

DRILL LOG

Operator License # 33741 API # 15-059-26460-00-00
 Operator Energex Kansas Lease Name Thoele South
 Address 2038 S. Princeton St., Ste B Well # BSP-TS40
Ottawa, KS 66067
 Contractor JTC Oil, Inc. Spud Date 7/08/13 Cement 7/12/13
 Contractor License 32834 Location _____ of _____
 T.D. 880 T.D. of Pipe 835 _____ feet from _____
 Surf. Pipe Size 7" Depth 20' _____ feet from _____
 Kind of Well Production County Franklin

Thickness	Strata	From	To	Thickness	Strata	From	To
<u>2</u>	<u>Lime</u>	<u>0</u>	<u>2</u>	<u>33</u>	<u>Lime</u>	<u>221</u>	<u>254</u>
<u>26</u>	<u>Lime</u>	<u>2</u>	<u>28</u>	<u>7</u>	<u>Black Shale</u>	<u>254</u>	<u>261</u>
<u>78</u>	<u>Shale</u>	<u>28</u>	<u>106</u>	<u>22</u>	<u>Lime</u>	<u>261</u>	<u>283</u>
<u>22</u>	<u>Lime</u>	<u>106</u>	<u>128</u>	<u>4</u>	<u>Coal</u>	<u>283</u>	<u>287</u>
<u>21</u>	<u>Shale</u>	<u>128</u>	<u>149</u>	<u>13</u>	<u>Lime</u>	<u>287</u>	<u>300</u>
<u>7</u>	<u>Lime</u>	<u>149</u>	<u>156</u>	<u>149</u>	<u>Shale</u>	<u>300</u>	<u>449</u>
<u>1</u>	<u>Shale</u>	<u>156</u>	<u>157</u>	<u>7</u>	<u>Lime</u>	<u>449</u>	<u>456</u>
<u>4</u>	<u>Red Red</u>	<u>157</u>	<u>161</u>	<u>7</u>	<u>Shale</u>	<u>456</u>	<u>463</u>
<u>14</u>	<u>Lime</u>	<u>157</u>	<u>213</u>	<u>3</u>			
<u>8</u>	<u>Shale</u>	<u>213</u>	<u>221</u>	<u>11</u>	<u>Sand</u>	<u>483</u>	<u>494</u>

25	Shale	494	519	
3	Coal	519	522	
4	Shale	522	526	
7	Lime	526	533	
14	Shale	533	547	
2	Lime	547	549	
18	Black Shale	549	567	
15	Lime	567	582	
8	Shale	582	590	
3	Lime	590	593	
2	Coal	593	596	
6	Lime	596	602	
3	Lime Oil-Black Jack	602	605	Good
3	Lime Oil-Black Jack	605	608	Good
1	Lime Oil	608	609	OK
2	Shale	609	611	
4	Coal	611	615	
15	Sand	615	630	
1 st Squirrel – Dead Oil				
19	Shale	630	649	
29	Black Shale	649	678	
2	Oil Sand	678	680	Good
2 nd Squirrel				
2	Oil Sand	680	682	Broken

33	Shale	682	715	
3	Coal	715	718	
9	Sand	718	727	
1 st Cattleman – No Oil				
12	Shale	727	739	
2	Coal	739	741	
7	Shale	741	748	
24	Shale/Sand	748	772	
1	Oil Sand	772	773	Good
3	Oil Sand	773	776	Good
2	Oil Sand	776	778	Good
3	Oil Sand	778	781	OK
3	Oil Sand	781	784	Good
3	Oil Sand	784	787	Good
3	Oil Sand	787	790	Good
3	Oil Sand	790	793	Good
3	Oil Sand	793	796	Broken
2	Shale	796	798	
3	Shale/Sand	798	801	Good
3	Oil Sand	801	804	V-Good
3	Oil Sand	804	807	V Good
3	Oil Sand	807	810	Broken
3	Oil Sand	810	813	Broken
22	Sand	813	835	

35	Shale	835	870
10	Black Shale	870	880
