

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. 560  
 T.D. of pipe 532  
 Surface pipe size 7"  
 Surface pipe depth 20'  
 Well Type Production

API # 15-121-30462-00-00  
 Lease Name Hahn  
 Well # BSP-HN4  
 Spud Date 7/8/2014  
 Cement Date 7/16/2014  
 Location Sec 23 T 18 R 21  
 1485 feet from N line  
 2475 feet from W line  
 County Miami

Driller's Log

Thickness	Strata	From	To	
2	soil	0	2	
1	clay	2	3	
6	lime	3	9	
22	shale	9	31	
3	lime	31	34	
42	shale	34	76	
15	lime	76	91	
10	shale	91	101	
30	lime	101	131	
8	black shale	131	139	
20	lime	139	159	
5	coal	159	164	
12	lime	164	176	
144	shale	176	320	
25	lime shale	320	345	
15	lime	345	360	
3	shale	360	363	
9	sand	363	372	little-ok
30	shale	372	402	
9	lime	402	411	
10	shale	411	421	
3	lime	421	424	
14	black shale	424	438	
11	lime	438	449	
15	shale	449	464	
2	lime	464	466	
4	coal	466	470	
4	lime	470	474	
6	shale	474	480	
2	oil sand	480	482	good
2	oil sand	482	484	good
2	oil sand	484	486	v-good
2	oil sand	486	488	v-good
2	oil sand	488	490	broken (mix shale/sand)

56	shale	490	546	
6	sandy/shale	546	552	no oil
8	black shale	552	560	