



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 # 12 IWU

API #15-003-26,236

September 17 - September 18, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
10	soil & clay	10
4	clay & gravel	14
64	shale	78
28	lime	106
70	shale	176
11	lime	187
5	shale	192
34	lime	226
6	shale	232
22	lime	254
3	shale	257
22	lime	279 base of the Kansas City
31	shale	310
17	sand	327 grey, no oil
129	shale	456
3	lime	459
6	shale	465
8	lime	473 oil show
13	shale	486
3	sand	489 green, no oil
4	shale	493
2	oil sand	495 green, good bleeding
3	silty shale	498
1	coal	499
5	shale	504
14	oil sand	518 green good bleeding
3	shale	521
2	coal	523
4	shale	527
4	lime	531
19	shale	550
4	lime	554
26	shale	580
10	lime	590
14	shale	604
3	lime	607
24	shale	631
3	limey sand	634 green no oil

1.5	broken sand	635.5 brown & green, 10% bleeding
0.5	limey sand	636 green & white, no oil
1.5	broken sand	637.5 brown & green 40% bleeding
1.5	broken sand	639 brown & green no bleeding
21	shale	660 TD

Drilled a 9 7/8" hole to 22.4'

Drilled a 5 5/8" hole to 660'

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

Set 655' 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>
635		40
636		57
637		32
638		30
639		31
640		34
641		35
642		40
643		39
644		34
645		33
646		36
647		33
648		33