



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 # 30-IWU

API #15-003-26,265

September 23 - September 24, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
14	soil & clay	14
4	clay & gravel	18
50	shale	68
27	lime	95
69	shale	164
10	lime	174
6	shale	180
33	lime	213
7	shale	220
22	lime	242
3	shale	245
20	lime	265 base of the Kansas City
172	shale	437
9	lime	446
6	shale	452
8	lime	460 oil show
21	shale	481
1	coal	482
3	shale	485
4	sand	489 grey, no oil
12	oil sand	501 grey, light oil show
4	shale	505
2	coal	507
4	shale	511
9	lime	520
13	shale	533
3	lime	536
23	shale	559
9	lime	568
19	shale	587
3	lime	590
8	shale	598
6	lime	604
7	shale	611
2	limey sand	613 green & white no oil
6	broken sand	619 brown & green ok bleeding
33	shale	652
1	lime & shells	653

1	limey sand	654
9	broken sand	663 brown & grey 40% bleeding
4	shale	667
3	limey sand	670 black & white, no oil
65	shale	735 TD

Drilled a 9 7/8" hole to 22.5'

Drilled a 5 5/8" hole to 735'

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

Set 725.3' 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>
654		35
655		23
656		31
657		31
658		26
659		25
660		25
661		36
662		25
663		31
664		23
665		29
666		32
667		56
668		40
669		35
670		17