

Colt Energy, Inc.
Geological Report

Well: **Allen #12-i**

Draft: 6/12/2015

360 FSL, 1800 FEL

Section 14-T26S-R14E

Woodson Co., KS

API #: 15-207-29224

Elevation: 917 GL (est. from the surveyed location of the Allen #8)

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

Spud: 6/08/2015

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

Under Surface: 6/09/15

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

Production bore hole: 6.75"

Rotary Total Depth (RTD): 1375' (6/10/15)

Geophysical E-Log(s): CDL and IES by Osage Wireline (6/10/15)

Production Casing: 1360.21' of 4 1/2", 10.5#/ft., includes 4' cmt pup jt., cmtd w/ 135 sx, (6/11/15)

Production Casing: Ran in hole by: BAR Drilling, LLC (6/11/15)

Formation/Member	DL/Spl Tops	Log Tops (Rdd off)	Datum (917)
Lansing Ls	174 (DL)	167	750
Base Lansing	439	434	483
Kansas City Ls	516	508	409
Stark Sh	----	600	317
Hushpuckney Sh	----	637	280
Base Ks City	----	664	253
"Old Drillers Log" B. KC	690	681	236
South Mound Sh	----	786	131
"Weiser" Ss	884	882	35
Mulberry Coal	----	927	-10
Myrick Station Ls	----	952	-35
Anna (Lexington Coal Zone) Sh	----	957	-40
Ft. Scott ("Oswego") Ls	990 (drlg time)	982	-65
Little Osage (Summit Coal Zone) Sh	1009	1002	-85
Excello Sh	1022 (spl)	1016	-99
Mulky Coal	1025	1020	-103
Squirrel Sand	1034	1028	-111
Bevier Coal	1091 (drlg time)	1085	-168
Verdigris (Ardmore) Ls	1104	1098	-181
"V" (Croweburg) Sh	1106	1101	-184
Croweburg Coal	----	1103	-186
Fleming Coal	1148	1142	-225
Mineral Coal	1165	1160	-243
Scammon Coal	1180	1176	-259
"Lower" Cattleman Ss	1182	1178	-261

Formation/Member	Spl Tops	Log Tops (Rdd off)	Datum (917)
Un-named Carb. Zone	1219	1215	-298
Un-Named Coal (Tebo?)	----	----	----
Bartlesville Ss Zone	1246	1244	-327
“Clean” Bartlesville Ss	1154	1251	-334
Un-Named Coal	1305	1304	-387
Un-Named Coal	1335	1335	-418
Riverton Coal	1341	1341	-424
Mississippian	*1374	----	*-457
Rotary Total Depth	1375.5	----	-458
E-log TD	----	1376	-459

Note: The drilling depths are 6-8 feet off up the hole, had depth corrections at 1171, 1233, and at 1286.

The following report is based on microscopic examination of rotary drill cuttings collected on location while drilling, a core 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 1040 to 1090 and 1200 to 1375 (RTD).

Major Zones of Interest:

“Weiser” Sandstone. The open hole log(s) or “log”, shows sand from 882 to 907 with a minor shale break from 899 to 904, this sand is “watery” and could make a good water source for a water supply well if needed.

Mulberry Coal, 927-929. Log shows a little over a foot of coal with a bulk density of 1.56.

Anna Shale (Lexington Coal Zone), 957-959. The log indicates black shale and no coal present.

Little Osage Shale (Summit Coal Zone), 1002-1004. Log shows a little over 2 feet of black shale and about 4 feet of shale below that, no coal present.

Excello Shale, 1016-1020. Shale, black, mostly angular cuttings, pyritic, trace gritty textured in part, no visible shows of gas.

Mulky Coal, 1020-1022+. Log shows about 2 feet of coal, there was only a small amount in the drill cuttings examined and just a few were “floaters”, no apparent shows of gas, this coal has a bulk density of 1.16. There is a small washout below the coal, but do not believe it has affected the bulk density reading.

Allen #12-i

Major Zones of Interest continued:

Squirrel Sand, 1028-1035. Silt/sandstone, grays with tan tint in part, silt size to fine grain, angular, to very angular, poor to very poorly sorted, moderately consolidated, loose grains to friable clusters, poor to fair porosity, fairly shaley, very weak odor, no fluorescence, very weak spotty shows of very dark brown to black free oil, weak show of hydrocarbon residue – “dead oil”, no shows of gas.

1041-1052. Sandstone, clear, frosted, opaque, semi-translucent, grains, that have a light gray tint when clustered, silt size to fine grain, poor to moderately sorted, abundant loose grains, very friable clusters, mostly good porosity (log indicates very good porosity), carbonaceous and micaceous in part, no to very-very dull fluorescence, weak to fair oily odor, weak trace fair show of “black” free oil, fair show of hydrocarbon residue, no shows of gas.

Note: Do not believe the Squirrel Sand merits further testing as of report date.

Bevier Coal, 1085-1087. The log shows 2+/- feet of coal with a bulk density of 1.43.

Croweburg Coal, 1103-1104. Log indicates around a foot of coal with a bulk density of 1.55.

Fleming Coal, 1142-1144+. The log specifies just shy of 2 feet of coal, bulk density is 1.21.

Mineral Coal, 1160-1162. Coal, pyritic, few “floaters”, no shows of gas, log points out a little over a foot of coal with a bulk density of 1.52.

Scammon Coal, 1175+ - 1177. Coal, fairly pyritic, 5% were “floaters” no visible shows of gas, has a bulk density of 1.37.

“Lower” Cattleman Sand, 1178-1184+/-. Silt/sandstone, medium to dark gray, black (color varies due to hydrocarbon residue), silt size to fine grain, angular to very angular, poor to very poorly sorted, well consolidated, friable to semi-friable clusters, poor to somewhat fair porosity in part, scattered shale platelets and micaceous fragment in part, very weak pungent petroliferous odor, fair to good show of hydrocarbon residue – “dead oil”, no shows of free oil or gas, this sand does not merit further testing, but should be examined in future well tests.

Un-named Carbonaceous Zone, 1215+ - - 1220. Shale, black, mix of angular, blocky, and platy cuttings, pyritic, trace carbonaceous, no shows of coal or gas and the log indicates no coal present.

Allen #12-i

Major Zones of Interest continued:

Bartlesville Sand Zone:

1244-1251. Sort of a mix or conglomerate of; tan clay/mudstone with light gray silt and sand grains to clusters attached to some fragments, gray-green shale with micro laminations of silt and very fine grain sandstone, that is carbonaceous in part, trace brown silt/sandstone – also carbonaceous in part, trace loose, sub-rounded, coarse grains of sand, trace clayish clusters of sand that is/was fairly micaceous, sample had fair to good oil odor, dull fluorescence, very weak scattered shows of “tarry” to “tacky” hydrocarbon residue, no shows of free oil or gas.

1251 to 1255+/-. Sandstone, browns (color varied with oil content of the sand clusters), very fine to medium grain, sub-angular to angular with a few sub-rounded to very angular grains, poor to moderately sorted, poor to very well consolidated, loose grains to friable clusters, good to very good inter-granular porosity (log shows very good to excellent porosity), scattered micro shale platelets and micaceous fragment in part, poor to dull fluorescence, very good to strong odor, good to very good with some clusters exhibiting excellent shows of very dark brown free oil, no apparent shows of free gas, circulated a good show of free oil to the drilling pits when this footage was drilled.

Note: Cored the Bartlesville Sand from 1258 to 1286.4+/- (Driller’s depths or about 1255.5+/- to 1283.9+/-), please see the Core Report.

Bartlesville Drill Cuttings continued:

1291-1297. Sandstone, medium grays, silt size to fine with trace medium grained, sub-angular to very angular, poor to very poorly sorted, poorly consolidated, abundant loose grains and very fine friable clusters, poor trace fair porosity, very-very weak to fair pungent petroliferous odor, no fluorescence, weak to fair show of “dead oil” (dead oil show seemed to slightly increase with depth), no shows of free oil or gas.

1297-1300+/-. Shale, medium gray with lamina and thin lenses of off white and light gray siltstone and very fine grain sandstone, trace clay/mudstone, very weak scattered shows of “dead oil”, not shows of free oil or gas.

Un-named Coal (possibly one of the Neutrals; “AW” or “BW” or the Rowe), 1304-1306.

Coal, 30%+ were floaters, pyritic in part, few fragments exhibited secondary fracturing with gypsum along fracture planes, no visible shows of gas, log shows a good 2 feet of coal and has a bulk density of 1.12

Un-named Coal, 1335+ - 1236+. Coal, no much in sample and only a few floaters, log indicates less than 6 inches thick with a bulk density of 1.94.

Allen #12-i

Major Zones of Interest continued:

Riverton Coal. There are two coals separated by about a 1.5 feet shale, the top coal is about 2.4 feet thick with a bulk density of less than 1 (about .97+/-) and the bottom is right at 2 feet with a bulk density of 1.03. The drill cuttings collected and examined contained only small amount of coal, of which most were “floaters”, but with this much coal one would of thought that the sample bag should of contained about 80 or 90% coal, the drilling fluid turned the pit black, so maybe the “drag” bit just pulverized the coal, also seen not visible shows of gas.

Mississippi (an), 1374-1375.5+/- (sample footage, not logged). Conglomerate; weathered chert fragments, tripolitic in part, few loose, sub-rounded, coarse sand grains, couple of tan dolomite fragments and various shades of gray shale. There was/is a 4 feet beige to light gray, clayish to dense, very poorly sorted, poor to very well consolidated, carbonaceous silt/sandstone laying on top of this conglomerate material, maybe part of the overall conglomerate, 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.