

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



James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

April 25, 1996

Mr. Ron Dauenhauer
Wilkes County Solid Waste Director
110 North Street
Wilkesboro, NC 28697

Fac/Perm/CSID #	Date	Doc ID#
97-01	08/02/2011	DIN 14662

RE: Upgrade of Water Quality Monitoring System
Closed Wilkes County Landfill, Germantown Site
Permit #97-01

Dear Mr. Dauenhauer,

Wilkes County is authorized by the Solid Waste Section to proceed with the installation of a groundwater monitoring well to replace MW-5a at the above referenced facility. Replacement of MW-5a will satisfy Condition 8.f. of the Closure Letter issued by the Section on December 29, 1995. Installation of the replacement well needs to meet the following conditions:

1. The monitoring well is to be constructed according to the specifications in the North Carolina Well Construction Standards (15A NCAC 2C .0108) and as illustrated by the "Typical Monitoring Well Schematic" diagram enclosed.
2. The monitoring well is to be placed adjacent to existing MW-5a.
3. The monitoring wells are to be drilled to a depth, and the screens placed at vertical locations, that will ensure that future drought conditions, which may lower the water table, will not render the monitoring system ineffective.
4. Shallow monitoring wells are to be installed with a 15 foot screen with the top of the screen set just above the seasonal high water table, unless hydrogeologic conditions justify changes in this design.
5. The sand pack should extend no more than two feet above and one foot below the screen. A bentonite seal of at least one foot thickness should be installed above the screened interval and be allowed adequate time to hydrate prior to grouting the remaining annular space.

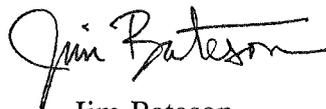
Mr. Ron Dauenhauer
Wilkes Co. Closure
Permit #97-01
April 25, 1996
Page 2

6. Monitoring wells are to be thoroughly developed after construction to reduce suspended solids and to establish equilibrium with the aquifer.
7. The well completion record, well schematic diagram, and the boring log should be submitted to this office within 30 days of well installation.

I have attached a copy of the *Sampling and Analysis Requirements for Construction and Demolition Landfills and Closed Sanitary Landfills* for your reference.

If you have any questions or comments regarding this authorization to upgrade the existing ground-water monitoring system, please contact me at the Solid Waste Section at (919) 733-0692, extension 342.

Sincerely,



Jim Bateson,
Hydrogeologist
Solid Waste Section

cc: Bobby Lutfy; Solid Waste Section
 Matt Gantt; "

5/31/96

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 2	
To	CHERYL MARKS	From	JIM BATESON
Co.	MUNICIPAL ENGINEERING	Co.	SOLID WASTE SECTION
Dept.		Phone #	919 733-0692 x 342
Fax #	(919) 772-1176	Fax #	

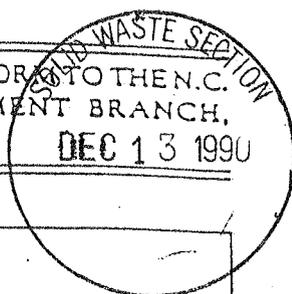
WILKES (GERMANTOWN) 97-01
MW-5A WELL RECORDS.

MW-5A WATER LEVELS:

~~4/21/94~~
4/29/93 14.75' BELOW T.O.C.
12/5/91 15.0' " "
9/17/91 15.8' " "

WELL COMPLETION RECORD

MW-5



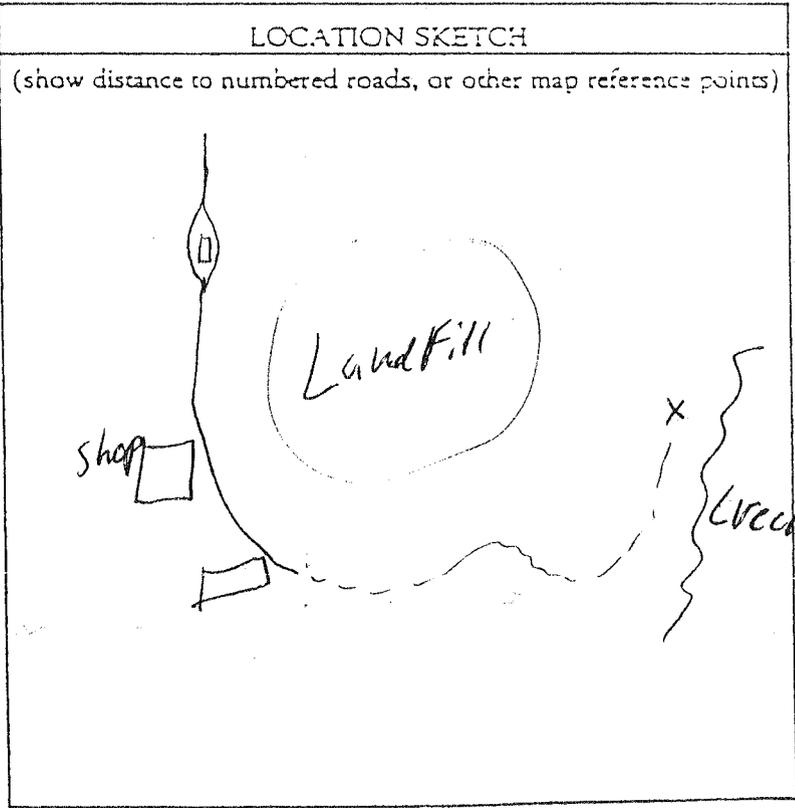
PLEASE COMPLETE ALL INFORMATION REQUESTED BELOW FOR EACH WELL INSTALLED, AND RETURN FORM TO THE N.C. DEPARTMENT OF HUMAN RESOURCES, SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH, BOX 2091, RALEIGH, N.C. 27602

NAME OF SITE: <p style="text-align: center;">Wilkes County Landfill</p>	PERMIT NO.: <p style="text-align: center;">AAC-066</p>
ADDRESS: <p style="text-align: center;">110 North Street, Wilkesboro, N.C.</p>	OWNER (principal): <p style="text-align: center;">Wilkes Co.</p>
DRILLING CONTRACTOR: <p style="text-align: center;">Yadkin Well Co. INC.</p>	REGISTRATION NO.: <p style="text-align: center;">474</p>

Type: <u>Screen PVC</u> dia. <u>2"</u> in. Grout Depth: from <u>0</u> to <u>45</u> ft. - dia. <u>6</u> in. Depth: from <u>60</u> to <u>80</u> ft. - dia. <u>2"</u> in. Bentonite Seal: <u>34'</u> from <u>45</u> to <u>48</u> ft. - dia. <u>6</u> in. Type: <u>Pipe PVC</u> dia. <u>2"</u> in. Sand/Gravel PK: from <u>48</u> to <u>82</u> ft. - dia. <u>6</u> in. Depth: from <u>0</u> to <u>60</u> ft. - dia. <u>2"</u> in. Total Well Depth: from <u>0</u> to <u>82</u> ft. - dia. <u>6</u> in.

Water Level: 17 feet from top of casing Date Measured 12 / 03 / 90
 (ppm): N/A Method of Testing: _____ Casing is 1.5 feet above land surface

DRILLING LOG		
DEPTH		
FROM	TO	FORMATION DESCRIPTION
0	3ft.	Clay
3 ft.	15 ft.	Sand & Clay mix
15 ft.	82 ft.	Granite



REMARKS: Small Zone of water at 75 ft.

DATE: Dec. 03, 1990 SIGNATURE: Vaughan Brown, P.E.