



Proposed PA WBD - Vertical

Well Name: TIMMERMAN 15-13

Original Hole [Land]		Well Header								
MD (ftKB)	Vertical schematic (proposed)	Surface UWI 0512321607		Business Unit Rockies		Gov Auth Dist		Prod Tree Loc Land		
		Orig. KB to Gnd (ft) 12.00	Original Spud Date 10/14/2003	Abandon Date		Well Sub-Status TA (AT SURFACE)		High...		
		Comment LIMITED ENTRY ORIGINAL FRAC. NIOB REFRAC POST JOB RPT LISTS NIOB C PERF'D 7040-7060', BUT NOT LISTED ON TREATMENT RPT OR ST FORM 5A. ??? FIELD OPS NOTICE- FLOWLINES ABANDONED, RCVD 6/28/17. STATE SHOWS SHUT IN SINCE NOV 2016.								
		Geologic Horizons								
		Formation Name FOXHILLS-BASE PROD					Final Top MD (ftKB) 473.3			
		Formation Name UPPER PIERRE AQUIFER-TOP PROD					Final Top MD (ftKB) 630.6			
		Formation Name UPPER PIERRE AQUIFER-BASE PROD					Final Top MD (ftKB) 1,560.8			
		Formation Name A SAND-TOP PROD					Final Top MD (ftKB) 2,505.6			
		Formation Name A SAND-BASE PROD					Final Top MD (ftKB) 3,071.7			
		Formation Name SUSSEX-TOP PROD					Final Top MD (ftKB) 4,241.3			
		Formation Name SUSSEX-BASE PROD					Final Top MD (ftKB) 4,587.3			
		Formation Name SHANNON-TOP PROD					Final Top MD (ftKB) 5,037.4			
		Formation Name SHANNON-BASE PROD					Final Top MD (ftKB) 5,192.6			
		Formation Name INTRA SHARON SPGS MK					Final Top MD (ftKB) 6,839.9			
		Formation Name NIOBRARA-TOP PROD					Final Top MD (ftKB) 6,880.2			
		Formation Name NIO A CHALK					Final Top MD (ftKB) 6,880.6			
		Formation Name NIO A MARL					Final Top MD (ftKB) 6,898.6			
		Formation Name NIO B CHALK					Final Top MD (ftKB) 6,957.2			
		Formation Name NIO B MARL					Final Top MD (ftKB) 6,988.5			
		Formation Name NIO C CHALK					Final Top MD (ftKB) 7,038.9			
		Formation Name NIO C MARL					Final Top MD (ftKB) 7,068.2			
		Formation Name NIO D CHALK					Final Top MD (ftKB) 7,112.4			
		Formation Name NIO FT HAYS					Final Top MD (ftKB) 7,146.9			
		Formation Name CODELL					Final Top MD (ftKB) 7,170.0			
		Formation Name CARLILE					Final Top MD (ftKB) 7,188.4			
		Formation Name GREENHORN					Final Top MD (ftKB) 7,233.0			
		Surface Location (Congressional)								
		Qtr 3 SW	Qtr 4 SE	Section 13	Twnshp 4	Twnsh... N	Range 65	Rng E/... W	Latitude (°) 40.306372	Longitude (°) -104.60685
		Wellbore Sections								
		Section Des			Hole Size (in)		Top Depth (ftKB)		Btm Depth (ftKB)	
		SURFACE			12 1/4		12.0		640.0	
		PRODUCTION			7 7/8		640.0		7,353.0	
		Casing Strings								
		Csg Des		Run Date		OD (in)	Wt/Len (lb/ft)	Grade	Top Depth (MD) (ftKB)	Set Depth (MD) (ftKB)
		Surface		10/15/2003		8 5/8	24.00		12	631
		Production Casing		10/21/2003		4 1/2	11.60	I-80	12	7335
		Cement								
		Des				Start Date		Top (ftKB)		Btm (ftKB)
		SURFACE CASING CEMENT				10/15/2003		12.0		631.0
		PRODUCTION CASING CEMENT				10/21/2003		1,938.0		5,240.0
		PRODUCTION CASING CEMENT				10/21/2003		6,204.0		7,335.0
		Stim/Frac Summary								
		Min Top Depth (ftKB) 6,882.0						Max Btm Depth (ftKB) 7,188.0		



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Original Hole [Land]		Stim/Frac Summary			
MD (ftKB)	Vertical schematic (proposed)	Min Top Depth (ftKB) 7,174.0		Max Btm Depth (ftKB) 7,188.0	
		Min Top Depth (ftKB) 6,882.0		Max Btm Depth (ftKB) 7,060.0	
		Perforations			
		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
12.1			4/10/2025 00:00	831.0	831.0
629.6		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		NIOBRARA, Original Hole	10/28/2003 00:00	6,882.0	6,898.0
630.9		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		NIOBRARA, Original Hole	3/14/2007 00:00	6,882.0	6,898.0
831.0		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		NIOBRARA, Original Hole	10/28/2003 00:00	6,972.0	6,988.0
1,938.0		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		NIOBRARA, Original Hole	3/14/2007 00:00	6,972.0	6,988.0
2,386.2		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		NIOBRARA, Original Hole	3/14/2007 00:00	7,040.0	7,060.0
2,485.9		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		CODELL, Original Hole	10/28/2003 00:00	7,174.0	7,188.0
2,487.9		Linked Zone	Date	Top Depth (ftKB)	Bottom Depth (ftKB)
		CODELL, Original Hole	6/26/2006 00:00	7,174.0	7,188.0
4,165.0		Other In Hole			
		Run Date	Des	Make	OD (in)
					Top (ftKB)
					Btm (ftKB)
4,192.9		Logs			
		Date	Type	Depth Top (MD) (ftKB)	Btm (ftKB)
5,240.2		10/20/2003	CEMENT VOLUME	632	7,345.0
		10/20/2003	COMPENSATED NEUTRON	4,000	7,335.0
6,204.1		10/20/2003	INDUCTION	632	7,345.0
		10/20/2003	MICRO LOG	4,000	7,335.0
6,806.1		10/21/2003	GYRO	0	7,353.0
		10/28/2003	CBL/CCL/GR	1,700	7,300.0
6,834.0		Wellbore Plug Back Total Depths			
		Date	Type	Com	PBTD (ftKB)
6,881.9		10/28/2003	FILL	DEPTH LOGGER ON CBL	7,300
6,898.0		3/29/2007	FILL	CLEAN OUT TO LAND TUBING	7,320
6,972.1					
6,987.9					
7,040.0					
7,060.0					
7,173.9					
7,188.0					
7,319.9					
7,320.5					
7,333.7					
7,335.0					