



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

D & Z Exploration, Inc.

Donovan #1-17

API # 15-091-24,276

February 21 - February 24, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
6	soil & clay	6
8	sandstone	14
17	silty shale	31
2	lime	33
25	shale	58
24	lime	82
7	shale	89
9	lime	98
9	shale	107
19	lime	126
18	shale	144
21	lime	165
5	shale	170
57	lime	227 with a few shale seams
21	shale	248
8	lime	256
21	shale	277
4	lime	281
8	shale	289
7	lime	296
34	shale	330
4	lime	334
9	shale	343
27	lime	370
5	shale	375
22	lime	397
5	shale	402
15	lime	417 base of the Kansas City
172	shale	589
4	lime	593
2	shale	595
2	lime	597
42	shale	639
2	lime	641
6	shale	647
3	lime	650
21	shale	671
3	lime	674
51	shale	725

7	lime	732
18	shale	750
8	broken sand	758 brown & grey, light bleeding
24	shale	782
3	lime	785
82	shale	867
4	limey sand	871 brown & white, good bleeding
4	oil sand	875 brown, good bleeding
2	broken sand	877 brown & grey bleeding
14	shale	891
1	coal	892
68	shale	960 TD

Drilled a 9 7/8" hole to 22.4'

Drilled a 5 5/8" hole to 960'

Set 22.4' of 7" surface casing cemented with 6 sacks of cement.

Set 914' of 2 7/8" 8 round upset tubing with seating nipple including 3 centralizers, 1 float shoe, and 1 clamp