

Marc A. Downing		Geologic Report	
Consulting Petroleum Geologist		Drilling Time and Sample Log	
Operator Downing-Nelson Oil Co., Inc.		Elevation KB 2039 DF 2037 GL 2031	
Lease Oelkers-Werth Unit No. 1-5		Casing Record Surface 8 5/8" @ 1254' Production 5 1/2" @ 3677'	
API # 15-165-22131-0000		Electrical Surveys CNDL, DIL, MEL, Sonic	
Field Wildcat		Location 1875' FNL & 2020' FEL	
Sec. 5	Twp. 16s	Rge. 19w	
County Rush		State Kansas	
Formation	Sample tops	Log Tops	Datum
Top Anhydrite	1238	1242	+797
Base Anhydrite	1286	1281	+758
Topoka	3012	3016	-977
Heebner	3282	3284	-1245
Toronto	3302	3304	-1265
LKC	3326	3328	-1289
BKC	3573	3375	-1336
Marmaton	3621	3622	-1583
Reagan Sand	3651	3652	-1613
Granite Wash	3670	NA	-1631
Total Depth	3677	3680	-1641
Reference Well For Structural Comparison		Joeseph P. Walter	
Werth #1		NE NW SE	
		Sec. 5-16s-19w	

Drilling Contractor	Discovery Drilling, Rig #2	
Commenced	8-8-16	Completed 8-16-16
Samples Saved From	3000	To RTD
Drilling Time Kept From	2900	To RTD
Samples Examined From	3000	To RTD
Geological Supervision From	2900	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.

Respectfully Submitted,

Marc A. Downing

