

Air Drilling Specialist  
Oil & Gas Wells

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

PO Box 449  
Caney, KS 67333

Date Started	<b>9/17/2010</b>
Date Completed	<b>9/20/2010</b>

Well No.	Operator	Lease	A.P.I #	County	State
<b>9A-28</b>	<b>Layne Energy Operating</b>	<b>Hummer</b>	<b>15-205-27861-00-00</b>	<b>Wilson</b>	<b>Kansas</b>

1/4	1/4	1/4	Sec.	Twp.	Rge.
			<b>28</b>	<b>30</b>	<b>14E</b>

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
<b>Sean</b>	<b>Oil</b>	<b>8</b>	<b>42' 8 5/8</b>	<b>1186</b>	<b>6 3/4</b>

### Formation Record

0-1	DIRT	701-704	SAND	1032-1066	SANDY SHALE
1-10	CLAY	704-712	SANDY SHALE	1066-1076	SAND
10-21	SHALE	712-735	SHALE	1076-1091	SHALE
21-88	LIME	735-743	SANDY SHALE	1091-1100	SANDY SHALE
88-105	SHALE	743-755	SAND	1100-1120	SAND
105-117	SAND	755-770	SANDY SHALE	1120-1130	SANDY SHALE
117-170	SHALE	770-780	SHALE	1130-1134	SHALE
170-180	LMY SHALE	780-820	SAND	1134-1146	SAND
180-189	SHALE	820-837	SANDY SHALE	1146-1186	SHALE
189-193	LIME	837-839	LIME (PAWNEE)	1186	TD
193-305	SHALE	839-840	COAL		
305-307	LIME	840-878	LIME		
307-350	SAND (WET)	878-881	BLACK SHALE		
360	WENT TO WATER	881-921	SHALE		
350-416	SHALE	921-942	LIME (OSWEGO)		
416-439	LIME/426 PICKED UP GAS	942-945	SHALE		
435	GAS TEST-7#,1",MCF-369	945-949	BLK SHALE (SUMMIT)		
439-443	SHALE	949-958	LIME		
443-524	LIME	958-962	BLK SHALE (EXCELLO)		
524-530	SHALE	961	GAS TEST - SLIGHT BLOW		
530-545	LIME	962-966	LIME		
545-550	LMY SHALE	966-976	SAND		
550-570	SAND	976-1006	SANDY SHALE		
570-628	LIME	1006-1007	COAL		
628-656	SHALE	1007-1020	SHALE		
656-658	LIME	1011	GAS TEST - SAME		
658-663	SHALE	1020-1022	LIME		
663-667	LIME	1022-1024	SHALE		
667-695	SHALE	1024-1025	COAL		
695-701	LIME	1025-1032	SAND		