



**Operator:**  
Black Travis, Inc.  
Paola, KS

**Travis #KR-37**

Miami Co., KS  
10-17S-22E  
API: 121-30783

|                        |                     |                         |            |
|------------------------|---------------------|-------------------------|------------|
| <b>Spud Date:</b>      | 11/6/2014           | <b>Surface Bit:</b>     | 9.875"     |
| <b>Surface Casing:</b> | 7.0"                | <b>Drill Bit:</b>       | 5.875"     |
| <b>Surface Length:</b> | 22.0'               | <b>Longstring:</b>      | 666.30'    |
| <b>Surface Cement:</b> | 4 sx                | <b>Baffle:</b>          | 634.60'    |
| <b>Longstring:</b>     | 2 7/8 EUE - New L/S | <b>Longstring Date:</b> | 11/10/2014 |

**Driller's Log**

| Top | Bottom | Formation   | Comments                 |
|-----|--------|-------------|--------------------------|
| 0   | 19     | Soil & clay |                          |
| 19  | 30     | Shale       |                          |
| 30  | 52     | Lime        |                          |
| 52  | 74     | Sand        | Grey                     |
| 74  | 86     | Shale       |                          |
| 86  | 90     | Lime        |                          |
| 90  | 130    | Shale       |                          |
| 130 | 180    | Lime        | Fair oil show at 168-170 |
| 180 | 193    | Shale       |                          |
| 193 | 210    | Lime        |                          |
| 210 | 215    | Bl. Shale   |                          |
| 215 | 232    | Lime        |                          |
| 232 | 238    | Shale       | Limey                    |
| 238 | 253    | Shale       |                          |
| 253 | 266    | Sand        | Grey                     |
| 266 | 273    | Sandy Shale |                          |
| 273 | 334    | Shale       |                          |
| 334 | 339    | Shale       | Limey                    |
| 339 | 362    | Shale       |                          |
| 362 | 365    | Red Bed     |                          |
| 365 | 369    | Sandy Shale |                          |
| 369 | 393    | Sand        | See below                |
| 393 | 396    | Shale       |                          |

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|            |     |           |            |
|------------|-----|-----------|------------|
| 396        | 404 | Lime      |            |
| 404        | 458 | Shale     |            |
| 458        | 468 | Lime      |            |
| 468        | 478 | Shale     |            |
| 478        | 489 | Lime      |            |
| 489        | 498 | Shale     | Limey      |
| 498        | 502 | Lime      |            |
| 502        | 516 | Shale     |            |
| 516        | 521 | Lime      |            |
| 521        | 528 | Shale     |            |
| 528        | 530 | Coal      |            |
| 530        | 533 | Lime      |            |
| 533        | 535 | Bl. Shale |            |
| 535        | 550 | Shale     |            |
| 550        | 602 | Sand      | See below  |
| 602        | 620 | Shale     |            |
| 620        | 622 | Sand      | Faint odor |
| 622        | 682 | Shale     |            |
| <b>682</b> |     | <b>TD</b> |            |

**Coring**

| Run | Footage | Rec. |
|-----|---------|------|
| 1   | 372-392 | 20'  |
| 2   | 553-573 | 20'  |
| 3   | 573-593 | 20'  |
| 4   | 593-613 | 20'  |

**Wayside Sand Detail**

|           |  |
|-----------|--|
| 369-374.5 | Sand, no oil saturation                            |
| 374.5-380 | Sand, slightly laminated, no oil saturation        |
| 380-382   | Mostly sand, good odor, light saturation and bleed |
| 382-382.5 | Lime   |
| 382.5-393 | Sand, good saturation, good odor                   |

**Squirrel Sand Detail**

|           |  |
|-----------|--|
| 553-560   | Laminated sand, good oil show                        |
| 560-563   | Laminated, mostly shale, light to fair oil show      |
| 563-569.5 | Laminated, good oil saturation and bleed             |
| 569.5-580 | Laminated, fair oil saturation, not as good as above |
| 580-581   | Coal   |
| 581-596.5 | Good sand, good oil saturation                       |
| 596.5-599 | Shale  |
| 599-602   | Sand, good oil saturation, heavier oil than above    |