



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 # 31-IWM

API #15-003-26,257

September 25 - September 26, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
14	soil & clay	14
4	clay & gravel	18
52	shale	70
27	lime	97
69	shale	166
10	lime	176
7	shale	183
32	lime	215
9	shale	224
21	lime	245
3	shale	248
22	lime	270 base of the Kansas City
176	shale	446
3	lime	449
6	shale	455
7	lime	462
17	shale	479
24	oil sand	503 green light bleeding
5	shale	508
2	coal	510
3	shale	513
8	lime	521 oil show
14	shale	535
4	lime	539
21	shale	560
5	lime	565
25	shale	590
4	lime	594
9	shale	603
4	lime	607
12	shale	619
1	limey sand	620 green & white, no oil
5	broken sand	625 brown & green, good bleeding
33	shale	658
1	lime & shells	659
1	limey sand	660

4	oil sand	664 brown, good bleedin
7	broken sand	671 brown & grey, ok bleeding
35	shale	706 TD

Drilled a 9 7/8" hole to 22.3'

Drilled a 5 5/8" hole to 706'

Set 22.3' of 7" surface casing with 5 sacks of cement.

Set 696' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.