

Colt Energy, Inc.
Geological Report

Well: **Allen #10-i**

Draft: 6/08/2015

40' FSL, 2090' FEL

Section 14-T26S-R14E

Woodson Co., KS

API #: 15-207-29222

Elevation: 909 GL (est. from the surveyed location of Lauber #33)

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

Spud: 6/03/2015

Surface Casing: 11.75" bore hole, 8 5/8" set at 40.10', cmtd w/ 14 sx of Portland

Under Surface: 6/04/15

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

Production bore hole: 6 3/4"

Rotary Total Depth (RTD): 1375' (6/04/15)

Geophysical E-Log(s): CDL and IES by Osage Wireline (6/05/15)

Production Casing: 1336.20' of 4 1/2", 10.5#/ft., includes 4' cmt pup jt., cmtd w/ 135 sx, (6/05/15)

Production Casing: Ran in hole by: BAR Drilling, LLC (6/05/15)

Formation/Member	DL/Spl Tops	Log Tops (Rdd off)	Datum (919)
Lansing Ls	----	180	739
Base Lansing	----	444	475
Kansas City Ls	----	519	400
Stark Sh	----	610	309
Hushpuckney Sh	----	647	272
Base Ks City	----	675	244
"Old Drillers Log" B. KC	----	691	228
South Mound Sh	----	795	124
"Weiser" Ss	----	887	32
Mulberry Coal	----	936	-17
Myrick Station Ls	----	962	-43
Anna (Lexington Coal Zone) Sh	----	967	-49
Ft. Scott ("Oswego") Ls	992 (drlg time)	991	-72
Little Osage (Summit Coal Zone) Sh	1011	1010	-91
Excello Sh	1024 (spl)	1025	-106
Mulky Coal	1027	1028	-109
Squirrel Sand	1036	1036	-117
Bevier Coal	1091(drlg time)	1091	-172
Verdigris (Ardmore) Ls	1104	1104	-185
"V" (Croweburg) Sh	1106	1106	-187
Croweburg Coal	----	1108	-189
Fleming Coal	1143	1145	-226
Mineral Coal	1157	1162	-243
Scammon Coal	1175	1177	-258
"Lower" Cattleman Ss Zone	1177	1180	-261

Formation/Member	DL / Spl Tops	Log Tops (Rdd off)	Datum (919)
Un-named Carb. Zone	1208 (drlg time)	1212	-293
Un-Named Coal (Tebo?)	----	----	----
Bartlesville Ss	1244 (spl)	1248	-329
“Clean” Bartlesville Ss	1251	1255	-336
Un-Named Coal	1322	1324	-405
Riverton Coal	1339	1342	-423
Mississippi	*1372	----	*-453
Rotary Total Depth	1375	----	-456
E-log TD	----	1378	-459

The following report is based on microscopic examination of rotary drill cuttings collected on location while drilling 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 1040 to 1100 and 1220 to 1375 (RTD).

Major Zones of Interest:

“Weiser” Sandstone. The open hole logs (“log”), shows fairly clean sand with a few shale breaks from 887 to 936. The log indicates this sand to be water saturated, so could make a good source for water supply if needed.

Mulberry Coal, 936-938. Log shows a little over a foot of coal with a bulk density of 1.45.

Anna Shale (Lexington Coal Zone), 967-969. No indications to the presence of coal, only black shale.

Little Osage Shale (Summit Coal Zone), 1010+ - 1013. No coal present, only black shale,

Mulky Coal, 1028-1029+. Log illustrates a coal that is about 1.5’ thick with a bulk density of 1.51.

Squirrel Sand, 1036-1039+/-. Silt/sandstone, grays, silty to shaley, poor to very poor porosity, few scattered specks of hydrocarbon residue – “dead oil”.

1039-1045. Sandstone, light grays, light gray-tan, light tan, clear, frosted, opaque silt size to fine grains, poor to very poorly sorted, moderately well consolidated, friable clusters, fair to good porosity, fair amount of micro shale platelets in most clusters, trace micaceous, dull fluorescence, weak oily odor, weak to fair show of “dead oil”, very weak, speckled to spotty shows of very dark brown to black oil, no shows of gas.

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Squirrel Sand Zone continued:

1049-1055. Silt and Sandstone, light gray-tans, light tans, silt size to fine grain, fairly shaley, poor porosity, scattered shows of “dead oil”.

Note: Due to lack of commercial oil shows and the high calculated water saturations, the Squirrel sand does not need further testing.

Bevier Coal, 1091-1091. Log shows a little less than a foot of coal with a bulk density of 1.77.

Croweburg Coal, 1108-1100. Log exhibits little over 1.5 feet of coal with a bulk density of 1.42.

Fleming Coal, 1145-1146+. Log shows a little over a foot of coal, bulk density is 1.63.

Mineral Coal, 1162-1164. Log indicates a little under 2 feet of coal and a bulk density of 1.27.

Scammon Coal, 1177-1179. Log shows just over 2 feet of coal and a bulk density of 1.42.

“Lower” Cattleman Sand, 1180-1185+/-. Sand zone calculates to be “watery” and does not merit further testing.

Bartlesville Sand Zone:

1246 -1254. Shale, silty to sandy with scattered, light grays to light tan lamina and thin lenses of siltstone and sandstone, silt size to fine grain, poorly sorted, poor to very well consolidated, friable to semi-firm clusters, poor to very poor porosity, very weak odor, no to very-very dull fluorescence, scattered speckled to spotty shows of free oil, no shows of gas.

1254-1261+/-. Sandstone, medium tans to medium browns (color varied to oil content), silt size to medium grain, mostly fine grain, sub-angular to angular, poorly sorted, p to moderately well consolidated, loose grains to friable clusters, very good to excellent inter-granular porosity, scattered micro shale platelets in most clusters, trace gray-green and clay/mudstone fragments – possibly from small “partings” within the sand, fair fluorescence – for the area, very good to strong oil odor, very good to excellent shows of dark to very dark brown free oil, no visible shows of gas.

1271-1273. Shale, gray-greens, green-grays, gray, silty to very slightly sandy in part.

1273-1277. Sandstone, various shades of gray, clear, frosted, opaque – silt size to fine grains, very poorly sorted, poorly consolidated, mostly loose grains and very fine size clusters, mostly good porosity, no fluorescence, weak pungent petroliferous odor, weak to fair show “dead oil”, no shows of free oil or gas.

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Bartlesville Sand Zone continued:

1318-1324+/-. Silt/sandstone; off white, tans, browns, and black clusters (color varied due to oil content), silt size to coarse grains, very poorly sorted, well consolidated, friable to firm clusters, mostly poor porosity, very silty to shaley – looked a little conglomeritic, no odor, no fluorescence, no show of free oil or gas, weak show of hydrocarbon residue – “dead oil”, log shows only a silty shale.

Note: Having cored the Bartlesville in the offset wells (Allen #5, Allen #6, Lauber #32 and Lauber #33), the decision was made not to core the Bartlesville in the subject well.

Un-named Coal (one of the Neutrals / “AW” or “BW”), 1324-1326+. Not much coal in sample, of which only around 1% were “floaters”, pyritic, log shows over 4 feet of coal with a bulk density of 1.14, would of thought there would have been more coal in the drill cuttings examined with this much “indicated” coal.

Riverton Coal, 1342-1345. Coal, 20+% were “floaters” pyritic in part, no visible shows of gas, log has about 2.5+/- feet of coal with a bulk density of 1.04.

Mississippi(an), 1378-1382 (not logged, sample footages). Dolomite, off white, “dirty” off white, very-very light grays, trace light tan, micro to coarse crystalline, trace glauconitic, trace off white and very-very light tan limestone fragments, and a few tripolitic chert fragments, no shows.

Summary:

The subject well was drilled for the purpose of injecting water into the Bartlesville Sand, after finding the sand was well developed and contained good shows of oil in same, the decision was made to run 4 ½” casing to complete the well as an “injector”.

End Report

Rex R. Ashlock
For: Colt Energy, Inc.