



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 # 9-IWU

API #15-003-26,380

November 12 - November 13, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
11	soil & clay	11
4	clay & gravel	15
80	shale	95
29	lime	124
5	shale	129
4	sand	133
61	shale	194
10	lime	204
6	shale	210
35	lime	245
1	shale	246
24	lime	270
1	shale	271
26	lime	297 base of the Kansas City
177	shale	474
6	lime	480
3	shale	483
7	lime	490 oil show
12	shale	502
9	oil sand	511 green lite oil show
3	shale	514
1	coal	515
1	shale	516
17	oil sand	533 green good bleeding
5	shale	538
2	coal	540
5	shale	545
4	lime	549
9	shale	558
3	lime	561
6	shale	567
3	lime	570
23	shale	593
7	lime	600
47	shale	647
2	limeysand	649 green & white no oil
1	broken sand	650 brown & green good bleeding
2	oil sand	652 brown good bleeding
2	broken sand	654 brown & green good bleeding
3	broken sand	657 brown & green 90% shale lite bleeding
24	shale	681 TD

Drilled a 9 7/8" hole to 22.4'

Drilled a 5 5/8" hole to 681'

Set 22.4' of 7" surface casing with 5 sacks of cement.

Set 676' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.