

DRILL LOG

Operator License# 32834

API # 15-121-31439-00-00

Operator _____ JTC Oil, Inc.

Lease East Waddle

Address 35790 Plum Creek Rd. Osaw. KS

Well # P-1

Contractor JTC Oil, Inc.

Spud Date 12/15/17 Cement 12/21/17

Contractor License 32834

Location _____ of _____

T.D. 600 T.D. of Pipe - 595

_____ feet from

Surface Pipe: 20' of 7" w/3sx cement _____ feet from _____

Kind of Well Producer

County Miami

Thickness	Strata	From	To	Thickness	Strata	From	To
2	soil	0	2	149	shale	173	322
6	lime	2	8	18	lime/shale	322	340
9	shale	8	17	14	lime	340	354
17	lime	17	34	43	shale	354	397
42	shale	34	76	6	coal	397	403
14	lime	76	90	19	lime/shale	403	422
9	shale	90	99	6	lime	422	428
31	lime	99	130	13	black shale	428	441
8	coal	130	138	14	lime	441	455
20	lime	138	158	11	shale	455	466
15	coal	158	173	2	lime	466	468

<u>2</u>	<u>coal</u>	<u>468</u>	<u>470</u>
<u>4</u>	<u>lime</u>	<u>470</u>	<u>474</u>
<u>4</u>	<u>lime oil</u>	<u>474</u>	<u>478</u>
<u>3</u>	<u>lime</u>	<u>478</u>	<u>481</u>
<u>6</u>	<u>shale</u>	<u>481</u>	<u>487</u>
<u>2</u>	<u>oil sand</u>	<u>487</u>	<u>489 good</u>
<u>2</u>	<u>oil sand</u>	<u>489</u>	<u>491 v good</u>
<u>2</u>	<u>oil sand</u>	<u>491</u>	<u>493 good</u>
<u>2</u>	<u>oil sand</u>	<u>493</u>	<u>495</u>
<u>2</u>	<u>oil sand</u>	<u>495</u>	<u>497</u>
<u>28</u>	<u>shale</u>	<u>497</u>	<u>525</u>
<u>15</u>	<u>black shale</u>	<u>525</u>	<u>540</u>
<u>10</u>	<u>shale</u>	<u>540</u>	<u>550</u>
<u>6</u>	<u>oil sand</u>	<u>550</u>	<u>556</u>
<u>44</u>	<u>shale</u>	<u>556</u>	<u>600</u>