

Air Drilling Specialist
Oil & Gas Wells

THORNTON AIR ROTARY, LLC
Office Phone: 620-879-2073

PO Box 449
Caney, KS 67333

Date Started	3/6/2012
Date Completed	3/7/2012

Well No.	Operator	Lease	A.P.I #	County	State
12H-30	Layne Energy Operating	Gartner	15-125-32162-00-00	Montgomery	Kansas

			Sec.	Twp.	Rge.
1/4	1/4	1/4	30	32	14

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Brantley	Oil/ Gas	4	21'8" 8 5/8	1181	6 3/4

Formation Record

0-4	DIRT	896-912	SANDY SHALE		
4-20	CLAY	912	GAS TEST - SAME		
20-80	SHALE	912-934	SHALE		
80-83	LIME	934-959	LIME		
83-154	SHALE	959-963	BLK SHALE (LEXINGTON)		
154-157	LIME	963-970	LIME		
157-171	SHALE	970-983	SAND		
171-240	SAND / DAMP, WET	983-1023	SANDY SHALE		
240-280	SANDY SHALE	1023-1051	LIME (OSWEGO)		
211	WENT TO WATER	1051-1062	BLK SHALE (SUMMIT)		
280-430	SHALE	1062-1080	LIME		
430-444	SAND	1080-1084	SHALE (EXCELLO)		
444-451	LIME	1084-1099	LIME		
451-482	SHALE	1099-1120	SHALE		
482-534	LIME	1120-1121	COAL		
534-663	SHALE	1121-1126	SHALE		
663-671	LIME	1126-1128	LIME		
671-721	SHALE	1128-1130	SHALE		
721-740	LIME	1130-1131	COAL (CROWBERG)		
740-766	SAND	1131-1175	SHALE		
766-783	SHALE	1175-1176	COAL		
783-795	LIME	1176-1187	SHALE		
795-814	LMY SHALE	1187	TD		
814-824	SANDY SHALE/ LT ODOR				
824-870	SAND/ LT ODOR				
862	G.T.- 2#, 1/4"= 12.7 MCF				
870-890	SAND, OIL SHOW, ODOR				
886	G.T.- 7#, 1/4"= 25 MCF				
890-894	BLK SAND /GOOD ODOR				
894-896	TAR SAND				