

DRILL LOG

Operator License# 32834

API # 15-121-31431-00-00

Operator _____ JTC Oil, Inc.

Lease East Waddle

Address 35790 Plum Creek Rd. Osawatomie KS 66064 Well # I-3

Contractor JTC Oil, Inc.

Spud Date 12/19/7 Cement 12/21/17

Contractor License 32834

Location _____ of _____

T.D. 520 T.D. of Pipe 500

_____ feet from _____

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

Kind of Well Injector

County Miami

Thickness	Strata	From	To	Thickness	Strata	From	To
2	soil	0	2	5	red bed	297	302
13	clay	2	15	17	lime/shale	302	319
40	shale	15	55	14	lime	319	333
14	lime	55	69	10	shale	333	341
9	shale	69	78	5	semi	341	346
28	lime	78	106	29	shale	346	375
9	coal	106	115	11	lime	375	396
22	lime	115	137	15	shale	396	411
5	coal	137	142	3	lime	411	424
10	lime	142	152	18	shale	424	442
145	shale	152	297	2	lime	442	444

<u>4</u>	<u>lime oil</u>	<u>444</u>	<u>448</u>
<u>6</u>	<u>shale</u>	<u>448</u>	<u>454</u>
<u>2</u>	<u>oil sand</u>	<u>454</u>	<u>456 broken</u>
<u>1</u>	<u>oil sand</u>	<u>456</u>	<u>457 ok</u>
<u>2</u>	<u>oil sand</u>	<u>457</u>	<u>459 good</u>
<u>2</u>	<u>oil sand</u>	<u>459</u>	<u>461 broken</u>
<u>33</u>	<u>shale</u>	<u>461</u>	<u>494</u>
<u>26</u>	<u>black shale</u>	<u>494</u>	<u>520</u>

TD 520

Casing 500