

Air Drilling Specialist
Oil & Gas Wells

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

PO Box 449
Caney, KS 67333

Date Started	6/17/2011
Date Completed	6/22/2011

Well No.	Operator	Lease	A.P.I #	County	State
6-4	Layne Energy Operating	Cotton	15-125-32103-00-00	Montgomery	Kansas

1/4	1/4	1/4	Sec.	Twp.	Rge.
			4	34	16

Driller	Type/Well	Cement Used	Casing Used	Depth	Size of Hole
Billy	Gas	4	21.6' 8 5/8	1183	6 3/4

Formation Record

0-5	DIRT	753-754	COAL		
5-34	SAND (WET)	754-763	SHALE		
34-62	SANDY SHALE	763-765	LIME (V-LIME)		
62-82	LIME	765-766	BLACK SHALE		
82-271	SANDY SHALE	766-767	COAL ? (CROWBERG)		
271-273	BLACK SHALE	767-822	SHALE		
273-330	SHALE	811	GAS TEST - SAME		
330-348	SAND	822-823	COAL (MINERAL)		
348-380	SHALE	823-846	SHALE		
380-405	LIME	837	GAS TEST - SAME		
405-445	SHALE	846-851	SANDY SHALE		
445-496	SAND	851-897	SHALE		
496-539	SHALE	897-898	COAL (VEIR)		
539-557	LIME (PAWNEE)	898-902	SANDY SHALE		
557-562	BLK SHALE (LEXINGTON)	902-908	SAND		
562-646	SHALE	908-927	SANDY SHALE		
586	GAS TEST - NO GAS	912	GAST TEST-SLIGHT BLOW		
646-675	LIME (OSWEGO)	927-940	SAND		
675-682	BLK SHALE (SUMMIT)	940-1022	SHALE		
682-710	LIME	1022-1064	SUGAR SAND		
686	GAS TEST - NO GAS	1030	WATERED OUT, TRICONE ON		
710-715	BLK SHALE (EXCELLO)	1064-1103	SHALE		
715-716	COAL (MULKY)	1074	BIT QUIT DRILLING, TRIPPED OUT		
716-724	LIME	1103-1104	COAL (ROWE)		
724-737	SHALE	1104-1164	SHALE		
736	GAS TEST - NO GAS	1164-1165	COAL		
737-739	LIME	1165-1169	SHALE		
739-740	COAL	1169-1183	MISS/CHATT (MISS.)		
740-753	SHALE	1183	TD		
761	GAS TEST - NO GAS				