



**Operator:**  
Grand Mesa Operating Co.  
Wichita, KS

**Vesecky #4-3**

Douglas Co., KS  
23-14S-20E  
API: 045-22232

**Spud Date:** 8/5/2014  
**Surface Casing:** 7.0"  
**Surface Length:** 42.0'  
**Surface Cement:** 10 sx  
**Longstring:**

**Surface Bit:** 11.0"  
**Drill Bit:** 6.125"  
**Longstring:** P&A  
**Longstring Date:**

**Driller's Log**

| Top | Bottom | Formation     | Comments |
|-----|--------|---------------|----------|
| 0   | 8      | Soil & clay   |          |
| 8   | 17     | Gravel & Sand |          |
| 17  | 22     | Mucky Shale   |          |
| 22  | 40     | Shale         |          |
| 40  | 74     | Lime          |          |
| 74  | 81     | Shale         |          |
| 81  | 88     | Lime          |          |
| 88  | 94     | Shale         |          |
| 94  | 114    | Lime          |          |
| 114 | 128    | Sandy Lime    |          |
| 128 | 146    | Shale         |          |
| 146 | 167    | Lime          |          |
| 167 | 169    | Coal          |          |
| 169 | 230    | Shale         |          |
| 230 | 254    | Lime          |          |
| 254 | 267    | Shale         |          |
| 267 | 271    | Lime          |          |
| 271 | 311    | Shale         |          |
| 311 | 327    | Lime          |          |
| 327 | 331    | Shale         |          |
| 331 | 360    | Lime          |          |
| 360 | 365    | Shale         |          |
| 365 | 388    | Lime          |          |
| 388 | 394    | Shale         |          |

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|            |     |             |                                      |
|------------|-----|-------------|--------------------------------------|
| 394        | 402 | Lime        | Douglas Co., KS                      |
| 402        | 412 | Shale       |                                      |
| 412        | 420 | Sandy Shale |                                      |
| 420        | 550 | Shale       |                                      |
| 550        | 561 | Lime        |                                      |
| 561        | 569 | Shale       |                                      |
| 569        | 574 | Lime        |                                      |
| 574        | 578 | Shale       |                                      |
| 578        | 601 | Mucky Shale |                                      |
| 601        | 603 | Lime        |                                      |
| 603        | 622 | Shale       |                                      |
| 622        | 628 | Lime        |                                      |
| 628        | 637 | Shale       |                                      |
| 637        | 640 | Lime        |                                      |
| 640        | 642 | Shale       |                                      |
| 642        | 645 | Lime        |                                      |
| 645        | 658 | Shale       |                                      |
| 658        | 664 | Lime        |                                      |
| 664        | 675 | Shale       |                                      |
| 675        | 679 | Lime        |                                      |
| 679        | 684 | Shale       |                                      |
| 684        | 685 | Sand        | Fair oil bleed in samples and to pit |
| 685        | 687 | Sand        | Very spotty oil show, mostly shale   |
| 687        | 705 | Shale       |                                      |
| <b>705</b> |     | <b>TD</b>   |                                      |

| <b>Coring</b> |                |             |
|---------------|----------------|-------------|
| <b>Run</b>    | <b>Footage</b> | <b>Rec.</b> |
| 1             | 685-705        | 20'         |

P&A - plugged through drill pipe with 10 sx at TD; 10 sx at 500' and fill 250 to surface.