

DRILLERS LOG

-15-053-20481
8-16-10W

Re: Harbacek # 1
300' W of C of NE/4
Section 8-16S-10W
Ellsworth County, Kansas

Elevation 1813 DF

OPERATOR: Bergman Oil Company
CONTRACTOR: Bergman Drilling, Inc.
COMMENCED: 9-23-77
COMPLETED: 10-1-77
TOTAL DEPTH: 3296'

Set 283' of 8 5/8" w/175 sacks

0	287	Surface
287	440	Red Bed Shale -Shells
440	611	Red Bed - Shale
611	637	Anhydrite
637	1185	Red Bed Shale
1185	1393	Red Bed @ Shale
1393	1485	Shale & Lime
1485	1760	Broken Lime - Shale
1760	1905	Lime - Shale
1905	2755	Shale @ Lime
2755	3103	Lime - Shale
3103	3160	Lime & Shale
3160	3240	Lime
3240	3273	Lime
3273	3288	Lime & Shale
3288	3296	Arbuckle
3296		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.


Harold I. Bergman, Manager