

Marc A. Downing
Geologic Report
Consulting Petroleum Geologist
Drilling Time and Sample Log

Operator **Downing-Nelson Oil Co., Inc.**
 Lease **Horinek No. 1-10**
 Elevation
 KB 2944
 DF 2942
 GL 2936

API # **15-153-21043-0000**
 Casing Record Surface
 8 5/8" @ 216'

Field **Wildcat**
 Production
 5 1/2" @ 4182

Location **335' FNL & 420' FEL**
 Electrical Surveys

Sec. **10** Twp. **1s** Rge. **33w**
 CNDL, DIL, MEL, Sonic

County **Rawlins** State **Kansas**

Formation	Sample tops	Log Tops	Datum	Struct Comp
Top Anhydrite	2769	2767	+177	-2
Base Anhydrite	2800	2797	+147	+6
Topeka	3671	3668	-724	NA
Oread	3796	3792	-848	+4
Heebner	3819	3816	-872	NA
Lansing	3862	3858	-914	+15
BKC	4137	4134	-1190	+5
				-7
Total Depth	4183	4183	-1239	

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Reference Well For Structural Comparison **Abercrombie Drilling Horinek "B" #1** C SW SW Sec. 2-1s-33w

Drilling Contractor **Discovery Drilling, Rig #1**
 Commenced **8-7-14** Completed **8-12-14**
 Samples Saved From **3750** To **RTD**
 Drilling Time Kept From **3600** To **RTD**
 Samples Examined From **3750** To **RTD**
 Geological Supervision From **3600** To **RTD**

Summary and Recommendations
 Due to structural position, DST recovery, and log evaluation, it was decided to set 5 1/2" production casing for completion.

Perforations:
 LKC F: 4112-4116
 LKC D: 4013-4018
 LKC C: 3955-3957
 Oread: 3804-3806, 3792-3798 (Before Abandonment)

Respectfully Submitted,
 Marc A. Downing

