

# GEOLOGIST'S REPORT

## DRILLING TIME AND SAMPLE LOG

### BACH OIL PRODUCTION

WELL: KK Unit #1

LOC.: 1410' FSL & 2320' FEL  
 SEC. 21-2-19W  
 PHILLIPS COUNTY, KANSAS  
 API: 15-147-20684-00-00

### ELEVATION

KB: 2185  
 GL: 2180  
 LOG MEASURED  
 FROM: KB

### SURFACE CASING

20# 8 5/8 "  
 Casing set @ 232  
 w/170 SX

### PRODUCTION CASING

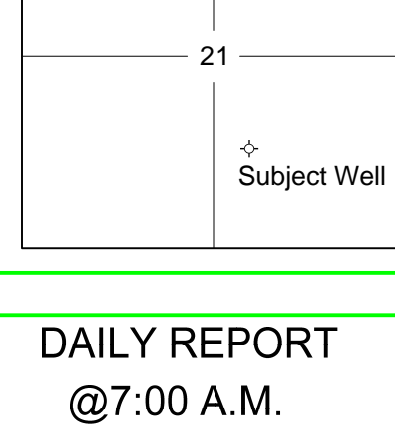
P&A

### WELL LOG SURVEYS

DIL/CDL

### ELECTRIC LOG TOPS

FORMATION	DEPTH	DATUM	POSITION
Top Stone Corral	1764	+421	+30
Base Stone Corral	1778	+407	+42
Topeka	3156	-971	+35
Heebner	3345	-1160	+38
Toronto	3375	-1190	+34
Lansing	3391	-1206	+32
Base Kansas City	3603	-1418	+37



### REFERENCE WELL:

Morris Sitrin  
 Kats #1  
 D&A  
 20-2-19W  
 SE SE NW

### REMARKS AND RECOMMENDATIONS

Due to negative drill stem tests this well was plugged and abandoned.

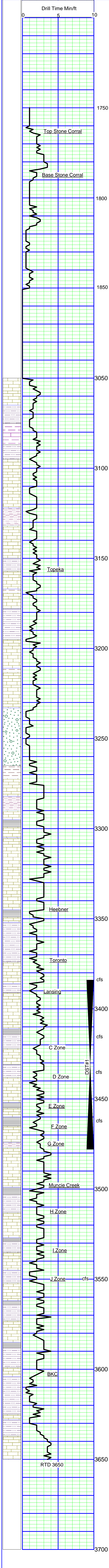
Respectfully submitted,

*Robert J. Petersen*  
 Robert J. Petersen

### DAILY REPORT

@7:00 A.M.

07-05-12 MIRU  
 07-06-12 570'  
 07-07-12 2380'  
 07-08-12 3260'  
 07-09-12 3478'  
 07-10-12 3650'



### SAMPLE DESCRIPTION

LS: Cream/gray, dense, foss, trace stain + SH; red/gray (3060-3070)

SH; Red/gray (3080)

LS: Cream/gray/tan, fine crystalline to dense, foss (3090)

SH; Red (3100)

LS: Tan/cream, fine crystalline, foss, chaly (3110)

SH; Dark gray, silty (3120)  
 LS: Tan/cream, fine crystalline, foss, moldic por, trace stain (3120)  
 LS: Tan/dark gray, dense, blocky (3130-40)  
 LS: Dark gray, dense, cherty, mottled (3150)

LS: Cream/gray, dense, cherty(foss-sharp)(3160)

LS: Tan, fine crystalline, foss, cherty, trace stain (3170)

LS: Cream/lt gray, fine crystalline, sl foss, sl dolo, chalky + SH; Black (3180)

LS: Cream, fine crystalline, foss-granular, chalky trace dead stain (3190)

LS: Cream/lt gray, fine crystalline to dense, foss, cherty(foss-ang) +SH; Gray (3200)

SH; Gray + SS: Gray, fine grained, well-cem, ang + LS; Gray, fine crystalline, fossil mottled (3210)

LS: Cream, fine crystalline, foss, dolo, tr ppt por, chety (3220)

SH; Gray (3230)

LS: Cream, fine crystalline to dense, foss, chalky, cherty (3240)

trace moldic por, tr edge stain (3250)  
 SH; Dark gray (3260)

SD; Gray, fine grained, friable (3260-3270)

SD; Red/gray, fine grained, friable (3280)  
 SH; Red, silty (3290)

LS: Cream, fine crystalline to coarse crystalline (calcite) (3300)

SH; Black (trace 3310)  
 LS: Cream/gray, fine crystalline, foss, chalky-cherty (3320)  
 SH; Red/gray, silty, sandy (3320)  
 LS: Gray, dense (3320)

LS: Cream/gray w/black mottled, fine crystalline, foss, cherty, trace stain (3330)

SH; Red/gray (3339) SHORT TRIP @3339'

LS: Cream/lt gray, dense, foss (3339/30')

LS: Lt gay, fine crystalline to dense, foss, sl dolo, trace stain + SH; gray (3350)

SH; Black (flood 3370)  
 LS: Gray, dense (3370)

SH; Maroon/gray, silty-sandy (3380)

LS: Cream/lt gray, dense, sl foss (3380)

LS: Cream/white, fine crystalline to dense, foss, chalky, cherty, trace stain (3385/15')

SH; Red/gray, silty-sandy (3400)  
 LS: Cream, fine crystalline, ool-granular w/fair intergran por, sfo, odor, light stain-sl grayish (3410)

LS: Cream, fine crystalline to dense, foss-subgranular, chalky (3420)

SH; Black (3430)  
 SH; Red/gray, silty (3434)

LS: Cream, fine crystalline, foss, w/poor moldic por, cherty, ssfo, fair odor, med stain on dry (3434)  
 LS: Cream, fine crystalline, foss, chalky (3440)

SH; Maroon/gray/green (3450)

LS: Cream, fine crystalline, foss, chalky, very cherty, trace moldic porm ssfo, faint odor (3458)

LS: Cream/white, fine crystalline, chalky, cherty (3458/45')

SH; Black (3470)  
 SH; Red/gray, silty (3478)  
 LS: Cream, fine crystalline, foss-granular in part, chalky, sfo, odor (3478)

LS: Cream, fine crystalline, foss, cherty, moldic por, sfo, odor (3478/15')

LS: Cream, fine crystalline, foss, sl chalky (3478/60')

SH; Gray/red (3490)

LS: Cream/white, fine crystalline, foss, gran, poor intergran por, vsfso, stain (3490)

LS: Cream, fine crystalline to dense, foss (3500)

LS: Cream/dark gray mottle, fine crystalline to dense, foss (3510)  
 SH; Black (3510)

SH; Gray, soft, sandy + LS; Dark gray, dense (3520)

LS: Cream, white, fine crystalline, foss, chalky, cherty (3530)

LS: Gray, fine crystalline to dense, foss, chalky (3540)

SH; Black (3550)  
 SH; Maroon/gray (3550)

LS: Cream, fine crystalline, foss, granular w/fair to good vug por, sfo, odor (3550/30')

LS: Cream/white, fine crystalline to dense, foss, w/fair moldic por, sfo, odor (3560)

SH; Red, silty (3560)

LS: Cream, dense w/trace foss, tr poor moldic por, ssfo (3570)

SH; Black (3580)  
 SH; Maroon/gray (3590)

LS: White, fine crystalline, ool-granular, w/poor intergran por, ssfo, dark stain on dry (3590)

LS: White, fine crystalline, ool w/poor intergran por, ssfo (3600)  
 SH; Black (3600)

SH; Red/gray, silty (3610)

LS: Gray, fine crystalline, foss, blocky (3620)  
 LS: Cream, fine crystalline, foss (3630)  
 SH; Red/gray, sandy (3630)

SD; Gray, fine grained silty (3640)

LS: Cream, fine crystalline, foss (3640)

SH; Red, silty-sandy (3650)

LS: Cream/white, fine crystalline, sandy-hard + LS; Gray, fine crystalline, dolo (3650)

DST#1  
 3384-3478'  
 30-45-30-60"  
 IF: Blow built to BOB in 29 min.  
 FF: Blow built to 9 3/4"  
 No blowback  
 Recovered:  
 12' SOCCM  
 188' WCM w/tr oil  
 SIP: 1057-1053#  
 FP: 21-70/72-110#