

**OPERATOR**

Company: ZU, LLC  
 Address: 108 WEST 34TH STREET  
 HAYS, KANSAS 67601

Contact Geologist: GREG WHITEHAIR  
 Contact Phone Nbr: 785-432-0789  
 Well Name: GOULD # 1  
 Location: E2 SE NE, SEC. 28-20S-12W  
 API: 15-009-25,996-00-00  
 Pool: IN FIELD  
 State: KANSAS

Field: CHASE-SILICA  
 Country: USA

**Scale 1:240 Imperial**

Well Name: GOULD # 1  
 Surface Location: E2 SE NE, SEC. 28-20S-12W  
 Bottom Location:  
 API: 15-009-25,996-00-00  
 License Number: 32699  
 Spud Date: 6/18/2014 Time: 9:00 AM  
 Region: BARTON COUNTY  
 Drilling Completed: 8/9/2014 Time: 3:00 AM  
 Surface Coordinates: 1980' FNL & 330' FEL  
 Bottom Hole Coordinates:  
 Ground Elevation: 1828.00ft  
 K.B. Elevation: 1835.00ft  
 Logged Interval: 2750.00ft To: 3530.00ft  
 Total Depth: 3530.00ft  
 Formation: ARBUCKLE  
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: -98.6464886  
 Latitude: 38.2846905  
 N/S Co-ord: 1980' FNL  
 E/W Co-ord: 330' FEL

**LOGGED BY**

Company: SOLUTIONS CONSULTING, INC.  
 Address: 108 WEST 35TH STREET  
 HAYS, KANSAS 67601

Phone Nbr: 785-625-3380  
 Logged By: GEOLOGIST

Name: BRUCE BASYE/HERB DEINES

**CONTRACTOR**

Contractor: PRECISION DRILLING, LLC  
 Rig #: 4  
 Rig Type: MUD ROTARY  
 Spud Date: 6/18/2014 Time: 9:00 AM  
 TD Date: 8/9/2014 Time: 3:00 AM  
 Rig Release: 8/10/2014 Time: 6:00 AM

**ELEVATIONS**

K.B. Elevation: 1835.00ft Ground Elevation: 1828.00ft  
 K.B. to Ground: 7.00ft

**NOTES**












PRODUCTION CASING WAS RAN TO FURTHER TEST AND DEVELOP WELL

NO DRILL STEM TESTS WERE RAN ON THIS WELL

**FORMATION TOPS COMPARISON**



|                    | <b>GOULD # 1</b>       | <b>SPACIL # 1</b>     | <b>SPACILE #2</b>     |
|--------------------|------------------------|-----------------------|-----------------------|
|                    | <b>E2 SE NE</b>        | <b>SE NW NE</b>       | <b>SE SE NE</b>       |
|                    | <b>SEC. 28-20S-12W</b> | <b>SEC. 28-20-12W</b> | <b>SEC. 28-20-12W</b> |
|                    | <b>1828'GL 1835'KB</b> | <b>KB 1854'</b>       | <b>KB 1835'</b>       |
| <u>FORMATION</u>   | <u>LOG TOPS</u>        | <u>LOG TOPS</u>       | <u>LOG TOPS</u>       |
| <b>Anhydrite</b>   | <b>613 +1222</b>       | <b>+1216</b>          | <b>+1220</b>          |
| <b>Topeka</b>      | <b>2755 -920</b>       | <b>- 929</b>          |                       |
| <b>Heebner Sh.</b> | <b>3020-1185</b>       | <b>-1192</b>          | <b>-1187</b>          |
| <b>Toronto</b>     | <b>3038-1203</b>       | <b>-1213</b>          |                       |
| <b>Douglas Sh.</b> | <b>3054-1219</b>       | <b>-1228</b>          |                       |
| <b>Brown Lime</b>  | <b>3147-1312</b>       | <b>-1317</b>          | <b>-1313</b>          |
| <b>LKC</b>         | <b>3163-1328</b>       | <b>-1332</b>          | <b>-1331</b>          |
| <b>BKC</b>         | <b>3377-1542</b>       | <b>-1540</b>          |                       |
| <b>Arbuckle</b>    | <b>3421-1586</b>       | <b>-1562</b>          | <b>-1564</b>          |
| <b>RTD</b>         | <b>3530-1695</b>       | <b>-1637</b>          | <b>-1597</b>          |

### ROCK TYPES

|  |          |   |           |   |            |  |            |
|--|----------|---|-----------|---|------------|--|------------|
|  | Clystgy  |  | Dolprim   |  | shale, grn |  | shale, red |
|  | Clystcol |  | Lmst fw<7 |  | shale, gry |  | Karst Topo |
|  | Congl    |  | Lmst fw>7 |  | Carbon Sh  |  |            |









### ACCESSORIES

#### FOSSIL





-  Oolite
-  Oomoldic

### OTHER SYMBOLS

#### Oil Show

-  Good Show
-  Fair Show
-  Poor Show
-  Spotted or Trace
-  Questionable Stn
-  Dead Oil Stn
-  Fluorescence
-  Gas

#### DST

-  DST Int
-  DST alt
-  Core
-  tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.9 (www.grsi.ca)

