of Rivers Ave.

Street address & City of Well Location: Navy Hospital-Charleston

Sketch Map: (See example on back)




**2. CUTTING SAMPLES** ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Water Bearing Zones | | |
|---|---|---|
| Wet Sand 0-20 | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

RECEIVED DEC 2 7 1989 GROUND WATER PROTECTION DIVISION

* Indicate water bearing zones

(use a 2nd sheet if needed)

**3. OWNER OF WELL:** Charleston Naval Shipyard - Public Works

Address: Charleston, S.C.

Telephone No.: 803-743-5519

Engineer: Sirrine Environmental Consultants

Address: 2694-A Lake Park Dr. Charleston, S.C. 29406

Telephone No.: 803-572-[illegible]

**5. WELL DEPTH (Completed)** 20 ft. Date Started: 11/27/89 Date Completed: 11/27/89

**6.** ☐ Mud Rotary ☐ Jetted ☑ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

**7. USE:** ☐ Domestic ☐ Public Supply Permit No. ____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☑ Monitor Well

**8. CASING:** ☑ Threaded ☐ Welded

Diam. 2"

Type ☑ PVC ☐ Galvanized ☐ Steel ☐ Other

2 in. to 2.5 ft. depth

____ in. to ____ ft. depth

Height: Above/Below Flush

TOC Elev. ~~Surface~~ 29.89 ft.

Weight ____ lbs./ft.

Drive Shoe? ☐ Yes ☑ No

**9. SCREEN:**

Type: PVC Diam. 2"

Slot/Gauze 10 Length 17.5'

Set Between 2.5 ft. and 20 ft.

____ ft. and ____ ft.

**NOTE: MULTIPLE SCREENS USE SECOND SHEET**

Sieve Analysis ☐ Yes (Please enclose) ☑ No

**10. STATIC WATER LEVEL**

6.0 ft. below land surface after 24 hours

**11. PUMPING LEVEL** Below Land Surface

____ ft. after ____ hrs. pumping ____ G.P.M.

Pumping Test: ☐ Yes (Please enclose) ☑ No

Yield ____

**12. WATER QUALITY**

Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No

Please Enclose Lab Results.

**13. ARTIFICIAL FILTER (Gravel Pack)** ☑ Yes ☐ No

Installed from 20 ft. to 15 ft.

Effective size FX 50 uniformity coefficient ____

**14. WELL GROUTED?** ☑ Yes ☐ No

Neat Cement ☑ Sand Cement ☐ Concrete ☐ Other ☐ ____

Depth From 1 ft. to 0 ft.

**15. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** ____ Feet ____ Direction

Underground Tank Type

Well disinfected upon completion ☐ Yes Type ____ ☐ No Amount ____

**16. PUMP:** Date Installed ____ not installed ☑

Mfr. name ____ model no. ____

H.P. ____ volts ____ length of drop pipe ____ ft. capacity ____ gpm

TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

Signature of Well Driller or Authorized Representative: [illegible]

DHEC # 1903 (10/86) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

1. LOCATION OF WELL

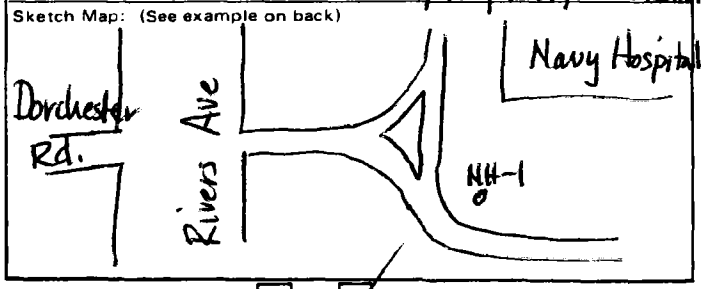
County: Charleston System Number: 25Y-NW-1

Distance And Direction from Road Intersections

- 100 ft. East of Rivers Ave.

Street address & City of Well Location Navy Hospital, Charleston

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Formation Description | | |
|---|---|---|
| Wet Sand 0' to 20' | | |
| | | |
| | | |
|

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

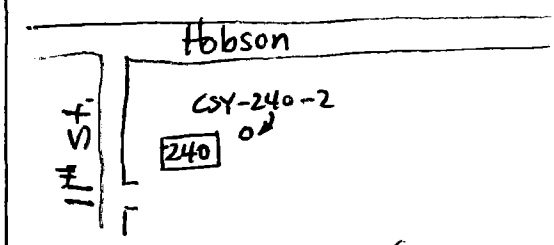
1. LOCATION OF WELL

[redacted] CSY-240-2

Distance And Direction from Road Intersections

Street address & City of Well Location Charleston Naval Shipyard

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| | | |
|---|---|---|
| Fill MAT 0' to 12' | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

* Indicate water bearing zones

(use a 2nd sheet if needed)

4. OWNER OF WELL: Charleston Naval Shipyard - Public Works
Address: Charleston, S.C.
Telephone No. 803-743-5519
Engineer: Sirrine Environmental Consultants
Address: 2694-A Long Point Rd. Charleston, S.C. [illegible]
Telephone No. 803-[illegible]

5. WELL DEPTH (Completed) 12 ft. Date Started: 12/1/89 Date Completed: 12/1/89

6. ☐ Mud Rotary ☐ Jetted ☑ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. _____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☑ Monitor Well

8. CASING: ☑ Threaded ☐ Welded
Diam. 2" No casing
Type ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 2 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Flush
TOC Elev. ~~Surface~~ 12.35 ft.
Weight _____ lbs./ft.
Drive Shoe? ☐ Yes ☑ No

9. SCREEN:
Type: PVC Diam. 2"
Slot/Gauze 10 Length 10'
Set Between 12 ft. and 2 ft.
0 ft. and 10.0 ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (Please enclose) ☑ No

10. STATIC WATER LEVEL
1.4 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface
_____ ft. after _____ hrs. pumping _____ G.P.M.
Pumping Test: ☐ Yes (Please enclose) ☑ No
Yield _____

12. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please Enclose Lab Results.

13. ARTIFICIAL FILTER (Gravel Pack) ☑ Yes ☐ No
Installed from 12 ft. to 1.5 ft.
Effective size FA-50 uniformity coefficient _____

14. WELL GROUTED? ☑ Yes ☐ No
Neat Cement ☑ Sand Cement ☐ Concrete ☐ Other ☐ _____
Depth From 1 ft. to 0 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ Feet _____ Direction
Underground Tank Type
Well disinfected upon completion ☐ Yes ☐ No
Type _____ Amount _____

16. PUMP: Date Installed _____ not installed ☑
Mfr. name _____ model no. _____
H.P. _____ volts _____ length of drop pipe _____ ft. capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

[redacted]

DHEC # 1903 (10/86) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

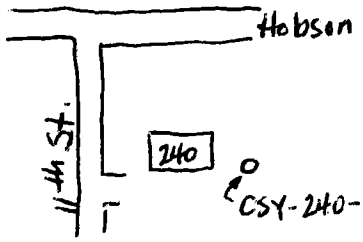
1. LOCATION OF WELL

County: Charleston Site: CSY-240-1

Distance And Direction from Road Intersections

Street address & City of Well Location: Charleston Naval Shipyard

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Formation Description | | |
|---|---|---|
| Fill Mat 0' to 12' | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

DEC 27 1989
GROUND-WATER PROTECTION DIVISION

* Indicate water bearing zones

(use a 2nd sheet if needed)

4. OWNER OF WELL: Charleston Naval Shipyard
Address: Public Works, Charleston, S.C.
Telephone No.: 803-743-5579
Engineer: Simpine Environmental Consultants
Address: 2694-A Lake Park Dr., Charleston, S.C. 29407
Telephone No.: 763-572-5[illegible]

5. WELL DEPTH (Completed) 12 ft. Date Started: 11/30/89 Date Completed: 11/30/89

6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☑ Monitor Well

8. CASING: ☑ Threaded ☐ Welded
Diam. 2"
Type ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
X in. to X ft. depth
2 in. to 0.5 ft. depth
Height: Above/Below ~~Surface~~ TOC Elev. 12.26 ft.
Weight ____ lbs./ft.
Drive Shoe? ☐ Yes ☑ No

9. SCREEN:
Type: PVC Diam. 2"
Slot/Gauze 10 Length 10'
Set Between X ft. and X ft.
0.5 ft. and 10.0 ft.
**NOTE: MULTIPLE SCREENS USE SECOND SHEET**
Sieve Analysis ☐ Yes (Please enclose) ☑ No

10. STATIC WATER LEVEL
1.6 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface
____ ft. after ____ hrs. pumping ____ G.P.M.
Pumping Test: ☐ Yes (Please enclose) ☑ No
Yield ____

12. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please Enclose Lab Results.

13. ARTIFICIAL FILTER (Gravel Pack) ☑ Yes ☐ No
Installed from 12 ft. to 15 ft.
Effective size .X-50 uniformity coefficient ____

14. WELL GROUTED? ☑ Yes ☐ No
Neat Cement ☑ Sand Cement ☐ Concrete ☐ Other ☐ ____
Depth From 1 ft. to 0 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ Feet ____ Direction
Underground Tank Type
Well disinfected upon completion ☐ Yes Type ____ ☐ No Amount ____

16. PUMP: Date Installed ____ not installed ☑
Mfr. name ____ model no. ____
H.P. ____ volts ____ length of drop pipe ____ ft. capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

Signature of Water Well Contractor or Authorized Representative
Registered Water Well Contractor No. 220 Y
Name: [illegible]
Signature: [illegible]
AUTHORIZED REPRESENTATIVE

DHEC # 1903 (10/86) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

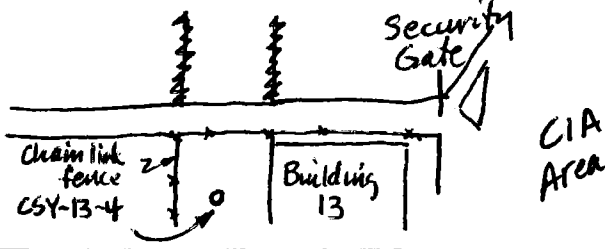
1. LOCATION OF WELL

County: Charleston Quadrangle Name: CSY-13-4

Distance And Direction from Road Intersections

Street address & City of Well Location: Charleston Navy Shipyard

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Formation Description | | |
|---|---|---|
| Sandy Clay 0' - 10' | | |
| Pure Clay 10' - 13' | | |
| | | |
| | | |
|

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

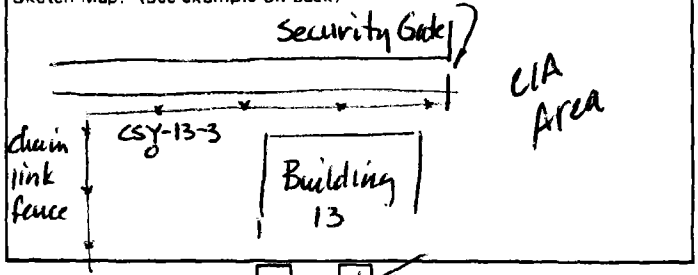
**1. LOCATION OF WELL**

County: Charleston Site Number: CSY-13-3

Distance And Direction from Road Intersections

Street address & City of Well Location: Charleston Navy Shipyard

Sketch Map: (See example on back)




**2. CUTTING SAMPLES** ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Formation Description | | |
|---|---|---|
| Sand Clay 0' - 10' | | |
| Pure Clay 10' - 13' | | |

RECEIVED
DEC 27 1989
GROUND WATER
PROTECTION DIVISION

* Indicate water bearing zones

(use a 2nd sheet if needed)

**4. OWNER OF WELL:** Charleston Naval Shipyard
Address: Public Works, Charleston, S.C.
Telephone No.: 803-743-[illegible]
Engineer: Sirrine Environmental Consultants
Address: 2694-A Lake Park Dr., Charleston, S.C. [illegible]
Telephone No.: 803-572-[illegible]

**5. WELL DEPTH (Completed)** 13 ft. Date Started: 11/28/89 Date Completed: 11/28/89

**6.** ☐ Mud Rotary ☐ Jetted ☑ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

**7. USE:** ☐ Domestic ☐ Public Supply-Permit No. ____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☑ Monitor Well

**8. CASING:** ☑ Threaded ☐ Welded
Diam. 2"
Type ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 13 ft. depth
____ in. to ____ ft. depth
Height: Above/Below Flush
TOC Elev. ~~Surface~~ 11.19 ft.
Weight ____ lbs./ft.
Drive Shoe? ☐ Yes ☑ No

**9. SCREEN:**
Type: PVC Diam. 2"
Slot/Gauze 10 Length 10'
Set Between 2.5 ft. and ~~10~~ 12.5 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (Please enclose) ☑ No

**10. STATIC WATER LEVEL**
10.6 ft. below land surface after 24 hours

**11. PUMPING LEVEL** Below Land Surface
____ ft. after ____ hrs. pumping ____ G.P.M.
Pumping Test: ☐ Yes (Please enclose) ☑ No
Yield ____

**12. WATER QUALITY**
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please Enclose Lab Results.

**13. ARTIFICIAL FILTER (Gravel Pack)** ☐ Yes ☐ No
Installed from 13 ft. to 2.5 ft.
Effective size 1Y-50 uniformity coefficient ____

**14. WELL GROUTED?** ☑ Yes ☐ No
Neat Cement ☑ Sand Cement ☐ Concrete ☐ Other ☐ ____
Depth From 1 ft. to 0 ft.

**15. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** ____ Feet ____ Direction
Underground Tank Type
Well disinfected upon completion ☐ Yes Type ____ ☐ No Amount ____

**16. PUMP:** Date Installed ____ not installed ☑
Mfr. name ____ model no. ____
H.P. ____ volts ____ length of drop pipe ____ ft. capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

Signature of Well Driller: [illegible]
Approved: [illegible]

DHEC # 1903 (10/86) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

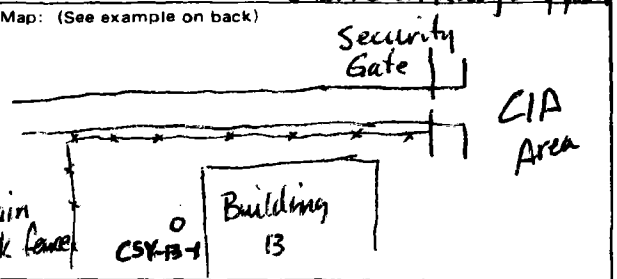
1. LOCATION OF WELL

County: Charleston Date Drilled: [illegible]

Distance And Direction from Road Intersections

Street address & City of Well Location Charleston Navy Shipyard

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☑ ~~No~~

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| Formation Description | | |
|---|---|---|
| Sandy Clay 0' - 10' | | |
| Pure Clay 10 - 15' | | |
| | | |
| | | |
|

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

1. LOCATION OF WELL

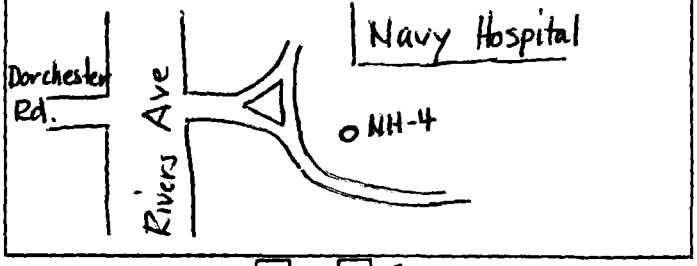
County: Charleston Site Name: Case NH-4

Distance And Direction from Road Intersections

~125 ft. East of Rivers Ave.

Street address & City of Well Location Navy Hospital, Charleston

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☑ No

Geophysical Logs ☐ Yes (Please enclose) ☑ No

| | | |
|---|---|---|
| Wet Sand 0'-20' | | |
| | | |
| | | |
|

# SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

**Ground Water Protection Division** **2600 Bull Street** **Columbia, S.C. 29201** **(803) 734-5331** **Water Well Record**

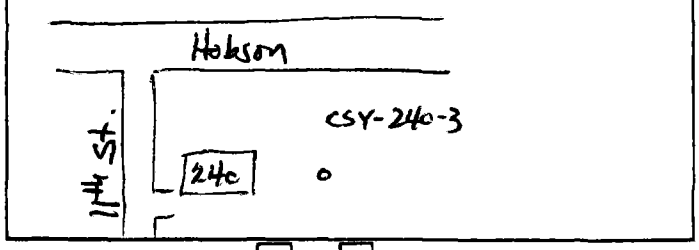
1. LOCATION OF WELL

[redacted] CSY-240-3

Distance And Direction from Road Intersections

Street address & City of Well Location Naval Shipyard Charleston

Sketch Map: (See example on back)




2. CUTTING SAMPLES ☐ Yes ☐ No

Geophysical Logs ☐ Yes (Please enclose) ☐ No

| | | |
|---|---|---|
| Sandy Clay 0' to 13' | | |
| Pure Clay 13' to 14' | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

* Indicate water bearing zones

(use a 2nd sheet if needed)

4. OWNER OF WELL: Charleston Naval Shipyard
Address: Public Works
Charleston, S.C.
Telephone No. 803-743-5519

Engineer: Sirrine Environmental Consultants
Address: 2694-A Lake Park Dr.
Charleston, S.C. [illegible]
Telephone No. 803-[illegible]

5. WELL DEPTH (Completed) 14 ft. Date Started: 12-1-89 Date Completed: 12-1-89

6. ☐ Mud Rotary ☐ Jetted ☑ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. USE: ☐ Domestic ☐ Public Supply-Permit No. _____ ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☑ Monitor Well

8. CASING ☑ Threaded ☐ Welded
Diam. 2"
Type ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
X in. to X ft. depth
0 in. to 0.8 ft. depth
Height: Above/Below TOC Elev ~~Surface~~ 11.84 ft.
Weight _____ lbs./ft.
Drive Shoe? ☐ Yes ☐ No

9. SCREEN:
Type: PVC Diam. 2"
Slot/Gauze 10 Length 10'
Set Between 4 ft. and 14 ft.
0.8 ft. and 13.3 ft.
**NOTE: MULTIPLE SCREENS USE SECOND SHEET**
Sieve Analysis ☐ Yes (Please enclose) ☑ No

10. STATIC WATER LEVEL
2.3 ft. below land surface after 24 hours

11. PUMPING LEVEL Below Land Surface
_____ ft. after _____ hrs. pumping _____ G.P.M.
Pumping Test: ☐ Yes (Please enclose) ☑ No
Yield _____

12. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please Enclose Lab Results.

13. ARTIFICIAL FILTER (Gravel Pack) ☑ Yes ☐ No
Installed from 3 ft. to 14 ft.
Effective size FX-50 uniformity coefficient _____

14. WELL GROUTED? ☑ Yes ☐ No
Neat Cement ☑ Sand Cement ☐ Concrete ☐ Other ☐ _____
Depth From 2 ft. to 0 ft.

15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ Feet _____ Direction
Underground Tank Type Well disinfected upon completion ☐ Yes ☐ No Type _____ Amount _____

16. PUMP: Date Installed _____ not installed ☑
Mfr. name _____ model no. _____
H.P. _____ volts _____ length of drop pipe _____ ft. capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

[redacted]

DHEC # 1903 (10/86) **COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)**