

# GEOLOGIST'S REPORT

## DRILLING TIME AND SAMPLE LOG

**BACH OIL PRODUCTION**

**WELL: HANKE #2**

**LOC.: 677' FNL & 2295' FEL  
SEC. 22-3-19W  
PHILLIPS COUNTY, KANSAS  
API: 15-147-20685-00-00**

### ELEVATION

KB: 2057  
GL: 2052  
LOG MEASURED  
FROM: KB

### SURFACE CASING

20# 8 5/8" Casing set @ 226 w/150 SX

### PRODUCTION CASING

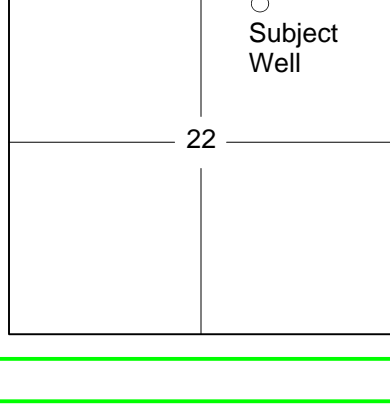
5 1/2" Casing set @ 3465'

### WELL LOG SURVEYS

DIL/CDL

### ELECTRIC LOG TOPS

FORMATION	DEPTH	DATUM	POS. A	POS. B
Stone Corral	1607	+450	-12	-1
Base Stone Corral	1632	+425	-16	Flat
Topeka	3000	-943	-16	+4
Heebner	3196	-1139	-13	+8
Toronto	3222	-1165	-14	+9
Lansing	3241	-1184	-13	+9
BKC (sample top)	3460	-1403	-14	+7



### REFERENCE WELL:

<u>Well A</u> Bach Oil Prod. Hanke #1 1930' FNL & 1650' FEL 22-3-19W	<u>Well B</u> Derby Oil Miller A 1 SE SW SE 15-3-19W
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### DAILY REPORT

@7:00 A.M.

7-12-12 MIRU SPUD  
7-13-12 380'  
7-14-12 2230'  
7-15-12 3180'  
7-16-12 3340' DST #1  
7-17-12 3460' RTD

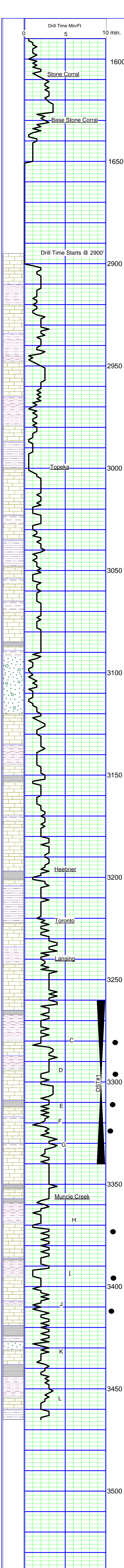
### REMARKS AND RECOMMENDATIONS

Production casing was run to further test this well.

Respectfully submitted,

*Robert J. Petersen*

Robert J. Petersen  
Sept. 15, 2011



### SAMPLE DESCRIPTION

- LS; Cream/gray, fine crystalline, doplo (2910)
- LS; Cream, dense (2920)
- LS; Gray, fine crystalline, foss mottled (2930)
- SH; Gray, silty-sandy (2940)
- LS; Cream, fine crystalline, foss + LS; Gray, fine crystalline to dense, sl dolo (2950)
- SH; Red/gray + LS; Tan/gray, fine crystalline to dense, foss, blocky (2960)
- SH; Dark gray (2970)
- LS; Tan/gray, dense, foss, blocky + SH; Gray (2980)
- SD; Gray, fine grained, well-cemented (3000)
- SH; Red, silty (3010)
- LS; Gray, dense, fossil-mottled, chalky (3010)
- SD; Gray, fine grained, angular, mic + SH; Red (3030)
- LS; Gray, fine crystalline to dense, foss, chalky + SH; Gray/red (3040)
- LS; Gray/tan, fine crystalline, foss, trace stain, sl dolo + SH; Black/red (3050)
- SD; Gray, fine grained, well-cem + SH; Gray (3060)
- LS; Cream, fine crystalline, foss (fragmented), dense matrix + SH; Gray/red (3070-80)
- LS; Cream, fine crystalline, foss, chalky, cherty (3080)
- LS; Cream, fine crystalline, foss, sl dolo, trace stain + SH; Gray (3090-3100)
- LS; Cream, fine crystalline, oolitic-granularm sl dolo, cherty, chalky, trace stain (3110-3120)
- SH; Black (trace 3110)
- SD; Gray, fine grained, friable (3120)
- SD; Gray, fine grained, friable to well-cemented + SH; Red, silty (3130)
- LS; Cream, fine crystalline, foss, cherty (3140)
- SH; Red/maroon, silty-sandy (3150)
- LS; Cream/tan, fine crystalline, foss, cherty (3160)
- SH; Black (3180-trace)
- LS; Cream/tan, fine crystalline to dense, foss, cherty + SH; Gray, silty (3180/3180-15")
- SH; Red/gray (3180/30")
- LS; Cream, fine crystalline, foss, cherty + LS; Gray, dense, foss (3190)
- LS; Lt gray/tan, fine crystalline to dense, foss, trace stain (3200-3210)
- SH; Black (3210)
- LS; Cream/gray, dense, hard (3220)
- SH; Red/gray (3220)
- SH; Red/gray, silty-sandy (3230)
- LS; Cream/white, dense, foss, cherty, chalky (3240)
- LS; Gray, dense, foss, chalky (3250)
- SH; Red/gray, silty (3250)
- LS; Cream/white, fine crystalline, ool-granular, chalky (3260)
- LS; Cream, fine crystalline to dense, sl foss, chalk (3270)
- SH; Black (trace 3280)
- SH; Red/gray, silty-sandy (3290)
- LS; Cream, fine crystalline, sl dolo, poor intercrystalline por, ssfo (3300)
- SH; Red, silty-sandy (3305)
- LS; Cream, fine crystalline, foss w/moldic & intercrystalline, por, sfo, odor (3310)
- LS; Cream, fine crystalline, foss, chalky (3320)
- SH; Gray (3330)
- LS; Cream, fine crystalline, ool-granular w/intergran poor, sfo, odor (3330)
- SH; Gray (3330)
- LS; Cream, fine crystalline, foss, moldic por, sfo, lt odor, med stain on dry (3340)
- SH; Gray (3340/15")
- LS; Cream, fine crystalline, chalky (3340/30")
- LS; Cream/white, fine crystalline, ool-granular in part, chalky (3360)
- LS; Gray, fine crystalline to dense, fossil-mottledm chalky-cherty (3370)
- SH; Black (3380)
- SH; Red/gray, silty-sandy, gummy (3380)
- LS; Cream, fine crystalline, foss, w/trace intergran por, lt stain, ssfo (3390)
- LS; Cream/lt gray, fine crystalline, chalky (3400)
- SH; Gray (3408)
- LS; Cream, fine crystalline to dense, sl foss, moldic por, sfo, good odor (3408/15")
- LS; Cream/tan, fine crystalline, foss, fair moldic por, even sat, sfo, good odor, med to dark sat on dry (3408/30")
- SH; Gray (3430)
- LS; Cream, fine crystalline, foss w/pt moldic por, ssfo, odor, med to dark stain on dry (3430)
- LS; Cream, fine crystalline, foss, intergran por, stain (3440)
- SH; Black (3450)
- SH; Red/gray (3450)
- LS; Cream, fine crystalline to dense (3450-60)
- SH; Black (3460)
- SH; Red/gray (3460)
- LS; Cream/gray, dense, blocky (3460)

**SHORT TRIP @ 3180'  
TO COLLARS**

NOTE: DST#1 recorded as DST #2  
first attempt was mis-run to stacked out  
at 2200

**DST #1**  
3360-3430'  
45-45-45-60  
IF: weak blow built to 1 1/8"  
Recovered: 30' VSOCM  
SIP: 576-564#  
FP: 30-30/45-40#  
Note: Hole had 8'  
of fill when tool got  
on bottom