



24 S. Gold Paola, KS 66071

Allen's Holdings & Investments
 Oil & Gas Well Drilling
 Water Wells
 Geo-Loop Installation

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WELL LOG

Petroleum Technologies, Inc.
 Knabe A - #14i
 API #15-091-24507-00-00
 July 9, 2019-July 11, 2019

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
16	soil & clay	16
46	shale	62
3	lime	65
9	shale	74
15	lime	89
8	shale	97
8	lime	105
6	shale	111
20	lime	131
20	shale	151
24	lime	175
46	shale	221
26	lime	247
14	shale	261
10	lime	271
18	shale	289
8	lime	297
4	shale	301
9	lime	310
41	shale	351
14	lime	365 oil show
3	shale	368
10	lime	378
8	shale	386
24	lime	410 making water at 395
3	shale	413
4	lime	417
4	shale	421
6	lime	427 BKC/Hertha
29	shale	456
5	broken sand	461 grey sand & shale, good oil show
136	shale	597
5	lime	602
5	shale	607
3	lime	610
5	shale	615
2	lime	617
3	shale	620

Knabe A - #14i

1	broken sand	621 brown sand & shale, light bleed
2	oil sand	623 brown sand,ok bleed
13	shale	636
2	lime	638
7	shale	645
1	lime	646
34	shale	680 redbed
4	lime	684
2	shale	686
1	lime	687
68	shale	755
5	broken sand	760 brown sand & shale, light bleed
3	silty shale	763
21	shale	784
3	lime	787
13	shale	800
1	lime	801
15	shale	816
1	sand	817
3	oil sand	820
4	silty shale	824
37	shale	861
1	limy sand	862
14	shale	876
1	broken sand	877
5	sand	882
8	oil sand	890
1	broken sand	891
5	silty shale	896
84	shale	980

Drilled a 9 7/8" hole to 21.7'

Drilled a 5 5/8" hole to 980'

Set 21.7' of new 7" casing threaded and coupled, cemented with 5 sacks cement.

Set 957' of new 2 7/8" 8 round upset tubing with a baffle set at 922' ran 3 centralizers, 1 float shoe, 1 clamp.

Dug 1 pit