



11 Lewis Drive

Paola, KS 66071

**Oil & Gas Well Drilling
Water Wells
Geo-Loop Installation**

Phone: 913-557-9083

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WELL LOG

Tailwater, Inc.

South Kempnich #13-IWL

API #15-003-26,495

January 12 - January 13, 2016

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
6	soil & clay	6
4	clay & gravel	10
61	shale	71
36	lime	107
61	shale	168
10	lime	178
6	shale	184
34	lime	218
6	shale	224
23	lime	247
3	shale	250
26	lime	276 base of the Kansas City
177	shale	453
3	lime	456
6	shale	462
7	lime	469 oil show
10	shale	479
8	broken sand	487 green & grey, light oil show
2	shale	489
1	coal	490
3	shale	493
20	oil sand	513 green, good bleeding
5	shale	518
1	coal	519
6	shale	525
10	lime	535
12	shale	547
6	lime	553
18	shale	571
8	lime	579
21	shale	600
5	lime	605
24	shale	629
8	broken sand	637 brown & green, ok bleeding
30	shale	667
1	lime & shells	668
8	oil sand	676 brown, good bleeding
43	shale	719
5	broken sand	724 brown & grey, ok bleeding

4	shale	728
9	broken sand	737 brown & grey, ok bleeding
2	shale	739
2	oil sand	741 black, ok bleeding
12	shale	753
4	oil sand	757 black, no bleeding
14	shale	771
6	oil sand	777 brown, no bleeding
6	shale	783
3	sand	786 grey, no oil
47	sandy shale	833 TD

Drilled a 9 7/8" hole to 23.5'

Drilled a 5 5/8" hole to 833'

Set 23.5' of 7" surface casing with 5 sacks of cement.

Set 823' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.