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**MONITORING WELL 7 - FEED MATERIALS
PRODUCTION CENTER (FMPC)**

08/20/87

**DOE-302-87
DOE-ORO/USEPA
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LETTER**



Department of Energy

Oak Ridge Operations
P. O. Box E
Oak Ridge, Tennessee 37831

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AUG 20 1987

DOE 302-87

William D. Franz, Chief
Environmental Review Branch
Planning & Management Division
US-EPA
Region V - SME-12
230 S. Dearborn Street
Chicago, Illinois 60604

MONITORING WELL 7 - FEED MATERIALS PRODUCTION CENTER (FMPC)

Dear Mr. Franz:

Reference is made to the following correspondence:

1. March 31, 1987 letter, Reafsnnyder to Franz, subject "Documentation Concerning Removal and Plugging of Monitoring Well 7 - FMPC."
2. June 25, 1987 letter, Franz to Reafsnnyder, regarding the same subject as above."

The following information is provided per your request in reference 2.

1. Research of FMPC records and interviews with FMPC personnel, indicate that no original construction drawings or "as-built" engineering drawings are available for Well 7.
2. Documentation which shows the method of plugging Well 7 was provided (Reference 1). The construction drawing attached with Reference 1 indicates that 112 feet of 8 inch steel casing was filled with 2000 psi concrete. The notation "tremie pipe not required" on the construction drawing might possibly indicate that the injected cement was forming an adequate seal between the borehole and casing, and the use of a tremie pipe was precluded.

A tremie pipe is a string of 2-inch (or larger) pipe which is lowered into the annular space between the borehole and casing through which concrete or other fill material is fed. With the use of a tremie pipe, fill materials are introduced

directly to the annular space, minimizing particle separation and bridging.

Any further documentation to ensure that adequate cement is present in Well 7 to prevent upward fluid migration through the annulus is not known to exist.

3. Well 7 was completed on October 10, 1963. A Well Log and Drilling Report for Well 7 was filed with the State of Ohio Department of Natural Resources, Division of Water. A copy of this report is attached.
4. There is no written documentation on the condition of the steel casing immediately prior to plugging. However, given the non-corrosive geochemistry of the groundwater in this area and that the well casing was only five years old at the time of plugging, it is assumed that the condition of the casing was good.
5. Affirmation of the effectiveness of the concrete fill cannot be made, since there is no known "as-built" documentation which states the exact volume or mix of concrete that was used in plugging Well 7.

We trust the above information satisfactorily answers your request.

Sincerely,


James A. Reafsnider
Site Manager

DP-84:Collier

Attachment:As stated

cc w/att.

Amy Blumberg, USEPA-5
Catherine McCord, USEPA-5
Graham Mitchell, OEPA-Dayton
Tom Winston, OEPA-Dayton

WELL LOG AND DRILLING REPORT

CUSTOMER'S COPY

PLEASE USE PENCIL
OR TYPEWRITER.
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio



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No. 258891

County Hamilton Township Crosby Section of Township North
 Owner NATIONAL Lead Coal Ohio Address Box 31958 Zone 39
 Location of property S.R. 128 Fernald Ohio
 City Cinti. Ohio

CONSTRUCTION DETAILS

BAILING OR PUMPING TEST

Casing diameter 8" Length of casing 96'
 Type of screen Red Brass Length of screen 20'
 Type of pump VERTICAL TURBINE
 Capacity of pump 200 G.P.M.
 Depth of pump setting 99' 4"
 Date of completion 10/10/63

Pumping rate..... G.P.M. Duration of test..... hr
 Drawdown..... ft. Date.....
 Developed capacity.....
 Static level—depth to water.....
 Pump installed by Hyden Bros Drilling Co

WELL LOG

SKETCH SHOWING LOCATION

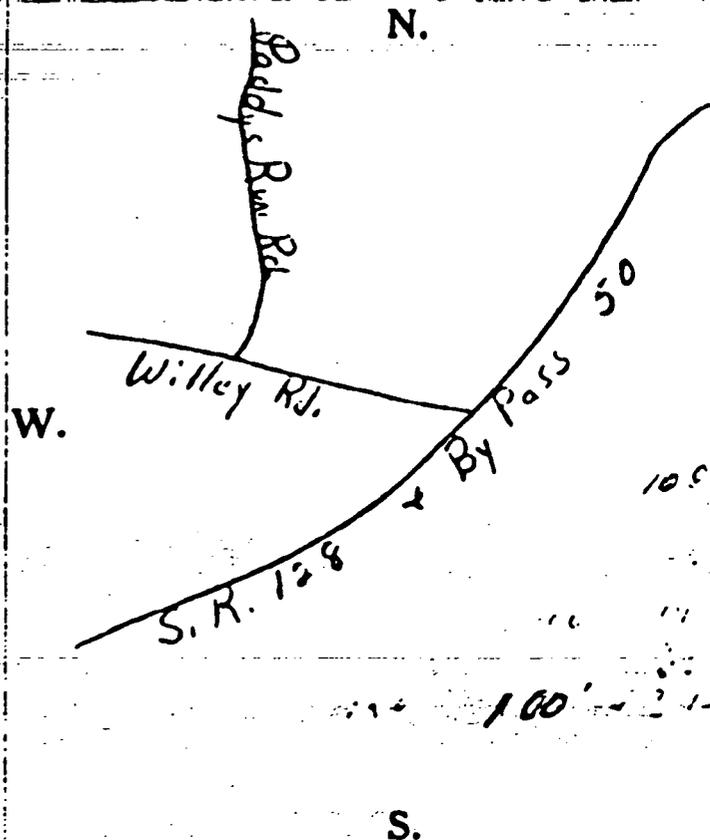
Formations
Sandstone, shale, limestone,
gravel and clay

From	To
0 Feet	8 Ft.
8'	60'
60'	116'

Top Soil
Sand

Sand + Gravel

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Hyden Bros Drilling Co
 Address 6105 WEAVER RD

Date 10/10/63
 Signed Paul W. Hyden 3