

DRILL LOG

Operator License# 32834

API # 15-121-31514-00-00

Operator _____ JTC Oil, Inc.

Lease Wingert

Address 35790 Plum Creek Rd. Osaw. KS

Well # P-13

Contractor JTC Oil, Inc.

Spud Date 9/16/18 Cement 9/20/18

Contractor License 32834

Location _____ of _____

T.D. 740 T.D. of Pipe 720

_____ feet from _____

Surf. Pipe Size 7" Depth ft. 20 ft. w/ 3sx cement _____ feet from _____

Kind of Well Production

County Miami

Thickness	Strata	From	To	Thickness	Strata	From	To
2	soil	0	2	4	lime	218	222
2	clay	2	4	38	shale	222	260
4	shale	4	13	14	lime	260	274
21	lime	13	34	12	shale	274	286
22	shale	34	56	27	lime	286	313
16	lime	56	72	13	coal	313	326
97	shale	72	169	16	lime	326	342
17	lime	169	186	5	coal	342	347
19	shale	186	205	13	lime	347	360
3	lime	205	208	137	shale	360	497
10	shale	208	218	19	lime/shale	497	516

<u>20</u>	lime	516	536
<u>47</u>	shale	536	583
<u>3</u>	lime	583	586
<u>18</u>	shale	586	604
<u>3</u>	lime	604	607
<u>18</u>	black shale	607	625
<u>5</u>	lime	625	630
<u>16</u>	shale	630	646
<u>4</u>	lime	646	650
<u>21</u>	shale	650	671
<u>2</u>	oil sand	671	673 broke
<u>3</u>	oil sand	673	676 ok
<u>3</u>	oil sand	676	679 ok
<u>3</u>	oil sand	679	682 ok
<u>58</u>	shale	682	740