

DRILLERS LOG

Re: Harbacek # 1  
SW SW NE Section 8-16S-10W  
Ellsworth County, Kansas  
Elevation 1807 DF

OPERATOR: D & L Oil Company

CONTRACTOR: Bergman Drilling, Inc.

COMMENCED: October 27, 1978

COMPLETED: November 7, 1978

TOTAL DEPTH: 3305' Set 8 5/8" @ 280 w/175 sacks

0	285	Post Rock & Shale
280	610	Shale
610	633	Anhydrite
633	917	Shale
917	920	Iron Pirite
920	1000	Shale
1000	1450	Shale & Lime
1450	1645	Shale & Lime
1645	1820	Shale & Lime
1820	2030	Broken Lime - Shale
2030	2240	Limed Shale
2240	2373	Lime & Shale
2373	2745	Shael - Lime
2745	2770	Lime & Shale
2770	3002	Lime & Shale
3002	3030	Lime
3030	3115	Lime
3115	3180	K.C. Lime
3180	3245	Lime
3245	3273	Lime
3273	3295	Arbuckle
3295	3300	Arbuckle
3300	3305	Arbuckle
3305		Total Depth D & A

We certify that the above and foregoing to be true and correct copy of the drillers log on the # 1 Harbacek, located in Ellsworth County, Kansas as revealed by the records of Bergman Drilling, Inc.

*[Handwritten signature]*