INTERVAL SHEET

WWCR 152

Page 1

Date 11/23/65

PROP: American Tel. & Tel.

COMP: Skinquarter Well #3
Falwell Well Corporation

COUNTY: Chesterfield (Skinquarter)

VDMR Well No: W-1423

VDMR Well No: Well No. 1423

Sample Interval: from 0 to 500

Total Depth 500

Oil ___ Gas ___ Water X Exploratory ___

Cuttings X Core ___ Other ___

Washed samples

From-To	From-To	From-To	From-To	From-To
-	-	0 - 10	300 - 310	-
-	-	10 - 20	310 - 320	-
-	-	20 - 30	320 - 330	-
-	-	30 - 40	330 - 340	-
-	-	40 - 50	340 - 350	-
-	-	50 - 60	350 - 360	-
-	-	60 - 70	360 - 370	-
-	-	70 - 80	370 - 380	-
-	-	80 - 90	380 - 390	-
-	-	90 - 100	390 - 400	-
-	-	100 - 110	400 - 410	-
-	-	110 - 120	410 - 420	-
-	-	120 - 130	420 - 430	-
-	-	130 - 140	430 - 440	-
-	-	140 - 150	440 - 450	-
-	-	150 - 160	450 - 460	-
-	-	160 - 170	460 - 470	-
-	-	170 - 180	470 - 480	-
-	-	180 - 190	480 - 490	-
-	-	190 - 200	490 - 500	-
-	-	200 - 210	-	-
-	-	210 - 220	-	-
-	-	220 - 230	-	-
-	-	230 - 240	-	-
-	-	240 - 250	-	-
-	-	250 - 260	-	-
-	-	260 - 270	-	-
-	-	270 - 280	-	-
-	-	280 - 290	-	-
-	-	290 - 300	-	-

OWNER: American Telephone & Telegraph Co., Well #3 VDMR #1423
(Geraghty and Miller, Contractors) WWCR #152
DRILLER: Falwell Well Corporation TOTAL DEPTH: 500'
COUNTY: Chesterfield (Skinquarter)

GEOLOGIC LOG

Residuum (0-50')

0-10	Residuum — pale-brown, clay, medium-sand to granule, angular; quartz, quartzite and granite.
10-20	Residuum — pale-pink, medium-sand to fine-pebbles, subangular; quartz, quartzite, granite, minor kaolin.
20-30	As above — with minor rounded, weathered pebbles and silicified porous arkose.
30-40	As above — minor pebbles of augen gneiss.
40-50	As above — darker, coarser, less medium-grained-sand.

Otterdale Sandstone, Newark Group (50-500')

50-60	Arkose — pale-pink, fine sand to medium-pebbles, poorly indurated, argillaceous cement, porous; quartz, feldspar minor mica and epidote, lithic fragments (granite shale, sandstone, soft green arkose).
60-70	As above.
70-80	Argillaceous Arkose — red-brown to pale-pink, clay to coarse-pebbles; very angular; quartz, feldspar, with clay and iron oxide; lithic (including greenstone) fragments.
80-90	As above.
90-100	Arkose — light-gray and pink, medium-sand to pebbles, angular, porous, poorly indurated; feldspar, quartz, lithic fragments, minor epidote, mica and ferruginous clay.
100-110	As above — minor calcite cement.
110-120	As above — iron stained.
120-130	As above — no calcite cement, less iron stain.
130-140	Arkose — red-brown, minor white and green-gray; silt to coarse sand; quartz, feldspar, mica, epidote, clay; fissile in part.

OWNER: American Telephone & Telegraph Co., Well #3 #1423
(Geraghty and Miller, Contractors)

140-150	Arkose — red-brown, minor white and green-gray; silt to coarse sand; quartz, feldspar, mica, epidote, clay; minor pebbles of quartz and gneiss.
150-160	As above — no pebbles.
160-170	Arkose — pink, medium-sand to granules and small-pebbles, angular, poorly indurated, porous; feldspar, quartz, greenstone, granite, quartzite and gray shale.
170-180	Argillaceous Sandstone — dark-red-brown, fine- to coarse-grained; quartz, feldspar, mica, epidote, clay and iron oxide; minor arkose as above.
180-190	Arkose — pink, coarse-grained and pebbles, angular; porous, poorly indurated feldspar, quartz, granite, gneiss, sandstone.
190-200	Shaly Sandstone —red-brown, fine sand to granules; slightly fissile; quartz, feldspar, mica, epidote, clay and iron oxide; minor arkose as above.
200-210	As above.
210-220	Zeolite Arkose — pale-pink, very-fine-sand to-granules; well indurated but porous; quartz, feldspar and lithic fragments that have been crushed and deformed; recemented by silica, argillaceous material and zeolites (probably laumontite-gismondine); abundant veins of zeolite; minor sandstone as above.
220-230	Ferruginous Sandstone — dark-red-brown, minor gray-green; fine sand to granules; quartz, feldspar, lithic with ferruginous clay cement; minor porous, pink arkose.
230-240	Arkose — pale-pink to red-brown, fine-sand to pebbles, poorly indurated, porous; quartz, feldspar, and lithic fragments, minor clay and iron oxide.
240-250	As above — less well indurated, much loose medium-coarse-quartz-sand.
250-260	Sandstone and Arkose — light-red-brown to pink and white; fine-sand to pebbles; quartz, feldspar, lithic fragments, clay and iron oxide; the light colored portion is coarser and very poorly indurated.
260-270	As above — darker with more ferruginous clay, shaly in part.

OWNER: American Telephone & Telegraph Co., Well #3 #1423
(Geraghty and Miller, Contractors)

270-280	Arkose — pale-dirty-pink and very-pale-gray, coarse-sand to fine-pebbles, angular, poorly indurated; quartz, feldspar, lithic fragments, minor ferruginous clay.
280-290	As above — lighter color, better induration.
290-300	As above — minor sandstone, red-brown arkosic.
300-310	Sandstone — red-brown, fine- to coarse-sand, arkosic; ferruginous clay cement.
310-320	Arkose — light-gray-pink, fine to coarse-sand, poorly indurated; quartz, feldspar, mica and lithic fragments.
320-330	As above — almost white to medium-brown.
330-340	Sandy Shale to Arkose — red-brown to pale-pink; clay to granules; arkose very poorly indurated.
340-350	As above — less shale.
350-360	Arkose — pale-pink, medium-sand to pebbles; quartz, feldspar, lithic fragments; minor epidote and mica; trace ferruginous sandstone.
360-370	As above — minor ferruginous sandstone and trace red-brown shale.
370-380	As above — less sandstone.
380-390	Ferruginous Sandstone — dark-red-brown, medium-sand to granules; quartz, feldspar, lithic fragments, ferruginous clay cement; minor arkose as above.
390-400	Arkose — pale-pink, fine- to coarse-sand, occasional pebbles; quartz, feldspar, lithic fragments; minor epidote and mica; much loose quartz-sand.
400-410	As above — better indurated, trace zeolite.
410-420	As above — very poorly indurated; few coarse-pebbles of biotite gneiss.
420-430	As above — one coarse chert pebble.
430-440	As above — no large pebbles.

OWNER: American Telephone & Telegraph Co., Well #3 #1423
(Geraghty and Miller, Contractors)

440-450	Sandstone to Arkose — medium-red-brown to dirty-pink and green; fine-sand to granules; quartz, feldspar, lithic fragments, and ferruginous clay cement.
450-460	Arkose — red-brown to dirty-pink; coarse-sand to pebbles; quartz, feldspar, granite, gneiss, sandstone and greenstone.
460-470	As above — fewer lithic pebbles.
470-480	Sand — very-pale-pink, fine-sand to granules; angular to rounded, unconsolidated; quartz, feldspar, lithic fragments; minor mica, chlorite and epidote.
480-490	Shaly Sandstone — red-brown, fine- to coarse-sand, abundant ferruginous clay cement; minor arkose as above; one large fragment pink biotite gneiss.
490-500	Arkose — dirty-pink, medium- to coarse-sand, and small pebbles; feldspar, quartz, lithic fragments, minor mica, epidote, and ferruginous clay.

GEOLOGIC SUMMARY

	ROCK UNIT	TIME ROCK UNIT
0-50	Residuum	Recent
50-500	Otterdale Sandstone (Newark Group)	Triassic

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
December 14, 1965