

31-31-15E

GEOLOGICAL
WELL REPORT

ON

SAM A. MURPHY

#3 SMITH

SW - SE - SE

SECTION 31, TOWNSHIP 31 SOUTH,
RANGE 15 EAST,
MONTGOMERY COUNTY,
KANSAS

PREPARED FOR

S. A. MURPHY

WICHITA, KANSAS

BY

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GEOLOGIST

SEDAN, KANSAS

DATED

MAY 5, 1972



INTRODUCTION: The S. A. Murphy #3 Smith test well is located in the SW - SE - SE, Section 31, township 31 South, Range 15 East, Montgomery county, Kansas.

This test well was contracted as an offset test to the Bartlesville Sandstone which produces gas in the #2 Smith located in the SE - SE - SE of Section 31.

B & N Drilling Company was awarded the drilling contract and Rotary drilling operations commenced on April 28, 1972. The first surface hole was lost due to fractured lime and crevices. The rig was subsequently moved 30 feet to the South and on April 30, 1972 at a depth of 177 feet, the contractor ran 8 5/8" O.D. surface pipe to 176 feet and cemented same to surface. When the cement had set, drilling operations commenced, cutting a 7 7/8" O.D. hole from 177 feet to 1381 total depth which was into the Mississippian limestone.

No significant shows of oil and or gas were observed in the samples. At total depth a Gamma-Neutron log was run in the open hole by Cornish Well Logging Service of Chanute, Kansas. This log reveals no sand present in the Bartlesville Sandstone section and in addition the zone appears to be approximately 21 feet lower than the #2 Smith gas well which is East one location. After careful analysis, the decision was reached by the operator to plug and abandon this test well.

There follows herewith a brief analysis and lithology of samples as observed on this well. This report is respectfully submitted for your files.

T. A. Leare



DATA SHEET

Operator: S. A. Murphy, 712 Brown Bldg, Wichita, Kansas, 67202

Lease Name: Well No: #3 Smith

Location: Sw - SE - SE, 31, 31 South, 15 East
Montgomery County, Kansas

Elevation: Approx. 935 Ground Level

Operations: Commenced 4-28-72, ceased 5-3-72

Drilling Contractor: B & N Drilling Co., Independence, Kansas

Rig Type: Rotary - Gardner - Denver 1500 Hold-down

Surface pipe: 176' of 8 5/8" O.D. cemented to surface

Hole size: 7 7/8" O.D. from 176' to 1381'

Total Depth: 1381', with hole bottomed in the Mississippi limestone

Cores: none

DST: none

Samples: 600 feet to 1381' total depth

(see lithology)

Condition of well: Dry hole

Surveys: Gamma - Neutron Log, by Cornish Well Log, Chanute, Ks.

Geologist: Harry Pearce, Consulting professional Geologist,
Sedan, Kansas

Date of Report: May 5, 1972



Sam A. Murphy #3 Smith

Lithology

Samples start @ 600'

600 - 10	Shale, dark gray
20	" " "
30	" " "
40	" " "
50	Black shale
60	" "
70	" "
80	Limestone, white to tan, gray, medium crystalline, tight, no show
90	As above with black shale
690 -700	Limestone, white to gray, medium crystalline, tight, no show
10	Gray lime, fine crystalline, tight, no show with gray shale
20	" " " " " " " " " "
30	Gray to green gray shale and slightly sandy shale
40	" " " " " " " " "
50	Gray shale with lime cavings from above
60	Gray shale
70	" " " " " " "
80	" " " " " " "
90	White to gray sand, very fine grain, no show, water sand
790 -800	" " " " " " " " " "
10	Sand, gray, fine grain, soft, mushy, water, no show
20	Gray shale - gray sandy shale
30	" " " " "
40	" " " " "
50	" " " " "
60	" " " " "
70	" " " " "

- 80 Limestone gray to buff to tan, fine to medium crystalline,
tight, no show, Top Pawnee Limestone 870
- 880 -890 Same as above
- 890 -900 Same as above, occasionally with white opaque chert
- 900 -10 Gray to slightly gray sandy shale and limestone from above
- 20 " " " " " "
- 30 Gray sand, very fine to fine grain, slightly porous to
porous, water sand, no show
- 40 Same as above
- 50 Same as above
- 60 Gray shale to gray sandy shale
- 70 Tan, buff, fine to medium crystalline, tight limestone
no show, Top Fort Scott Ls. @ 965
- 80 Same as above
- 90 Gray to tan to buff, fine crystalline, tight limestone, N.S.
- 990 -1000 " " " " " " " " " "
- 10 " " " " " " " " " "
- 20 Limestone, white, gray, tan, to buff, fine crystalline,
tight, no show with black shale
- 30 Black shale with traces limestone, white, gray, tan, fine
crystalline, tight, no show
- 40 Black shale with limestone, dark gray to brown, fine to
medium crystalline, tight, no show. 1033 -Base of Fort
Scott limestone and Top Cherodee Group
- 50 Black shale with traces limestone as above
- 60 " " " " " " " "
- 70 Black shale with light gray to tan to white, medium cry-
stalline, tight limestone, no show; Top Ardmore Ls. 1066
- 80 Black to gray shale and gray sandy shale
- 90 Gray shale with traces white, gray, very fine grain hard
tight glassy sand, no show; Mud 31 viscosity; 9.2 wgt. ✓
- 1090-1100 Gray shale with traces sand as above
- 10 Gray shale and light gray, very fine grain shaley sand,
tight, no show
- 20 Gray shale and sand tan to brown, very fine grain, tight
shaley, possible slight oil stain, very poor fluorescence

- 30 Gray shale and sand as above, tight with possible oil stain, very poor fluorescence
- 40 Brown to dark brown, medium crystalline, limestone and gray sandy shale
- 50 gray, dark gray to brown, very fine grain, shaley, tight sand with spotted oil stain, slight odor and fluorescence very slight reaction in 10% HCL
- 60 Sand as above with very slight show, very faint fluorescence
- 70 Gray to dark gray shale
- 80 " " " " "
- 90 " " " " " and gray to light gray sandy shale
- 1190-1200 Gray to light gray sandy shale
- 1200- 10 Black to dark gray shale; Approximate top of Bartlesville Sand Zone
- 20 Black shale, traces brown coarse crystalline limestone, abundant pyrite
- Circulate @ 1220 for 15 minutes:
- Traces limestone as above and sand white, gray, brown, very fine to fine grain, very tight, shaley, possible very slight spotted oil stain, no odor, no fluorescence
- 1220 -30 White, gray to brown, limy, very fine grain, tight sand and brown nodular lime with gray shale
- Circulate @ 1230 for 15 minutes:
- Sand as above, no shows with trace lime as above and gray shale
- 1230- 40 Shale with traces brown medium crystalline limestone and sand, white to brown, very fine grain, tight, limy, N.S.
- Circulate @ 1245
- Gray shale with traces limestone and sand as above, N.S.
- 1240- 50 Gray shale
- 60 Gray shale with brown medium crystalline limestone fragments, no show
- 70 Gray shale, Medium crystalline
- 80 " " " "
- 90 " " " "
- 1290-1300 Black shale
- 1300- 10 " "

20 Light gray siltstone

30 " " "

40 " " "

50 " " "

60 Black shale with brown medium crystalline, tight limestone; Top Mississippi 1368

70 Black shale, same as above

75 Limestone, dark gray to dark brown, medium crystalline, siliceous, very tight, no shows, very slight trace white opaque fresh chert

1380 Limestone, white, coarse crystalline, tight, no porosity, no show, with white, fresh, opaque chert, no porosity, no shows: Few very large quartz, sand grains, sub-round to round, slightly frosted.

Circulated @ 1381 for 30 minutes:

Limestone, white, coarse crystalline, tight, no shows with white, opaque, fresh chert with few large quartz sand grains as above

Total Depth 1381 - Prepare to run Gamma-Neutron Log

Ran log - prepare to plug and abandon well, May 3, 1972

