

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	10/14/2011
Date Completed	10/17/2011

Well No.	Operator	Lease	A.P.I #	County	State
10Q-34WIW	Layne Energy Operating	Metzger	15-205-27933-00-00	Wilson	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			34	30	14 E

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Brantley	Oil	8	43.2' 8 5/8	1262	6 3/4

Formation Record

0-4	DIRT	863-890	LIME (PAWNEE)	1162-1166	SHALE
4-71	LIME	890-893	BLK SHALE (LEXINGTON)	1166-1172	WHITE SAND
71-175	SHALE	893-898	LIME	1172-1177	SANDY SHALE
175-300	LMY SHALE	898-912	BLACK SHALE	1177-1192	SHALE
300-410	SAND / DAMP	912-932	SAND	1192-1194	SAND
410-431	SHALE	932-947	SANDY SHALE	1194-1235	SHALE
431-446	LIME	947-976	LIME (OSWEGO)	1235-1237	COAL
446-452	SHALE	976-981	BLK SHALE (SUMMIT)	1237-1262	SANDY SHALE
452-541	LIME	981-995	LIME	1262	TD
536	WENT TO WATER	995-1000	BLACK SHALE		
541-569	SAND	1000-1001	COAL (MULKY)		
569-596	LIME	1001-1004	LIME		
596-608	SHALE	1004-1042	SHALE		
608-634	LIME	1042-1044	COAL		
634-661	BLACK SHALE	1044-1050	SHALE		
661-665	LIME	1050-1051	COAL		
665-695	SHALE	1051-1060	SHALE		
695-706	LIME	1060-1062	LIME		
706-713	SANDY LIME	1062-1064	SHALE		
713-731	SHALE	1064-1065	COAL (CROWBERG)		
731-733	LIME	1065-1072	SHALE		
733-734	SHALE	1072-1078	SAND		
734-744	LIME	1078-1087	SANDY SHALE		
744-749	BLACK SHALE	1087-1104	SHALE		
749-753	SANDY LIME	1104-1105	COAL (MINERAL)		
753-771	SAND / LITE ODOR	1105-1143	SHALE		
771-825	SANDY SHALE	1143-1144	COAL		
825-859	SHALE	1144-1152	SHALE		
837	G.T.-20#, 1/4"= 47.1 MCF	1152-1156	SAND		
859-863	COAL (MULBERRY)	1156-1162	BROWN SAND/OIL ODOR		