

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. 760  
 T.D. of pipe 0  
 Surface pipe size 7"  
 Surface pipe depth 20'  
 Well Type Production

API # 15-121-31054-00-00  
 Lease Name Heckerson  
 Well # P-1  
 Spud Date 8/13/2015  
 Cement Date  
 Location Sec 23 T 18 R 21  
 2475 feet from S line  
 165 feet from E line  
 County Miami

Driller's Log

Thickness	Strata	From	To
2	soil	0	2
6	clay	2	8
13	lime	8	21
21	shale	21	42
4	lime	42	46
42	shale	46	88
15	lime	88	103
10	shale	103	113
29	lime	113	142
6	coal	142	148
25	lime	148	173
5	coal	173	178
10	lime	178	188
141	shale	188	329
13	lime shale	329	342
8	shale	342	350
15	lime	350	365
3	shale	365	368
7	sandy	368	375
33	shale	375	408
9	lime	408	417
10	shale	417	427
3	lime	427	430
14	black shale	430	444
11	lime	444	455
15	shale	455	470
2	lime	470	472
3	coal	472	475
3	lime	475	478
6	shale	478	484
1	oil sand	484	485
2	sand	485	487
2	sand/shale	487	489
2	sandy shale	489	491

broke

3	sandy	491	494
17	shale	494	511
46	black shale	511	557
42	shale	557	599
2	sand	599	601
2	sandy	601	603
3	sandy shale	603	606
12	shale	606	618
25	sandy shale	618	643
53	sand	643	696
12	shale	696	708
17	black shale	708	725
6	sand	725	731
11	shale	731	742
9	black shale	742	751
9	shale	751	760