HOWARD COUNTY HEALTH DEPARTMENT

JOYCE M. BOYD, M.D., M.P.H. DEPUTY STATE AND COUNTY HEALTH OFFICER

in the same



P.O. BOX 476
ELLICOTT CITY, MARYLAND 21043
TELEPHONE 463-5000

September 2, 1977

TO: Mr. Frommelt, Assistant Director Environmental Health

FROM: Tom Ogle, Sanitarian T.O

SUBJECT: Unauthorized Well Grout, Ten Oaks Farm, Lot 17
L.F. Easterday, Well Driller, Permit #HO-73-2225

8/24/77: Grout scheduled. Arrived with grout truck at approximately 1400 hours. Pouring rain. 88 feet of casing down, 63 feet of open hole measured. Lester (grout truck driver) called Easterday's radio dispatcher and reported the well could not be grouted without drop-pipe to bottom. Her reply was "Inspector was contradicting the regulations, as only 40 feet of open hole was required in event of caving." This writer repeated Department's policy of requiring grouting to the bottom of casing, or reasonable attempt to reach bottom. Policy confirmed with Mr. Frommelt by telephone. Since rain had intensified, company decided to re-schedule grout.

8/25/77: Grout re-scheduled. Arrived at property approximately 0940 hours and met grout truck. Lester asked if our policy had changed; and was advised that it had not. He related that his instructions were that if more than 40 feet of drop-pipe was required, not to grout well. Writer and grout crew moved on to next well.

8/30/77: Visited lot at approximately 1245 hours and ascertained that the well had been grouted without Health Department approval or witness.

TO:dg

cc: Arnold Shiffman, Chief
Permits Division
Water Resources Administration
Tawes State Office Bldg.
Annapolis, Md. 21401



L. FRANKLIN EASTERDAY., INC.

WHIL DRILLING - PUMP INSTALLATION & SERVICE Rt.3 - Phone

MT. AIRY, MARYLAND 21771

August 26, 1977

Mr. Arnold Shiffman Department of Natural Resources Tawes Office Building Annapolis, Maryland

Dear Mr. Shiffman:

Per our conversation, this is to notify you of the following deviations from the standards provided in the Rules and Regulations of the Maryland State Department of Natural Resources governing water well construction standards and being Regulation No. 8.05.02.03 C (2) i (3).

In this reference well, we have a "cave in" which I believe would justify a deviation pursuant to Regulation 8.05.02.03 C (1) h, and an application of coastal plain or other standards. In that specific regard, we believe a required grouting to forty (40) feet would be both equitable to all parties and safe for potential users of this well. (however we would actually have 63 feet of grout). The well is designated as Permit No. HO-73-2225, Ten Oaks Farms Lot 17, with 88 feet casing, 63 feet open hole, and we plan to grout the well today at 2:50 pm, in order to avoid any other chances of further cave ins.

In the process of drilling the overburden, we hit a sandy formation at 30-70 feet. We hit some water at 60 feet causing a cave in at that point. We had to push the casing through the sand that had caved from approximately 63 feet to the 88 feet in the sand rock.

It is my professional opinion that there is not any bridging from the 63 feet to the bottom of the casing, because we had to actually push the casing through the sand in order to get a seal in to the rock.

Please let us hear from you at the earliest possible moment as to this matter as building permits are being withheld.

Thank you for your cooperation and attention to this matter.

Very truly yours.

Humplin Casteday ST. Franklin Easterday, Sr.

President



August 31, 1977

Mr. L. Franklin Easterday, Sr. 9265 Brown Church Road Mount Airy, MD 21771

Re: Well Construction Permit #HO-73-2225

Dear Mr. Easterday:

I am in receipt of your letter of August 26, 1977 requesting a deviation from well construction standards pursuant to Water Resources Regulation .08.05.02.03C(1)h.

Your explanation as to why you feel that the well bore was not bridged by caved material from 63 to 88 feet appears to be technically sound. The fact that you report a sandy formation as the caving material reenforces this judgement.

Your letter states that you have grouted and completed the well. Under the regulation cited above, the Administration must make a determination as to whether or not the well meets standards; if not, it shall be abandoned and sealed. Based on your letter, I see no reason not to grant the requested deviation from standards; however, I will need the well completion report to finalize my determination. Kindly submit this well completion report as soon as possible.

As you know, requests for a deviation from standards for caving conditions is becoming a significant problem. On the one hand I recognize the field realities of drilling wells and respect your judgement as a Licensed Master Well Driller. On the other hand, I see responsible officials of the Howard County Health Department trying their best to enforce grouting requirements. In granting these deviations from standards, I am, at least in part, substituting my judgement for the judgement of the county official in the field. Although I can and will exercise this judgement in an isolated case, I obviously cannot and will not do it on a routine basis.

We are grafting regulations to try to narrow the "gray areas" involved with caving conditions. However, I do not feel that these gray areas can be completely eliminated. Therefore, I suggest that you increase your cooperative efforts with Howard County. From a practical standpoint, there are only two ways that you can demonstrate the nature of caving conditions: either physically demonstrate it in the field by jetting or some other technique or show, by means of your knowledge as a well driller and specific information obtained during drilling, that there is complete caving and filling of the annular space without voids.

Sincerely,

Arnold Schiffman, Chief

Permits Division

AS:dlk

cc: Palmer Wine Howard County



August 31, 1977

Mr. L. Franklin Easterday, Sr. 9265 Brown Church Road Mount Airy, MD 21771

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Sincerely,

Arnold Schiffman, Chief

Permits Division

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ATTRIBUTED SCHOOL PERSONS

Permits navially



STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401

July 13, 1977

Mr. Palmer Wine Director, Environmental Health Howard County Health Department 3450 Courthouse Drive Ellicott City, Maryland 21043

Dear Mr. Wine:

As we have previously discussed, I am proposing changes to the Administration's well construction standards to deal with caving conditions and grouting of wells.

I would appreciate your comments on the following regulation change.

"Where caving conditions cause the annular space to fill up with mud or other formation material in domestic wells west of the Fall Line, the annular space shall be cleaned out to a depth of not less than 30 feet and then grouted. Clean-out shall be accomplished with water pumped and recirculated through a pump with a capacity of at least 50 gallons per minute under 100 feet of head. The annular space shall be cleaned to the maximum depth possible consistent with pump capacity and water losses. Water losses in the bore hole in excess of 500 gallons is taken as a limit to the maximum clean-out depth."

As this proposed regulation involves the application of coastal plain techniques to rock drilling, a meeting with representatives of the well drilling industry would be appropriate. As this issue is, at the present time, of greatest concern in

Page Two Mr. P. Wine July 13, 1977

Howard County, I would appreciate it if we could hold this meeting in your office within the next week or two.

Please call me if you have any questions.

Sincerely

Arnold Schiffman Chief, Permits Division

AS:mw

cc: John J. McFarland George Easterday



June 30, 1977

Mr. John MacDonald King Attorney at Law 9863 Main Street Damascus, Maryland 20750

Dear Mr. King:

This is in answer to your letter of June 29, 1977 on behalf of your client L. F. Easterday, Inc.

Pursuant to Regulation 08.05.03C(1)h, <u>Deviation from</u>
Requirements, your request for a deviation from grouting requirements of Regulation 08.05.03C(2)i(3) is approved subject to the following conditions:

- 1) The annular space must be cleaned out to the maximum depth possible and grouted. This depth may not be less than 30 feet. In most cases, equipment limitations will prevent significant clean out below the zone of caving; however, an attempt must be made to grout as much of the casing as possible.
- The work must be performed in accordance with all county inspection requirements.

I would plan to address the question of a "blanket deviation authorization" by a change in State regulations. This change appears to be justified because of the nature of the weathered zone and caving conditions. Where the weathered zone is competent and caving does not occur, openings can exist which could allow rapid movement of contaminents to an open annular space and then down into the well. For this reason, the annular space must be sealed over the entire weathered zone. On the other hand, where

Page Two Mr. J. MacDonald King June 30, 1977

caving occurs, any openings would likely be plugged by relatively fine grained material such as clays, silts and fine sands. It is obvious that if this material was not present there would be nothing to cave into the well bore. Therefore, grouting to the zone of caving seems reasonable. A minimum depth would be required as a safety factor.

Sincerely,

Arnold Schiffman

Chief, Permits Division

AS: mw

co: P. Wine, Howard Co. Health Dept. (w/lter. dated 6/29/77)

Palmer Wine Environmental Health Gounty Office Bldg Ellicott City, Md

Dear Hr Wine

the well on how IT Ten Cake Farm as being natisfactory and herewith request that you release the Suilding Permit on Mis.

Lot. The well was drilled under Permit no. NO -73-2225.

Thank You

Edwid G. Willman



September 14, 1977

Mr. L. Franklin Easterday, Sr. 9265 Brown Church Road Mount Airy, Maryland 21771

> RE: Well Construction Permit #HO-73-2225

Dear Mr. Easterday:

I have received the well completion report requested in my letter to you of August 31, 1977. I have also received a report from the Howard County Health Department well inspector (Sanitarian).

The well in question meets standards. However, I see no reason why the well could not have been grouted in the presence of the Sanitarian. You grouted the well to 63 feet and Water Resources Regulations require that the grout (drop) pipe extend to this depth. It would have been a simple matter to grout the well instead of arguing over whether or not 40 feet of pipe was required. Frankly, this is not the type of case that should come to my attention.

Sincerely

Arnold Schiffman

Chief, Permits Division

AS:mw

vcc: Mr. Palmer Wine, Howard Co. Health Dept.