



**Discovery
Drilling**

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

DRILLER'S LOG

Operator: Hupfer Operating, Inc. Lic# 30380 Contractor: Discovery Drilling Co., Inc. LIC#31548
P.O. Box 3912 PO Box 763
Shwanee, KS 66203-0912 Hays, KS 67601

Lease: Ringwald "B" # 5 Location: 1320 FNL / 1980 FWL
C-E/2-E/2-NW
Section 5/ 20S/ 10W
Rice County, KS

Loggers Total Depth: No Log API#15- 159-22,700-00-00
 Rotary Total Depth: 3297' Elevation: 1801 GL / 1809 KB
 Commenced: 10/8/2012 Completed: 10/12/2012
 Casing: 8 5/8" @ 250'W/180sks Status: Oilwell
5 1/2" @ 3294'W100sks

**DEPTHS & FORMATIONS
(All from KB)**

| | | | |
|-----------------------|-------------|--------------|--------------|
| Surface, Sand & Shale | <u>0'</u> | Shale | <u>507'</u> |
| Dakota Sand | <u>105'</u> | Shale & Lime | <u>1350'</u> |
| Shale | <u>165'</u> | Shale | <u>1876'</u> |
| Cedar Hill Sand | <u>322'</u> | Shale & Lime | <u>2363'</u> |
| Red Bed Shale | <u>409'</u> | Lime & Shale | <u>2881'</u> |
| Anhydrite | <u>494'</u> | RTD | <u>3297'</u> |
| Base Anhydrite | <u>507'</u> | | |

STATE OF KANSAS)
) ss
 COUNTY OF ELLIS)

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

 Thomas H. Alm

Subscribed and sworn to before me on 10-15-12

My Commission expires: 8-9-2015

(Place stamp or seal below)

 Notary Public

