



# Discovery Drilling

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

## DRILLER'S LOG

Operator: Cattlemans Oil Operations Lic# 7064 Contractor: **Discovery Drilling Co., Inc. LIC#31548**  
2260 Catherine Road PO Box 763  
Hays, KS 67601 Hays, KS 67601

Lease: Hadley # 13 Location: 330 FNL - 2310 FEL  
NW/NW/NE  
Section 20/ 11S/ 17W  
Ellis County, KS

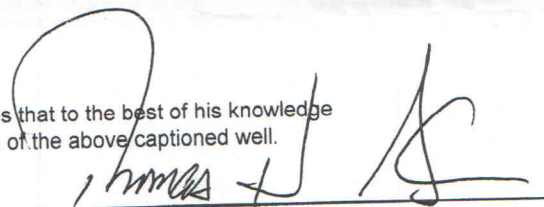
Loggers Total Depth: 3489' API#15- 051-26,546-00-00  
Rotary Total Depth: 3490' Elevation: 1846 GL - 1854 KB  
Commenced: 8/28/2013 Completed: 9/4/2013  
Casing: 8 5/8" @ 259.59'W/150sks Status: Oilwell  
5 1/2" @ 3489.79'W/195sks  
(Port Collar @ 1384')

## DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1128'</u>
Dakota Sand	<u>401'</u>	Shale & Lime	<u>1754'</u>
Shale	<u>482'</u>	Shale	<u>2216'</u>
Cedar Hill Sand	<u>596'</u>	Shale & Lime	<u>2668'</u>
Red Bed Shale	<u>747'</u>	Lime & Shale	<u>3010'</u>
Anhydrite	<u>1094'</u>	RTD	<u>3490'</u>
Base Anhydrite	<u>1128'</u>		

STATE OF KANSAS )  
) ss  
COUNTY OF ELLIS )

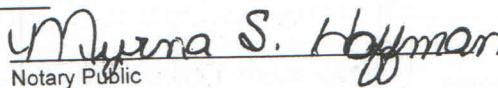
Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

  
Thomas H. Alm

Subscribed and sworn to before me on 9-5-13

My Commission expires: 6-28-14

(Place stamp or seal below)

  
Notary Public

