

Air Drilling Specialist  
Oil & Gas Wells

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

PO Box 449  
Caney, KS 67333

Date Started	<b>4/8/2011</b>
Date Completed	<b>4/11/2011</b>

Well No.	Operator	Lease	A.P.I.#	County	State
<b>16F-34</b>	<b>Layne Energy Operating</b>	<b>Metzger</b>	<b>15-205-27925-00-00</b>	<b>Wilson</b>	<b>Kansas</b>

	1/4	1/4	1/4	Sec.	Twp.	Rge.
				<b>34</b>	<b>30</b>	<b>14</b>

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
<b>Billy</b>	<b>Oil</b>	<b>8</b>	<b>42.8' 8 5/8</b>	<b>1262</b>	<b>6 3/4</b>

### Formation Record

0-8	DIRT	1014-1018	LIME		
8-90	LIME	1018-1019	COAL (MULKEY)		
90-304	LMY SHALE	1019-1027	LIME		
304-306	LIME	1027-1067	SANDY SHALE		
306-360	SAND	1067-1068	COAL (BEVIER)		
360-383	SHALE	1068-1081	SHALE		
383-415	SAND	1081-1083	LIME (V-LIME)		
415-444	SHALE	1083-1085	SHALE		
444-467	LIME	1085-1086	COAL (CROWBERG)		
467-477	SHALE	1086-1128	SHALE		
477-550	LIME	1128-1129	COAL (MINERAL)		
550-588	SANDY SHALE	1129-1172	SHALE		
588-614	LIME	1172-1173	COAL		
614-625	SHALE	1173-1184	SANDY SHALE		
625-651	LIME	1184-1192	BLK SAND/LITE OIL ODOR		
651-713	SHALE	1192-1200	SANDY SHALE		
713-729	LIME	1200-1202	COAL (WEIR)		
729-752	SHALE	1202-1227	SANDY SHALE		
752-774	LIME	1227-1262	SHALE		
774-787	SAND	1237	GAS TEST-SLIGHT BLOW		
787-877	SHALE	1262	TD		
877-879	LIME				
879-880	COAL (MULBERRY)				
880-917	LIME (PAWNEE)				
917-926	BLK SHALE (LEXINGTON)				
926-939	SHALE				
939-969	SANDY SHALE				
969-994	LIME (OSWEGO)				
994-1002	BLK SHALE (SUMMIT)				
1002-1014	LIME				