



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

Petroleum Technologies, Inc.

Sawyer #17

API #15-091-24,320

July 7 - July 9, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
14	soil & clay	14
25	shale	39
26	lime	65
10	shale	75
8	lime	83
7	shale	90
21	lime	111
19	shale	130
22	lime	152
6	shale	158
10	lime	168
2	shale	170
41	lime	211
18	shale	229
8	lime	237
21	shale	258
6	lime	264
6	shale	270
7	lime	277
43	shale	320
27	lime	347
9	shale	356
22	lime	378
4	shale	382
14	lime	396 base of the Kansas City
170	shale	566
4	lime	370
2	shale	372
5	lime	377
3	shale	580
9	lime	589
14	shale	603
4	lime	607
6	shale	613
10	lime	623
27	shale	650
3	lime	653
70	shale	723
11	broken sand	734 brown & grey, light bleeding

17	shale	751
3	lime	754
77	shale	831
2	sand	833
11	shale	844
7	limey sand	851
1	limey sand	852
3	limey sand	855
11	silty shale	866
49	shale	915 TD

Drilled a 9 7/8" hole to 21.6'

Drilled a 5 5/8" hole to 915'

Set 21.6' of 7" casing cemented with 5 sacks cement.

Set 885.6' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.