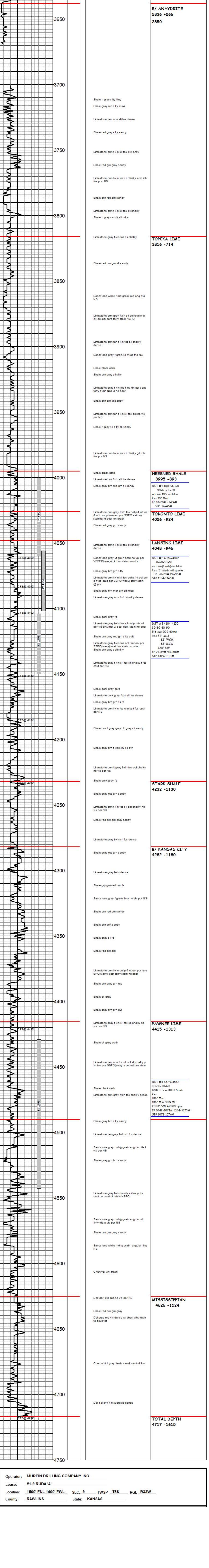


GEOLOGISTS' REPORT

OPERATOR MURFIN DRILLING COMPANY INC.		ELEVATIONS	
LEASE #1-9 RUDA 'A'		KB 3102'	
LOCATION 1500' FNL 1400' FWL		GL 3097'	
SEC. 9	TWSP T5S	ROE R33W	ALL MEASUREMENTS FROM K.B.
COUNTY RAWLINS	STATE KANSAS		
FIELD WILCOAT			
CONTRACTOR MURFIN DRILLING CO.	RIG NO. #8	CASING RECORD	
COMPLETED DEC 21, 2011	COMPLETED JAN 4, 2012	Conductor	
MUD DISPLACED 3890'	MUD TYPE CHEMICAL	Surface 8 5/8" @ 250'	
DRILLING TIME/EFT FROM 3700'	TO 4717'	Production	
SAMPLES SAVED FROM 3530'	TO 4717'		
SAMPLES EXAMINED FROM 3700'	TO 4717'		
GEOLOGICAL SUPERVISION FROM 3740' TO 4717'			
GEOLOGIST ON WELL STEPHEN J MILLER			
FORMATION		LOG	SAMPLE
NAME	TOP	DATE	TOP
ANHYDRITE	2800	+302	2799
ANHYDRITE	2836	+285	2840
TOPEKA LIME	3832	-730	3816
HEEBNER SHALE	4045	-894	4048
LANISING LIME	4233	-1131	4232
STARK SHALE	4284	-1182	4282
B/KC LIME	4483	-1381	4480
CHEROKEE SHALE	4640	-1538	4625
MISSISSIPPIAN	4720	-1618	4717
TOTAL DEPTH	4720	-1618	4717

API 15-153-20890
Drilling Fluids: MORGAN MUD
Drill Stem Testing: TRILOBITE TESTING
Gas Trailer: NONE
Reserve Pit Chlorides: 21.000 ppm

DRILL TIME (MIN/FT)	DEPTH	LITHOLOGY	SAMPLES	ELECTRICAL SURVEYS	LOG TECH	DUAL IND	COMP NEUT-DENS	SONIC LOG	MICRO LOG
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Operator: MURFIN DRILLING COMPANY INC.
Lease: #1-9 RUDA 'A'
Location: 1500' FNL 1400' FWL SEC. 9 TWSP T5S RGE R33W
County: RAWLINS State: KANSAS