

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	7/18/2014
Date Completed	7/21/2014

Operator	A.P.I #	County	State
L R Energy Inc.	15-125-32412-00-00	Montgomery	Kansas

Well No.	Lease	Section	Township	Range
12B-30	Gartner	30	32	14

Type of Well	Driller	Cement	Surface	TD	Size of Hole
Oil	Billy Thornton	4	21' 2" 8 5/8	1022	6 3/4

0-5	DIRT	715-716	COAL		
5-18	CLAY	716-717	SHALE		
18-25	SHALE	717-719	LIME		
25-29	SAND / DAMP	719-727	SHALE		
29-79	SHALE	727-728	COAL/ BLK SHALE		
79-85	LIME	728-738	LIME		
85-106	SHALE	738-758	SAND		
106-109	LIME	758-785	SANDY SHALE		
109-152	SHALE	785-797	LIME		
152-154	BLACK SHALE	797-801	BLACK SHALE		
154-160	LIME	801-804	SAND		
160-171	SHALE	804-810	SHALE		
171-221	SAND /DAMP	810-815	LIME		
211	WENT TO WATER	815-818	BLACK SHALE		
221-376	SHALE	818-820	SANDY SHALE		
376-377	COAL	820-826	SAND/ LT OIL ODOR		
377-393	SAND	826-830	SANDY SHALE/ NO ODOR		
393-394	COAL	830-842	SAND/ FAINT ODOR		
394-401	SAND	842-846	SAND/ LT ODOR & SHOW		
401-451	SHALE	846-870	SAND / SHOW IN PIT		
451-455	LIME	870-876	SAND / LT ODOR		
455-477	SAND	876-895	SAND / GOOD ODOR		
477-535	LIME	895-901	LAMINATED SAND		
535-542	SHALE	901-933	SHALE		
542-551	SAND	933-936	BLACK SHALE		
551-566	SHALE	936-957	LIME (PAWNEE)		
566-596	SAND	957-969	SHALE		
596-636	SHALE	969-971	LIME		
636-639	LIME	971-1022	SHALE		
639-715	SHALE	1022	TD		