



**BUNNELL-LAMMONS ENGINEERING, INC.**

GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

# REPORT OF PIEZOMETER ABANDONMENT: PHASE 5 (CELL No. 13 & 14)

EAST CAROLINA REGIONAL MSW LANDFILL  
BERTIE COUNTY, NORTH CAROLINA  
PERMIT NUMBER 08-03

*Prepared for:*

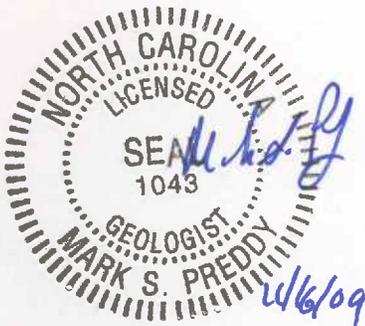
REPUBLIC SERVICES OF NORTH CAROLINA, LLC  
1220 Commerce Street SW, Suite A  
Conover, North Carolina 28613

*Prepared by:*

BUNNELL-LAMMONS ENGINEERING, INC.  
6004 Ponders Court  
Greenville, South Carolina 29615

November 16, 2009

BLE Project Number J09-1001-62



November 16, 2009

Republic Services of North Carolina, LLC  
1220 Commerce Street SW, Suite A  
Conover, North Carolina 28613

Attention: Mr. Raymond Hoffman, P.E.  
North Carolina Area Engineer

Subject: **Report of Piezometer Abandonment: Phase 5 (Cells No. 13 & 14)**  
East Carolina Regional MSW Landfill  
Bertie County, North Carolina  
Permit Number 08-03  
BLE Project Number J09-1001-62

Dear Mr. Hoffman:

Bunnell-Lammons Engineering, Inc. (BLE) is pleased to provide this report of piezometer abandonment for the Phase 5 area at the East Carolina Regional MSW Landfill. Included in this report are a summary of the project information, a description of the field activities performed, and documentation of the abandonment activities.

### **BACKGROUND INFORMATION**

The East Carolina Regional MSW Landfill is located at 1922 Republican Road in Bertie County, 7.5 miles northwest of Windsor, North Carolina near the community of Aulander (Figure 1). The landfill is owned and operated by Republic Services of North Carolina, LLC (Republic).

Piezometers, groundwater monitoring wells, and methane monitoring probes have been installed as part of past site hydrogeologic and design hydrogeologic investigations in the future Phase 5 area (Cells No. 13 & 14), and as part of the facility's groundwater and methane monitoring systems. The North Carolina Department of Environment and Natural Resources (NCDENR) approved the design hydrogeologic investigation of Phase 5, as documented in a letter dated May 14, 2008 to Republic. As a result, the remaining piezometers are no longer of use and need to be abandoned ahead of future cell construction. This report provides documentation of the abandonment activities of the twenty-one piezometers, one groundwater monitoring well, and one methane monitoring probe prior to cell construction in the Phase 5 area.

### **FIELD PROCEDURES AND ACTIVITIES**

A North Carolina-licensed driller from Landprobe, Inc. of Greenville, South Carolina, a subsidiary of BLE, performed the drilling and abandonment services under the supervision of a North Carolina-licensed professional geologist from BLE. The piezometers, groundwater monitoring well, and methane monitoring probe were abandoned using a CME-75 track-mounted drilling rig during March 18-22, 2009. The abandoned piezometers, well, and probe include the following:

Abandoned Piezometers, Groundwater Wells, and Methane Probes						
PZ-10,	PZ-108	PZ-111	PZ-114	PZ-116	PZ-118	PZ-121
PZ-56	PZ-109A	PZ-112	PZ-115A	PZ-117A	PZ-119	PZ-122
PZ-107A	PZ-109B	PZ-113	PZ-115B	PZ-117B	PZ-120	MM-7R
PZ-107B						GW-14

Each of the twenty-one piezometers, one groundwater monitoring well, and one methane monitoring probe were located in the field and measured with a tag line to check for obstructions; each location was in-tact prior to abandonment. During abandonment, each of the locations was over-drilled to their total depth. Each borehole was then tremie grouted with a non-shrink bentonite-cement mixture to within approximately ten feet below the proposed subgrade of the landfill, and the remaining portion above the grout was filled with hydrated bentonite. A North Carolina well abandonment form (Form GW-30) for each piezometer, well, and probe is attached to this report, along with a site location map (Figure 1), and a boring location plan (Figure 2).

### SUMMARY

The twenty-one piezometers, one groundwater monitoring well, and one methane monitoring probe in the Phase 5 area have been permanently abandoned prior to upcoming cell construction. The abandonment activities performed were in accordance with North Carolina Rule Title 15A NCAC 2C.0113(b)(1) and the facility permit. There are no piezometers, wells, or probes remaining in the footprint of future Phase 5 (Cell Nos. 13 and 14).

### CLOSING

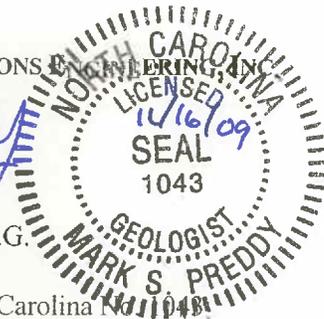
We appreciate the opportunity to serve as your geological and geotechnical consultant on this project and look forward to continue working with you at the subject site. If you have any questions, please contact us at (864) 288-1265.

Sincerely,

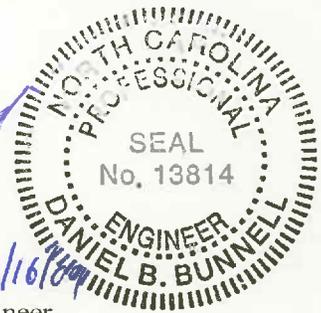
BUNNELL-LAMMONS ENGINEERING, INC.



Mark S. Preddy, P.G.  
Senior Geologist  
Registered, North Carolina No. 1043




Daniel B. Bunnell, P.E.  
Principal Geotechnical Engineer  
Registered, North Carolina No. 13814

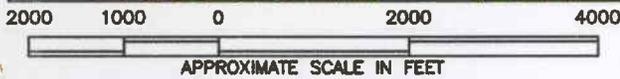
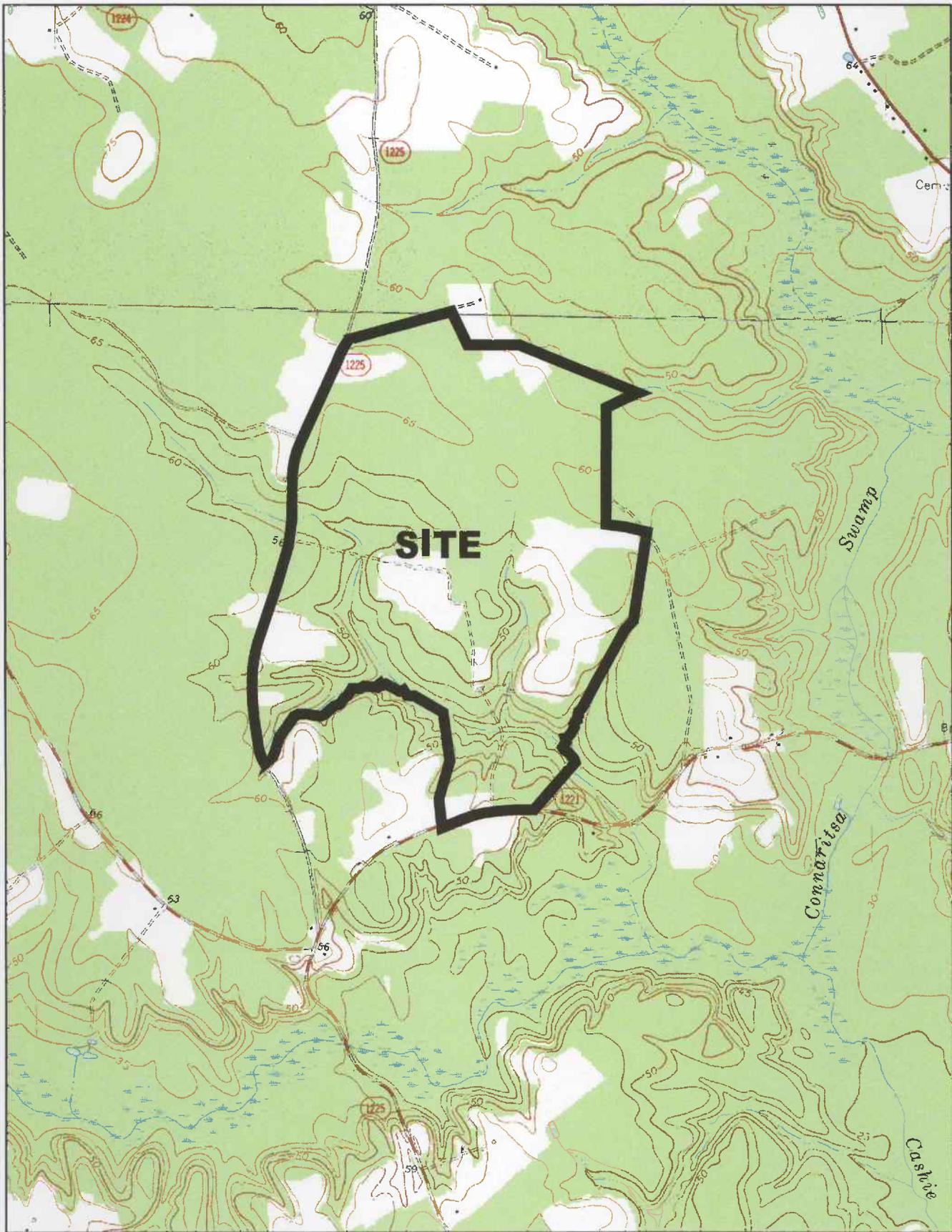


Attachments: Figure 1 – Site Location Map  
Figure 2 – Boring Location Plan of Abandoned Piezometers  
NCDENR Well Abandonment Records

cc: William F. Hodges, P.E. – Hodges, Harbin, Newberry, & Tribble, Inc.

c:\msp files\east carolina lf nc\100162\1001-62 pza.doc

**FIGURES**



REFERENCE:  
 USGS TOPOGRAPHIC MAP, 7.5 MINUTE SERIES,  
 AULANDER AND REPUBLICAN, N.C. QUADRANGLES, 1972 AND 1978.

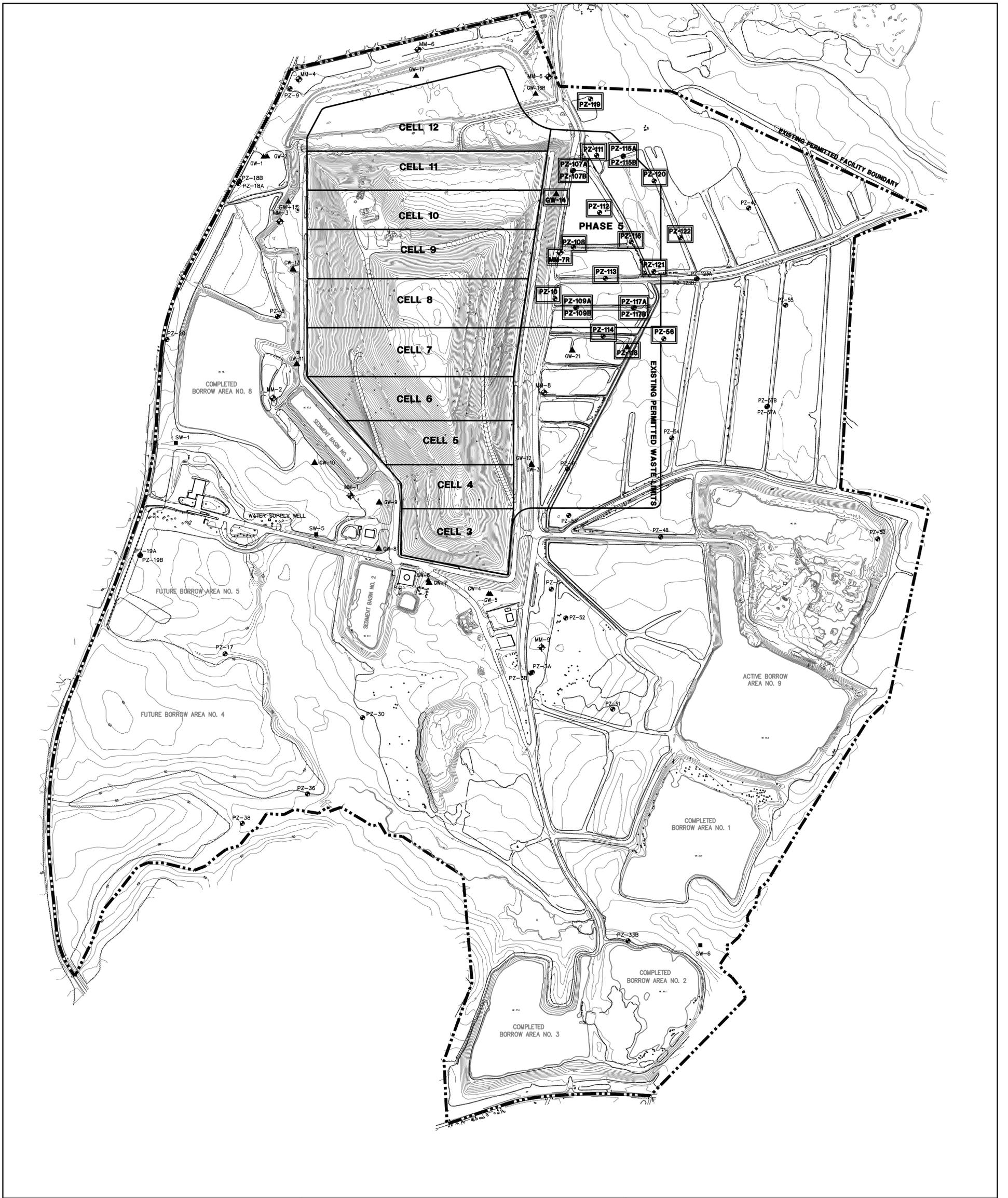
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CHECKED:	MSP	CAD:	ECLF62-SLM
APPROVED:		JOB NO:	J09-1001-62

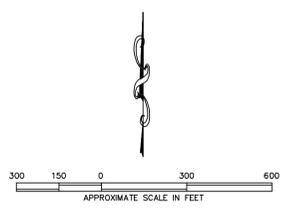
**IBLE** INC.  
**BUNNELL-LAMMONS ENGINEERING, INC.**  
 6004 PONDERS COURT  
 GREENVILLE, SOUTH CAROLINA 29615  
 PHONE: (864)288-1285 FAX: (864)288-4430

SITE LOCATION MAP  
 EAST CAROLINA LANDFILL  
 BERTIE COUNTY, NORTH CAROLINA

FIGURE

**1**



MONITORING SYSTEM LEGEND	GEOLOGIC LEGEND	GENERAL MAP REFERENCE
<p>GW-1 ▲ SURVEYED LOCATION OF GROUNDWATER MONITORING WELL</p> <p>SW-1 ■ APPROXIMATE LOCATION OF SURFACE WATER MONITORING POINT</p> <p>PZ-1 ● SURVEYED LOCATION OF EXISTING GROUNDWATER PIEZOMETER</p> <p><b>PZ-1</b> ⊕ SURVEYED LOCATION OF RECENTLY ABANDONED PIEZOMETER OR WELL</p>	<p>6.50 ——— GROUND SURFACE CONTOUR IN FEET ABOVE MSL CONTOUR INTERVAL = 2 FEET.</p> <p>----- PROPERTY BOUNDARY</p> <p>~~~~~ STREAM OR CREEK</p>	 <p>APPROXIMATE SCALE IN FEET</p> <p>REFERENCES:</p> <ol style="list-style-type: none"> <li>1) TOPOGRAPHY AND SURFACE FEATURES PROVIDED BY SPATIAL DATA. DATE OF PHOTOGRAPH: MARCH 2007.</li> <li>2) PROPERTY BOUNDARY AND WELL LOCATIONS PROVIDED BY THOMAS J. FIELDS, RLS, RALPH A. TRUE, RLS, DRAPER-ARDEN ASSOC., RLS, AND DONALDSON, GARRETT AND ASSOCIATES, RLS.</li> <li>3) DRAWING TITLED "SURVEY AND BOUNDARY SURVEY, EAST CAROLINA LANDFILL," DATED NOVEMBER 1996, PREPARED BY HHNT.</li> <li>4) MEAN SEA LEVEL ELEVATION (MSL) IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD).</li> </ol>

<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	DESCRIPTION	BY										<table border="1"> <tr> <td>DRAWN</td> <td>ACE</td> <td>DATE</td> <td>11-16-09</td> </tr> <tr> <td>CHECKED</td> <td>MSP</td> <td>FILE</td> <td>ECLF 1001-62 PZA</td> </tr> <tr> <td>APPROVED</td> <td> </td> <td>JOB NO:</td> <td>J09-1001-62</td> </tr> </table>	DRAWN	ACE	DATE	11-16-09	CHECKED	MSP	FILE	ECLF 1001-62 PZA	APPROVED		JOB NO:	J09-1001-62	<p><b>IBLE</b> INC. <b>BUNNELL-LAMMONS ENGINEERING, INC.</b></p> <p>6004 PONDERS COURT GREENVILLE, SOUTH CAROLINA 29615 PHONE: (864)288-1265 FAX: (864)288-4430</p>	<p><b>SITE TOPOGRAPHIC MAP AND PIEZOMETER ABANDONMENT PLAN</b> EAST CAROLINA REGIONAL MSW LANDFILL BERTIE COUNTY, NORTH CAROLINA</p>	<p>FIGURE NO. <b>2</b></p>
REVISIONS	DESCRIPTION	BY																										
DRAWN	ACE	DATE	11-16-09																									
CHECKED	MSP	FILE	ECLF 1001-62 PZA																									
APPROVED		JOB NO:	J09-1001-62																									

**WELL ABANDONMENT RECORDS**



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION # 3362-A

### 1. WELL CONTRACTOR:

Joe Smith  
Well Contractor (Individual) Name

Landprobe  
Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615  
City or Town State Zip Code

(864) - 288-1265  
Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-10

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other \_\_\_\_\_

(Check appropriate setting)

LATITUDE 36 7 11.9

LONGITUDE 77 3 42.3

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805  
City or Town State Zip Code

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 15.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 6.0 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 15.0 ft. 2.0 in.

b. Casing Removed: 15.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

Cement 96 lb.  
Water 6 gal.

#### Sand Cement

Cement \_\_\_\_\_ lb.  
Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 57 lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

### 10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED 3/18/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joe Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville

SC

29615

City or Town

State

Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-56

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 9.6

LONGITUDE 77 3 33.3

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander

NC

27805

City or Town

State

Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 19.8 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 2.0 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length

Diameter

a. Casing Depth (if known): 19.8 ft. 2.0 in.

b. Casing Removed: 19.8 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 192 lb.

Cement \_\_\_\_\_ lb.

Water 12 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/19/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C. WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

DATE

4-7-09

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE (The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ- 107A

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 20.4

LONGITUDE 77 3 41.6

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY - The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 27.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 16.0 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 27.0 ft. 2.0 in.

b. Casing Removed: 27.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 320 lb.

Cement \_\_\_\_\_ lb.

Water 20 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED 3/21/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joe Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-107 B

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 20.4

LONGITUDE 77 3 41.6

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 50.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 17.3 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 50.0 ft. 2.0 in.

b. Casing Removed: 50.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

Neat Cement Sand Cement

Cement 800 lb. Cement lb.  
Water 50 gal. Water gal.

### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water gal.

### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED 3/21/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C. WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-108

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 15.2

LONGITUDE 77 3 41.1

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 18.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 5.2 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 18.0 ft. 2.0 in.

b. Casing Removed: 18.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

Cement 160 lb.

Water 10 gal.

#### Sand Cement

Cement \_\_\_\_\_ lb.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 590 lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth.

All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/20/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C. WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09 DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE (The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-109 A

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 11.3

LONGITUDE 77 3 40.2

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 24.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 15.8 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 24.0 ft. 2.0 in.

b. Casing Removed: 24.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

Cement 272 lb.  
Water 17 gal.

#### Sand Cement

Cement \_\_\_\_\_ lb.  
Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 590 lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/18/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-109 B

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 11.3

LONGITUDE 77 3 40.2

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 52.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 17.3 ft.

Measuring point is 0 ft. above land surface.

6. CASING: Length Diameter

a. Casing Depth (if known): 52.0 ft. 2.0 in.

b. Casing Removed: 52.0 ft. 2.0 in.

7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

8. SEALING MATERIAL:

Neat Cement

Sand Cement

Cement 832 lb.

Cement lb.

Water 52 gal.

Water gal.

Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water gal.

Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED 3/18/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-111

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 21.9

LONGITUDE 77 3 39.9

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 18.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 13.0 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 18.0 ft. 2.0 in.

b. Casing Removed: 18.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

Cement 160 lb.

Water 10 gal.

#### Sand Cement

Cement \_\_\_\_\_ lb.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED 3/20/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joseph Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-112

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other \_\_\_\_\_

(Check appropriate setting)

LATITUDE 36 7 17.7

LONGITUDE 77 3 39.7

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID # (if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 22.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 8.2 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length

Diameter

a. Casing Depth (if known): 22.0 ft. 2.0 in.

b. Casing Removed: 22.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 240 lb.

Cement \_\_\_\_\_ lb.

Water 15 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 590 lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/21/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joseph Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ- 113

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 13.3

LONGITUDE 77 3 38.7

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 22.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 6.5 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length Diameter

a. Casing Depth (if known): 22.0 ft. 2.0 in.

b. Casing Removed: 22.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 240 lb.

Cement \_\_\_\_\_ lb.

Water 15 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/19/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joseph Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-114

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 9.5

LONGITUDE 77 3 38.6

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY - The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID # (if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 21.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 14.0 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length Diameter

a. Casing Depth (if known): 21.0 ft. 2.0 in.

b. Casing Removed: 21.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 208 lb.

Cement \_\_\_\_\_ lb.

Water 13 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/18/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ- 115A

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 21.7

LONGITUDE 77 3 37.2

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 17.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 12.6 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length

Diameter

a. Casing Depth (if known): 17.0 ft. 2.0 in.

b. Casing Removed: 17.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 144 lb.

Water 9 gal.

Cement lb.

Water gal.

#### Bentonite

Bentonite 59 lb.

Type:  Slurry  Pellets

Water gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/20/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-115 B

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 21.7

LONGITUDE 77 3 37.2

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID # (if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 50.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 15.2 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 50.0 ft. 2.0 in.

b. Casing Removed: 50.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

Neat Cement

Sand Cement

Cement 800 lb.

Cement lb.

Water 50 gal.

Water gal.

Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water gal.

Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED

3/20/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-116

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 15.9

LONGITUDE 77 3 36.4

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 19.5 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 14.0 ft.

Measuring point is 0 ft. above land surface.

6. CASING: Length Diameter

a. Casing Depth (if known): 19.5 ft. 2.0 in.

b. Casing Removed: 19.5 ft. 2.0 in.

7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

8. SEALING MATERIAL:

Neat Cement

Sand Cement

Cement 192 lb.

Cement lb.

Water 12 gal.

Water gal.

Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water gal.

Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED 3/21/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09 DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE

(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ- 117A

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 11.5

LONGITUDE 77 3 36.5

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 16.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 7.2 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length

Diameter

a. Casing Depth (if known): 16.0 ft. 2.0 in.

b. Casing Removed: 16.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 112 lb.

Cement \_\_\_\_\_ lb.

Water 7 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/19/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE

(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004. Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ- 117 B

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 11.5

LONGITUDE 77 3 36.5

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 50.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 8.3 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length Diameter

a. Casing Depth (if known): 50.0 ft. 2.0 in.

b. Casing Removed: 50.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 800 lb.

Cement lb.

Water 50 gal.

Water gal.

#### Bentonite

Bentonite 57 lb.

Type:  Slurry  Pellets

Water gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED 3/19/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Signature of Certified Well Contractor: [Signature] DATE: 4-7-09

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE (The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Signature of Private Well Owner: Joe Smith PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-118

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 8.6

LONGITUDE 77 3 36.4

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 21.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 14.3 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 21.0 ft. 2.0 in.

b. Casing Removed: 21.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

Neat Cement

Sand Cement

Cement 208 lb.

Cement \_\_\_\_\_ lb.

Water 13 gal.

Water \_\_\_\_\_ gal.

Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/18/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09 DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE (The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-119

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other \_\_\_\_\_

(Check appropriate setting)

LATITUDE 36 7 25.5

LONGITUDE 77 3 40.6

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 20.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 8.0 ft.

Measuring point is 0 ft. above land surface.

6. CASING: Length Diameter

a. Casing Depth (if known): 20.0 ft. 2.0 in.

b. Casing Removed: 20.0 ft. 2.0 in.

7. DISINFECTION: \_\_\_\_\_

(Amount of 65%-75% calcium hypochlorite used)

8. SEALING MATERIAL:

Neat Cement

Sand Cement

Cement 192 lb.

Cement \_\_\_\_\_ lb.

Water 12 gal.

Water \_\_\_\_\_ gal.

Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

Other

Type material Bentonite chips

Amount 4 Bags

9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED 3/21/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joseph Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-120

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 20.2

LONGITUDE 77 3 34.8

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 21.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 16.0 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 21.0 ft. 2.0 in.

b. Casing Removed: 21.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

Cement 208 lb.

Water 13 gal.

#### Sand Cement

Cement \_\_\_\_\_ lb.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

11. DATE WELL ABANDONED 3/20/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Signature of Certified Well Contractor: Joe Smith DATE: 4-7-09

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE (The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Signature of Private Well Owner: Joe Smith PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615

City or Town State Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ- 121

STATE WELL PERMIT # (if applicable)

COUNTY WELL PERMIT # (if applicable)

DWQ or OTHER PERMIT # (if applicable)

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 14.0

LONGITUDE 77 3 34.3

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID # (if applicable)

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805

City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 20.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 13.2 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length Diameter

a. Casing Depth (if known): 20.0 ft. 2.0 in.

b. Casing Removed: 20.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 192 lb.

Cement \_\_\_\_\_ lb.

Water 12 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 52 lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/19/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09 DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE (The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville

SC

29615

City or Town

State

Zip Code

(864) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) PZ-122

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) Piezometer

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other

(Check appropriate setting)

LATITUDE 36 7 16.4

LONGITUDE 77 3 32.5

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander

NC

27805

City or Town

State

Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 24.0 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 12.2 ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length

Diameter

a. Casing Depth (if known): 24.0 ft. 2.0 in.

b. Casing Removed: 24.0 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

#### Neat Cement

#### Sand Cement

Cement 272 lb.

Cement \_\_\_\_\_ lb.

Water 17 gal.

Water \_\_\_\_\_ gal.

#### Bentonite

Bentonite 596 lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

#### Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The piezometer was over-drilled to its total depth.

All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/20/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joe Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR

4-7-09  
DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE

(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C.0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith  
Well Contractor (Individual) Name

Landprobe  
Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville SC 29615  
City or Town State Zip Code

(864) - 288-1265  
Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) GW-14

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) \_\_\_\_\_

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

#### TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other \_\_\_\_\_

(Check appropriate setting)

LATITUDE 36 7 18.7

LONGITUDE 77 3 43.9

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY- The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander NC 27805  
City or Town State Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 47.8 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): 17.3 ft.  
Measuring point is 0 ft. above land surface.

### 6. CASING:

a. Casing Depth (if known): 47.8 ft. 2.0 in.

b. Casing Removed: 47.8 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

<u>Neat Cement</u>	<u>Sand Cement</u>
Cement <u>768</u> lb.	Cement _____ lb.
Water <u>48</u> gal.	Water _____ gal.

Bentonite

Bentonite 5% lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The well was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then tremie grouted. The upper 10 feet was filled with hydrated bentonite chips.

### 10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

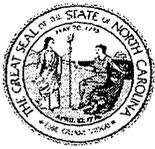
### 11. DATE WELL ABANDONED 3/22/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Joe Smith  
SIGNATURE OF CERTIFIED WELL CONTRACTOR 4-7-09 DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL



# WELL ABANDONMENT RECORD

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

## WELL CONTRACTOR CERTIFICATION #3362-A

### 1. WELL CONTRACTOR:

Joe Smith

Well Contractor (Individual) Name

Landprobe

Well Contractor Company Name

STREET ADDRESS 6004 Ponders Court

Greenville

SC

29615

City or Town

State

Zip Code

( 864 ) - 288-1265

Area code - Phone number

### 2. WELL INFORMATION:

SITE WELL ID # (if applicable) MM-7R

STATE WELL PERMIT # (if applicable) \_\_\_\_\_

COUNTY WELL PERMIT # (if applicable) \_\_\_\_\_

DWQ or OTHER PERMIT # (if applicable) \_\_\_\_\_

WELL USE (Check applicable use):  Monitoring  Residential

Municipal/Public  Industrial/Commercial  Agricultural

Recovery  Injection  Irrigation

Other (list use) \_\_\_\_\_

### 3. WELL LOCATION:

COUNTY Bertie QUADRANGLE NAME Republican

NEAREST TOWN: Aulander

(see Figure 1 attached)

(Street/Road Name, Number, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:

Slope  Valley  Flat  Ridge  Other \_\_\_\_\_

(Check appropriate setting)

LATITUDE 36 7 15.0

LONGITUDE 77 3 42.0

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source:  GPS  Topographic map

(Location of well must be shown on a USGS topo map and attached to this form if not using GPS.)

4a. FACILITY. The name of the business where the well is located. Complete 4a and 4b. (If a residential well, skip 4a; complete 4b, well owner information only.)

FACILITY ID #(if applicable) \_\_\_\_\_

NAME OF FACILITY East Carolina Regional Landfill

STREET ADDRESS 1922 Republican Road

Aulander

NC

27805

City or Town

State

Zip Code

### 4b. CONTACT PERSON/WELL OWNER:

NAME Charles Forth

STREET ADDRESS as above

### 5. WELL DETAILS:

a. Total Depth: 9.5 ft. Diameter: 2.0 in.

b. Water Level (Below Measuring Point): \_\_\_\_\_ ft.

Measuring point is 0 ft. above land surface.

### 6. CASING:

Length

Diameter

a. Casing Depth (if known): 9.5 ft. 2.0 in.

b. Casing Removed: 9.5 ft. 2.0 in.

### 7. DISINFECTION:

(Amount of 65%-75% calcium hypochlorite used)

### 8. SEALING MATERIAL:

Neat Cement

Sand Cement

Cement \_\_\_\_\_ lb.

Cement \_\_\_\_\_ lb.

Water \_\_\_\_\_ gal.

Water \_\_\_\_\_ gal.

Bentonite

Bentonite \_\_\_\_\_ lb.

Type:  Slurry  Pellets

Water \_\_\_\_\_ gal.

Other

Type material Bentonite chips

Amount 4 Bags

### 9. EXPLAIN METHOD OF EMPLACEMENT OF MATERIAL:

The well was over-drilled to its total depth. All of the PVC was removed from the borehole. The borehole was then filled with hydrated bentonite chips.

10. WELL DIAGRAM: Draw a detailed sketch of the well on the back of this form showing total depth, depth and diameter of screens (if any) remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.

### 11. DATE WELL ABANDONED

3/21/09

I DO HEREBY CERTIFY THAT THIS WELL WAS ABANDONED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CERTIFIED WELL CONTRACTOR

DATE

SIGNATURE OF PRIVATE WELL OWNER ABANDONING THE WELL DATE  
(The private well owner must be an individual who personally abandons his/her residential well in accordance with 15A NCAC 2C .0113.)

Joe Smith  
PRINTED NAME OF PERSON ABANDONING THE WELL