

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	3/12/2012
Date Completed	3/13/2012

Well No.	Operator	Lease	A.P.I #	County	State
13A-30	Layne Energy Operating	Gartner	15-125-32163-00-00	Montgomery	Kansas

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

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Brantley	Oil/Gas	4	22' 10" 8 5/8	1147	6 3/4

Formation Record

0-10	MUD	799-807	LIME	1132-1143	SAND
10-21	SAND	807-892	SAND / LT ODOR	1143-1147	SANDY SHALE
21-71	SHALE	837	G.T. - SLIGHT BLOW	1147	G.T. - SAME
71-77	SAND / HARD	862	G.T.-2#, 1/4"= 12.7 MCF	1147	TD
77-151	SHALE	887	G.T.- SAME		
151-156	LIME	892-895	SANDY SHALE / OIL ODOR		
156-162	SHALE	895-902	SHALE		
162-186	SAND / DAMP	902-912	SANDY SHALE		
186-211	SAND / WET	912	G.T. - SAME		
211	WENT TO WATER	912-928	SHALE		
211-381	SHALE	928-929	COAL		
381-390	BLACK SHALE	929-931	SHALE		
390-396	SHALE	931-957	LIME (PAWNEE)		
396-397	COAL	957-958	COAL		
397-442	SHALE	958-962	SANDY SHALE		
442-445	LIME	962-970	SAND		
445-473	SHALE	970-974	SANDY SHALE		
473-526	LIME	974-1021	SHALE		
526-541	SANDY SHALE	1021-1052	LIME (OSWEGO)		
541-546	SAND	1052-1062	BLK SHALE (SUMMIT)		
546-547	COAL	1062-1079	LIME		
547-590	SAND / HARD	1079-1085	BLACK SHALE		
590-707	SHALE	1085-1087	COAL (MULKY)		
707-710	LIME	1087-1094	LIME		
710-716	SHALE	1094-1106	SHALE		
716-730	LMY SHALE	1106-1107	COAL		
730-755	SAND	1107-1126	SHALE		
755-777	SHALE	1126-1128	LIME		
777-789	LIME	1128-1130	SHALE		
789-799	SHALE	1130-1132	COAL (CROWBERG)		