

Hornbaker #1-11
 Daily Drilling Report
 Page Two

7/23/14 Depth 3622'. Cut 242'. DT: None. CT: 15hrs. Dev.: None. **DST #2 3394 - 3504 (LKC H-K):** 30-60-60-90. IF: strong blw BOB in 3½ mins. FF: strong blw BOB in 1 min, GTS in 22mins. FSI: wk blw 1-4". Rec.: 250'MW (32%M, 68%W /Rw .06 @ 96°), 105'Drlg M. HP: 1717-1680. FP: 29/104, 66/169. SIP: 1270-1269. BHT: 111°. **Viola:** Chert: wh, tan, lt grey, fresh, op/semi-trans, spotty fluor & st on faces & edges, some weathered, scat tripolitic, pr - fr ppt vuggy por, pr - fr fluor & cut, spotty to full st & sat, SS ppts FO on break, w/ S-Exc show gas bubbles, ft odor. **DST #3 3596-3657 (Viola):**

7/24/14 Depth 3726'. Cut 104'. DT: None. CT: 19 ¼ hrs. Dev.: None. **DST #3 3596-3657 (Viola):** 30-60-30-60, IFP: surf blow bldg to 3/4" then dec to surf blow, FFP: no blow, REC: 20' Mud, HSP: 1811-1768, FP: 20-25/27-45, SIP: 115-95, BHT: 111°. **Simpson (upper)** was a wh, vfnxtln, sandy (vfngrnd), dense dolomite - drld 3-4.5"/ft. Lower in the zone there was some ss: grey, clear, vfn - fngrained, most w/ calc/dolo cement & no vis por, 2-3 clusters/tray w/ tr vry pr intergrained por, pr spotty fluor, vry wk slow cut, tr pr st, few ppts FO & few gas bubbles on break, no odor. **Arb** 3' cut. Dolo: off wh, lt grey, some tan, vfn - fnxtln, scat pr interxtln por, most barren, few pcs w/ ppts bright fluor, ft cut, SSFO, pr st, no odor. **DST #4 3636-3726' (Simp-Arb):** 30-60-60-90, IFP: BOB in 3", ISIP: no blow, FFP: BOB in 4", FSIP: no blow, REC: 280' MW (19%M, 81%W), 2000' W (Chl: 39000 ppm, Sys: 9700 ppm), HSP: 1849-1823, FP: 67/541, 519/1027, SIP: 1299-1299, BHT: 114°.

7/25/14 RTD: 3825'. Cut 99'. DT: None. CT: 21 ¼ hrs. Dev.: 1° @ 3825'. HC @ 4:15PM 7/24. Pioneer logged 7:45PM-11:45PM 7/24. LTD: 3817'.

7/26/14 RTD: 3825'. CT: 3 ¾ hrs. B E plugged hole, 3:30AM-6:45AM 6/25, as follows using 60/40Poz, 4%Gel, ¼#Flo seal, 50sxs @ 3712', 50sxs @ 630', 75sxs @ 300', 20sxs @ 60', 30sxs RH, 20sxs MH. Orders Nathan Willis KCC. RR @ 10:45AM 7/25. FINAL REPORT

MDCI Hornbaker #1-11 2310' FSL 2310' FWL Sec. 11-23S-11W 1804' KB							Western Petr Co Lichte #1 SE NE NE Sec. 10-T23S-R11W 1799' KB		
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum	
Anhydrite				504	+1300	+7	506	+1293	
B/Anhydrite	518	+1286	+12	520	+1284	+10	525	+1274	
Oread	2997	-1193	+3	2998	-1194	+2	2995	-1196	
Topeka									
Heebner	3097	-1293	+2	3094	-1290	+5	3094	-1295	
Lansing	3241	-1437	+2	3238	-1434	+5	3238	-1439	
Stark	3473	-1669	-1	3473	-1669	-1	3467	-1668	
BKC	3533	-1729	-2	3532	-1728	-1	3526	-1727	
Viola	3614	-1810	-6	3606	-1802	+2	3604	-1804	
Simpson	3654	-1850	+1	3650	-1846	+5	3650	-1851	
Arbuckle	3717	-1913	+3	3713	-1909	+7	3715	-1916	
RTD	3825	-2021					3752		
LTD				3817	-2013				