

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	7/21/2014
Date Completed	7/22/2014

Operator	A.P.I #	County	State
L R Energy Inc.	15-125-32411-00-00	Montgomery	Kansas

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

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

0-12	DIRT	656-683	SHALE	896--901	SANDY SHALE
12-20	CLAY	683-687	LIME	901-904	SAND / GOOD ODOR & SHOW
20-95	SHALE	687-696	LMY SHALE	904-906	SANDY SHALE
95-101	LIME	696-730	SHALE	906-908	SAND
101-121	LMY SHALE	730-732	BLACK SHALE	908-916	SHALE
121-168	SHALE	732-735	SHALE	916-932	SANDY SHALE
168-176	LIME	735-737	LIME	932-950	SHALE
176-180	SHALE	737-746	SHALE	950-952	BLACK SHALE
180-237	SAND/ DAMP	746-748	BLACK SHALE	952-973	LIME
237-380	SHALE	748-758	LIME	973-976	BLACK SHALE
380-393	SANDY SHALE	758-777	SAND	976-977	LIME
393-396	BLACK SHALE	777-807	SHALE	977-980	BLACK SHALE
396-408	SAND / DAMP	807-819	LIME	980-981	COAL
408-410	SANDY SHALE	819-822	BLACK SHALE	981-986	SHALE
410-411	BLACK SHALE	822-825	LMY SHALE	986-987	LIME
411-424	SHALE	825-832	SHALE	987-1022	SHALE
424-426	BLACK SHALE	832-837	LIME	1022	TD
426-448	SHALE	837-841	SHALE		
448-461	SAND /DAMP	841-845	SAND		
461-471	LIME	845-850	SAND / LT ODOR		
471-480	SHALE	850-854	SHALE		
486	WENT TO WATER	854-867	SAND		
480-494	SAND	867-870	SAND / FAINT ODOR		
494-501	LIME	870-875	SAND / GOOD ODOR & SHOW		
501-503	SHALE	875-877	SHALE		
503-554	LIME	877-880	SAND / GOOD ODOR & SHOW		
554-566	SANDY SHALE	880-886	SANDY SHALE		
566-592	SAND	886-890	LAMINATED SAND		
592-653	SHALE	890-893	SAND / FAINT ODOR		
653-656	LIME	893-896	SAND		