

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

BACH OIL PRODUCTION

WELL: HENRIETTA #1

LOC.: 508' FSL & 1311' FEL
SEC. 9-2-19W
PHILLIPS COUNTY, KANSAS
API: 15-147-20700-00-00

DRILLING CONTR.: MURFIN RIG #16
SPUD: 11-27-12 COMP: 12-1-12
MUD UP: 2850' TYPE MUD: CHEM.
DRILL TIME: 3050 to' RTD
RTD: 3720' LTD: 3718'
SAMPLES SAVED: 3100'-RTD
GEOLOGIST: ROBERT J. PETERSEN

ELEVATION
KB: 2284
GL: 2279
LOG MEASURED
FROM: KB

SURFACE CASING

20# 8 5/8"
Casing set @ 248'
w/200 SX

PRODUCTION CASING

D & A

WELL LOG SURVEYS

RAG

ELECTRIC LOG TOPS

FORMATION	DEPTH	DATUM	POSITION
SC	1863	+421	+17
BSC	1885	+399	-2
TOPEKA	3231	-947	-9
HEEBNER	3441	-1157	-7
TORONTO	3471	-1187	-7
LKC	3489	-1205	-7
Muncie	3596	-1312	-6
Stark	3659	-1375	-6
BKC	3699	-1415	-7



REFERENCE WELL:

Bach
Tien #1
530' FSL & 330' FWL
15-2-19W

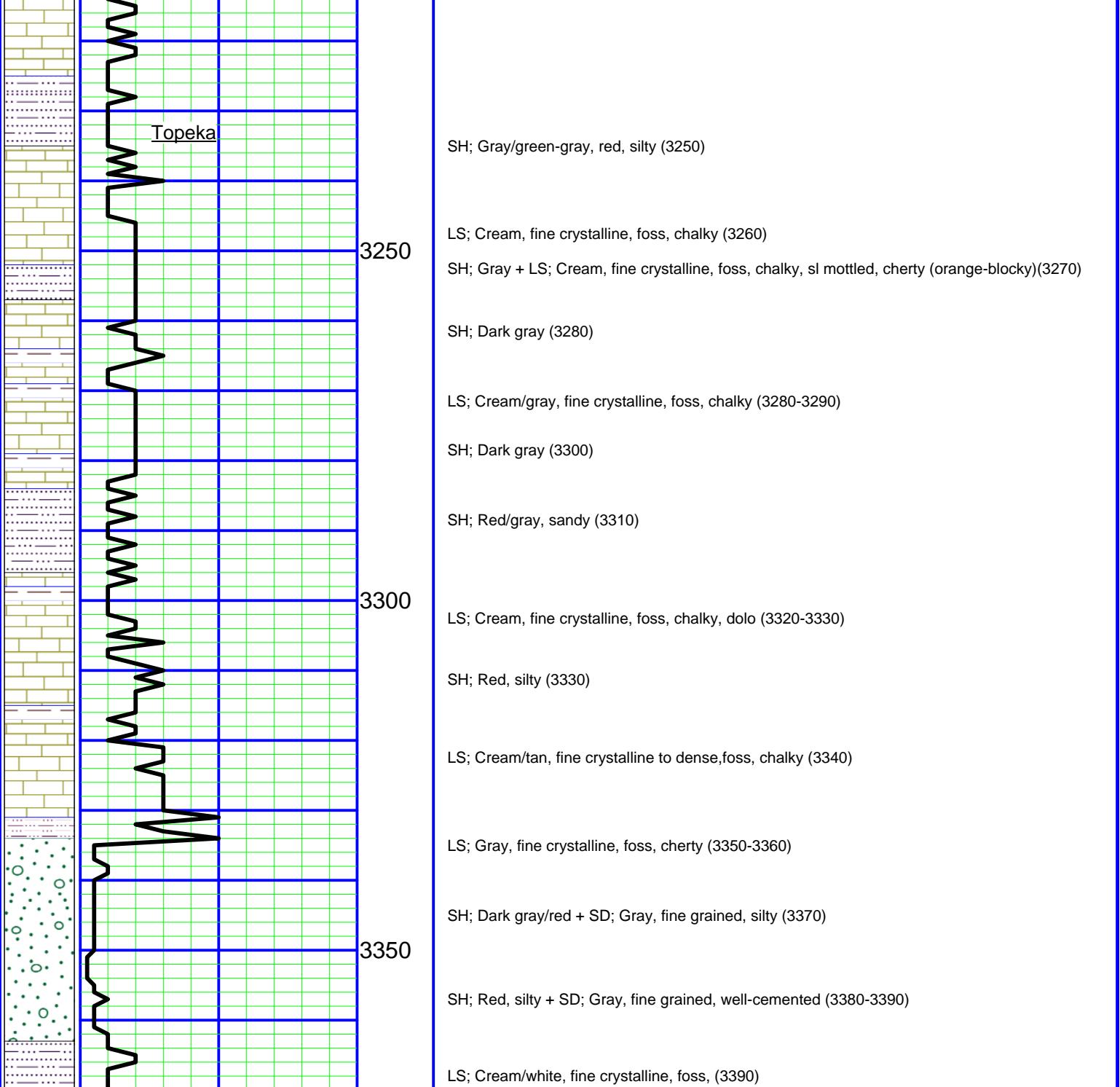
REMARKS AND RECOMMENDATIONS

Due to the low structural position and poor zone development this test was plugged and abandoned by the operator.

Respectfully submitted,
Robert J. Petersen
Robert J. Petersen

DAILY REPORT @7:00 A.M.

11-27-12 MIRU/SPUD
11-28-12 248'
11-29-12 2215'
(rig down for repair 5 hours)
11-30-12 3040'
12-01-12 3595'



SAMPLE DESCRIPTION

SH: Gray, silty-sandy + LS; Cream, fine crystalline, foss (3110)
SH: Red/gray, sandy (3120)
SD: Brown fine grained, angular + SH; Gray + LS; Tan, fine crystalline (3130)
LS: Cream, fine crystalline to dense, foss + LS; Gray, dense, arg (3140)
SH: Gray + SD; Gray, fine grained (3150)
LS: Gray, dense, foss (3150)
SH: Dark gray (3160)
LS: Cream, fine crystalline, foss, chalky (soft) (3160)
LS: Cream/tan, fine crystalline, foss, chalky + SH; Dark gray (3170-3180)
LS: Gray, dense, foss (3180)
SH: Red/gray, sandy (3190)
LS: Cream/gray, fine crystalline to dense, foss w/trace some shale clast (3200)
LS: Gray, dense, foss, blocky, cherty (3210)
SH: Gray, silty (3220)
LS: Cream/tan, dense, foss, chalky + SH; Gray (3230-3240)
SH: Gray/green-gray, red, silty (3250)
LS: Cream, fine crystalline, foss, chalky (3260)
SH: Gray + LS; Cream, fine crystalline, foss, chalky, sl mottled, cherty (orange-blocky) (3270)
SH: Dark gray (3280)
LS: Cream/gray, fine crystalline to dense, foss, chalky (3280-3290)
SH: Dark gray (3300)
SH: Red/gray, sandy (3310)
LS: Cream, fine crystalline, foss, chalky, dolo (3320-3330)
SH: Red, silty (3330)
LS: Cream/tan, fine crystalline to dense, foss, chalky (3340)
LS: Gray, fine crystalline, foss, cherty (3350-3360)
SH: Red, silty + SD; Gray, fine grained, well-cemented (3380-3390)
LS: Cream/white, fine crystalline, foss, (3390)
LS: Tan/white, fine crystalline, sl foss, dol, cherty (3400)
SD: Gray/red, fine grained, calcareous + SH; Gray/red (3400)
LS: Gray, fine crystalline, foss, dol, cherty, trace stain (3410)
SH: Dark gray (3410)
Bit trip 3401 Strap 0.43 Short
LS: Tan/cream/gray, fine crystalline to dense, foss, cherty, trace stain (3420-3430)
SH: Red/gray, silty + SD; Gray, fine grained, well-cemented (3430-3440)
LS: Cream, fine crystalline, ool-granular in part + LS; Gray, fine crystalline, foss, dol, chalky-cherty (3440)
LS: Crean/lt gray, fine crystalline, foss, chalky w/chert inclusions (3460)
SH: Black (3470)
LS: Gray, fine crystalline, foss, dol (3470)
SH: Red/gray, silty-sandy (3480-3490)
LS: Cream/white, fine crystalline to dense, chalky (3490)
LS: Cream, fine crystalline, foss, cherty, chalky, dolomitic, mottled, chert (3500)
SH: Red/gray (3500)
LS: Cream, fine crystalline, foss, dol, cherty, vssfo, tr med brown stain on dry (3510)
SH: Black (3510)
LS: Lt gray/tan, fine crystalline to dense, dolo, cherty (3570)
LS: Cream, fine crystalline, ool-granular w/intergran por ssfo (3580)
SH: Red/gray (3580)
LS: Cream, fine crystalline, foss, granular, dolo + LS; Gray, fine crystalline, dolo, cherty, chalky, trace stain (3590)
SH: Black (3590)
LS: Cream/lt gray, fine crystalline to dense, sl cherty, trace stain (3600)
SH: Red, silty (3530)
LS: Cream, fine crystalline, foss, dol, cherty (3540)
SH: Maroon/gray, silty-sandy (3550)
LS: Cream/lt gray, very fine crystalline, sl foss, dolomitic, mottled, chert (3555)
SH: Red/gray (3555/20')
LS: Cream, fine crystalline, foss, dol, cherty, vssfo, tr stain on dry (3555/20')
SH: Black (3560)
LS: Lt gray/tan, fine crystalline to dense, dolo, cherty (3570)
LS: Cream, fine crystalline, ool-granular w/intergran por ssfo (3580)
SH: Red/gray, silty (3660)
LS: Cream, fine crystalline, foss-granular, trace moldic por, stain (3670)
LS: Cream/tan, fine crystalline to dense, sl foss, chalky (3670-3680)
SH: Black (trace 3680/increase 3690)
SH: Red/green-gray, silty-sandy (3690)
LS: Cream/white, very fine crystalline to dense, chalky (3690-3700)
SH: Black (3700)
SH: Red/green-gray, silty (3700/3710)
LS: Cream, fine crystalline, ool-granular w/yellow mineral stain + SH; Red/gray, silty-sandy (3720)

NOTE:
Sample log tops are 4 to 5 feet lower than E-log tops.