

Colt Energy, Inc.
Geological Report

Well: **Schafer #CS-7**

Draft: 6/25/2015

2475 FNL, 539 FEL

Section 22-T26S-R14E

Woodson Co., KS

API #: 15-207-29244

Elevation: 939 GL (est. from the surveyed location of Pendley #14)

Drilling Contractor: Andrew King (Op. Lic. #34953), dba BAR Drilling, LLC

Spud: 6/18/2015

Surface Casing: 11.75" bore hole, 8 5/8" set at 40.5', cmtd w/ 14 sx of Portland

Under Surface: 6/19/15

Drilling fluid: water "native mud" and a little polymer

Production bore hole: 6.75"

Rotary Total Depth (RTD): 1398' (6/23/15)

Geophysical E-Log(s): CDL and IES by Osage Wireline (6/23/15)

Production Casing: 1385.50' of 4 1/2", 10.5#/ft., includes 4' cmt pup jt., cmtd w/ 135 sx, (6/24/15)

Production Casing: Ran in hole by: BAR Drilling, LLC (6/24/15)

Formation/Member	DL/Spl Tops	Log Tops (Rdd off)	Datum (939)
Lansing Ls	219 (DL)	219	720
Base Lansing	483	478	461
Kansas City Ls	558	558	381
Stark Sh	----	649	290
Hushpuckney Sh	----	688	251
Base Ks City	----	719	220
"Old Drillers Log" B. KC	738	733	206
South Mound Sh	----	827	112
"Weiser" Ss	----	933	6
Mulberry Coal	----	969	-30
Myrick Station Ls	----	992	-53
Anna (Lexington Coal Zone) Sh	----	997	-58
Ft. Scott ("Oswego") Ls	1022 (spl)	1021	-82
Little Osage (Summit Coal Zone) Sh	1041	1041	-102
Excello Sh	1055	1055	-116
Mulky Coal	1058	1058	-119
Squirrel Sand	1066	1065	-126
Bevier Coal	1120	1120	-181
Verdigris (Ardmore) Ls	1132	1133	-194
"V" (Croweburg) Sh	1134	1135	-196
Croweburg Coal	----	1136	-197
Fleming Coal	1173	1175	-236
Mineral Coal	1189	1191	-252
Scammon Coal	1207	1210	-271
"Lower" Cattleman Ss	1210	1212	-273

Formation/Member	Spl Tops	Log Tops (Rdd off)	Datum (939)
Un-named Carb. Zone	1239	1240	-301
Un-Named Coal (Tebo?)	1249	1250	-311
Bartlesville Ss Zone	1289	1289	-350
“Clean” Bartlesville Ss	1291	1291	-352
Un-Named Coal	1348	1349	-410
Riverton Coal	1358	1359	-420
Mississippian	*1396	---- (not log'd)	*-457
Rotary Total Depth	1398	----	-459
E-log TD	----	1397	-458

The following report is based on microscopic examination of rotary drill cuttings collected on location while drilling, two cores taken from the Bartlesville Sand Zone, and a series of open hole logs; depths have been corrected back to the open hole log measurements unless noted.

Note: drill cuttings were collected, “bagged”, and microscopically examined from 1050 to 1110, 1160 to 1180, and 1200 to 1398' (RTD).

Major Zones of Interest:

“Weiser” Sandstone. The open hole logs – “log” shows the “cleaner” part of the sand with the better porosity from 940 to 968, there is a “cross-over” effect, which indicates the presence of hydrocarbons from 964-966, but all this sand is “watery” and does not merit further testing, there is enough for the possibility of a water source for water injection purposes

Mulberry Coal, 969 -970. The log indicates a foot of coal with a bulk density of 1.93.

Anna Shale (Lexington Coal Zone), 997-999. No coal present.

Little Osage Shale (Summit Coal Zone), 1041-1043. Shale, black, mostly angular cuttings, trace pyritic, no coal, or visible shows of gas.

Excello Shale, 1055-1058. Shale, black, mix of angular, platy, and blocky cuttings, pyritic in part, no shows of gas.

Mulky Coal, 1058.5+/- -1260. Coal, few “floaters”, no apparent shows of gas, log shows around 1.5 feet of coal with a bulk density of 1.75.

Squirrel Sand, 1065-1069. Silt/sandstone, light browns, silt size to very fine with trace fine grain, angular to very angular, poor to very poorly sorted, poor to moderately consolidated, very friable clusters to loose grains, poor to very poor porosity, fair amount of micro shale platelets, no fluorescence, no petroliferous odor, no show of free oil or gas, weak show of hydrocarbon residue – “dead oil”.

Schafer #CS-7

Squirrel Sand Zone continued:

1073-1081. Silt/sandstone, various shades of gray (due to hydrocarbon residue), silt size to fine grain, mostly very fine grain, angular to very angular, poor to very poorly sorted, very poor to moderately consolidated, very friable to friable clusters, abundant loose grains, fair to good porosity, samples indicate fair amount of micro lamina, but log shows sand to be fairly “clean”, no fluorescence, very weak to questionable oily odor, no visible shows of free oil or gas, fair to trace good shows of hydrocarbon residue – “dead oil”, based on the drill cutting examined, the Squirrel Sand does not merit further testing.

Bevier Coal, 1120-1121. Log shows about 10+/- inches of coal with a bulk density of 2.09

Croweburg Coal, 1136+ -1137. Only a trace of coal in sample, very few “floaters”, and log reveals around a foot of coal with a bulk density of 1.94.

“Upper” Cattleman Sand Zone, 1143-1148. Silt/sandstone, very light-pale green, silt size to very fine grain, trace fine grain, sub-angular to angular, poor to moderately well sorted, moderately well consolidated, poor to very poor porosity, abundant pale green micro shale platelets in all the clusters, no shows, sand is “watery”. Noted this sand for the record only, but when drilling may elect to “keep an eye” on this zone, may develop and contain hydrocarbons.

Fleming Coal, 1175-1176+. Coal, few “floaters”, no shows of gas, log shows over 1.5 feet of coal with a bulk density of 1.64.

Mineral Coal, 1191-1192. Coal, less than 5% were “floaters”, trace “coaly-shale”, gritty textured, pyritic in part, no apparent shows of gas, log indicates a little over a foot of coal and has a bulk density of 1.91.

Scammon Coal, 1210-1211+. Coal, less than 5% were “floaters”, no show of gas, has a bulk density of 1.73.

“Lower” Cattleman Sand Zone, 1212-1216+/-. Silt/sandstone, grays (due to hydrocarbon residue), silt size to very fine with trace fine grain, mostly very angular, poor to very poorly sorted, poor to moderately well consolidated, friable clusters, few loose grains, very poor to poor porosity, appeared micro laminated, micaceous, shaley, no to very-very weak questionable oily odor, no fluorescence, no shows of free oil or gas, very weak show of hydrocarbon residue.

Un-named Carbonaceous Zone (Tebo?), 1240-1244+. Shale, black, pyritic, few scattered micro carbonaceous fragments, no shows.

Tebo Coal, 1250-1252+. Coal, 40%+ were “floaters”; log shows over 1.5 feet of coal with a bulk density of 1.66.

Schafer #CS-7

Major Zones of Interest continued:

Bartlesville Sand Zone:

1289-1293. Sandstone, various shades of browns (due to oil content), silt size to medium grain, angular to very angular, poorly sorted, very poor to well consolidated, friable to semi-friable clusters, fair amount of loose grains in samples, fair to very good inter-granular porosity, top 2+/- feet had micro lamina of medium gray silty shale, trace carbonaceous fragments, sand became “cleaner” with depth, fair fluorescence (for the area), very good to strong oily odor, good to very good shows of very dark brown free oil, few gas bubbles, while circulating at 1293, circulated a very good show of free oil to drilling pits.

Note: cored the Bartlesville Sand Zone from 1293 to 1320.6+/- and again from 1321+/- to 1343 (Driller’s depths which are the same (+/-1 foot) with the log measurements, please see the Core Report for more details.

Un-named Coal (possibly one of the Neutrals / “AW” or “BW”), 1349-1351. Coal, 40%+ were floaters, few scattered gas bubbles, log shows 2+/- feet of coal with a bulk density of 1.51.

Riverton Coal, 1359-1360+. Coal as above, same percentage (possibly a little more) of “floaters”, trace secondary fracturing with pyrite and gypsum along fracture planes, log indicates a little of 2 feet of coal with a bulk density of 1.60.

Mississippi, 1296-1298 (spl footage, not logged): Limestone (only a half dozen or so pieces in samples), light tans, off white, cream, fine to very coarse crystalline with fossil fragments in a micro crystalline matrix – looked “re-worked”, no chert or dolomitic material in samples, fair amount of light to medium beige clay/shale cuttings, no show.

Summary:

Due to the shows of oil found in the Bartlesville Sand, the decision was made to run production casing for further testing of this sand for commercial production, in the event that it is “non-commercial”, the subject well should be converted into a water injection well.

End Report

Rex R. Ashlock
For: Colt Energy, Inc.