



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.

Winfrey #4-T

API#15-003-25,639

December 18 - December 19, 2012

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
2	soil & clay	2
4	clay & gravel	6
87	shale	93
32	lime	125
65	shale	190
10	lime	200
6	shale	206
39	lime	245
5	shale	250
19	lime	261
3	shale	272
22	lime	294 base of the Kansas City
170	shale	464
3	lime	467
4	shale	471
4	lime	475
5	shale	480
8	lime	488 oil show
7	shale	495
16	oil sand	511 green, good bleeding
3	shale	514
17	oil sand	531 green, good bleeding
7	shale	538
1	coal	539
7	shale	546
6	lime	552
15	shale	567
8	lime	575
33	shale	608
7	lime	615
31	shale	646
6	broken sand	652 brown & green, good bleeding
33	shale	685
1	lime & shells	686
6	oil sand	692 brown, good bleeding
4	shale	696
3	sand	699 black, no oil show

38	shale	737
1	broken sand	738 brown & grey, light oil show
2	silty shale	740
35	broken sand	775 brown & grey, light oil show
15	shale	790
3	oil sand	793 grey, good bleeding
24	shale	817
1	oil sand	818 brown, good bleeding
42	silty shale	860 TD

Drilled a 9 7/8" hole to 20.5'

Drilled a 5 5/8" hole to 860'

Set 20.5' of 7" surface casing cemented with 6 sacks of cement.

Set 850.2' of 2 7/8" threaded and coupled 8 round upset tubing with 3 centralizers, 1 float shoe and 1 clamp.