

# KITT NOAH

PETROLEUM GEOLOGIST  
Kansas License #229



## GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

ELEVATION: **KB 1954**  
GL: **1945**  
MEASURED FROM: **KB**

#15-009-26.074

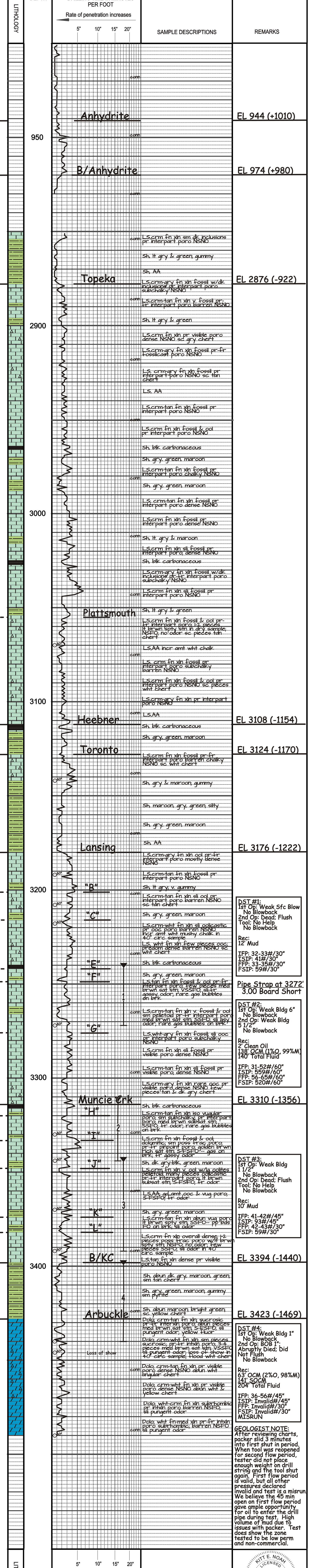
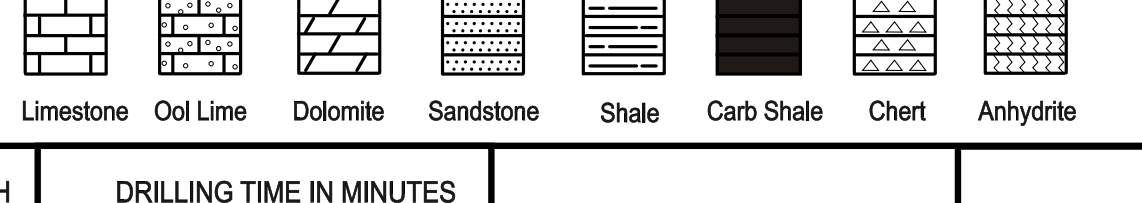
OPERATOR: **Russell Oil, Inc.**  
LEASE: **Charles** WELL NO: **#1-16**  
LOCATION: **330FN & 1100FW**  
SEC: **16** TWP: **16S** RNG: **14W**  
COUNTY: **Barton** STATE: **KANSAS**

CASING RECORD:  
SURFACE: **8 5/8" set at 412 w/200 sk.**  
PRODUCTION: **D&A**  
DV TOOL: \_\_\_\_\_

FORMATION	TOP DATUM
Anhydrite	944 (+1010)
B/Anhydrite	974 (+980)
Lopela	2876 (-922)
Heebner	3108 (-1154)
Toronto	3124 (-1170)
Lansing	3176 (-1222)
Muncie Creek	3310 (-1356)
B/KC	3394 (-1440)
Arbuckle	3423 (-1469)
RTD	3490 (-1536)
LTD	3484 (-1530)

CONTRACTOR: **Southwind Rig #2**  
COMM: **2-11-2014** COMPT: **2-18-2014**  
RTD: **3490** LTD: **3488**  
SAMPLER: **2880 to TD**  
DRILLING TIME SAVED FROM: **2880 to TD**  
SAMPLES EXAMINED FROM: **2880 to TD**  
GEOLOGICAL SUPERVISION FROM: **2960 to TD**  
MUD UP: **2800** MUD TYPE: **chemical**  
MUDCO: **Rick Hughes**  
DRILL STEM TESTS TAKEN: **4**  
Tribofile: **Dustin Ellis**  
SURVEYS: **Pioneer Energy Services**  
Dual Computerized Porosity  
Microlog

### LEGEND



**DST #1:**  
1st Op: Weak Sfc Blow  
No Blowback  
2nd Op: Dead; Flush  
Tool: No Help  
No Blowback  
Rec:  
12' Mud  
IFP: 32-33#/30"  
ISIP: 41#/30"  
FFP: 33-35#/30"  
FSIP: 59#/30"

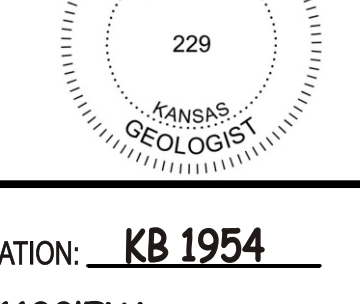
**Pipe Strap at 3272'**  
3.00 Board Short

**DST #2:**  
1st Op: Weak Bldg 6"  
No Blowback  
2nd Op: Weak Bldg 5 1/2"  
No Blowback  
Rec:  
2' Clean Oil  
138' OCM (1%O, 99%M)  
140' Total Fluid  
IFP: 31-52#/60"  
ISIP: 559#/60"  
FFP: 56-65#/60"  
FSIP: 520#/60"

**DST #3:**  
1st Op: Weak Bldg 1 1/2"  
No Blowback  
2nd Op: Dead; Flush  
Tool: No Help  
No Blowback  
Rec:  
10' Mud  
IFP: 41-42#/45"  
ISIP: 93#/45"  
FFP: 42-43#/30"  
FSIP: 59#/30"

**DST #4:**  
1st Op: Weak Bldg 1"  
No Blowback  
2nd Op: BOB 1"; Abruptly Died; Did Not Flush  
No Blowback  
Rec:  
63' OCM (2%O, 98%M)  
141' SOCM  
140' Total Fluid  
IFP: 36-56#/45"  
ISIP: Invalid#/45"  
FFP: Invalid#/30"  
FSIP: Invalid#/30"  
MISRUN

**GEOLOGIST NOTE:**  
After reviewing charts, packer shut 3 minutes into first shut in period, When tool was reopened for second flow period, tester did not place enough weight on drill string and the tool shut again. First flow period is valid, but all other pressures declared invalid and test is a misrun. We believe the 45 min open on first flow period gave ample opportunity for oil to enter the drill pipe during test. High volume of mud due to issues with packer. Test does show the zone tested to be low perm and non-commercial.



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LEASE: **Charles** WELL NO: **#1-16** SEC: **16** TWP: **16S** RNG: **14W**  
API: **15-009-26.074** FIELD: **Deines** COUNTY: **Barton** STATE: **Kansas**