

15-087-20351

16-9-20E

GEOLOGICAL WELL REPORT

CALIBOGUE KANSAS CORPORATION

PETE NO. 4

SE NE SW Sec. 16-T9S-R20E

Jefferson County, Kansas

McLOUTH FIELD

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BASIC DATA

OPERATOR: Calibogue Kansas Corporation
McLouth, Kansas

WELL: Pete No. 4

LOCATION: SE NE SW Sec. 16-T9S-R20E, Jefferson County,
Kansas

AREA: McLouth Field

ELEVATION: 989

DRILLING
MEASURED FROM: Ground level

PRINCIPAL
CONTRACTOR: Glen Chase Drilling Co., Independence, Kansas

EQUIPMENT: Type: Portable mud rotary
Make: Failing 1500 w/ Ford 361
Pumps: Gardner-Denver 7 x 10 w/ Detroit
671
Gardner-Denver 5 x 8 w/ Ford 361
Drill pipe: 2-7/8" Failing w/ 4-1/2" collars
Bit size: 6-1/4"

COMMENCED: 1-28-87

SURFACE CASING: 7" @ 284 feet, cemented to surface

DRILLING FLUID: Chemical mud

DRILLING
COMPLETED: 2-1-87

ROTARY TOTAL
DEPTH: 1428 feet

ELECTRIC LOGGING: Log-Tech, Inc., Topeka, Kansas

DEPTH REACHED,
ELECTRIC LOG: 1430 feet

GEOLOGIST: John E. Hickox

STATUS: Awaiting completion

PROGRESS

- 1-28,29-87 Moved in and rigged up rotary tools. Drilled 10-inch hole to 300'. Ran 7-inch casing, set @ 284" and cemented to surface w/ 30 sax.
- 1-30 Set and tested blowout preventer.
- 1-31 Drilled to 1200'.
- 2-1 Drilled to 1428'. Running electric logs.
- 2-2 Completed electric logs. Preparing to run production string.

FORMATION TOPS
(Electric log)

Base Kansas City	685
Lenepah-Altamont	824
Cherokee	922
Ardmore	1017
McLouth sand zone	1376
McLouth sand	1386
Mississippian	1415
RTD	1428
ELTD	1430

DUAL POROSITY/DUAL INDUCTION LOG

Formation and depth	\emptyset	R_t	S_w	$R_w=0.2$
McLouth sand 1376-1378	14	11		80
1378-1380	14	14		70
1380-1382	14	15		68
1382-1384	13	15		71
1384-1386	14	17		62
1386-1388	22	20		40
1388-1390	22	30		33
1390-1392	22	45		26
1392-1394	20	45		27
1394-1396	18	40		33
1396-1398	18	35		35
1398-1400	14	25		53
1400-1402	16	20		50
1402-1404	18	20		45
1404-1406	18	20		45
1406-1408	16	20		50
1408-1410	17	20		48

SAMPLE DESCRIPTION
Depths corrected to electric log

DEPTH

1060-1067 Sandstone, gray, very fine-grained, shaly

1067-1080 Shale, gray, very fine sandy

1080-1090 Shale, gray, soft, sticky

1090-1092 Shale, black, carbonaceous

1092-1100 Shale, black, sticky, w/ streak limestone, buff, dense, finely crystalline

1100-1102 Shale, black, carbonaceous

1102-1129 Shale, black

1129-1142 Sandstone, pale greenish-gray, fine to medium-grained, glauconitic, slightly calcareous, clean, slight porosity

1142-1168 Shale, black, soft, and shale, black, gritty

1168-1170 Coal streak

1170-1177 Shale, black, gray-green

1177-1210 Sandstone, white, very fine-grained, limy, shaly, soft, and shale, black, soft

1210-1236 Shale, black, soft

1236-1260 Sandstone, white, very fine-grained, slightly shaly, and shale, green, brown, w/ streak limestone, brown, medium to coarsely crystalline, dense to granular

1260-1290 Shale, gray, micaceous

1290-1300 Skip

1300-1334 Sandstone, gray, medium-grained, subangular to subrounded, micaceous, w/ slight porosity, and shale, black, soft to gritty, and streaks coal

1334-1376 Shale, black, soft, and shale, black, gray-green, green, brown, w/ coal streak

1376 McLOUTH SAND ZONE

1376-1386 Sandstone, light gray, fine-grained, hard, clean, very slight porosity, no show oil

SAMPLE DESCRIPTION, CONTINUED

DEPTH

1386 McLOUTH SAND

1386-1410 Sandstone, brown, medium-grained, clean, friable, good porosity, good odor, good show oil, oil on pits

1410-1415 Shale, green

1415 MISSISSIPPIAN

1415-1430 Limestone, buff-tan, finely crystalline, partly granular, w/ chert, buff, tan, subvitreous

1430 TOTAL DEPTH

COMMENTS AND RECOMMENDATIONS

Calibogue Kansas Corporation No. 4 Pete is prospective for oil and gas production from the aggregate McLouth sand interval 1386-1410'.