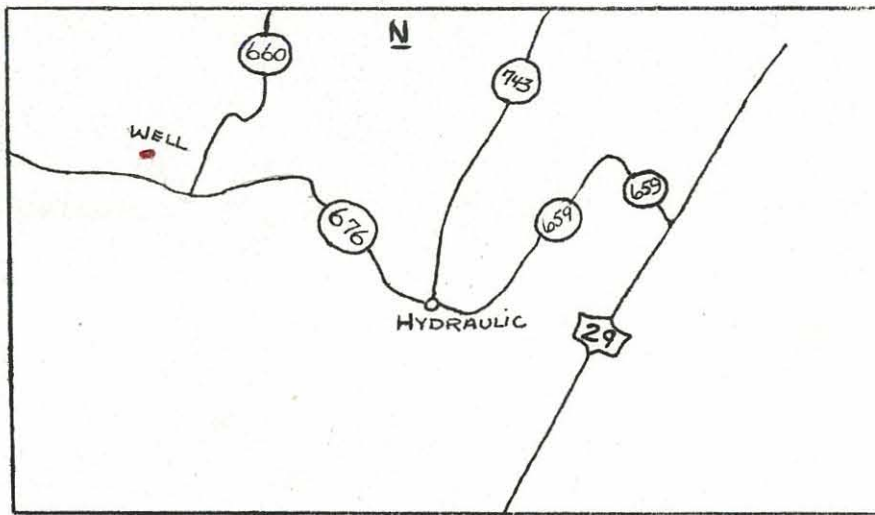


Log # 100 W # 859 County Albemarle - 876 Date 7/15/63

Owner Jim-Tel Builders, Inc. Use Domestic

Location 1/10 mile west of intersection of Virginia Highway 676 and 660; on north side of 676 approximately 40 yds. from road.



Well Data

Driller: Moore, C. R.
Completed: 7/12/63
Total Depth: 404' (driller)
Static W. L.: 136.79 (tape)
Casing: 6" x 48'
Bedrock: 45'
Hole Size: 9" x 0'-48'
6" x 48'-404'
Yield: 1/2 GPM
H₂O Temp: -
Aquifers: -
Elev: 565' (topo)
Geology: Lovington formation

Instrument Data

SP setting 50 Mv Approx. 40' /min.
Res. " 100 Ohm-m " 20' /min.
.0025 Mr " 28' /min.
Gamma " .005 Mr " ' /min.
T. C. " E-3; G-16
Fluid: Fresh Water
Running Time 2 Hrs. 30 Mins.
Depth of Log: Elec. 389' Gamma 389'
Ground Electrode in well approximately
10' below SWL

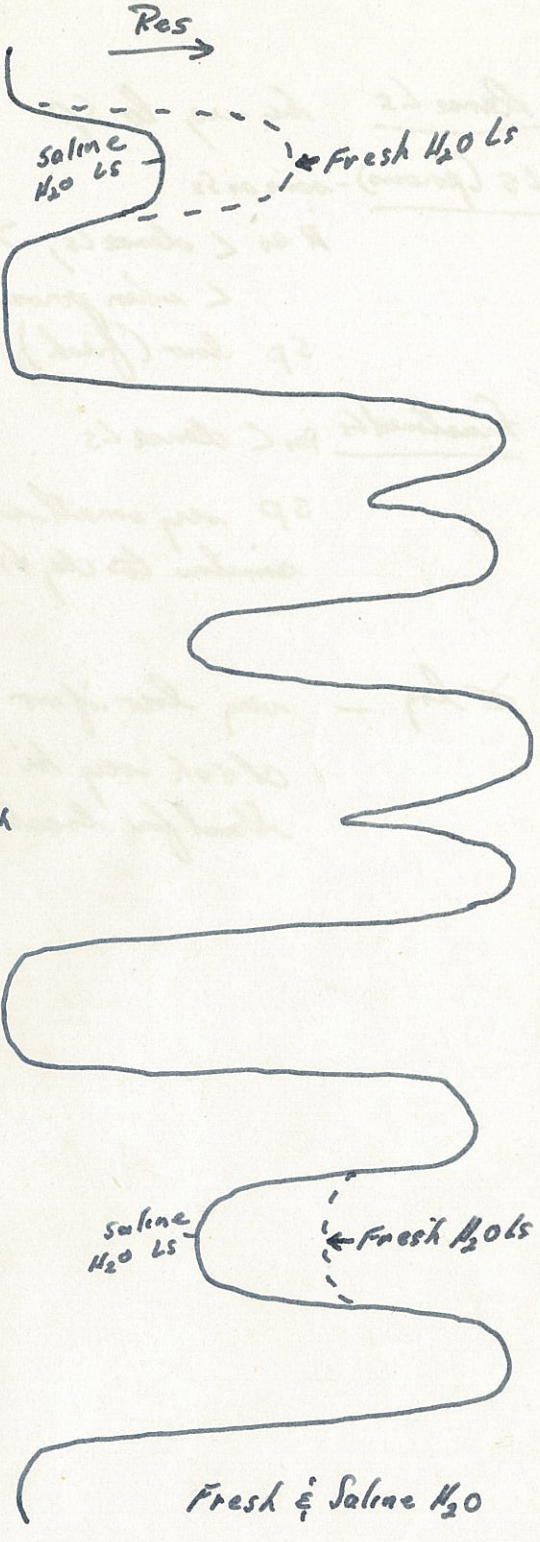
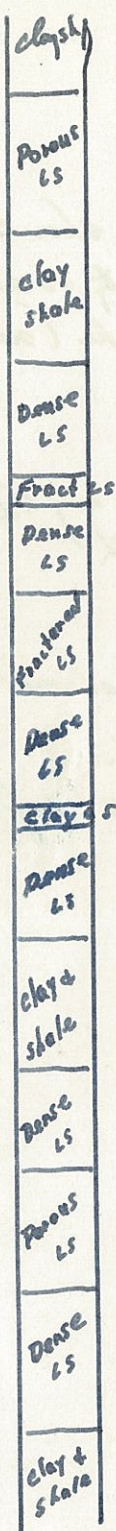
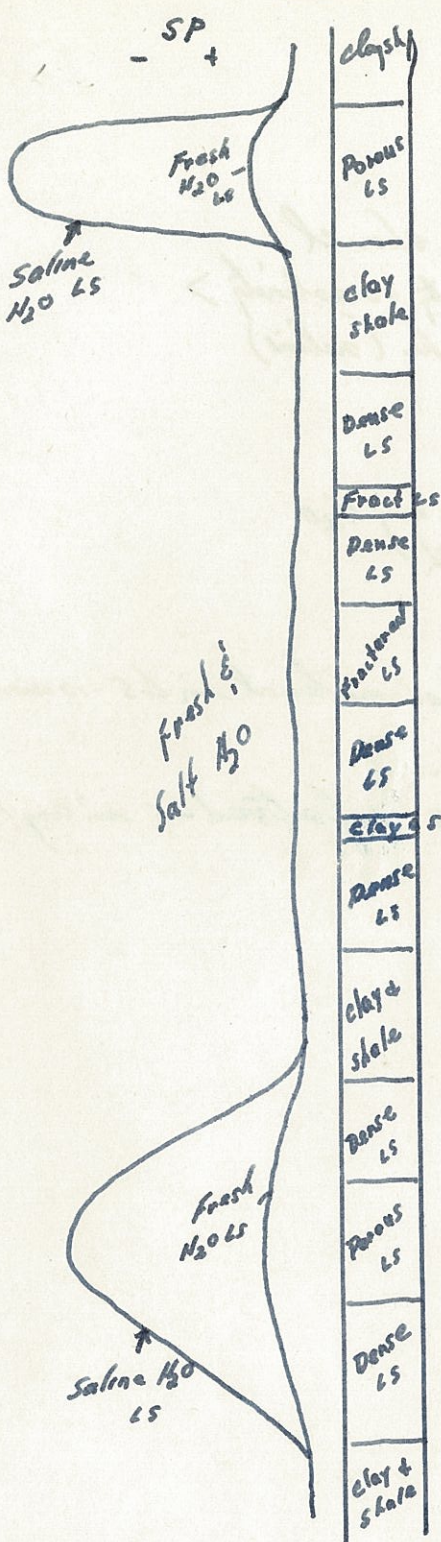
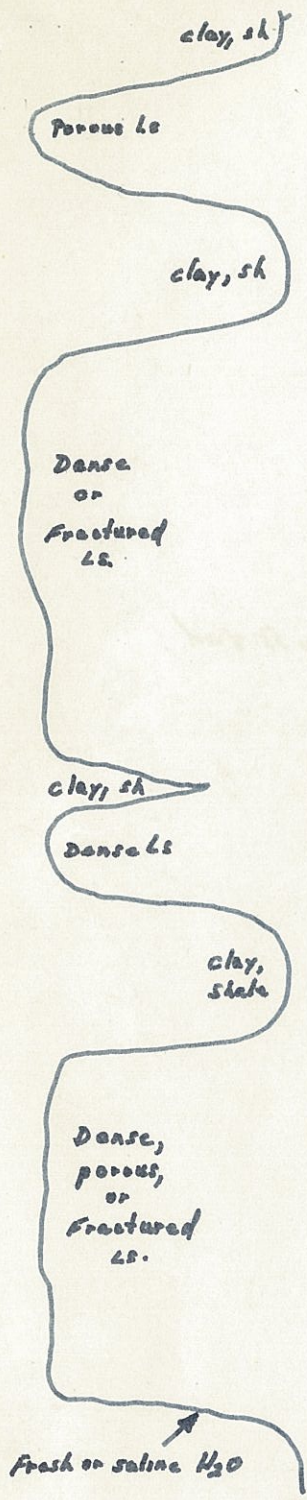
Remarks SP and RESISTANCE curves not functioning properly. Logged after well dynamited. Top and bottom of well blasted with a total of 150 lbs. of dynamite filling up hole to a depth of 389 feet. Rough spots encountered at the following depths: 62, 224, 353, 372 and 380 possibly caused by dynamiting.

Logged By Whitfield and Sheffield

idealized logs

Gamma Ray log

Electric logs



generalizations

SP

Dense Ls - low
porous Ls, ss - small (fresh)
high, negative (salt)
Fractured Ls - low

Res

Dense Ls - low
Porous Ls, ss - < dense Ls
> cl & sh
< up porosity & salinity
Fractured Ls - < dense

LS, SS - low } not affected
cl, sh - high } by type of H₂O

The higher the porosity the lower the Res.

Dense Ls ρ_{cs} high, ρ_{sp} low

Ls (porous) - same as ss

ρ_{cs} $\left\{ \begin{array}{l} \text{dense Ls, } > \text{ shor cl} \\ \text{when porosity or salinity} \end{array} \right\}$
 ρ_{sp} low (fresh), hi (saline)

Fractured Ls ρ_{cs} $\left\{ \begin{array}{l} \text{dense Ls} \end{array} \right\}$

ρ_{sp} very small in any H_2O
similar to clay & sh

$\Delta \log$ - very low if no sh material in Ls - same as ss & od.
cl sh very hi.
Good for location of fractured Ls in any H_2O