

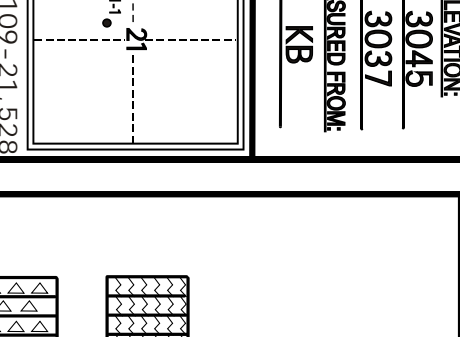
KITT NOAH

PETROLEUM GEOLOGIST
Kansas License #229



GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG



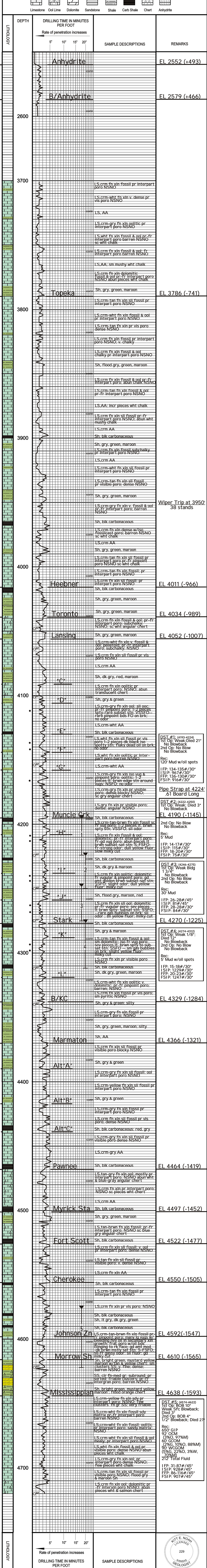
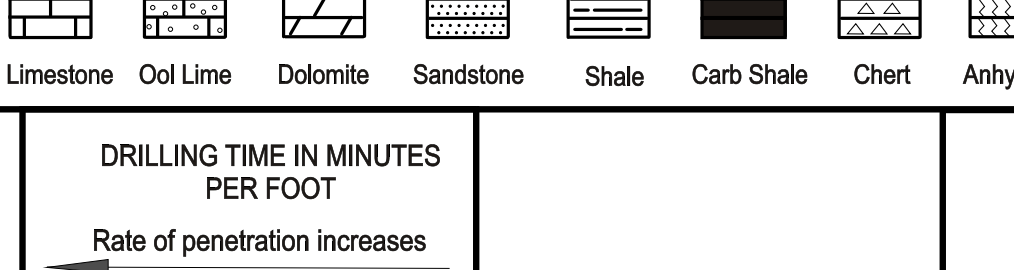
ELEVATION: KB 3045
GL: 3037
MEASURED FROM KB

OPERATOR: Russell Oil, Inc.
LEASE: Dorothy WELL NO: #21-1
LOCATION: 2045 FN & 2310 FW
SEC: 21 TWP: 11S RNG: 32W
COUNTY: Logan STATE: Kansas

CONTRACTOR: WW Drilling Rig #12
COMPL: 10-21-2017
LTD: 4720
SAMPLER: 3700 to ID
DRILLING TIME: 3700 to ID
SAMPLER EXAMINED FROM: 3700 to ID
GEOLOGICAL SUPERVISION FROM: 3820 to ID
MUD UP: 3411 MUD TYPE: CHEMICAL
MUDLOG: REID AKERS
DRILL TESTS TAKEN: 5
SURVEYS: Gemini Wireline, LLC
COMPENSATED DENSITY NEUTRON
DUAL INDUCTION
MICROLOG

FORMATION TOP DATUM
Anhydrite 2562 (-493)
B/Anhydrite 2579 (-466)
Heebner 4011 (-966)
Toronto 4034 (-989)
Lansing 4052 (-1007)
Stark 4270 (-1225)
B/KC 4329 (-1284)
Marmaton 4366 (-1321)
Pawnee 4464 (-1419)
Cherokee 4550 (-1505)
Mississippian 4638 (-1593)
LTD 4720 (-1675)

LEGEND



DST #1: (4193-4224)
1st Op: Weak/Died 21'
No Blowback
2nd Op: No Blow
No Blowback
Rec: 120' Mud w/oil spots
IFP: 134-135#/30"
ISIP: 967#/30"
FFP: 136-130#/30"
FSIP: 916#/30"

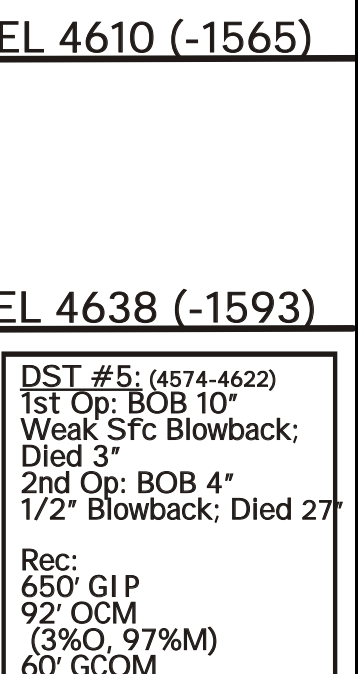
Pipe Strap at 4224'
.61 Board Long

DST #2: (4222-4250)
1st Op: Weak; Died 3'
No Blowback
2nd Op: No Blow
No Blowback
Rec: 5' Mud
IFP: 14-17#/30"
ISIP: 115#/30"
FFP: 18-20#/30"
FSIP: 75#/30"

DST #3: (4246-4275)
1st Op: Weak Bldg 1 3/4"
No Blowback
2nd Op: No Blow
No Blowback
Rec: 30' Mud
IFP: 26-28#/45"
ISIP: 81#/45"
FFP: 28-28#/30"
FSIP: 84#/30"

DST #4: (4274-4312)
1st Op: Weak 1/8"; Died 12"
No Blowback
2nd Op: No Blow
No Blowback
Rec: 5' Mud w/oil spots
IFP: 15-18#/30"
ISIP: 1229#/30"
FFP: 20-23#/30"
FSIP: 1247#/30"

DST #5: (4574-4622)
1st Op: BOB 10'
Weak Sfc Blowback;
Died 3"
2nd Op: BOB 4'
1/2" Blowback; Died 27'
Rec: GIP 650
3% OCM (3%O, 97%M)
60' GCOM (2%G, 10%O, 88%M)
90' WCGOM (5%G, 22%O, 3%W, 70%M)
212' Total Fluid
IFP: 31-87#/45"
ISIP: 928#/45"
FFP: 86-116#/45"
FSIP: 907#/45"



ELEVATION: KB 3045

OPERATOR: Russell Oil, Inc. LOCATION: 2045 FN & 2310 FW
LEASE: Dorothy WELL NO: #21-1 SEC: 21 TWP: 11S RNG: 32W
API: 15-109-21.528 FIELD: Wildcat COUNTY: Logan STATE: Kansas