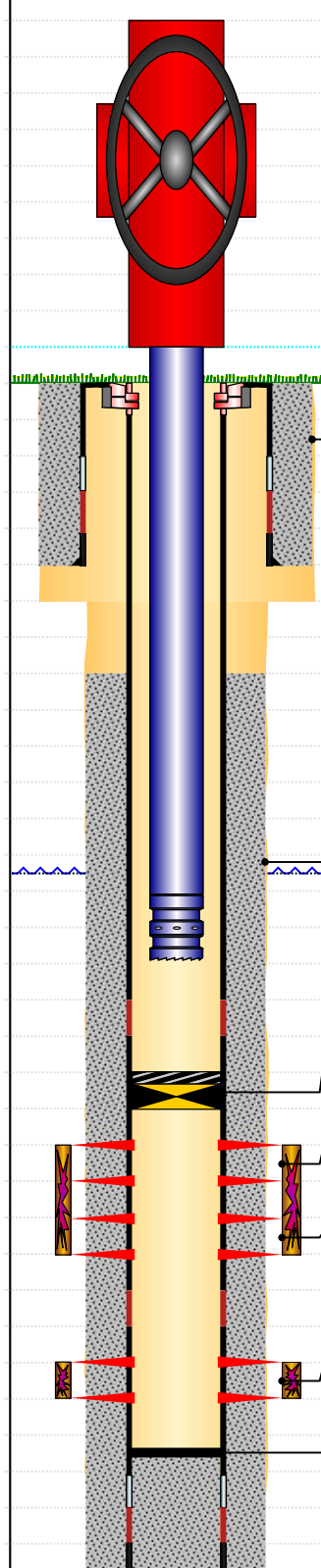




PA Wellbore For State - Vertical

Well Name: RHINO D27-27D

Original Hole [Land]		Well Header													
MD (ftK B)	Vertical schematic (actual)	Surface UWI 0512333852		Business Unit Rockies		Gov Auth Dist		Prod Tree Loc Land							
		Orig. KB to Gnd (ft) 13.00		Original Spud Date 8/31/2011		Abandon Date		Well Sub-Status TA							
		Comment NO OPEN HOLE LOGS RUN ON THIS WELL													
		Geologic Horizons													
		Formation Name FOXHILLS-BASE PROD							Final Top MD (ftKB) 675.4						
-1.0		Formation Name UPPER PIERRE AQUIFER-TOP PROD							Final Top MD (ftKB) 812.5						
Formation Name UPPER PIERRE AQUIFER-BASE PROD							Final Top MD (ftKB) 1,724.3								
-0.9		Formation Name A SAND-TOP PROD							Final Top MD (ftKB) 2,775.8						
-0.8		Formation Name PIERRE							Final Top MD (ftKB) 3,167.0						
-0.7		Formation Name A SAND-BASE PROD							Final Top MD (ftKB) 3,545.6						
-0.6		Formation Name PARKMAN							Final Top MD (ftKB) 4,204.0						
-0.5		Formation Name SUSSEX-TOP PROD							Final Top MD (ftKB) 4,736.3						
-0.4		Formation Name SUSSEX-BASE PROD							Final Top MD (ftKB) 5,134.5						
-0.3		Formation Name SHANNON-TOP PROD							Final Top MD (ftKB) 5,757.1						
-0.2		Formation Name SHANNON-BASE PROD							Final Top MD (ftKB) 5,975.1						
-0.1		Formation Name TEPEE BUTTES							Final Top MD (ftKB) 6,872.9						
0.0		Formation Name INTRA SHARON SPGS MK							Final Top MD (ftKB) 7,549.2						
13.1		Formation Name NIOBRARA-TOP PROD							Final Top MD (ftKB) 7,607.5						
14.1		Formation Name NIO A CHALK							Final Top MD (ftKB) 7,607.6						
778.2		Formation Name NIO A MARL							Final Top MD (ftKB) 7,608.7						
779.2		Formation Name NIO B CHALK							Final Top MD (ftKB) 7,613.8						
823.2		Formation Name NIO B MARL							Final Top MD (ftKB) 7,664.0						
824.1		Formation Name NIO C CHALK							Final Top MD (ftKB) 7,734.0						
834.0		Formation Name NIO C MARL							Final Top MD (ftKB) 7,767.0						
1024.0		Formation Name NIO D CHALK							Final Top MD (ftKB) 7,805.7						
1994.1	Formation Name NIO FT HAYS							Final Top MD (ftKB) 7,856.2							
2655.8	Formation Name CODELL							Final Top MD (ftKB) 7,879.8							
2755.9	Formation Name CARLILE							Final Top MD (ftKB) 7,895.3							
2757.9	Surface Location (Congressional)														
4660.1	Qtr 3 NE							Qtr 4 SW	Section 27	Twnshp 3	Twnsh... N	Range 64	Rng E/... W	Latitude (°) 40.19623304	Longitude (°) -104.537761431
4688.0	Wellbore Sections														
6451.4	Section Des							Hole Size (in)		Top Depth (ftKB)		Btm Depth (ftKB)			
6452.4	SURFACE							12 1/4		13.0		834.0			
6453.1	PRODUCTION							7 7/8		834.0		8,034.0			
7538.7	Casing Strings														
7555.1	Csg Des							Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top Depth (MD) (ftKB)	Set Depth (MD) (ftKB)		
7562.0	Surface							9/1/2011	8 5/8	24.00	J-55	13	824.3		
7580.1	Production Casing							9/4/2011	4 1/2	11.60	M-80	13	8034.1		
7650.9	Cement														
7663.1	Des							Start Date		Top (ftKB)		Btm (ftKB)			
7753.0	Surface Casing Cement							9/1/2011		13.0		824.3			
7765.1	Production Casing Cement							9/5/2011		1,994.0		8,034.1			
7842.5	Stim/Frac Summary														
7864.2	Min Top Depth (ftKB)							Max Btm Depth (ftKB)							
7880.9	7,651.0							7,893.0							
7893.0															
7988.8															
7989.2															
7990.2															
8033.1															
8034.1															



PA Wellbore For State - Vertical

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