



# P&A Wellbore For State

Well Name: BERNHARDT J31-20D

Original Hole [Land]		Well Header									
MD (ftK B)	Vertical schematic (actual)	Surface UWI 0512328163			Business Unit Rockies		Gov Auth Dist		Prod Tree Loc Land		
		Orig. KB to Gnd (ft) 13.00		Original Spud Date 11/18/2008		Abandon Date		Well Sub-Status SI		High...	
		Comment DIRECTIONAL WELL - 318A.e. LOCATION!									
		Surface Location (Congressional)									
		Qtr 3 NW	Qtr 4 SW	Section 31	Twtnshp 5	Twtnsh... N	Range 66	Rng E/... W	Latitude (°) 40.35472149 5	Longitude (°) -104.829807102	
		Wellbore Sections									
		Section Des			Hole Size (in)			Top Depth (ftKB)		Btm Depth (ftKB)	
		SURFACE			12 1/4			13.0		500.0	
		PRODUCTION			7 7/8			500.0		7,587.0	
		Casing Strings									
		Csg Des			Run Date		OD (in)	Wt/Len (lb/ft)	Grade	Top Depth (MD) (ftKB)	Set Depth (MD) (ftKB)
		Surface			11/18/2008		8 5/8	24.00	J-55	13	488.4
		Production Casing			11/21/2008		4 1/2	11.60	M-80	13	7582.3
		Cement									
		Des					Start Date		Top (ftKB)		Btm (ftKB)
		Surface Casing Cement					11/18/2008		13.0		488.4
		Production Casing Cement					11/21/2008		286.0		7,582.3
		Zone Statuses									
		Zone Name	Status Date	Status	Fluid Type	Job				Prod Method	
		NIOBRARA	8/18/2015	PR	Water	DRILLING/COMPLETION - ORIGINAL, 11/16/200...				Flowing	
		NIOBRARA	3/22/2017	SI							
		CODELL	1/9/2009	PR							
		CODELL	2/4/2010	PR							
		Perforation Data									
		Linked Zone		Explosive Type	Entered Shot Total	Top (ftKB)		Btm (ftKB)		Date	
		NIOBRARA, Original Hole		A	32	7,130.0		7,146.0		1/9/2009	
		NIOBRARA, Original Hole		B	32	7,251.0		7,267.0		1/9/2009	
		CODELL, Original Hole		01	72	7,452.0		7,470.0		12/5/2008	
		Stim/Frac Stage									
		Zone				Start Date		Top (ftKB)		Btm (ftKB)	
		NIOBRARA, Original Hole				1/9/2009		7,130.0		7,267.0	
		CODELL, Original Hole				1/9/2009		7,452.0		7,470.0	
		Other In Hole									
		Run Date	Des				Make	OD (in)	Top (ftKB)	Btm (ftKB)	
		Logs									
		Date	Type						Depth Top (MD) (ftKB)	Btm (ftKB)	
		11/21/2008	Caliper/Comp. Density/Neutron/GR/SP/ML						2,700	7,585.0	
		11/21/2008	DIL/GR/SP/Caliper						488	7,585.0	
		12/1/2008	CBL/CCL/GR						200	7,556.0	
		2/20/2013	GYRO						13	7,400.0	
		Wellbore Plug Back Total Depths									
		Date	Type		Com					PBTD (ftKB)	
		2/19/2009	PLUG REMNANTS							7,523	
		12/28/2013	FILL							7,509	

10.5

13.1

286.1

447.5

487.5

488.5

500.0

688.0

2,347.1

2,446.9

2,449.1

7,054.1

7,062.0

7,076.1

7,080.1

7,129.9

7,146.0

7,251.0

7,267.1

7,375.7

7,395.0

7,431.4

7,432.4

7,433.1

7,452.1

7,470.1

7,508.9

7,565.9

7,566.9

7,581.4

7,582.3

7,586.9

Surface Casing Cement,  
Casing, 11/18/2008 22:15;  
13-488.4; 2008-11-18 22:15

Production Casing Cement,  
Casing, 11/21/2008 09:45;  
286-7582.3; 2008-11-21  
09:45

7,130.0-7,146.0ftKB on  
1/9/2009 10:31 (Perforated);  
7130-7146; 2009-01-09  
10:31

7,251.0-7,267.0ftKB on  
1/9/2009 10:30 (Perforated);  
7251-7267; 2009-01-09  
10:30

7,452.0-7,470.0ftKB on  
12/5/2008 14:00  
(Perforated); 7452-7470;  
2008-12-05 14:00