

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	3/13/2014
Date Completed	3/19/2014

Operator	A.P.I #	County	State
L R Energy Inc.	15-125-32402-00-00	Montgomery	Kansas

Well No.	Lease	Sec.	Twp.	Rge.
12M-30	Gartner	30	32	14E

Type	Driller	Cement Used	Casing Used	Depth	Size of Hole
Oil	Billy Thornton	4	21'1" 8 5/8	1022	6 3/4

Formation Record

0-6	DIRT	680-722	SHALE		
6-21	CLAY	722-723	COAL		
21-83	SHALE	723-734	SHALE		
83-90	LIME	734-754	LIME		
90-157	SHALE	754-793	SANDY SHALE		
157-160	BLACK SHALE	793-805	LIME		
160-164	LIME	805-813	BLACK SHALE		
164-171	SHALE	813-824	LIME		
171-200	SAND / DAMP	824-834	SANDY SHALE		
211	WENT TO WATER	834-837	SAND		
20-385	SHALE	837-848	SHALE		
385-390	BLACK SHALE	848-855	SANDY SHALE		
390-398	LIME	855-859	SAND		
398-408	SAND	859-865	SAND / OIL ODOR		
408-426	SANDY SHALE	865-880	SANDY SHALE /NO ODOR		
426-438	SHALE	880-889	SAND/ OIL ODOR & SHOW		
438-454	SAND	889-894	SANDY SHALE/ LT ODOR		
454-459	LIME	894-890	SAND/ GOOD ODOR		
459-471	SANDY SHALE	890-939	SHALE		
471-485	SAND	939-941	BLACK SHALE		
485-542	LIME	941-963	LIME (PAWNEE)		
542-544	SHALE	963-967	BLACK SHALE		
544-545	COAL	967-1022	SHALE		
545-550	SHALE	1022	TD		
550-571	SANDY SHALE				
571-600	SAND				
600-643	SHALE				
643-648	LIME				
648-672	SHALE				
672-680	LMY SHALE				