



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.

North Kempnich #15-IWU

API #15-003-26,239

August 14 - August 15, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
14	soil & clay	14
4	clay & gravel	18
103	shale	121
30	lime	151
65	shale	216
10	lime	226
6	shale	232
34	lime	266
6	shale	272
20	lime	292
3	shale	295
22	lime	317 base of the Kansas City
29	shale	346
15	sand	361 grey, no oil
132	shale	493
2	lime	495
7	shale	502
8	lime	510
21	shale	531
1	coal	532
20	oil sand	552 green, good bleeding
4	shale	556
1	coal	557
14	shale	571
8	lime	579 green, good bleeding
3	shale	582
3	lime	585
18	shale	603
4	lime	607
30	shale	637
3	lime	640
25	shale	665
0.5	broken sand	665.5 brown & green light bleeding
0.5	limy sand	666
2	broken sand	668 brown & green light bleeding
2	broken sand	670 brown & green no bleeding
24	shale	694 TD

Drilled a 9 7/8" hole to 21.6'

Drilled a 5 5/8" hole to 694'

Set 21.6' of 7" surface casing threaded and coupled cemented with 5 sacks of cement.

Set 688.8' of 2 7/8" 8 round upset tubing with 3 centralizers, 1 float shoe and 1 clamp.

Core Times

	<u>Minutes</u>	<u>Seconds</u>
666		32
667		28
668		29
669		35
670		32
671		40
672		38
673		33
674		36
675		44
676		40
677		39
678		45
679		39