

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

BACH OIL PRODUCTION
WELL: CANDY KRAFFT #1

LOC.: 1000' FSL & 330' FWL
 SEC. 12-1-19W
 PHILLIPS COUNTY, KANSAS
 API: 15-147-20701-00-00

ELEVATION
 KB: 2070
 GL: 2065
 LOG MEASURED FROM: KB

SURFACE CASING
 20# 8 5/8 "
 Casing set @ 209'
 w/175 SX

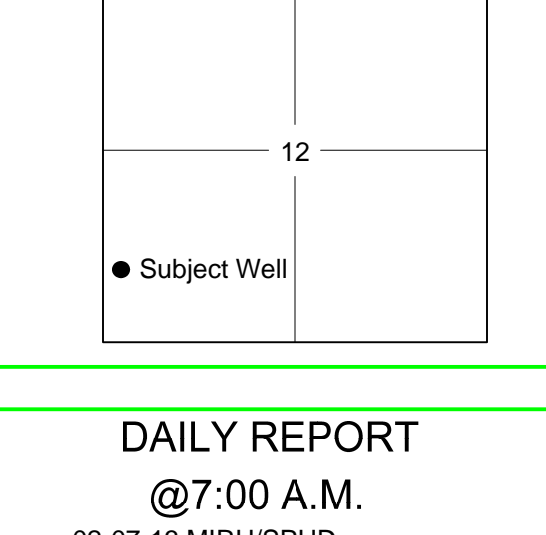
PRODUCTION CASING
 5 1/2" casing set

WELL LOG SURVEYS
 DIL/CDL/MICRO

DRILLING CONTR.: MURFIN RIG #8
SPUD: 02-07-13 COMP: 02-11-13
MUD UP: 2823' TYPE MUD: CHEM.
DRILL TIME: 2900 to' RTD
RTD: 3547' LTD: 3550'
SAMPLES SAVED: 2950'-RTD
GEOLOGIST: ROBERT J. PETERSEN

ELECTRIC LOG TOPS

FORMATION	DEPTH	DATUM	POSITION
Stone Corral	1698	+372	+3
Base Stone Corral	1721	+349	+1
Topeka	3045	-975	+5
Heebner	3249	-1179	+4
Toronto	3277	-1207	+4
Lansing	3294	-1224	+5
Muncie Creek	3405	-1335	+4
Stark	3469	-1399	+6
BKC	3510	-1440	+6
LTD	3550	-1480	+6



REFERENCE WELL:

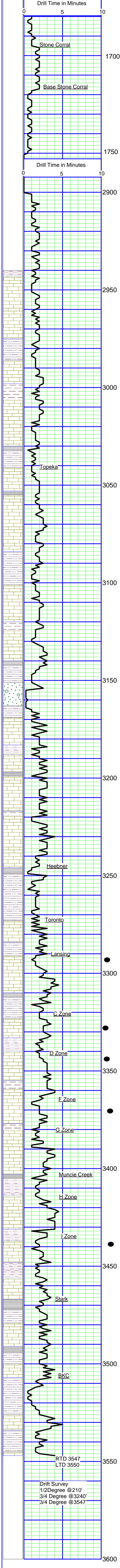
Bach
 Jessup Unit #1
 300' FSL & 790' FEL
 11-1-19W

REMARKS AND RECOMMENDATIONS

Production casing was set to further test this well.

Respectfully submitted,
Robert J. Petersen
 Robert J. Petersen

DAILY REPORT
@7:00 A.M.
 02-07-13 MIRU/SPUD
 02-08-13 270' WOC
 02-09-13 2166'
 02-10-13 3175'
 02-11-13 3547' Logging



SAMPLE DESCRIPTION

- LS; Cream/gray, fine crystalline to dense, very foss + SH; Gray, silty (2950)
- LS; Cream, very fine crystalline, foss, chalky, slightly cherty (2960)
- SH; Gray, silty-sandy (2970)
- LS; Cream/white, very fine crystalline, foss, chalky (2980)
- LS; Tan/cream, fine crystalline, foss, chalky + SH; Red/gray (2980)
- LS; Cream/tan, fine crystalline, foss + SH; Gray, silty-sandy (2990)
- SH; Gray, silty (3000)
- LS; Cream, fine crystalline, foss, cherty (blocky) (3010)
- LS; Cream/lt gray, very fine crystalline to dense + SH; Gray (3020-3030)
- LS; Cream/lt gray, dense + SH; Gray, trace SD (Brown, fine grained, friable) (3040)
- LS; Gray/dark gray, dense, foss (3050)
- SH; Black (3050)
- SH; Gray/red (3060)
- LS; Cream/gray, fine crystalline, sl dolo, foss, cherty (3070)
- SH; Dark gray (3080)
- LS; Lt gray, dense (3090)
- LS; Cream, fine crystalline, foss-granular, slightly chalky (3100)
- LS; Cream, fine crystalline, foss, slightly gray mottle (3110)
- SH; Dark gray (3120)
- LS; Cream/lt gray, fine crystalline, foss, dolo, cherty (3120)
- SH; Red/gray (3130)
- LS; Cream, fine crystalline, foss, chalky (3140)
- SH; Gray (3150)
- LS; Cream, fine crystalline, foss, cherty (blocky) (3150-3160)
- SH; Black (trace 3160)
- SH; Red +SD. Gray, fine grained, angular, calc (3180)
- SD; Gray, very fine grained, friable (3190)
- SH; Red/gray, sandy (3190)
- LS; Cream, fine to medium crystalline, foss, chalky (3190)
- SH; Red/gray + SD; Calc (3200)
- LS; Cream, fine crystalline, ool-subgran (3210)
- SH; Black (trace 3220)
- LS; Cream/lt gray, fine crystalline to dense, slightly dolo, foss (3220)
- SH; Red, silty (3230)
- LS; Cream/white, fine crystalline, foss, dolo-chalky (3230)
- LS; Cream/white, fine crystalline w/scattered coarse crystalline, foss (3240)
- LS; Cream/gray, fine crystalline, foss, dolo (3260)
- SH; Black (trace 3260/ flood 3270)
- LS; Gray/tan, dense (3270)
- SH; Red/gray, silty-sandy (3280)
- SD; Gray, fine grained, friable (3290)
- LS; Lt gray, fine crystalline, dolo (3300)
- SH; Red/gray, sandy (3300)
- LS; Cream, fine crystalline, ool-granular w/fair inter-granular por, sfo, odor, gold sat on dry (3310)
- LS; Cream, fine crystalline to dense, slightly chalky (3320)
- LS; Gray, dense, foss, cherty (3330)
- SH; Black (3330)
- SH; Red/gray (3340)
- LS; Cream, fine crystalline, foss/ool, granular, cherty w/inter granular/moldic por, sfo, good odor, brown sat on dry (3340)
- LS; Cream, fine crystalline, foss, dolo, w/trace intercrystalline por, light stain on dry (3350)
- SH; Red, silty (3350)
- LS; Lt gray, fine crystalline, very cherty (orange blocky), dolo w/fair intercrystalline por trace moldic por, sfo, good odor (3355)
- LS; Cream/lt gray, fine crystalline to dense, dolo (3355/15")
- SH; Black (3360)
- SH; Red, silty (3360)
- LS; Cream, fine crystalline, foss, dolo w/poor intercrystalline por, sso (3370)
- LS; Cream/gray, fine crystalline, foss, chalky-soft, trace poor intercrystalline por, sso, faint odor (3380-3390)
- SH; Red/gray (3390)
- LS; Cream/lt gray, fine crystalline, slightly foss, dolo w/trace moldic por, stain (3400)
- LS; Cream, fine crystalline to dense, slightly dolo, sl cherty (3410)
- LS; Gray/dark gray, fine crystalline to dense, foss, cherty (3420)
- SH; Black (3420)
- SH; Red/gray, silty (3430)
- LS; Cream, fine crystalline, foss, slightly dolomitic, chalky (3430)
- LS; Cream/lt gray, fine crystalline, foss, cherty, trace poor moldic pot, vsso (3440)
- SH; Black (3440)
- SH; Red, silty (3450)
- LS; Cream, dense, poor vug por, sfo (3450)
- LS; Cream, dense, foss w/fair moldic por, trace vug por, sfo, gas bubbles, odor, dark patchy to full sat on dry (3450/15") some granular foss w/inter-granular por (3450/30")
- LS; Cream, dense, foss w/fair vug /moldic por, sfo (3460)
- SH; Red/gray (3460)
- LS; Cream, very fine crystalline, slightly foss, dolo, chalky (3470)
- LS; Tan, fine crystalline, foss, subgranular, hard (3480)
- SH; Black (trace 3480/increase 3490)
- SH; Red/gray, silty-sandy (3490)
- LS; Cream/white, fine crystalline, slightly foss, chalky (3490)
- LS; Cream, fine crystalline, ool-granular w/fair to good inter ool por, sfo + Dolo; Tan, sucrosic + Chert; Blue-gray, angular (3500)
- SH; Black (3510)
- SH; Red/gray, sandy (3510)
- LS; Cream, fine to med crystalline, foss, subgranular, chalky (3520)
- LS; Cream w/yellow min stain, fine to med crystalline, foss-granular (3530)
- SS; Gray/tan, very fine grained, hard (3530)
- SH; Red/gray (3530)
- SH; Maroon/red, sandy (3540)
- LS; Tan/gray, fine crystalline, foss (3540)
- SH; Maroon/gray, silty + SD; Lt gray/gray, very fine grained, friable + LS; Cream/gray fine crystalline to dense, cherty (3547)