

Marc A. Downing Geologic Report		Discovery Drilling, Rig #1	
Consulting Petroleum Geologist		Completed 11-27-14	
Drilling Time and Sample Log		Completed 11-27-14	
Operator H&C Oil Operating, Inc.		KB Elevation 2371	
Lease North Fork Farms No. 20-1		DF 2363	
API # 15-195-22970-0000		GL 2363	
Field Wildcat		Casing Record Surface 8 5/8" @ 223'	
Location 480' FNL & 2130' FEL		Production 5 1/2" @ 4334'	
Sec. 20 Twp. 11s Rge. 23w		Electrical Surveys CNL/CDL, DIL, MEL, SONIC	
County Trego State Kansas		Perforate: LKC J: 3925-3929	
Formation Sample tops Log Tops Datum Struct Comp			
Top Anhydrite	1944	1944	+427
Base Anhydrite	1976	1974	+397
Topeka	3484	3484	-1113
Heebner	3707	3707	-1336
Toronto	3728	3728	-1357
LKC	3741	3740	-1369
BKC	3979	3979	-1608
Marmaton	4091	4092	-1721
Cherokee Sh	4148	4146	-1775
Cong. Sand	4223	4223	-1852
Miss/Osage	4264	4263	-1892
Gilmore City	4294	4293	-1922
Viola	4315	NA	-1944
Total Depth	4335	4336	-1965
Reference Well For Structural Comparison Jay Boy Oil Miller "A" 1 SE SE SW		Sec. 20-11s-23w	

Drilling Contractor		Discovery Drilling, Rig #1	
Commenced	11-18-14	Completed	11-27-14
Samples Saved From	3450	To	RTD
Drilling Time Kept From	3350	To	RTD
Samples Examined From	3450	To	RTD
Geological Supervision From	3350	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.

Perforate:
 LKC J: 3925-3929

Respectfully Submitted,

Marc A. Downing

