

Potthoff #1-4
 Daily Drilling Report
 Page Two
 2/26/14

Depth 4165'. Cut 125'. DT: None. CT: 15½ hrs. Dev.: None. **LKC A:** Ls crm-wh, pr-fr inter xln por, pr-fr bug por, drk brn stn, tr FO, gd cut & fluor. **LKC D:** Ls, moldic & vug por, fr SFO, odor, GD cut & fluor. **DST #3 4043-4165 (LKC A-D):** 30-60-60-90. IF: wk blw built to 2". FF: ½" steady blw throughout. Rec.: 68'GOCM (5%G, 15%O, 80%M) HP: 2041-2019. FP: 19/27, 34/43. SIP: 927-936. BHT: 126°.

2/27/14 Depth 4235'. Cut 70'. DT: None. CT: 19½ hrs. Dev.: None. **LKC G:** Ls, crm-wh, hrd-mod soft chky, V fn grn, micro xln, foss & oolitic, occasional grainstones w/gd inter part & vug por, drk brn stn, GSFO wk odor, excellent cut & fluor. **DST #4 4157-4235 (LKC G):** 30-60-60-90. IF: blw built to 1½". FF: blw built to 1". Rec.: 75'OCM (10%O, 90%M). HP: 2081-2055. FP: 19/37, 43/60. SIP: 922-890. BHT: 127°. **LKC H:** NS. **LKC I:** Ls, pp por, hv blk tarry oil stn no odor. **LKC J:** Ls, tn, hrd dns, foss, oolitic, pr-fr vug por, drk brn fr SFO, bleeding oil, excellent cut & fluor. **DST #5 4214-4309 (LKC H-J):**

2/28/14 Depth 4345'. Cut 110'. DT: None. CT: 17 hrs. Dev.: None. **DST #5 4214-4309 (LKC H-J):** 30-60-60-90. IF: BOB in 23 min. ISI: blw back built to ½". FF: BOB in 15 mins. Rec.: 308'GOCM (20%G, 28%O, 25 M), 40'CO (1%G, 99%O), 642'GIP. HP: 2157-2121. FP: 30/108, 109/155. SIP: 1326-1287. BHT 130°.

3/1/14 Depth 4510'. Cut 165'. DT: None. CT: 11½ hrs. Dev.: ¼° @ 4510'. **Pawnee:** Ls, wh-crm, v fn grn, xln, foss, oolitic, fr-gd xln por, occasional vug porosity, drk brn stn, fair SFO, wk odor. **DST #6 4455-4510 (Pawnee):** 30-60-30-60. IF: 1/8" blw. FF: no blw. Rec.: 2' M. HP: 2298-265. FP: 18/19, 20/21. SIP: 104-56. BHT: 132°.

3/2/14 RTD 4660'. Cut 150'. DT: None. CT: 12 hrs. Dev.: None. HC 1:00 AM 3/2/2014. Pioneer began logging @ 5:00 AM. Plan to run 5 ½" production casing.

3/3/14 RTD: 4660'. CT: 24hrs. Pioneer finished logging @ 10:00AM 3/2. Ran 111jts of 15.5# 5½" prod csg, set @ 4652'. C.O.W.S. cmt w/300sxs CMD, 200sxs OWC. PD @ 2:00AM 3/3. Circ 10BBLs. RR @ 6:00AM 3/3/14 FINAL REPORT

Formation	MDCI Potthoff #1-4 2100' FNL 500' FWL Sec. 4-T1S-R37W 3122' KB						MDCI Shones Unit #1-5 2600' FSL 660' FEL Sec. 5-T1S-R37W 3177' KB	
	Sample top	Datum	Ref	Log Top	Datum	Ref	Log Top	Datum
Anhydrite	3085	+37	+2	3094	+28	-7	3142	+35
B/Anhydrite	3125	-3	-4	3126	-4	-5	3176	+1
Neva	3546	-424	-5	3544	-422	-3	3596	-419
Red Eagle	3614	-492	-8	3609	-487	-3	3661	-484
Foraker	3658	-536	-6	3656	-534	-4	3707	-530
Stotler	3806	-684	-5	3804	-682	-3	3856	-679
Topeka	3875	-753	-5	3874	-752	-4	3925	-748
Oread	4013	-891	-8	4008	-886	-3	4060	-883
Lansing	4088	-966	-5	4086	-964	-3	4138	-961
Stark	4308	-1186	-6	4305	-1183	-3	4357	-1180
BKC	4362	-1240	-3	4360	-1238	-1	4414	-1237
Pawnee	4478	-1356	-3	4478	-1356	-3	4530	-1353
Cherokee	4567	-1445	-3	4566	-1444	-2	4619	-1442
Mississippi	NR			NR			4870	-1693
RTD	4660	-1538					4955	
LTD				4660	-1538		4960	