

DRILL LOG

Operator License # 33741 API # 15-059-26365-00-00
 Operator Energex Kansas Lease Name Thoele South
 Address 2038 S. Princeton St., Ste B Well # BSP-TS32
Ottawa, KS 66067
 Contractor JTC Oil, Inc. Spud Date 6/18/13 Cement 6/28/13
 Contractor License 32834 Location _____ of _____
 T.D. 820 T.D. of Pipe 799 _____ feet from _____
 Surf. Pipe Size 7" Depth 20' _____ feet from _____
 Kind of Well Production County Franklin

| Thickness | Strata | From | To | Thickness | Strata | From | To |
|-----------|------------|------|-----|-----------|-------------|------|-----|
| 3 | Soil | 0 | 3 | 2 | Lime | 197 | 199 |
| 4 | Clay | 3 | 7 | 14 | Shale | 199 | 213 |
| 19 | Lime | 7 | 26 | 9 | Lime | 213 | 222 |
| 6 | Shale | 26 | 32 | 6 | Red Bed | 222 | 228 |
| 3 | Red Bed | 32 | 35 | 35 | Shale | 228 | 263 |
| 28 | Shale | 35 | 63 | 17 | Lime | 263 | 280 |
| 39 | Lime | 63 | 102 | 8 | Shale | 280 | 288 |
| 68 | Shale | 102 | 170 | 28 | Lime | 288 | 316 |
| 18 | Lime | 170 | 188 | 10 | Black Shale | 316 | 326 |
| 3 | Lime Shale | 188 | 191 | 24 | Lime | 326 | 350 |
| 6 | Shale | 191 | 197 | 4 | Coal | 350 | 354 |

| | | | | |
|-----|-------------|-----|-----|------------|
| 13 | Lime | 354 | 367 | |
| 150 | Shale | 367 | 517 | |
| 19 | Lime | 517 | 536 | |
| 2 | Shale | 536 | 538 | |
| 9 | Lime | 538 | 547 | |
| 5 | Shale | 547 | 552 | |
| 2 | Sand | 552 | 554 | |
| 4 | Oil Sand | 554 | 558 | Little Oil |
| 4 | Oil Sand | 558 | 562 | Little Oil |
| 7 | Sand | 562 | 569 | |
| 22 | Shale | 569 | 591 | |
| 3 | Coal | 591 | 594 | |
| 5 | Shale | 594 | 599 | |
| 5 | Lime | 599 | 604 | |
| 16 | Shale | 604 | 620 | |
| 2 | Lime | 620 | 622 | |
| 13 | Black Shale | 622 | 635 | |
| 19 | Lime | 635 | 654 | |
| 7 | Shale | 654 | 661 | |
| 5 | Lime | 661 | 666 | |
| 2 | Coal | 666 | 668 | |
| 7 | Lime | 668 | 675 | |
| 3 | Lime Oil | 675 | 678 | Good |
| 3 | Lime Oil | 678 | 681 | Good |

| | | | | |
|----|-------------|-----|-----|--------|
| 1 | Lime Oil | 681 | 682 | Ok |
| 2 | Shale | 682 | 684 | |
| 3 | Coal | 684 | 687 | |
| 15 | Sand | 687 | 702 | |
| 36 | Shale | 702 | 738 | |
| 13 | Black Shale | 738 | 751 | |
| 2 | Oil Sand | 751 | 753 | Good |
| 2 | Oil Sand | 753 | 755 | Good |
| 2 | Oil Sand | 755 | 757 | Ok |
| 1 | Oil Sand | 757 | 758 | Broken |
| 62 | Shale | 758 | 820 | |