

HAT DRILLING  
 12371 KS HWY 7  
 MOUND CITY, KS 66056  
 LICENSE # 33734

Gillespie A4-2  
 API # 15-091-24228-00-00  
 SPUD DATE 10-28-13

| Footage | Formation  | Thickness | Set 45' of 7"                                              |
|---------|------------|-----------|------------------------------------------------------------|
| 2       | Topsoil    | 2         | TD 913'                                                    |
| 28      | clay       | 26        | Ran 909' of 2 7/8 on 11-04-13                              |
| 40      | shale      | 12        |                                                            |
| 50      | lime       | 10        |                                                            |
| 58      | shale      | 8         |                                                            |
| 75      | lime       | 17        |                                                            |
| 83      | shale      | 8         |                                                            |
| 92      | lime       | 9         |                                                            |
| 100     | shale      | 8         |                                                            |
| 120     | lime       | 20        |                                                            |
| 139     | shale      | 19        |                                                            |
| 160     | lime       | 21        |                                                            |
| 169     | shale      | 9         |                                                            |
| 180     | lime       | 11        |                                                            |
| 196     | shale      | 16        |                                                            |
| 226     | lime       | 30        |                                                            |
| 239     | shale      | 13        |                                                            |
| 253     | lime       | 14        |                                                            |
| 265     | shale      | 12        |                                                            |
| 289     | lime       | 24        |                                                            |
| 329     | shale      | 40        |                                                            |
| 364     | lime       | 35        |                                                            |
| 369     | shale      | 5         |                                                            |
| 390     | lime       | 21        |                                                            |
| 393     | shale      | 3         |                                                            |
| 395     | lime       | 2         |                                                            |
| 402     | shale      | 7         |                                                            |
| 407     | lime       | 5         |                                                            |
| 578     | shale      | 171       |                                                            |
| 584     | lime       | 6         |                                                            |
| 591     | shale      | 7         |                                                            |
| 606     | lime       | 15        |                                                            |
| 624     | shale      | 18        |                                                            |
| 636     | lime       | 12        |                                                            |
| 740     | shale      | 104       |                                                            |
| 744     | sand/shale | 4         | <i>squirrel</i> 45% sand, 55% shale, good odor, good bleed |
| 799     | shale      | 55        |                                                            |
| 800     | sand       | 1         | <i>cattleman</i> good odor, slight bleed                   |
| 857     | shale      | 57        |                                                            |
| 867     | sand       | 10        | <i>B+ivsl</i> good odor, good bleed                        |
| 913     | shale      | 46        |                                                            |