

Air Drilling Specialist  
Oil & Gas Wells

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

PO Box 449  
Caney, KS 67333

Date Started	<b>7/19/2013</b>
Date Completed	<b>7/20/2013</b>

Operator	A.P.I.#	County	State
<b>Post Rock Energy</b>	<b>15-133-27688-00-00</b>	<b>Neosho</b>	<b>Kansas</b>

Well No.	Lease	Sec.	Twp.	Rge.
<b>20-4</b>	<b>Kramer, Jerry L</b>	<b>20</b>	<b>29</b>	<b>19</b>

Type	Driller	Cement Used	Casing Used	Depth	Size of Hole
<b>Oil</b>	<b>Billy Thornton</b>	<b>4</b>	<b>23' 8 5/8</b>	<b>832</b>	<b>7 7/8</b>

**Formation Record**

0-5	DIRT	429-452	LIME (PAWNEE)	746-748	SHALE
5-18	SHALE	452-454	BLK SHALE	748-749	COAL
18-75	LIME	454-463	LIME	749-775	SANDY SHALE
75-78	BLK SHALE	463-466	BLK SHALE (LEXINGTON)	775-832	SHALE
78-83	LIME	466-474	SHALE	832	TD
83-90	SAND	474-486	SAND		
90-121	SHALE	486-501	SHALE		
121-142	LIME	501-529	LIME (OSWEGO)		
142-171	SHALE	529-535	BLK SHALE (SUMMIT)		
171-178	SAND / DAMP	535-545	LIME		
178-191	SHALE	545-549	BLK SHALE (MULKY)		
191-204	LIME	549-550	LIME		
204-215	BLK SHALE	550-561	SAND		
215-226	SHALE	561-618	SHALE		
226-229	LIME	618-619	COAL		
229-230	COAL	619-630	SANDY SHALE		
230-241	SHALE	630-641	SHALE		
241-250	LIME	641-643	LIME		
250-280	SHALE	643-645	BLK SHALE		
280-281	COAL	645-646	COAL		
281-291	LIME	646-651	SHALE		
291-296	SANDY SHALE	651-658	SAND		
296-306	LIME	658-679	SHALE		
306-311	SAND	679-680	COAL		
311-354	LIME	680-708	SHALE		
354-366	SANDY SHALE	708-714	SAND / OIL ODOR		
366-400	SAND / DAMP	714-729	SAND / GOOD SHOW		
400-418	SANDY SHALE	729-733	SANDY SHALE		
418-428	LIME	733-745	SHALE		
428-429	COAL	745-746	COAL		