# KITT NOAH

PETROLEUM GEOLOGIST
Kansas License #229

RUSSELL DRILLING CO.
Rotary Drilling Contractors
Diamond Drilling
Exploration & Production
Russell, Kansas

GEOLOGIST'S REPORT
Edwards Trust "A" #1-32
Wildcat
Section 32 - T18S - R34W
Scott County, Kansas

Elevation: KB 3047
Spud: 10-21-08
Completed: 10-31-08
Total Depth: 4617'
Log Depth: 4616'
Casing: 8 5/8" @ 224'
Production Casing: None
Status: D&A
Contractor: Russell Drilling Co. Rig #1
Mud Type: Chemical
Mud Engineer: Kitt Noah
Logging Engineer: Kitt Noah
Logging Type: Mud Log
Samples Saved: Yes
Drilling Time: Yes
Samples Washed: Yes
Samples Examined: Yes
Samples Sacked: Yes
Samples Shipped: Yes
Samples Stored: Yes
Drilling Time Recorded: Yes
Electric Log Run: Yes
Electric Log Company: Pioneer
Electric Log Type: Dual Induction, Density/Neutron, Micro
Electric Log Recorded: Yes
Drill Stem Tests Run: 1
Drill Stem Tests Recorded: Yes
Drill Stem Tests Analyzed: Yes
Drilling Time Analyzed: Yes
Samples Analyzed: Yes
Electric Log Analyzed: Yes
Geologist: Kitt Noah
Geologist Phone: 620-793-8183
Geologist Address: 229 Arnold Ave. Great Bend, Ks. 67530

LEGEND

Limestone | Dol Lime | Dolomite | Sandstone | Shale | Carb Shale | Chert | Anhydrite

| DEPTH | DRILLING TIME IN MINUTES PER FOOT (Rate of penetration increases 0' 10' 10' 20') | SAMPLE DESCRIPTIONS | REMARKS |
|---|---|---|---|
| | Anhydrite | | EL 2380 (+667) |
| 2400 | B/Anhydrite | | EL 2397 (+650) |
| 3600 | Topeka | Sh, dk gry & red<br>Ls,cr-xln,fn,sbchty,pr intergran,pr porosity,brn stain | EL 3636 (-589) |
| 3700 | Lecompton | Sh, gry, green, maroon<br>Ls,fn to vfn,sdy,p intergran,pr porosity,brn stain<br>Ls,cr-xln,fn,sbchty,pr intergran,pr porosity,brn stain<br>Sh, dk gry & green<br>Ls,fn to vfn,sd f vuggy,p intergran,pr porosity,brn stain<br>Ls,cr-xln,fn,sbchty,pr intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Sh, dk gry, green, maroon | |
| 3800 | Oread | Sh, blk carbonaceous<br>Ls,cr-xln,fn,sh,sdy,p,cr intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, dk gry & maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous | |
| 3900 | Toronto | Sh, gry,green & maroon<br>Lsdy,fn to vfn,f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous | EL 3872 (-825)<br>EL 3892 (-845) |
| 4000 | Lansing<br>"A"<br>"B"<br>"C"<br>"D"<br>"E"<br>"F"<br>"G" | Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>LSAA<br>Sh, dk gry & green<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, dk gry, green<br>Lsdy,fn to vfn,f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous | EL 3920 (-873)<br>DST #1<br>21-45 Min 30# 2" 2nd Op 60# 5 Min 2nd Op 60# 5 Min No Blowback<br>Rec: 10' Mud<br>IFP: 36CM -16PSIG(50M) FFP: 36CM -16PSIG(50M) ISIP: 1000 PSIG FSIP: 1000 PSIG Chlor: 37,000 ppm<br>Pipe Strap at 4044' 2.93 Board Short |
| 4100 | Muncie Crk<br>"H" | Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, dk gry, green, maroon | EL 4098 (-1051) |
| 4200 | Stark<br>"K" | Sh, blk carbonaceous<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>LSAA<br>Sh, blk carbonaceous | EL 4190 (-1143)<br>EL 4272 (-1225) |
| 4300 | B/Kc<br>Pleasanton | Sh, gry & green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry & green, sdy<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry & green, sdy<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon | DST #2<br>Tool Set not remove Float; ran tap with 1000# on bottom to float and try to recover pressures recorded<br>MFSR/UN |
| 4400 | Marmaton<br>Alt"A"<br>Alt"B"<br>Alt"C"<br>Pawnee | Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry & maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, blk carbonaceous<br>Lsdy,fn to vfn,sd f vugs,p intergran,pr porosity,brn stain<br>Sh, gry, green, maroon