KITT NOAH

PETROLEUM GEOLOGIST
Kansas License #229

RUSSELL OIL INCORPORATED
Operator for Joseph Farms

GEOLOGICAL SURVEY
CIRCULATING NO. 1 SAMPLE REPORT
Wildcat Prospect

Operator: Russell Oil, Inc.
Lease: Joseph
Well No.: #35-1
Location: 1880' FSL & 340' FW
Sec.: 35 Twp.: 12S Rge.: 33W
County: Logan State: Kansas
Elevation: KB 3095
Spud: 8-22-2008 Rig Release: 8-30-2008
Total Depth: 4722' (-1627)
Casing: 8 5/8" @ 224' w/ 150 sks cmt
Status: Plugged & Abandoned
Drilling Contractor: Duke Drilling Co. Rig #9
Mud Type: Chemical
Rotary Time: 3:00 AM 8-23 to 10:00 AM 8-30
Samples: 10' Wet & Dry from 3500' to RTD
Electric Log: Dual Induction, Dual Compensated Porosity, Borehole Compensated Sonic, Microresistivity
Log Depth: Same as Rotary Depth
Drill Stem Tests: None
Formation Tops:
Anhydrite (+516) 2579'
B/Anhydrite (+494) 2601'
Heebner (-913) 4008'
Toronto (-937) 4032'
Lansing (-955) 4050'
"C" 4084'
"D" 4109'
"E" 4145'
"F" 4167'
"G" 4184'
Muncie Crk (-102) 4197'
"H" 4219'
"I" 4248'
"J" 4270'
"K" 4284'
Stark (-189) 4284'
"L" 4304'
B/KC (-1250) 4345'
Marmaton (-1293) 4388'
Alt "A" 4407'
Alt "B" 4429'
Alt "C" 4453'
Pawnee (-1387) 4482'
Fort Scott (-1443) 4538'
Cherokee (-1470) 4565'
Johnson Zn (-1513) 4608'
Morrow Sh (-1547) 4642'
Mississippian (-1583) 4678'
RTD 4722' (-1627)
LTD 4720' (-1625)
Geologist: Kitt Noah
Contractor: Duke Drilling Co. Rig #9
Spud: 8-22-2008 Comp: 8-30-2008
Casing: 8 5/8" @ 224' w/ 150 sks cmt
Status: Plugged & Abandoned
Samples: 10' Wet & Dry from 3500' to RTD
Elevation: KB 3095'
Surface: 1880' FSL & 340' FWL
Sec. 35-T12S-R33W
Logan County, Kansas
API # 15-109-21,324
Operator: Russell Oil, Inc.
Lease: Joseph #35-1
Contractor: Duke Drilling Co. Rig #9
Total Depth: 4722' (-1627)
Log Depth: Same as Rotary Depth
Geologist: Kitt Noah
Kansas License #229
Petroleum Geologist

LEGEND

Limestone, Oolitic Lime, Dolomite, Sandstone, Shale, Carbly Shale, Chert, Anhydrite

DEPTH | DRILLING TIME IN MINUTES PER FOOT (Rate of penetration increases 5' 10' 15' 20') | SAMPLE DESCRIPTIONS | REMARKS

2500
Anhydrite — EL 2579 (+516)
2600
B/Anhydrite — EL 2601 (+494)
3700
3800
3900
4000
Heebner — EL 4008 (-913)
Toronto — EL 4032 (-937)
Lansing — EL 4050 (-955)
4100
4200
Muncie Crk — EL 4197 (-102)
4300
Stark — EL 4284 (-189)
B/KC — EL 4345 (-1250)
4400
Marmaton — EL 4388 (-1293)
Alt "A"
Alt "B"
Alt "C"
4500
Pawnee — EL 4482 (-1387)
Fort Scott — EL 4538 (-1443)
Cherokee — EL 4565 (-1470)
4600
Johnson Zn — EL 4608 (-1513)
Morrow Sh — EL 4642 (-1547)
Mississippian — EL 4678 (-1583)
4700

DST #1
Top: Week Bldg 3/4"
No Blowback
2nd Op: No Blow
No Blowback
Rec:
60' MCW (5%W, 95%M)
30' Total Fluid
IFP: 27-58# /45"
ISIP: 1424# /45"
FFP: 58-93# /90"
FSIP: 1424# /90"
Chlorides: Not Taken

DST #2
1st Op: BOB 9"
No Blowback
2nd Op: BOB 12"
No Blowback
Rec:
248' MCW
(40%W, 60%M)
1000' MCW
(80%W, 20%M)
350' MCW
(90%W, 10%M)
2598' Total Fluid
IFP: 53-310# /30"
ISIP: 1084# /45"
FFP: 314-888# /30"
FSIP: 1084# /45"
Chlorides: 25,000 ppm

DST #3
1st Op: BOB 38"
No Blowback
2nd Op: Week Bldg 8"
No Blowback
Rec:
350' MW w/oil spots
(50%W, 50%M)
1000' MW
(90%W, 10%M)
300' MCW
(40%W, 60%M)
1650' Total Fluid
IFP: 29-201# /45"
ISIP: 1084# /45"
FFP: 230-314# /45"
FSIP: 1084# /45"
Chlorides: 15,000 ppm

DST #4
1st Op: Week Bldg 1 1/2"
No Blowback
2nd Op: Week Bldg 1/2"
No Blowback
Rec:
10' MCW
(50%W, 50%M)
124' MCW
(20%W, 20%M)
124' MCW
(20%W, 20%M)
258' Total Fluid
IFP: 22-73# /60"
ISIP: 996# /45"
FFP: 73-124# /45"
FSIP: 1084# /45"
Chlorides: 11,000 ppm

DST #5
1st Op: BOB 8"
No Blowback
2nd Op: BOB 12"
Weak 1/2" Blowback
Died 15 minutes
Rec:
620' GIP
(5%G, 95%O - Grav 31
(10%G, 90%O
186' Gassy Oil
(10%G, 90%O
186' MCW
(30%W, 50%O, 10%M)
186' MCW
(30%W, 50%O, 10%M)
186' Total Fluid
IFP: 38-148# /30"
ISIP: 1022# /45"
FFP: 148-186# /45"
FSIP: 1022# /90"

DST #6
Top: BOB 38"
No Blowback
2nd Op: BOB 38"
No Blowback
Rec:
20' MW w/oil spots
(50%W, 50%M)
1000' MW
(90%W, 10%M)
300' MCW
(40%W, 60%M)
1620' Total Fluid
IFP: 53-310# /30"
ISIP: 1084# /45"
FFP: 314-888# /30"
FSIP: 1084# /45"
Chlorides: 25,000 ppm

Pipe Strap at 4240'
1.97 Board of Long

DST #7
1st Op: BOB 38"
No Blowback
2nd Op: Week Bldg 8"
No Blowback
Rec:
124' MW w/oil spots
(50%W, 50%M)
1000' MW
(90%W, 10%M)
300' MCW
(40%W, 60%M)
1424' Total Fluid
IFP: 29-201# /45"
ISIP: 1084# /45"
FFP: 230-314# /45"
FSIP: 1084# /45"
Chlorides: 15,000 ppm

DST #8
Top: BOB 38"
No Blowback
2nd Op: BOB 12"
No Blowback
Rec:
124' MCW
(20%W, 20%M)
124' MCW
(20%W, 20%M)
248' Total Fluid
IFP: 38-148# /30"
ISIP: 1022# /45"
FFP: 148-186# /45"
FSIP: 1022# /90"

DRILLING TIME IN MINUTES PER FOOT (Rate of penetration increases 5' 10' 15' 20') | SAMPLE DESCRIPTIONS

ELEVATION: KB 3095

OPERATOR: Russell Oil, Inc. LOCATION: 1880'FS & 340'FW
LEASE: Joseph WELL NO.: #35-1 SEC: 35 TWP: 12S RNG: 33W
API: 15-109-21,324 FIELD: Wildcat COUNTY: Logan STATE: Kansas

KITT E. NOAH
Kansas License
229
PETROLEUM GEOLOGIST