

# GEOLOGISTS' REPORT

OPERATOR <b>MURFIN DRILLING COMPANY INC.</b>		ELEVATIONS	
LEASE <b>#1-25 SCHROEDER</b>		KB <b>3108'</b>	
LOCATION <b>900' FSL 330' FWL</b>		GL <b>3103'</b>	
SEC. <b>25</b>	TWSP <b>T55</b>	RGE <b>R33W</b>	ALL MEASUREMENTS FROM K.B.
COUNTY <b>RAWLINS</b>	STATE <b>KANSAS</b>		
FIELD <b>WILCOAT</b>			
CONTRACTOR <b>MURFIN DRILLING CO.</b>	RIG NO. <b>#8</b>	<b>CASING RECORD</b>	
COMMENCED <b>JAN 19 2012</b>	COMPLETED <b>JAN 30 2012</b>	Conductor	
MUD DISPLACED <b>3000'</b>	MUD TYPE <b>CHEMICAL</b>	Surface <b>8 5/8" @ 267'</b>	
DRILLING TIME/FEET FROM <b>3700'</b>	TO <b>4725'</b>	Production <b>5 1/2" @ 4720'</b>	
SAMPLES SAVED FROM	3700' TO 4725'		
SAMPLES EXAMINED FROM	3700' TO 4725'		
GEOLOGICAL SUPERVISION FROM	3720' TO 4725'		
GEOLOGIST ON WELL	<b>STEPHEN J MILLER</b>		
FORMATION		LOG	SAMPLE
NAME	TOP	DATE	TOP
ANHYDRITE	2742	+966	2741
ANHYDRITE	2776	+932	2777
ANHYDRITE	2800	+900	2798
TOPEKA LIME	3972	-894	3970
HEEBNER SHALE	4020	-892	4018
LANSING LIME	4200	-1092	4198
STARK SHALE	4200	-1092	4198
B/K C LIME	4252	-1144	4242
CHEROKEE SHALE	4453	-1345	4451
MISSISSIPPIAN	4579	-1471	4596
TOTAL DEPTH	4728	-1620	4725

LOG TECH	DUAL IND.
ELECTRICAL SURVEYS:	COMP. NEUT-DENS
	SONIC LOG
	MICRO LOG

REMARKS	API 15-153-2089
Drilling Fluids:	MORGAN MUD
Drill Stem Testing:	TRILOBITE TESTING
Gas Trailer:	NONE
Reserve Pit Chlorides:	7200 ppm

DEPTH	LITHOLOGY	STONES	SAMPLE DESCRIPTIONS	REMARKS
2700				
2741 +367				<b>ANHYDRITE</b>
2750				
2777 +331				<b>BASE ANHYDRITE</b>
2800				
3798 -690				<b>TOPEKA LIME</b>
3970 -862				<b>HEEBNER SHALE</b>
4002 -894				<b>TORONTO LIME</b>
4018 -910				<b>LANSING LIME</b>
4186 -1078				<b>STARK SHALE</b>
4242 -1134				<b>BASE KC LIME</b>
4373 -1265				<b>PAWNEE LIME</b>
4451 -1343				<b>CHEROKEE SHALE</b>
4596 -1488				<b>MISSISSIPPIAN</b>
4725 -1617				<b>TOTAL DEPTH</b>

Operator:	<b>MURFIN DRILLING COMPANY INC.</b>
Lease:	<b>#1-25 SCHROEDER</b>
Location:	<b>900' FSL 330' FWL</b>
County:	<b>RAWLINS</b>
State:	<b>KANSAS</b>

