

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	10/15/2010
Date Completed	10/18/2010

Well No.	Operator	Lease	A.P.I #	County	State
7L-34	Layne Energy Operating	Metzger	205-27856-00-00	Wilson	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			34	30	14

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Billy	Oil	8	41.2" 8 5/8	1227	6 3/4

Formation Record

0-4	DIRT	742-746	SANDY SHALE	1118-1131	SHALE
4-70	LIME	746-748	(LITE OIL ODOR)	1131-1136	SANDY SHALE
70-161	SHALE	746-774	SAND	1136-1139	(LITE OIL ODOR)
161-250	LIME	774-849	SANDY SHALE	1136-1141	SAND
250-282	SHALE	849-850	COAL (MULBERRY)	1141-1143	SANDY SHALE
282-288	LIME	850-882	LIME (PAWNEE)	1143-1146	(OIL ODOR)
288-289	COAL	882-885	SHALE	1143-1148	SAND
289-350	SAND (DAMP)	885-887	LIME	1148-1150	SANDY SHALE
350-402	SANDY SHALE	887-892	BLK SHALE (LEXINGTON)	1150-1160	SAND
402-410	LIME	892-905	SHALE	1160-1167	SHALE
410-428	SHALE	905-920	SAND	1167-1170	SAND
426	WENT TO WATER	920-938	SHALE	1170-1182	SHALE
428-442	LIME	927	GAS TEST-23#,1/2,MCF-193	1177	GAS TEST-17#,1/2,MCF-159
442-456	SHALE	938-963	LIME (OSWEGO)	1182-1184	SAND
456-522	LIME	963-972	BLK SHALE (SUMMIT)	1184-1227	SHALE
522-539	BLACK SHALE	972-982	LIME	1227	TD
539-544	LIME	982-986	BLK SHALE (EXCELLO)		
544-568	SAND	986-987	COAL (MULKEY)		
551	GAS TEST-13#,1/2,MCF-134	987-993	LIME		
568-570	LIME	993-1030	SHALE		
570-572	SHALE	1002	GAS TEST - SAME		
572-591	LIME	1030-1031	BLACK SHALE		
591-596	SHALE	1031-1049	SHALE		
596-630	LIME	1049-1051	LIME		
630-686	LMY SHALE	1051-1053	SHALE		
686-703	LIME	1053-1054	COAL (CROWBERG)		
703-708	SANDY SHALE	1054-1092	SHALE		
708-723	SHALE	1092-1093	COAL		
723-738	LIME	1093-1118	SANDY SHALE		
738-742	SHALE	1102	GAS TEST - SAME		