

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	9/27/2011
Date Completed	9/28/2011

Well No.	Operator	Lease	A.P.I #	County	State
16M-34 WIW	Layne Energy Operating	Metzger	15-205-27972-00-00	Montgomery	Kansas

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

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Billy	Oil	8	42.9' 8 5/8	1287	6 3/4

Formation Record

0-5	DIRT	915-929	SHALE		
5-70	LIME	929-950	SAND		
70-305	LMY SHALE	950-960	SHALE		
305-400	SAND (DAMP)	960-985	LIME (OSWEGO)		
336	WENT TO WATER	985-993	BLK SHALE (SUMMIT)		
336	G.T.- SLIGHT BLOW	993-1005	LIME		
400-440	SANDY SHALE	1005-1009	BLACK SHALE		
440-533	LIME	1009-1010	COAL (MULKY)		
533-548	SHALE	1010-1017	LIME		
548-558	LIME	1017-1026	SANDY SHALE		
558-580	SAND	1026-1057	SHALE		
580-585	SHALE	1057-1058	COAL (BEVEIR)		
585-606	LIME	1058-1073	SHALE		
606-612	SHALE	1073-1075	LIME (V-LIME)		
612-645	LIME	1075-1080	SHALE		
645-683	SHALE	1080-1081	COAL (CROWBERG)		
683-688	SAND	1081-1119	SANDY SHALE		
688-715	LMY SHALE	1119-1120	COAL (MINERAL)		
715-746	SHALE	1120-1162	SHALE		
746-755	LIME	1162-1166	SAND		
755-759	SHALE	1166-1173	SANDY SHALE		
759-769	LMY SAND	1173-1194	BLACK SAND / OIL ODOR		
769-780	SAND / LITE OIL ODOR	1194-1197	COAL		
780-873	SHALE	1197-1287	SHALE		
873-874	COAL (MULBERRY)	1287	TD		
874-877	SHALE				
877-903	LIME (PAWNEE) LITE OIL ODOR				
903-905	SHALE				
905-908	LIME				
908-915	BLK SHALE (LEXINGTON)				