



Lease Review All - Frac Summary

Well Name: RAZOR 33M-2803

API Number 051233925700		WPC ID 1CO0761112		Well Permit Number 400571544		Field Name DJ Horizontal Niobrara		County Weld		State CO							
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 4,747.50		Ground Elevation (ft) 4,729.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,129.0					
Original Spud Date 12/31/2014		Completion Date 2/25/2015		Asset Group Redtail		Responsible Engineer Charles Ohlson			N/S Dist (ft) 565.0		N/S Ref FSL		E/W Dist (ft) 741.0		E/W Ref FWL		
Lot		Quarter 1 SW	Quarter 2 SW	Quarter 3	Quarter 4	Section 33	Section Suffix	Section Type		Township 10 N		Township N/S Dir		Range 58 W		Range E/W Dir Meridian	
Lateral/Horizontal - Original Hole, 6/17/2015 2:12:32 PM						Wellbore Sections											
MD (ftKB)	D (ft K B)	n (C B)	Vertical schematic (actual)	Logs	Wellbore Name		Start Date		Size (in)		Act Top (ftKB)		Act Btm (ftKB)				
					Original Hole		12/11/2014		24		18.5		108.5				
					Original Hole		12/31/2014		13 1/2		108.5		1,594.0				
					Original Hole		1/2/2015		8 3/4		1,594.0		6,040.0				
					Original Hole		1/5/2015		6		6,040.0		13,129.0				
Conductor Pipe, 108.5ftKB																	
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des					
16		42.09		J-55		18.5		108.5		90.00		Casing joints					
Surface Csg, 1,575.0ftKB																	
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des					
9 5/8		36.00		J-55		18.5		18.5		0.00		Landing joint					
9 5/8		36.00		J-55		18.5		27.0		8.50		Pup joint/wellhead					
9 5/8		36.00		J-55		27.0		1,531.4		1,504.38		Casing Joints					
9 5/8		36.00		J-55		1,531.4		1,532.4		1.00		Float Collar					
9 5/8		36.00		J-55		1,532.4		1,573.5		41.12		Casing Joints					
9 5/8		36.00		J-55		1,573.5		1,575.0		1.50		Guide Shoe					
Frac String, 4,961.3ftKB																	
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des					
7 1/16						0.0		2.0		2.01		Casing Hanger					
4 1/2		11.60		P-110		2.0		45.3		43.25		Casing Joints					
4 1/2						45.3		65.8		20.52		Pup Joint 10.22ft 8.1ft 2.2ft					
4 1/2		11.60		P-110		65.8		4,944.3		4,878.50		Casing Joints					
4 1/2						4,944.3		4,950.4		6.14		Handling Sub					
4 1/2						4,950.4		4,961.3		10.90		Seal Assembly					
Intermediate Csg, 6,022.9ftKB																	
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des					
7		29.00		P-110		18.5		18.5				Casing Joints					
7		29.00		P-110		18.5		20.5		2.00		Casing Hanger					
7		29.00		P-110		20.5		25.5		5.00		Pup Joint					
7		29.00		P-110		25.5		5,976.8		5,951.30		Casing Joints					
7		29.00		P-110		5,976.8		5,978.3		1.50		Float Collar					
7		29.00		P-110		5,978.3		6,021.4		43.12		Casing Joints					
7		29.00		P-110		6,021.4		6,022.9		1.50		Float Shoe					
Liner, 13,107.0ftKB																	
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des					
5 1/4		11.60		HCP-110		4,962.7		4,983.5		20.77		Packer assembly					
5 1/4		11.60		HCP-110		4,983.5		4,984.3		0.87		Collar					
5 1/4		11.60		HCP-110		4,984.3		4,990.8		6.49		Schlumberger Collosus hanger.					
4 1/2		11.60		HCP-110		4,990.8		4,992.5		1.68		Cross over					
4 1/2		11.60		HCP-110		4,992.5		13,059.2		8,066.68		Casing Joints					
4 1/2		11.60		HCP-110		13,059.2		13,060.7		1.54		Ball catch landing collar					
4 1/2		11.60		HCP-110		13,060.7		13,062.3		1.63		Float Collar					
4 1/2		11.60		HCP-110		13,062.3		13,105.6		43.21		Casing Joints					
4 1/2		11.60		HCP-110		13,105.6		13,107.0		1.45		Guide shoe (wet)					
Cement Stages																	
Des		Pump Start Date		Drill Out Date		Top (ftKB)		Btm (ftKB)		Top Meas Meth							
Conductor Cement		12/11/2014				18.5		108.5		Returns to Surface							
Surface Casing Cement		1/1/2015				18.5		1,575.0		Returns to Surface							
Intermediate Casing Cement		1/4/2015				18.5		6,022.9		Returns to Surface							
Liner Cement		1/8/2015				4,962.7		13,107.0		Volume Calculations							
Perforations																	
Type of Hole		Date		Top (ftKB)		Btm (ftKB)		Zone									
Perforated Liner		2/26/2015		6,045.0		6,047.0		Niobrara, Original Hole									
Perforated Liner		2/26/2015		6,112.0		6,114.0		Niobrara, Original Hole									
Perforated Liner		2/26/2015		6,179.0		6,181.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,247.0		6,249.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,314.0		6,316.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,381.0		6,383.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,448.0		6,450.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,515.0		6,517.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,582.0		6,584.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,652.0		6,654.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,717.0		6,719.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,784.0		6,786.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,851.0		6,853.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,918.0		6,920.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		6,986.0		6,988.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		7,053.0		7,055.0		Niobrara, Original Hole									
Perforated Liner		2/25/2015		7,120.0		7,122.0		Niobrara, Original Hole									



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Original Spud Date 12/31/2014			Completion Date 2/25/2015		Asset Group Redtail			Responsible Engineer Charles Ohlson			N/S Dist (ft) 565.0		N/S Ref FSL		E/W Dist (ft) 741.0		E/W Ref FWL	
Lot		Quarter 1 SW	Quarter 2 SW	Quarter 3	Quarter 4	Section 33		Section Suffix	Section Type		Township 10 N		Township N/S Dir		Range 58	Range E/W Dir W		Meridian
Lateral/Horizontal - Original Hole, 6/17/2015 2:12:34 PM						Perforations												
MD (ftKB)	D (ft K B)	n (C)	Vertical schematic (actual)	Logs	Type of Hole		Date	Top (ftKB)	Btm (ftKB)	Zone								
					Perforated Liner	2/25/2015	7,187.0	7,189.0	Niobrara, Original Hole									
					Perforated Liner	2/25/2015	7,254.0	7,256.0	Niobrara, Original Hole									
					Perforated Liner	2/25/2015	7,321.0	7,323.0	Niobrara, Original Hole									
26.9	26.9	26.9			Perforated Liner	2/25/2015	7,389.0	7,391.0	Niobrara, Original Hole									
1,532.5	1,532.5	1,532.5			Perforated Liner	2/24/2015	7,456.0	7,458.0	Niobrara, Original Hole									
1,750.0	1,750.0	1,750.0			Perforated Liner	2/24/2015	7,523.0	7,525.0	Niobrara, Original Hole									
3,307.4	3,307.4	3,307.4			Perforated Liner	2/24/2015	7,590.0	7,592.0	Niobrara, Original Hole									
4,418.3	4,418.3	4,418.3			Perforated Liner	2/24/2015	7,657.0	7,659.0	Niobrara, Original Hole									
4,984.3	4,984.3	4,984.3			Perforated Liner	2/24/2015	7,725.0	7,727.0	Niobrara, Original Hole									
5,569.2	5,569.2	5,569.2			Perforated Liner	2/24/2015	7,792.0	7,794.0	Niobrara, Original Hole									
5,582.0	5,582.0	5,582.0			Perforated Liner	2/24/2015	7,859.0	7,861.0	Niobrara, Original Hole									
6,021.3	6,021.3	6,021.3			Perforated Liner	2/24/2015	7,926.0	7,928.0	Niobrara, Original Hole									
6,111.9	6,111.9	6,111.9			Perforated Liner	2/24/2015	7,993.0	7,995.0	Niobrara, Original Hole									
6,249.0	6,249.0	6,249.0			Perforated Liner	2/24/2015	8,060.0	8,062.0	Niobrara, Original Hole									
6,448.2	6,448.2	6,448.2			Perforated Liner	2/24/2015	8,128.0	8,130.0	Niobrara, Original Hole									
6,584.0	6,584.0	6,584.0			Perforated Liner	2/24/2015	8,195.0	8,197.0	Niobrara, Original Hole									
6,784.1	6,784.1	6,784.1			Perforated Liner	2/24/2015	8,262.0	8,264.0	Niobrara, Original Hole									
6,919.9	6,919.9	6,919.9			Perforated Liner	2/24/2015	8,329.0	8,331.0	Niobrara, Original Hole									
7,120.1	7,120.1	7,120.1			Perforated Liner	2/24/2015	8,396.0	8,398.0	Niobrara, Original Hole									
7,255.9	7,255.9	7,255.9			Perforated Liner	2/24/2015	8,468.0	8,470.0	Niobrara, Original Hole									
7,456.0	7,456.0	7,456.0			Perforated Liner	2/24/2015	8,531.0	8,533.0	Niobrara, Original Hole									
7,591.9	7,591.9	7,591.9			Perforated Liner	2/24/2015	8,598.0	8,600.0	Niobrara, Original Hole									
7,792.0	7,792.0	7,792.0			Perforated Liner	2/23/2015	8,665.0	8,667.0	Niobrara, Original Hole									
7,925.9	7,925.9	7,925.9			Perforated Liner	2/23/2015	8,732.0	8,734.0	Niobrara, Original Hole									
8,062.0	8,062.0	8,062.0			Perforated Liner	2/23/2015	8,799.0	8,801.0	Niobrara, Original Hole									
8,262.1	8,262.1	8,262.1			Perforated Liner	2/23/2015	8,867.0	8,869.0	Niobrara, Original Hole									
8,398.0	8,398.0	8,398.0			Perforated Liner	2/23/2015	8,934.0	8,936.0	Niobrara, Original Hole									
8,598.1	8,598.1	8,598.1			Perforated Liner	2/23/2015	9,001.0	9,003.0	Niobrara, Original Hole									
8,733.9	8,733.9	8,733.9			Perforated Liner	2/23/2015	9,068.0	9,070.0	Niobrara, Original Hole									
8,934.1	8,934.1	8,934.1			Perforated Liner	2/23/2015	9,136.0	9,138.0	Niobrara, Original Hole									
9,069.9	9,069.9	9,069.9			Perforated Liner	2/23/2015	9,203.0	9,205.0	Niobrara, Original Hole									
9,270.0	9,270.0	9,270.0			Perforated Liner	2/23/2015	9,270.0	9,272.0	Niobrara, Original Hole									
9,405.8	9,405.8	9,405.8			Perforated Liner	2/20/2015	9,337.0	9,339.0	Niobrara, Original Hole									
9,606.0	9,606.0	9,606.0			Perforated Liner	2/20/2015	9,404.0	9,406.0	Niobrara, Original Hole									
9,742.1	9,742.1	9,742.1			Perforated Liner	2/20/2015	9,474.0	9,476.0	Niobrara, Original Hole									
9,941.9	9,941.9	9,941.9			Perforated Liner	2/20/2015	9,539.0	9,541.0	Niobrara, Original Hole									
10,078.1	10,078.1	10,078.1			Perforated Liner	2/20/2015	9,606.0	9,608.0	Niobrara, Original Hole									
10,277.9	10,277.9	10,277.9			Perforated Liner	2/20/2015	9,673.0	9,675.0	Niobrara, Original Hole									
10,414.0	10,414.0	10,414.0			Perforated Liner	2/20/2015	9,740.0	9,742.0	Niobrara, Original Hole									
10,609.9	10,609.9	10,609.9			Perforated Liner	2/20/2015	9,800.0	9,802.0	Niobrara, Original Hole									
10,750.0	10,750.0	10,750.0			Perforated Liner	2/19/2015	9,874.0	9,876.0	Niobrara, Original Hole									
10,952.1	10,952.1	10,952.1			Perforated Liner	2/19/2015	9,942.0	9,944.0	Niobrara, Original Hole									
11,086.0	11,086.0	11,086.0			Perforated Liner	2/19/2015	10,009.0	10,011.0	Niobrara, Original Hole									
11,285.1	11,285.1	11,285.1			Perforated Liner	2/19/2015	10,076.0	10,078.0	Niobrara, Original Hole									
11,421.9	11,421.9	11,421.9			Perforated Liner	2/19/2015	10,143.0	10,145.0	Niobrara, Original Hole									
11,621.1	11,621.1	11,621.1			Perforated Liner	2/19/2015	10,210.0	10,212.0	Niobrara, Original Hole									
11,758.9	11,758.9	11,758.9			Perforated Liner	2/19/2015	10,278.0	10,280.0	Niobrara, Original Hole									
11,957.0	11,957.0	11,957.0			Perforated Liner	2/19/2015	10,345.0	10,347.0	Niobrara, Original Hole									
12,096.1	12,096.1	12,096.1			Perforated Liner	2/19/2015	10,412.0	10,414.0	Niobrara, Original Hole									
12,290.0	12,290.0	12,290.0			Perforated Liner	2/19/2015	10,479.0	10,481.0	Niobrara, Original Hole									
12,429.1	12,429.1	12,429.1			Perforated Liner	2/19/2015	10,546.0	10,548.0	Niobrara, Original Hole									
12,695.9	12,695.9	12,695.9			Perforated Liner	2/19/2015	10,610.0	10,612.0	Niobrara, Original Hole									
12,832.0	12,832.0	12,832.0			Perforated Liner	2/19/2015	10,681.0	10,683.0	Niobrara, Original Hole									
13,029.9	13,029.9	13,029.9			Perforated Liner	2/19/2015	10,748.0	10,750.0	Niobrara, Original Hole									
13,105.6	13,105.6	13,105.6			Perforated Liner	2/19/2015	10,815.0	10,817.0	Niobrara, Original Hole									
					Perforated Liner	2/19/2015	10,882.0	10,884.0	Niobrara, Original Hole									
					Perforated Liner	2/19/2015	10,952.0	10,954.0	Niobrara, Original Hole									
					Perforated Liner	2/19/2015	11,017.0	11,019.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,084.0	11,086.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,150.0	11,152.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,218.0	11,220.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,285.0	11,287.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,352.0	11,354.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,420.0	11,422.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,487.0	11,489.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,554.0	11,556.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,621.0	11,623.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,688.0	11,690.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,757.0	11,759.0	Niobrara, Original Hole									
					Perforated Liner	2/18/2015	11,823.0	11,825.0	Niobrara, Original Hole									



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Well Configuration Type Lateral/Horizontal			Orig KB Elv (ft) 4,747.50			Ground Elevation (ft) 4,729.00			Casing Flange Elevation (ft)			Tubing Head Elevation (ft)		Total Depth (ftKB) 13,129.0					
Original Spud Date 12/31/2014			Completion Date 2/25/2015			Asset Group Redtail			Responsible Engineer Charles Ohlson			N/S Dist (ft) 565.0		N/S Ref FSL		E/W Dist (ft) 741.0		E/W Ref FWL	
Lot		Quarter 1 SW	Quarter 2 SW	Quarter 3	Quarter 4	Section 33		Section Suffix	Section Type		Township 10 N		Township N/S Dir		Range 58 W		Range E/W Dir		Meridian
Lateral/Horizontal - Original Hole, 6/17/2015 2:12:36 PM										Perforations									
<div><div>MD (ftKB)</div><div>D (ft K B)</div><div>n c l ()</div><div>Vertical schematic (actual)</div><div>Logs</div></div>										Type of Hole		Date		Top (ftKB)		Btm (ftKB)		Zone	
										Perforated Liner		2/18/2015		11,890.0		11,892.0		Niobrara, Original Hole	
										Perforated Liner		2/18/2015		11,957.0		11,959.0		Niobrara, Original Hole	
										Perforated Liner		2/18/2015		12,024.0		12,026.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,094.0		12,096.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,159.0		12,161.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,226.0		12,228.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,290.0		12,292.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,360.0		12,362.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,427.0		12,429.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,562.0		12,564.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,629.0		12,631.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,696.0		12,698.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,766.0		12,768.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,830.0		12,832.0		Niobrara, Original Hole	
										Perforated Liner		2/16/2015		12,945.0		12,947.0		Niobrara, Original Hole	
										Perforated Liner		2/17/2015		12,945.0		12,947.0		Niobrara, Original Hole	
										Perforated Liner		2/16/2015		13,012.0		13,014.0		Niobrara, Original Hole	
										Perforated Liner		2/16/2015		13,030.0		13,032.0		Niobrara, Original Hole	
										Stimulations & Treatments									
Sand Frac on 2/16/2015 06:00																			
Comment																			
Treatment End Date:2/25/2015; Number of staged intervals: 35; Min frac gradient: 0.752 psi/ft; Number of perfs: 1260; Total Trident XL Gel: 62880 bbl; CMHPG Linear Gel:13083 bbl; 15% HCL: 756 bbl; Slickwater: 31842bbl; Freshwater: 990 bbl																			
Total Clean Volu...		Vol Slurry Tot (bbl)		Proppant Desig...		Proppant Frm (lb)		P Max (psi)		Avg Treat...		Avg Treat...		Max Tre...		Frac Gr...			
109549.90		114119.80		5,036,500.0		4,579,106.0		8,908.0		4,603.0		53.80		59.80		0.80			
Total Add Amount																			
Proppant Ottawa 20/40 4463848 lb; Proppant Ottawa 40/70 115258 lb																			
Stim/Treat Fluids																			
Fluid Name																			
Trident XL Gel; CMHPG Linear Gel; 15% HCL																			
Stim/Treat Stages																			
Interval 1																			
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment							
1		2/16/2015		12,945.0		13,032.0		3787.80		3953.90		XL Gel:1367 bbl; Linear Gel:307 bbl; 15% HCL:12 bbl; Slickwater:2095bbl; Freshwater:6 bbl							
Stim/Treat Additives																			
Stg #		Add			Type			Amount		Units		Sand Size							
1		Proppant			Ottawa 20/40			58,220.0		lb		20/40							
1		Proppant			Ottawa 40/70			3,395.0		lb		40/70							
Interval 2																			
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment							
2		2/17/2015		12,766.0		12,947.0		2832.40		2941.00		XL Gel:1493 bbl; Linear Gel:314 bbl; 15% HCL:18 bbl; Slickwater:988bbl; Freshwater:20 bbl							
Stim/Treat Additives																			
Stg #		Add			Type			Amount		Units		Sand Size							
2		Proppant			Ottawa 20/40			89,400.0		lb		20/40							
2		Proppant			Ottawa 40/70			3,085.0		lb		40/70							
Interval 3																			
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment							
3		2/17/2015		12,562.0		12,698.0		2918.60		3030.80		XL Gel:1569 bbl; Linear Gel:313 bbl; 15% HCL:18 bbl; Slickwater:1009bbl; Freshwater:10 bbl							
Stim/Treat Additives																			
Stg #		Add			Type			Amount		Units		Sand Size							
3		Proppant			Ottawa 20/40			89,845.0		lb		20/40							
3		Proppant			Ottawa 40/70			3,393.0		lb		40/70							
Interval 4																			
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment							
4		2/17/2015		12,290.0		12,429.0		3251.00		3407.20		XL Gel:1880 bbl; Linear Gel:287 bbl; 15% HCL:12 bbl; Slickwater:1062bbl; Freshwater:10 bbl							
Stim/Treat Additives																			
Stg #		Add			Type			Amount		Units		Sand Size							
4		Proppant			Ottawa 20/40			135,923.0		lb		20/40							
4		Proppant			Ottawa 40/70			3,500.0		lb		40/70							
Interval 5																			
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment							
5		2/17/2015		12,094.0		12,228.0		3076.80		3198.30		XL Gel:1695 bbl; Linear Gel:288 bbl; 15% HCL:12 bbl; Slickwater:1072bbl; Freshwater:10 bbl							
Stim/Treat Additives																			
Stg #		Add			Type			Amount		Units		Sand Size							
5		Proppant			Ottawa 20/40			114,274.0		lb		20/40							
5		Proppant			Ottawa 40/70			3,584.0		lb		40/70							



Lease Review All - Frac Summary

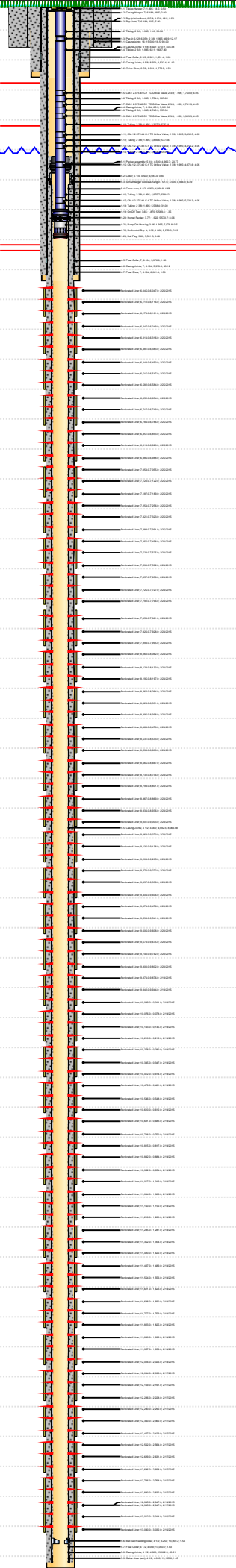
Well Name: RAZOR 33M-2803

API Number 051233925700		WPC ID 1CO0761112		Well Permit Number 400571544		Field Name DJ Horizontal Niobrara		County Weld		State CO	
Well Configuration Type Lateral/Horizontal		Orig KB Elv (ft) 4,747.50		Ground Elevation (ft) 4,729.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,129.0	
Original Spud Date 12/31/2014		Completion Date 2/25/2015		Asset Group Redtail		Responsible Engineer Charles Ohlson		N/S Dist (ft) 565.0		N/S Ref FSL	
E/W Dist (ft) 741.0		E/W Ref FWL		Lot		Quarter 1 SW		Quarter 2 SW		Quarter 3	
Quarter 4		Section 33		Section Suffix		Section Type		Township 10 N		Township N/S Dir	
Range 58		Range E/W Dir W		Meridian							
Lateral/Horizontal - Original Hole, 6/17/2015 2:12:38 PM				Stim/Treat Stages							
MD (ftKB)	D (ft K B)	n (C L)	<div>Vertical schematic (actual)</div>	Logs	Interval 6						
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
26.9	26.9	26.9			6	2/18/2015	11,890.0	12,026.0	2966.00	3070.00	XL Gel:1607 bbl; Linear Gel:314 bbl; 15% HCL:12 bbl; Slickwater:986bbl; Freshwater:47 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
1,532.5	1,532.5	1,532.5			6	Proppant	Ottawa 20/40	105,162.0	lb	20/40	
1,750.0	1,750.0	1,750.0			6	Proppant	Ottawa 40/70	3,281.0	lb	40/70	
Interval 7					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
3,307.4	3,307.4	3,307.4			7	2/18/2015	11,688.0	11,825.0	3117.00	3211.00	XL Gel:1421 bbl; Linear Gel:313 bbl; 15% HCL:12 bbl; Slickwater:1332bbl; Freshwater:40 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
4,418.3	4,418.3	4,418.3			7	Proppant	Ottawa 20/40	83,348.0	lb	20/40	
4,984.3	4,984.3	4,984.3			7	Proppant	Ottawa 40/70	3,182.0	lb	40/70	
Interval 8					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
5,569.2	5,569.2	5,569.2			8	2/18/2015	11,487.0	11,623.0	3144.20	3036.30	XL Gel:1821 bbl; Linear Gel:282 bbl; 15% HCL:24 bbl; Slickwater:970bbl; Freshwater:47 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
5,582.0	5,582.0	5,582.0			8	Proppant	Ottawa 20/40	120,399.0	lb	20/40	
6,021.3	6,021.3	6,021.3			8	Proppant	Ottawa 40/70	3,203.0	lb	40/70	
Interval 9					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
6,111.9	6,111.9	6,111.9			9	2/18/2015	11,285.0	11,422.0	3399.00	3545.10	XL Gel:1993 bbl; Linear Gel:386 bbl; 15% HCL:24 bbl; Slickwater:971bbl; Freshwater:25 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
6,249.0	6,249.0	6,249.0			9	Proppant	Ottawa 20/40	141,772.0	lb	20/40	
6,448.2	6,448.2	6,448.2			9	Proppant	Ottawa 40/70	3,305.0	lb	40/70	
Interval 10					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
6,584.0	6,584.0	6,584.0			10	2/18/2015	11,084.0	11,220.0	3374.10	3519.70	XL Gel:1954 bbl; Linear Gel:362 bbl; 15% HCL:18 bbl; Slickwater:1021bbl; Freshwater:20 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
6,784.1	6,784.1	6,784.1			10	Proppant	Ottawa 20/40	144,220.0	lb	20/40	
6,919.9	6,919.9	6,919.9			10	Proppant	Ottawa 40/70	3,306.0	lb	40/70	
Interval 11					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
7,120.1	7,120.1	7,120.1			11	2/18/2015	10,882.0	11,019.0	3329.90	3464.00	XL Gel:1909 bbl; Linear Gel:382 bbl; 15% HCL:24 bbl; Slickwater:1000bbl; Freshwater:15 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
7,255.9	7,255.9	7,255.9			11	Proppant	Ottawa 20/40	142,587.0	lb	20/40	
7,456.0	7,456.0	7,456.0			11	Proppant	Ottawa 40/70	3,270.0	lb	40/70	
Interval 12					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
7,591.9	7,591.9	7,591.9			12	2/19/2015	10,681.0	10,817.0	3297.20	3472.20	XL Gel:1918 bbl; Linear Gel:363 bbl; 15% HCL:24 bbl; Slickwater:956bbl; Freshwater:37 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
7,792.0	7,792.0	7,792.0			12	Proppant	Ottawa 20/40	141,494.0	lb	20/40	
7,925.9	7,925.9	7,925.9			12	Proppant	Ottawa 40/70	3,476.0	lb	40/70	
Interval 13					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
8,062.0	8,062.0	8,062.0			13	2/19/2015	10,479.0	10,612.0	3273.60	3473.90	XL Gel:1919 bbl; Linear Gel:478 bbl; 15% HCL:24 bbl; Slickwater:822bbl; Freshwater:31 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
8,262.1	8,262.1	8,262.1			13	Proppant	Ottawa 20/40	144,791.0	lb	20/40	
8,398.0	8,398.0	8,398.0			13	Proppant	Ottawa 40/70	3,289.0	lb	40/70	
Interval 14					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
8,598.1	8,598.1	8,598.1			14	2/19/2015	10,278.0	10,414.0	3263.00	3426.00	XL Gel:1906 bbl; Linear Gel:401 bbl; 15% HCL:24 bbl; Slickwater:910bbl; Freshwater:22 bbl
Stim/Treat Additives					Stg #	Add	Type	Amount	Units	Sand Size	
8,733.9	8,733.9	8,733.9			14	Proppant	Ottawa 20/40	143,915.0	lb	20/40	
8,934.1	8,934.1	8,934.1			14	Proppant	Ottawa 40/70	3,498.0	lb	40/70	
9,069.9	9,069.9	9,069.9									
9,270.0	9,270.0	9,270.0									
9,405.8	9,405.8	9,405.8									
9,606.0	9,606.0	9,606.0									
9,742.1	9,742.1	9,742.1									
9,941.9	9,941.9	9,941.9									
10,078.1	10,078.1	10,078.1									
10,277.9	10,277.9	10,277.9									
10,414.0	10,414.0	10,414.0									
10,609.9	10,609.9	10,609.9									
10,750.0	10,750.0	10,750.0									
10,952.1	10,952.1	10,952.1									
11,086.0	11,086.0	11,086.0									
11,285.1	11,285.1	11,285.1									
11,421.9	11,421.9	11,421.9									
11,621.1	11,621.1	11,621.1									
11,758.9	11,758.9	11,758.9									
11,957.0	11,957.0	11,957.0									
12,096.1	12,096.1	12,096.1									
12,290.0	12,290.0	12,290.0									
12,429.1	12,429.1	12,429.1									
12,695.9	12,695.9	12,695.9									
12,832.0	12,832.0	12,832.0									
13,029.9	13,029.9	13,029.9									
13,105.6	13,105.6	13,105.6									



Lease Review All - Frac Summary

Well Name: RAZOR 33M-2803

API Number 051233925700		WPC ID 1CO0761112		Well Permit Number 400571544		Field Name DJ Horizontal Niobrara		County Weld		State CO	
Well Configuration Type Lateral/Horizontal		Orig KB Elv (ft) 4,747.50		Ground Elevation (ft) 4,729.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,129.0	
Original Spud Date 12/31/2014		Completion Date 2/25/2015		Asset Group Redtail		Responsible Engineer Charles Ohlson		N/S Dist (ft) 565.0		N/S Ref FSL	
E/W Dist (ft) 741.0		E/W Ref FWL		Lot		Quarter 1 SW		Quarter 2 SW		Quarter 3	
Quarter 4		Section 33		Section Suffix		Section Type		Township 10 N		Township N/S Dir	
Range 58		Range E/W Dir W		Meridian							
Lateral/Horizontal - Original Hole, 6/17/2015 2:12:41 PM				Stim/Treat Stages							
MD (ftKB)	D (ft K B)	n (C L)	Vertical schematic (actual)	Logs	Interval 15						
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
26.9	26.9	64		15	2/19/2015	10,076.0	10,212.0	3036.60	3150.50	XL Gel:1683 bbl; Linear Gel:389 bbl; 15% HCL:24 bbl; Slickwater:914bbl; Freshwater:27 bbl	
Stim/Treat Additives											
1,532.5	1,532.5	64		Stg #	Add	Type	Amount	Units	Sand Size		
1,750.0	1,750.0	64		15	Proppant	Ottawa 20/40	96,835.0	lb	20/40		
3,307.4	3,307.4	64		15	Proppant	Ottawa 40/70	3,283.0	lb	40/70		
Interval 16											
4,418.3	4,418.3	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
4,984.3	4,984.3	64		16	2/19/2015	9,874.0	10,011.0	3448.20	3588.00	XL Gel:2071 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:916bbl; Freshwater:25 bbl	
Stim/Treat Additives											
5,569.2	5,569.2	64		Stg #	Add	Type	Amount	Units	Sand Size		
5,582.0	5,582.0	64		16	Proppant	Ottawa 20/40	140,639.0	lb	20/40		
6,021.3	6,021.3	64		16	Proppant	Ottawa 40/70	3,375.0	lb	40/70		
Interval 17											
6,111.9	6,111.9	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
6,249.0	6,249.0	64		17	2/20/2015	9,673.0	9,802.0	3235.10	3372.10	XL Gel:1897 bbl; Linear Gel:412 bbl; 15% HCL:24 bbl; Slickwater:882bbl; Freshwater:20 bbl	
Stim/Treat Additives											
6,448.2	6,448.2	64		Stg #	Add	Type	Amount	Units	Sand Size		
6,584.0	6,584.0	64		17	Proppant	Ottawa 20/40	141,819.0	lb	20/40		
6,784.1	6,784.1	64		17	Proppant	Ottawa 40/70	3,271.0	lb	40/70		
Interval 18											
6,919.9	6,919.9	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
7,120.1	7,120.1	64		18	2/20/2015	9,474.0	9,608.0	3224.80	3358.30	XL Gel:1886 bbl; Linear Gel:398 bbl; 15% HCL:24 bbl; Slickwater:885bbl; Freshwater:32 bbl	
Stim/Treat Additives											
7,255.9	7,255.9	64		Stg #	Add	Type	Amount	Units	Sand Size		
7,456.0	7,456.0	64		18	Proppant	Ottawa 20/40	140,889.0	lb	20/40		
7,591.9	7,591.9	64		18	Proppant	Ottawa 40/70	3,355.0	lb	40/70		
Interval 19											
7,792.0	7,792.0	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
7,925.9	7,925.9	64		19	2/20/2015	9,270.0	9,406.0	3150.60	3267.50	XL Gel:1817 bbl; Linear Gel:412 bbl; 15% HCL:24 bbl; Slickwater:859bbl; Freshwater:39 bbl	
Stim/Treat Additives											
8,062.0	8,062.0	64		Stg #	Add	Type	Amount	Units	Sand Size		
8,262.1	8,262.1	64		19	Proppant	Ottawa 20/40	117,180.0	lb	20/40		
8,398.0	8,398.0	64		19	Proppant	Ottawa 40/70	3,146.0	lb	40/70		
Interval 20											
8,598.1	8,598.1	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
8,733.9	8,733.9	64		20	2/23/2015	9,068.0	9,205.0	2711.80	2782.50	XL Gel:1411 bbl; Linear Gel:397 bbl; 15% HCL:24 bbl; Slickwater:854bbl; Freshwater:25 bbl	
Stim/Treat Additives											
8,934.1	8,934.1	64		Stg #	Add	Type	Amount	Units	Sand Size		
9,069.9	9,069.9	64		20	Proppant	Ottawa 20/40	65,726.0	lb	20/40		
9,270.0	9,270.0	64		20	Proppant	Ottawa 40/70	3,123.0	lb	40/70		
Interval 21											
9,405.8	9,405.8	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
9,606.0	9,606.0	64		21	2/23/2015	8,867.0	9,003.0	3166.60	3299.10	XL Gel:1909 bbl; Linear Gel:310 bbl; 15% HCL:24 bbl; Slickwater:879bbl; Freshwater:46 bbl	
Stim/Treat Additives											
9,742.1	9,742.1	64		Stg #	Add	Type	Amount	Units	Sand Size		
9,941.9	9,941.9	64		21	Proppant	Ottawa 20/40	141,217.0	lb	20/40		
10,078.1	10,078.1	64		21	Proppant	Ottawa 40/70	3,232.0	lb	40/70		
Interval 22											
10,277.9	10,277.9	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
10,414.0	10,414.0	64		22	2/23/2015	8,665.0	8,801.0	3206.00	3353.00	XL Gel:1933 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:812bbl; Freshwater:24 bbl	
Stim/Treat Additives											
10,609.9	10,609.9	64		Stg #	Add	Type	Amount	Units	Sand Size		
10,750.0	10,750.0	64		22	Proppant	Ottawa 20/40	140,728.0	lb	20/40		
10,952.1	10,952.1	64		22	Proppant	Ottawa 40/70	3,334.0	lb	40/70		
Interval 23											
11,086.0	11,086.0	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
11,285.1	11,285.1	64		23	2/24/2015	8,468.0	8,600.0	3360.60	3503.20	XL Gel:2081 bbl; Linear Gel:463 bbl; 15% HCL:24 bbl; Slickwater:740bbl; Freshwater:53 bbl	
Stim/Treat Additives											
11,421.9	11,421.9	64		Stg #	Add	Type	Amount	Units	Sand Size		
11,621.1	11,621.1	64		23	Proppant	Ottawa 20/40	141,608.0	lb	20/40		
11,758.9	11,758.9	64		23	Proppant	Ottawa 40/70	3,221.0	lb	40/70		
Interval 23											
11,957.0	11,957.0	64		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
12,096.1	12,096.1	64		23	2/24/2015	8,468.0	8,600.0	3360.60	3503.20	XL Gel:2081 bbl; Linear Gel:463 bbl; 15% HCL:24 bbl; Slickwater:740bbl; Freshwater:53 bbl	
Stim/Treat Additives											
12,290.0	12,290.0	64		Stg #	Add	Type	Amount	Units	Sand Size		
12,429.1	12,429.1	64		23	Proppant	Ottawa 20/40	141,608.0	lb	20/40		
12,695.9	12,695.9	64		23	Proppant	Ottawa 40/70	3,221.0	lb	40/70		
12,832.0	12,832.0	64		23	Proppant	Ottawa 40/70	3,221.0	lb	40/70		
13,029.9	13,029.9	64		23	Proppant	Ottawa 40/70	3,221.0	lb	40/70		
13,105.6	13,105.6	64		23	Proppant	Ottawa 40/70	3,221.0	lb	40/70		



Lease Review All - Frac Summary

Well Name: RAZOR 33M-2803

API Number 051233925700		WPC ID 1CO0761112		Well Permit Number 400571544		Field Name DJ Horizontal Niobrara		County Weld		State CO					
Well Configuration Type Lateral/Horizontal		Orig KB Elv (ft) 4,747.50		Ground Elevation (ft) 4,729.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,129.0					
Original Spud Date 12/31/2014		Completion Date 2/25/2015		Asset Group Redtail		Responsible Engineer Charles Ohlson		N/S Dist (ft) 565.0		N/S Ref FSL		E/W Dist (ft) 741.0		E/W Ref FWL	
Lot		Quarter 1 SW	Quarter 2 SW	Quarter 3	Quarter 4	Section 33	Section Suffix	Section Type	Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian		
Lateral/Horizontal - Original Hole, 6/17/2015 2:12:43 PM															
Stim/Treat Stages															
Interval 24															
Stg # 24		Start Date 2/24/2015		Top (ftKB) 8,262.0		Btm (ftKB) 8,398.0		Vol Clean... 3095.50		Vol Slurry... 3246.40		Comment XL Gel:1831 bbl; Linear Gel:415 bbl; 15% HCL:24 bbl; Slickwater:798bbl; Freshwater:27 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
24		Proppant				Ottawa 20/40				141,169.0		lb		20/40	
24		Proppant				Ottawa 40/70				3,258.0		lb		40/70	
Interval 25															
Stg # 25		Start Date 2/24/2015		Top (ftKB) 8,060.0		Btm (ftKB) 8,197.0		Vol Clean... 3063.50		Vol Slurry... 3206.20		Comment XL Gel:1771 bbl; Linear Gel:428 bbl; 15% HCL:24 bbl; Slickwater:816bbl; Freshwater:25 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
25		Proppant				Ottawa 20/40				140,204.0		lb		20/40	
25		Proppant				Ottawa 40/70				3,271.0		lb		40/70	
Interval 26															
Stg # 26		Start Date 2/24/2015		Top (ftKB) 7,858.0		Btm (ftKB) 7,995.0		Vol Clean... 3051.80		Vol Slurry... 3194.30		Comment XL Gel:1816 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:773bbl; Freshwater:26 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
26		Proppant				Ottawa 20/40				142,801.0		lb		20/40	
26		Proppant				Ottawa 40/70				3,185.0		lb		40/70	
Interval 27															
Stg # 27		Start Date 2/24/2015		Top (ftKB) 7,657.0		Btm (ftKB) 7,794.0		Vol Clean... 3064.00		Vol Slurry... 3202.90		Comment XL Gel:1814 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:782bbl; Freshwater:32 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
27		Proppant				Ottawa 20/40				141,581.0		lb		20/40	
27		Proppant				Ottawa 40/70				3,450.0		lb		40/70	
Interval 28															
Stg # 28		Start Date 2/24/2015		Top (ftKB) 7,456.0		Btm (ftKB) 7,592.0		Vol Clean... 3019.10		Vol Slurry... 3166.90		Comment XL Gel:1805 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:754bbl; Freshwater:23 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
28		Proppant				Ottawa 20/40				141,327.0		lb		20/40	
28		Proppant				Ottawa 40/70				3,215.0		lb		40/70	
Interval 29															
Stg # 29		Start Date 2/24/2015		Top (ftKB) 7,254.0		Btm (ftKB) 7,391.0		Vol Clean... 3002.00		Vol Slurry... 3146.40		Comment XL Gel:1803 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:736bbl; Freshwater:26 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
29		Proppant				Ottawa 20/40				142,062.0		lb		20/40	
29		Proppant				Ottawa 40/70				3,220.0		lb		40/70	
Interval 30															
Stg # 30		Start Date 2/25/2015		Top (ftKB) 7,053.0		Btm (ftKB) 7,189.0		Vol Clean... 3068.40		Vol Slurry... 3212.60		Comment XL Gel:1768 bbl; Linear Gel:382 bbl; 15% HCL:24 bbl; Slickwater:875bbl; Freshwater:20 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
30		Proppant				Ottawa 20/40				141,351.0		lb		20/40	
30		Proppant				Ottawa 40/70				3,263.0		lb		40/70	
Interval 31															
Stg # 31		Start Date 2/25/2015		Top (ftKB) 6,851.0		Btm (ftKB) 6,988.0		Vol Clean... 2962.30		Vol Slurry... 3106.60		Comment XL Gel:1765 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:734bbl; Freshwater:27 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
31		Proppant				Ottawa 20/40				141,466.0		lb		20/40	
31		Proppant				Ottawa 40/70				3,266.0		lb		40/70	
Interval 32															
Stg # 32		Start Date 2/25/2015		Top (ftKB) 6,652.0		Btm (ftKB) 6,786.0		Vol Clean... 2962.10		Vol Slurry... 3110.30		Comment XL Gel:1775 bbl; Linear Gel:413 bbl; 15% HCL:24 bbl; Slickwater:721bbl; Freshwater:29 bbl			
Stim/Treat Additives															
Stg #		Add				Type				Amount		Units		Sand Size	
32		Proppant				Ottawa 20/40				140,554.0		lb		20/40	
32		Proppant				Ottawa 40/70				3,259.0		lb		40/70	



Lease Review All - Frac Summary

Well Name: RAZOR 33M-2803

API Number	WPC ID	Well Permit Number	Field Name	County	State
051233925700	1CO0761112	400571544	DJ Horizontal Niobrara	Weld	CO
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,747.50	4,729.00			13,129.0
Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref
12/31/2014	2/25/2015	Redtail	Charles Ohlson	565.0	FSL
E/W Dist (ft)	E/W Ref				
741.0	FWL				
Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section
	SW	SW			33
Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir
		10	N	58	W
Meridian					

Lateral/Horizontal - Original Hole, 6/17/2015 2:12:47 PM					Other In Hole						
MD (ftKB)	D (ft K B)	n c l (Vertical schematic (actual)	Logs	Des	OD (in)	Run Date	Pull Date	Top (ftKB)	Btm (ftKB)	
26.9	26.9	14			CFP	4	2/25/2015	3/9/2015	7,211.0	7,213.0	
1,532.5	1,532.5	14			CFP	4	2/25/2015	3/9/2015	7,417.0	7,419.0	
1,750.0	1,750.0	14			CFP	4	2/24/2015	3/9/2015	7,630.0	7,632.0	
3,307.4	3,307.4	14			CFP	4	2/24/2015	3/9/2015	7,830.0	7,832.0	
4,418.3	4,418.3	14			CFP	4	2/24/2015	3/9/2015	8,012.0	8,014.0	
4,984.3	4,984.3	14			CFP	4	2/24/2015	3/10/2015	8,214.0	8,216.0	
5,569.2	5,569.2	14			CFP	4	2/24/2015	3/10/2015	8,430.0	8,432.0	
5,582.0	5,582.0	14			CFP	4	2/24/2015	3/10/2015	8,634.0	8,638.0	
6,021.3	6,021.3	14			CFP	4	2/24/2015	3/10/2015	8,634.0	8,638.0	
6,111.9	6,111.9	14			CFP	4	2/23/2015	3/10/2015	8,845.0	8,847.0	
6,249.0	6,249.0	14			CFP	4	2/23/2015	3/10/2015	8,845.0	8,847.0	
6,448.2	6,448.2	14			CFP	4	2/23/2015	3/10/2015	9,027.0	9,029.0	
6,584.0	6,584.0	14			CFP	4	2/23/2015	3/10/2015	9,027.0	9,029.0	
6,784.1	6,784.1	14			CFP	4	2/23/2015	3/10/2015	9,238.0	9,240.0	
6,919.9	6,919.9	14			CFP	4	2/23/2015	3/10/2015	9,238.0	9,240.0	
7,120.1	7,120.1	14			CFP	4	2/20/2015	3/10/2015	9,438.0	9,440.0	
7,255.9	7,255.9	14			CFP	4	2/20/2015	3/10/2015	9,438.0	9,440.0	
7,456.0	7,456.0	14			CFP	4	2/20/2015	3/10/2015	9,650.0	9,652.0	
7,591.9	7,591.9	14			CFP	4	2/20/2015	3/10/2015	9,650.0	9,652.0	
7,792.0	7,792.0	14			CFP	4	2/20/2015	3/10/2015	9,828.0	9,830.0	
7,925.9	7,925.9	14			CFP	4	2/19/2015	3/10/2015	10,042.0	10,044.0	
8,062.0	8,062.0	14			CFP	4	2/19/2015	3/10/2015	10,042.0	10,044.0	
8,262.1	8,262.1	14			CFP	4	2/19/2015	3/10/2015	10,244.0	10,246.0	
8,398.0	8,398.0	14			CFP	4	2/19/2015	3/10/2015	10,244.0	10,246.0	
8,598.1	8,598.1	14			CFP	4	2/19/2015	3/10/2015	10,430.0	10,432.0	
8,733.9	8,733.9	14			CFP	4	2/19/2015	3/10/2015	10,430.0	10,432.0	
8,934.1	8,934.1	14			CFP	4	2/19/2015	3/10/2015	10,634.0	10,636.0	
9,069.9	9,069.9	14			CFP	4	2/19/2015	3/10/2015	10,634.0	10,636.0	
9,270.0	9,270.0	14			CFP	4	2/19/2015	3/10/2015	10,847.0	10,849.0	
9,405.8	9,405.8	14			CFP	4	2/19/2015	3/10/2015	10,847.0	10,849.0	
9,606.0	9,606.0	14			CFP	4	2/19/2015	3/10/2015	11,050.0	11,052.0	
9,742.1	9,742.1	14			CFP	4	2/18/2015	3/10/2015	11,050.0	11,052.0	
9,941.9	9,941.9	14			CFP	4	2/18/2015	3/10/2015	11,261.0	11,263.0	
10,078.1	10,078.1	14			CFP	4	2/18/2015	3/10/2015	11,261.0	11,263.0	
10,277.9	10,277.9	14			CFP	4	2/18/2015	3/10/2015	11,432.0	11,434.0	
10,414.0	10,414.0	14			CFP	4	2/18/2015	3/10/2015	11,432.0	11,434.0	
10,609.9	10,609.9	14			CFP	4	2/18/2015	3/10/2015	11,647.0	11,649.0	
10,750.0	10,750.0	14			CFP	4	2/18/2015	3/10/2015	11,647.0	11,649.0	
10,952.1	10,952.1	14			CFP	4	2/18/2015	3/10/2015	11,856.0	11,858.0	
11,086.0	11,086.0	14			CFP	4	2/18/2015	3/10/2015	11,856.0	11,858.0	
11,285.1	11,285.1	14		CFP	4	2/18/2015	3/10/2015	12,071.0	12,073.0		
11,421.9	11,421.9	14		CFP	4	2/18/2015	3/10/2015	12,071.0	12,073.0		
11,621.1	11,621.1	14		CFP	4	2/17/2015	3/10/2015	12,255.0	12,257.0		
11,758.9	11,758.9	14		CFP	4	2/17/2015	3/10/2015	12,255.0	12,257.0		
11,957.0	11,957.0	14		CFP	4	2/17/2015	3/10/2015	12,445.0	12,447.0		
12,096.1	12,096.1	14		CFP	4	2/17/2015	3/10/2015	12,445.0	12,447.0		
12,290.0	12,290.0	14		CFP	4	2/17/2015	3/10/2015	12,657.0	12,659.0		
12,429.1	12,429.1	14		CFP	4	2/17/2015	3/10/2015	12,657.0	12,659.0		
12,695.9	12,695.9	14		CFP	4	2/17/2015	3/10/2015	12,870.0	12,872.0		
12,832.0	12,832.0	14		CFP	4	2/17/2015	3/10/2015	12,870.0	12,872.0		
13,029.9	13,029.9	14		CFP	4	2/16/2015	3/10/2015	13,040.0	13,042.0		
13,105.6	13,105.6	14		CFP	4	2/16/2015	3/10/2015	13,040.0	13,042.0		
Bottom Hole Cores											
Date					Core #		Top (ftKB)		Btm (ftKB)		Recov (ft)