NCDENR
North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Coleen H. Sullins
Director, Division of Water Quality

Dee Freeman
Secretary

September 14, 2009

124 Palmer Marsh
Mooresville, NC 28117
Attention: Joe Freeman

RE: Variance Request to Rule 15A NCAC 2C .0107(a)(2)(N) –
Separation distance between a well and surface water bodies
Freeman Residence – Drinking Water Supply Well
185 Old Arborway Road, Mooresville, Iredell County
Well Variance Permit #WV0300046

Dear Mr. Freeman:

On September 8, 2009, the Mooresville Regional Office received a written request for a variance to the well construction rules, specifically rules 15A NCAC 2C.0107(a)(2)(N), which specifies a 50-foot separation from surface water bodies such as reservoirs. The variance request is for the construction of a drinking water supply well at 185 Old Arborway Road, Mooresville, Iredell County.

In the request and confirmed by discussions with Iredell County Environmental Health, the only suitable location for the well is approximately 25 feet from the edge of Lake Norman within the lake buffer. Based upon the information that has been submitted, a variance to the above-cited rules is granted. The variance will be effective from the date issued until March 14, 2010. Since the well will not meet the regulatory requirements, the following minimum additional construction requirements will be necessary to mitigate any potential problems that could affect public health, the ground water resource and/or the well's effective operation:

1. Galvanized steel casing with drive shoe shall be used, or PVC casing may be used if fitted with appropriate galvanized steel shoe.

2. The casing shall extend into consolidated bedrock in accordance with the following table:

Depth to Consolidated Bedrock	Minimum Depth of Casing
Less than 50 feet	15 feet into bedrock
50 to 100 feet	10 feet into bedrock
More than 100 feet	5 feet into bedrock

3. The entire length of the casing shall be grouted. A drill bit that is at least 4 inches greater than the outside diameter of the casing shall be used to drill the cased portion of the well. The full length grout shall be installed per methods described in 15A NCAC 2C .0107(f)(4). The final construction method shall be shown on the GW-1 Well Construction Record.

4. The well shall be located in the area indicated on the attached map.

5. The well driller shall be certified by the North Carolina Well Contractor Certification Commission as required by General Statutes 87-98.4, Title 15A NCAC 27.0101 and .0110.

6. The well shall be sampled for Total and Fecal coliform bacteria and inorganics in accordance with Iredell County Environmental Health policy.

7. Sediment resulting from drilling activities must remain on site and shall not be released to surface waters. Pits and/or sediment fences shall be used to retain the material.

It is my finding that the factors specified above are sufficient to satisfy the conditions for approval of a variance as defined in 15A NCAC 2C.0118. A copy of this variance shall be attached to the required Well Construction Record (GW-1). The granting of this variance is for the location of the well only, and in no way relieves the owner or agent from other requirements of the North Carolina Well Construction Standards, or any other applicable law, rule or regulation that may be regulated by other agencies. If you are dissatisfied with this decision, you may commence a contested case by filing a petition under G.S. 150-23 within sixty (60) days after receipt of the decision.

If you have any questions regarding this variance, please contact Maria Schutte at 704/663-1699 ext 2184 or by email at Maria.Schutte@ncdenr.gov.

Sincerely,

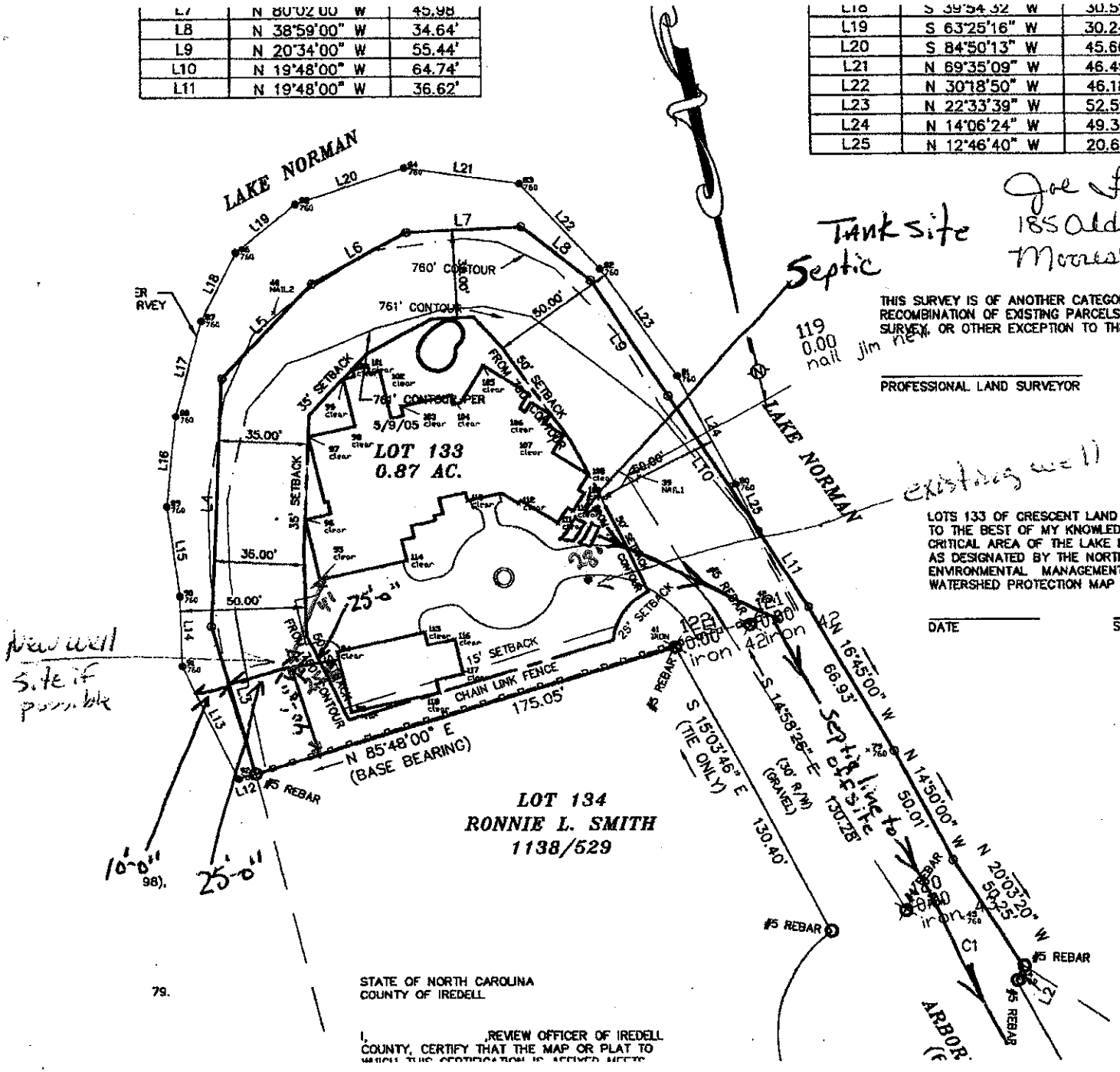
Andrew H. Pitner, P.G.
Environmental Regional Supervisor

Attachment

Cc: David Hinson, Iredell County Health Department (email)
Wesley Sparks, Iredell County Health Department (email)
Advanced Well Drilling, LLC, 2221 Pump Road, Catawba 28609
John Whitley, Whitley Construction, LLC, Mooresville (email)
John Brooks, NCDENR, DEH (email)

L7	N 80°02'00" W	45.98'
L8	N 38°59'00" W	34.64'
L9	N 20°34'00" W	55.44'
L10	N 19°48'00" W	64.74'
L11	N 19°48'00" W	36.62'

L18	S 39°54'32" W	30.51'
L19	S 63°25'16" W	30.24'
L20	S 84°50'13" W	45.66'
L21	N 69°35'09" W	46.49'
L22	N 30°18'50" W	46.18'
L23	N 22°33'39" W	52.59'
L24	N 14°06'24" W	49.32'
L25	N 12°46'40" W	20.64'



Joe Freeman
185 Old Asbury Rd.
Mooresville, NC 28117

THIS SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT ORDERED SURVEY, OR OTHER EXCEPTION TO THE DEFINITION OF SU

PROFESSIONAL LAND SURVEYOR

LOTS 133 OF CRESCENT LAND & TIMBER CORP., S TO THE BEST OF MY KNOWLEDGE LIE WITHIN THE \ CRITICAL AREA OF THE LAKE NORMAN/CATAWBA W AS DESIGNATED BY THE NORTH CAROLINA DIVISION ENVIRONMENTAL MANAGEMENT AND AS APPEARS WATERSHED PROTECTION MAP OF IREDELL COUNTY.

DATE

SUBDIVISION ADMINIST

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P.P. =
DUKE
E.I.P. = EXISTI
I.P.S. = #4 RE
R/W = RIGHT-

79.

STATE OF NORTH CAROLINA
COUNTY OF IREDELL

I, ,REVIEW OFFICER OF IREDELL COUNTY, CERTIFY THAT THE MAP OR PLAT TO