

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	3/26/2014
Date Completed	4/1/2014

Operator	A.P.I #	County	State
L R Energy Inc.	15-125-32379-00-00	Montgomery	Kansas

Well No.	Lease	Section	Township	Range
14-2	Chism	2	32	13

Type of Well	Driller	Cement	Surface	TD	Size of Hole
Gas & Oil	Billy Thornton	Rig Cemented	83' 3" 8 5/8	1462	6 3/4

0-6	DIRT	878-882	SANDY SHALE	1210-1248	SHALE
6-31	SDY CLAY / WET	882-884	SHALE	1248-1249	COAL
31-91	SHALE	884-950	SAND	1249-1292	SHALE
91-129	LIME	950-963	SANDY SHALE	1292-1293	BLK SHALE / COAL
129-136	SAND	963-983	SHALE	1293-1297	SHALE
136-220	LIME	983-1003	LIME (PAWNEE)	1297-1303	SAND
220-420	LMY SHALE	1003-1012	BLACK SHALE	1303-1327	SANDY SHALE
420-439	LIME / DAMP	1012-1043	SHALE	1327-1328	COAL
439-455	SAND	1043-1051	SANDY SHALE	1328-1368	SHALE
455-470	SHALE	1051-1064	SHALE	1368-1377	RED SHALE
470-483	SAND / DAMP	1064-1065	COAL	1377-1458	SHALE
483-484	COAL	1065-1066	SHALE	1458-1462	SAND
484-538	LIME	1066-1089	LIME (OSWEGO)	1458-1462	LOTS OF WATER /
538-545	LMY SHALE	1089-1097	BLK SHALE (SUMMIT)		WATERED OUT
545-607	LIME	1097-1098	COAL	1462	TD
607-630	SANDY SHALE	1098-1099	BLACK SHALE		
630-631	COAL	1099-1110	LIME		GAS TESTS:
631-670	SAND /DAMP	1110-1117	BLK SHALE (EXCELLO)	760	NO GAS
660	WENT TO WATER	1117-1118	COAL (MULKY)	1011	SLIGHT BLOW
670-678	SHALE	1118-1126	LIME	1111	5#, 1/4"= 20.7 MCF
678-723	LIME	1126-1149	SHALE	1136	10#, 1/4"= 30.8 MCF
723-751	BLACK SHALE	1149-1150	COAL	1185	SAME
751-787	SHALE	1150-1164	SHALE	1311	SAME
787-794	LIME	1164-1166	LIME (V-LIME)	1362	SAME
794-831	SAND	1166-1168	BLACK SHALE		
831-838	SHALE	1168-1169	COAL (CROWBERG)		
838-851	LIME	1169-1178	SHALE		
851-852	COAL	1178-1184	SAND		
852-868	LIME / SHALE	1184-1209	SHALE		
868-878	SHALE	1209-1210	COAL		