



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.

South Kempnich # 13-IWU

API #15-003-26,384

October 309 - October 31, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
12	soil & clay	12
4	clay & gravel	16
57	shale	73
30	lime	103
66	shale	169
10	lime	179
7	shale	186
35	lime	221
6	shale	227
24	lime	251
3	shale	254
25	lime	279 base of the Kansas City
175	shale	454
3	lime	457
7	shale	464
7	lime	471 oil show
8	shale	479
9	oil sand	488 green, light oil show
4	shale	492
1	coal	493
2	shale	495
23	oil sand	518 green good bleeding
3	shale	521
2	coal	523
4	shale	527
4	lime	531
8	shale	539
2	lime	541
7	shale	548
4	lime	552
28	shale	580
3	lime	583
20	shale	603
4	lime	607
23	shale	630
1	limy sand	631 green, no oil
6	broken sand	637 brown & green, ok bleeding
1	broken sand	638 brown & green, light bleedin
17	shale	655 TD

Drilled a 9 7/8" hole to 22.5'

Drilled a 5 5/8" hole to 655'

Set 22.5' of 7" surface casing with 5 sacks of cement.

Set 650.2' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.