

Operator License # 32834  
 Operator JTC Oil, Inc.  
 Address 35790 Plum Creek Road  
 City Osawatomie, KS 66064  
 Contractor JTC Oil, Inc.  
 Contractor License # 32834  
 T.D. 600'  
 T.D. of pipe 592'  
 Surface pipe size 7"  
 Surface pipe depth 20'  
 Well Type Production

API # 15-121-30631-00-00  
 Lease Name Renner  
 Well # P-12  
 Spud Date 9/19/2014  
 Cement Date  
 Location Sec 16 T 17 R 22  
 495 feet from S line  
 330 feet from E line  
 County Miami

Driller's Log

Thickness	Strata	From	To	
2	soil	0	2	
19	clay	2	21	
28	shale	21	49	
20	lime	49	69	
27	shale	69	96	
8	lime	96	104	
34	shale	104	138	
15	lime	138	153	
8	shale	153	161	
26	lime	161	187	
7	coal	187	194	
21	lime	194	215	
5	coal	215	220	
11	lime	220	231	
140	shale	231	371	
4	lime/shale	371	375	
3	oil sand	375	378	little oil
4	oil sand	378	382	ok
2	oil sand	382	384	ok
3	oil sand	384	387	good
3	oil sand	387	390	v-good
3	oil sand	390	393	v-good
3	oil sand	393	396	v-good
2	oil sand	396	398	v-good
10	lime	398	408	
52	shale	408	460	
6	lime	460	466	
14	shale	466	480	
3	lime	480	483	
15	black shale	483	498	
5	lime	498	503	
16	shale	503	519	
3	lime	519	522	
7	coal	522	529	

1	lime	529	530	
6	shale	530	536	
2	oil sand	536	538	good
3	oil sand	538	541	v-good
3	oil sand	541	544	v-good
3	oil sand	544	547	v-good
1	oil sand	547	548	ok
52	shale	548	600	