

JUN 8 0 REC'D

WELL LOGState Geological Survey  
WICHITA BRANCHOPERATOR: Liberty Enterprises, Inc.WELL NAME: Carmicheal #4LOCATION: NW NE SE 4-11S-17WCOUNTY: EllisSTATE: KansasWELL COMMENCED: April 18, 1979WELL COMPLETED: April 29, 1979ELEVATION: 1901'DF 1904' KBTOTAL DEPTH: 3482'PRODUCTION: OilRIG NO: #2

CASING - 8-5/8": 198.08' of 28# cemented with 130 sxs common 2% gel 3% cc

5-1/2": 3481' of 14# cemented with 50 sxs Poz mix 4% Gilsonite 100 sxs  
common 10% salt.ALL MEASUREMENTS TAKEN FROM THE TOP OF ROTARY BUSHING:

FROM	TO	FORMATION	DEVIATION FROM VERTICAL	REMARKS:
*206'	630'	shale and pyrite		
0'	130'	sand and shale		
*130'	206'	*shale and sand		
630'	1115'	*sand and shale and pyrite	621' - 1 1/4 degrees	
1115'	1485'	sand and shale		
1129'	1158'	Anhydrite		
1485'	1780'	shale	1710' - 3/4 degree	
1780'	1838'	shale and lime		
1838'	1838'	lime and shale		
1838'	1945'	shale and lime		
1945'	2130'	lime and shale		
2130'	2380'	lime and shale		
2380'	2558'	lime and shale		
2558'	2670'	lime and shale		
2670'	2783'	lime and shale		
2783'	2905'	lime and shale		
2905'	3005'	lime and shale		
3005'	3100'	lime and shale		
3100'	3180'	shale and lime		
3180'	3190'	lime and shale		
3190'	3225'	shale and lime		
3225'	3286'	lime and shale		
3286'	3334'	lime		
3334'	3397'	shale and lime		
3397'	3455'	lime and shale		
3455'	3470'	shale and lime		
3470'	3482'	lime and shale		
3482'	RTD			

RECEIVED  
STATE GEOLOGICAL COMMISSION

MAY - 1 1979