

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. 740'
 T.D. of pipe 729'
 Surface pipe size 7"
 Surface pipe depth 20'
 Well Type Injection

API # 15-121-30434-00-00
 Lease Name Cooper
 Well # I-17
 Spud Date 3/11/2015
 Cement Date 3/16/2015
 Location Sec 9 T 17 S R 22 E
 990 feet from S line
 990 feet from E line
 County Miami

Driller's Log

Thickness	Strata	From	To	
2	soil	0	2	
2	clay	2	4	
84	shale	4	88	
18	lime	88	106	
30	shale	106	136	
4	lime	136	140	
41	shale	140	181	
15	lime	181	196	
9	shale	196	205	
27	lime	205	232	
6	coal	232	238	
22	lime	238	260	
4	coal	260	264	
6	lime	264	270	
4	lime oil	270	274	v-good 7ft.
3	lime oil	274	277	v-good 7ft.
138	shale	277	415	
30	lime shale	415	445	
11	lime	445	456	
42	shale	456	498	
7	lime	498	505	
20	shale	505	525	
3	lime	525	528	
14	black shale	528	542	
4	lime	542	546	
19	shale	546	565	
3	lime	565	568	
47	shale	568	615	
3	oil sand	615	618	broke
4	oil sand	618	622	ok
4	oil sand	622	626	broke
4	oil sand	626	630	broke
4	oil sand	630	634	good
4	oil sand	634	638	ok

4	oil sand	638	642	ok
4	oil sand	642	646	good
4	oil sand	646	650	good
4	oil sand	650	654	ok
4	oil sand	654	658	ok
4	oil sand	658	662	good
6	oil sand	662	668	v-good
4	oil sand	668	672	v-good
4	oil sand	672	676	v-good
2	oil sand	676	678	good
3	oil sand	678	681	good
3	oil sand	681	684	good
4	oil sand	684	688	good
2	oil sand	688	690	ok
50	shale	690	740	