ROBERT STOWLIE
GEOLOGICAL CONSULTANT
P.O. BOX 1168
GREAT BEND, KANSAS 67530
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Operator: Mark D. Allen & Jno.
Lease: Rick
Well No.: 1
Location: 495' FSL & 2310' FEL
Sec. 15 T 18S R 15W
County: Barton
State: Kansas
Elevation: KB 1838
GL 1833
Contractor: Allen Drilling Co. Rig 1
Spud: 10-31-85
Comp: 11-6-85
T.D. 3320
Rotary
Mud Up: 2700'
Type Mud: Chemical
Samples Saved From: 2700' to T.D.
Drlg. Time Kept From: 2700' to T.D.
Electric Log Tops: Same

Remarks: Structurally comparable to the Allen Drilling Co. Rick #1 NW NW NE 15-18S-15W

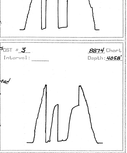
DST # 1 ZONE: Lansing "B" & "D" Zones
INTERVAL: 3016'-3040'

Pressures: Time / Press.
1. Initial Hydrostatic: 20 / 1533
2. Initial Flow: Start: 0 / 91
3. Final Flow: End: 30 / 316
4. Initial Shut-in: End: 60 / 1165
5. Final Flow: Start: 0 / 339
6. Final Flow: End: 30 / 516
7. Final Shut-in: End: 60 / 1165
8. Final Hydrostatic: / 1870

RECOVERY
2 ft. Water cut mud (50% water)
60 ft. Slightly Oil & Gas Cut Mud (5% oil, 10% gas, 85% mud)
240 ft. Water cut mud (70% water)
420 ft. Salt water

Chart: 8373
Depth: 3013'

DST # 1
Interval: 3016'-3040'



DST # 2 ZONE: Lansing "K" & "J" Zones
INTERVAL: 3082'-3104'

Pressures: Time / Press.
1. Initial Hydrostatic: 20 / 1918
2. Initial Flow: Start: 0 / 19
3. Final Flow: End: 30 / 58
4. Initial Shut-in: End: 60 / 1259
5. Final Flow: Start: 0 / 61
6. Final Flow: End: 60 / 109
7. Final Shut-in: End: 90 / 1259
8. Final Hydrostatic: / 1917

RECOVERY
72 ft. Water cut mud (50% water)
240 ft. Water cut mud (80% salt water)
360 ft. Gas in pipe
Blow Data:
1st: Built to 6"
2nd: No blow
3rd: Died in 5 min.
4th: No blow

Chart: 8374
Depth: 3082'

DST # 2
Interval: 3082'-3104'

DST # 3
Interval: _____

Chart: 8374
Depth: 3058'

DST # 3 ZONE: "B" & "C" Zones
INTERVAL: 3057'-3110'

Pressures: Time / Press.
1. Initial Hydrostatic: 20 / 1924
2. Initial Flow: Start: 0 / 21
3. Final Flow: End: 30 / 52
4. Initial Shut-in: End: 60 / 1285
5. Final Flow: Start: 0 / 58
6. Final Flow: End: 60 / 85
7. Final Shut-in: End: 90 / 1264
8. Final Hydrostatic: / 1919

RECOVERY
1 ft. Oil cut mud
60 ft. Oil cut mud (5% oil, 95% mud)
60 ft. Salt water
Blow Data:
1st: Built to 6"
2nd: No blow
3rd: Died in 5 min.
4th: No blow

ABBREVIATIONS LEGEND

ROCK TYPES:
Ls = Limestone
Dol = Dolomite
Sh = Shale
Clst = Claystone
Sltst = Siltstone
Ss = Sandstone
Cht = Chert
Cgl = Conglomerate
Bent = Bentonite
Anhy = Anhydrite
Gyp = Gypsum
Salt = Salt

COLOR:
Wh = White
Gy = Gray
Blk = Black
Brn = Brown
Red = Red
Grn = Green
Tan = Tan
Cream = Cream

HARDNESS:
Frm = Firm
Hd = Hard
Brit = Brittle
Sft = Soft
Mod = Moderate
Slt = Slightly
Vf = Very fine
Fn = Fine
Med = Medium
Crs = Coarse

FOSSILS:
Fos = Fossiliferous
Fos Fr = Fossil fragments
Oolic = Oolitic
Pel = Pelletal
Arg = Argillaceous
Calc = Calcareous
Sdy = Sandy
Glauc = Glauconitic
Pyr = Pyritic
Carb = Carbonaceous
Bit = Bituminous
Lam = Laminated
Mic = Micaceous
Slty = Silty
Cgl = Conglomeratic
Ool = Oolitic
Pel = Pelletal
Arg = Argillaceous
Calc = Calcareous
Sdy = Sandy
Glauc = Glauconitic
Pyr = Pyritic
Carb = Carbonaceous
Bit = Bituminous
Lam = Laminated
Mic = Micaceous
Slty = Silty
Cgl = Conglomeratic

POROSITY:
Vug = Vuggy
Intxln = Intercrystalline
Oomoldic = Oomoldic
Chalky = Chalky
Fract = Fracture
Pinpoint = Pinpoint
Pp = Pinpoint
Intxln = Intercrystalline
Vug = Vuggy
Oomoldic = Oomoldic
Chalky = Chalky
Fract = Fracture

OIL SIGNS:
○ Stn Oil Stain
○ Fluor Oil Show
○ Even Oil Show
○ Spotted Oil Show

ROCK TYPE SYMBOLS

DRILLING TIME
MIN. PER FOOT
5 10 15 20 25 30 35 40 45 50 55 60

SAMPLE DESCRIPTIONS

REMARKS

2600 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

2700 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Stone Corral (-2498)

Base of Heebner (-2815)

2800 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Drilling Time and Sample Description Begins at 2700'

No DST Tests Run Through Zone Due to Poor Hole Conditions

2900 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

3000 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Topeka Fm. (-3020)

3100 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Deer Creek Ls. (-3059)

3200 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Elmdale Shale

DST #1 3016'-3040' (Lansing "B" & "D" Zones) 30-60-60-90 Strong blow

Elmdale Ls. (-3084)

Lansing Group

Kansas City Group

3300 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Kdrby Shale

Stanton Ls. (-3134)

Winterset Shale (-3155)

DST #2 3082'-3104' (Lansing "K" & "J" Zones) 30-60-60-90 Blow Died in 5 min.

3400 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Weathered Shale

Drum Ls. (-3200)

Weathered Shale

Farlington Ls. (-3220)

Fair-Weather Shale

Plattsburg Ls. (-3240)

Plattsburg Shale

Weathered Shale

DST #3 3057'-3110' (Lansing "B" & "C" Zones) 30-60-60-90 Blow Died in 5 min.

3500 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Vera Shale

Vera Ls. (-3304)

Excello Shale (-3324)

Merriam Ls. (-3337)

Base of Kansas City Group (-3358)

Marmaton Group

Pawnee Ls. (-3382)

Fort Scott Ls. (-3404)

Cherokee Sh. (-3443)

3600 Ls, Wh, Cream, Tan, Fn-Med Xln, Chalky, Fract, Pinpoint Por, Slt Stn Oil, Fluor Oil Show

Mississippian (-3515)

T.D. 3560'
L.T.D. 3558'

Allen Drilling Co. Rig 1

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