

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

BACH OIL PRODUCTION

WELL: DAWNDY #1

LOC.: 2854' FSL & 449' FEL
SEC. 14-1-19W
PHILLIPS COUNTY, KANSAS
API: 15-147-20739-00-00

DRILLING CONTR.: MURFIN RIG #24
SPUD: 05-13-14 COMP: 05-18-14
MUD UP: 2800' TYPE MUD: CHEM.
DRILL TIME: 2900 to' RTD
RTD: 3540' LTD: 3540'
SAMPLES SAVED: 2900'-RTD
GEOLOGIST: ROBERT J. PETERSEN

ELEVATION

KB: 2073
GL: 2068
LOG MEASURED
FROM: KB

SURFACE CASING

8 5/8" Set @ 220'
W/175 SX 3% CC 2%gel

PRODUCTION CASING

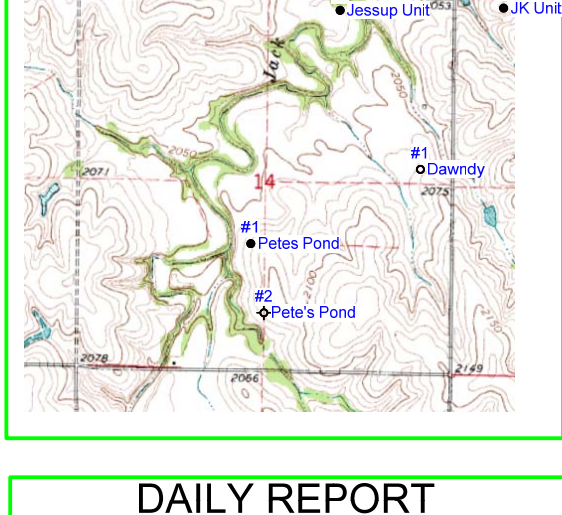
5 1/2" Set

WELL LOG SURVEYS

DIL/CDL

ELECTRIC LOG TOPS

FORMATION	DEPTH	DATUM	POS.
Stone Corral	1706	+367	+1
Base Stone Corral	1728	+345	Flat
Topeka	3057	-984	+1
Heebner	3265	-1192	+3
Toronto	3292	-1219	+1
Lansing	3309	-1236	+2
Muncie	3419	-1346	+2
Stark	3486	-1413	Flat
LTD	3540	-1467	—



REFERENCE WELL:

Bach Oil Production
 Pete's Pond #1
 NE SE NE SW
 1750' FSL & 2416' FWL
 14-1-19W

DAILY REPORT

@7:00 A.M.

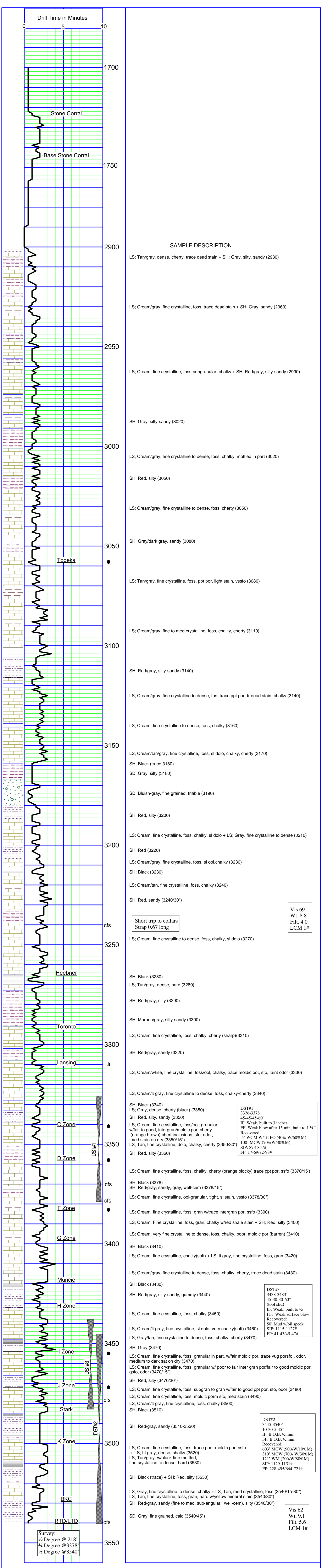
05-13-12 MIRU/SPUD
05-14-14 415'
05-15-14 2314'
05-16-14 3240'
05-17-14 3470'
05-18-14 3540'

REMARKS AND RECOMMENDATIONS

Production casing was run to further test this well for commercial production.

Respectfully submitted,

Robert J. Petersen
 Robert J. Petersen



SAMPLE DESCRIPTION

LS; Tan/gray, dense, cherty, trace dead stain + SH; Gray, silty, sandy (2930)

LS; Cream/gray, fine crystalline, foss, trace dead stain + SH; Gray, sandy (2960)

LS; Cream, fine crystalline, foss-subgranular, chalky + SH; Red/gray, silty-sandy (2990)

SH; Gray, silty-sandy (3020)

LS; Cream/gray, fine crystalline to dense, foss, chalky, mottled in part (3020)

SH; Red, silty (3050)

LS; Cream/gray, fine crystalline to dense, foss, cherty (3050)

SH; Gray/dark gray, sandy (3080)

LS; Tan/gray, fine crystalline, foss, ppt por, light stain, vssfo (3080)

LS; Cream/gray, fine to med crystalline, foss, chalky, cherty (3110)

SH; Red/gray, silty-sandy (3140)

LS; Cream/gray, fine crystalline to dense, foss, trace ppt por, tr dead stain, chalky (3140)

LS; Cream, fine crystalline to dense, foss, chalky (3160)

LS; Cream/tan/gray, fine crystalline, foss, sl dolo, chalky, cherty (3170)

SH; Black (trace 3180)

SD; Gray, silty (3180)

SD; Bluish-gray, fine grained, friable (3190)

SH; Red, silty (3200)

LS; Cream, fine crystalline, foss, chalky, sl dolo + LS; Gray, fine crystalline to dense (3210)

SH; Red (3220)

LS; Cream/gray, fine crystalline, foss, sl ool, chalky (3230)

SH; Black (3230)

LS; Cream/tan, fine crystalline, foss, chalky (3240)

SH; Red, sandy (3240/30")

LS; Cream, fine crystalline to dense, foss, chalky, sl dolo (3270)

SH; Black (3280)

LS; Tan/gray, dense, hard (3280)

SH; Red/gray, silty (3290)

SH; Maroon/gray, silty-sandy (3300)

LS; Cream, fine crystalline, foss, chalky, cherty (sharp)(3310)

SH; Red/gray, sandy (3320)

LS; Cream/white, fine crystalline, foss/ool, chalky, trace moldic pot, sfo, faint odor (3330)

LS; Cream/lt gray, fine crystalline to dense, foss, chalky-cherty (3340)

SH; Black (3340)

LS; Gray, dense, cherty (black) (3350)

SH; Red, silty, sandy (3350)

LS; Cream, fine crystalline, foss/ool, granular w/fair to good, intergran/moldic por, cherty (orange brown) chert inclusions, sfo, odor, med stain on dry (3350/15")

LS; Tan, fine crystalline, dolo, chalky, cherty (3350/30")

SH; Red, silty (3360)

LS; Cream, fine crystalline, foss, chalky, cherty (orange blocky) trace ppt por, sfo (3370/15")

SH; Black (3378)

SH; Red/gray, sandy, gray, well-cem (3378/15")

LS; Cream, fine crystalline, ool-granular, tight, sl stain, vssfo (3378/30")

LS; Cream, fine crystalline, foss, gran w/trace intergran por, ssofo (3390)

LS; Cream, Fine crystalline, foss, gran, chalky w/red shale stain + SH; Red, silty (3400)

LS; Cream, very fine crystalline to dense, foss, chalky, poor, moldic por (barren) (3410)

SH; Black (3410)

LS; Cream, fine crystalline, chalky(soft) + LS; lt gray, fine crystalline, foss, gran (3420)

LS; Cream/gray, fine crystalline to dense, foss, chalky, cherty, trace dead stain (3430)

SH; Black (3430)

SH; Red/gray, silty-sandy, gummy (3440)

LS; Cream, fine crystalline, foss, chalky (3450)

LS; Cream/lt gray, fine crystalline, sl dolo, very chalky(soft) (3460)

LS; Gray/tan, fine crystalline to dense, foss, chalky, cherty (3470)

SH; Gray (3470)

LS; Cream, fine crystalline, foss, granular in part, w/fair moldic por, trace vug poroso, odor, medium to dark sat on dry (3470)

LS; Cream, fine crystalline, foss, granular w/ poor to fair inter gran por/fair to good moldic por, gsf, odor (3470/15")

SH; Red, silty (3470/30")

LS; Cream, fine crystalline, foss, subgran to gran w/fair to good ppt por, sfo, odor (3480)

LS; Cream, fine crystalline, foss, gran, moldic porm sfo, med stain (3490)

LS; Cream/lt gray, fine crystalline, foss, chalky (3500)

SH; Black (3510)

SH; Red/gray, sandy (3510-3520)

LS; Cream, fine crystalline, foss, trace poor moldic por, ssofo + LS; Lt gray, dense, chalky (3520)

LS; Tan/gray, w/black fine mottled, fine crystalline to dense, hard (3530)

SH; Black (trace) + SH; Red, silty (3530)

LS; Gray, fine crystalline to dense, chalky + LS; Tan, med crystalline, foss (3540/15-30")

LS; Tan, fine crystalline, foss, gran, hard w/yellow mineral stain (3540/30")

SH; Red/gray, sandy (fine to med, sub-angular, well-cem), silty (3540/30")

SD; Gray, fine grained, calc (3540/45")

Vis 69
 Wt. 8.8
 Filt. 4.0
 LCM 1#

DST#1
 3326-3378'
 45-45-45-60"
 IF: Weak, built to 3 inches
 FF: Weak blow after 15 min, built to 1 1/4"
 Recovered:
 5' WCM W/1ft FO (40% W/60%M)
 100' MCW (70% W/30%M)
 SIP: 873-857#
 FP: 17-69/72-98#

DST#3
 3438-3483'
 45-30-30-60"
 (tool slid)
 IF: Weak, built to 1/2"
 FF: B.O.B. 1/2 min.
 Recovered:
 50' Mud w/oil speck
 SIP: 1129-1131#
 FP: 41-43/45-47#

DST#2
 3445-3540'
 10-30-5-45"
 IF: B.O.B. 1/2 min.
 FF: B.O.B. 1/2 min.
 Recovered:
 603' MCW (90% W/10%M)
 310' MCW (70% W/30%M)
 121' WM (20% W/80%M)
 SIP: 1129-1131#
 FP: 228-495/664-721#

Vis 62
 Wt. 9.1
 Filt. 5.6
 LCM 1#

Survey:
 1/2 Degree @ 218'
 3/4 Degree @ 3378'
 1/2 Degree @ 3540'