



11 Lewis Drive

Paola, KS 66071

Oil & Gas Well Drilling
Water Wells
Geo-Loop Installation

Phone: 913-557-9083

Fax: 913-557-9084

WELL LOG

Tailwater, Inc.

North Kempnich # 1-IWU

API #15-003-26,225

September 26 - September 29, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
15	soil & clay	15
3	clay & gravel	18
99	shale	117
35	lime	152
61	shale	213
12	lime	225
5	shale	230
30	lime	260
11	shale	271
21	lime	292
3	shale	295
24	lime	319 base of the Kansas City
173	shale	492
3	lime	495
6	shale	501
7	lime	508 oil show
10	shale	518
7	oil sand	525 green good bleeding
6	shale	531
1	coal	532
2	shale	534
17	oil sand	551 green good bleeding
6	shale	557
2	coal	559
4	shale	563
6	lime	569
15	shale	584
3	lime	587
19	shale	606
14	lime	620
16	shale	636
3	lime	639
25	shale	664
3	limy sand	667 green & white, no oil
4	broken sand	671 brown & green, ok bleeding
33	shale	704
1	lime & shells	705
5	oil sand	710 brown ok bleeding
2	broken sand	712 brown & grey ok bleeding

8	shale	720
3	sand	723 black, no oil
45	shale	768 TD

Drilled a 9 7/8" hole to 22.45'

Drilled a 5 5/8" hole to 768'

Set 22.45' of 7" surface casing with 5 sacks of cement.

Set 758.9' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.