

<div><div><div><div></div><div>WHITING</div></div></div></div> <div>Lease Review All - Frac Summary</div> <div>Well Name: RAZOR 11E-0202B</div>																
API Number 051233853100			WPC ID 1CO0761006			Well Permit Number			Field Name DJ Horizontal Niobrara			County Weld		State CO		
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 5,018.60			Ground Elevation (ft) 5,001.80		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 12,996.0			
Original Spud Date 2/21/2014		Completion Date 6/18/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 822.0		E/W Ref FWL	
Lot		Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type		Township 10	Township N/S Dir N	Range 58		Range E/W Dir W	Meridian	
Lateral/Horizontal - Original Hole, 10/8/2014 4:10:53 PM						Wellbore Sections										
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Wellbore Name		Start Date		Size (in)		Act Top (ftKB)		Act Btm (ftKB)	
							Original Hole		2/10/2014		20		16.8		96.8	
							Original Hole		2/21/2014		13 1/2		96.8		1,838.0	
							Original Hole		2/23/2014		8 3/4		1,838.0		6,440.0	
							Original Hole		2/26/2014		6		6,440.0		12,996.0	
Conductor Pipe, 96.8ftKB																
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des				
16		75.00		J-55		16.8		96.8		80.00		Casing Joints				
Surface Csg, 1,825.0ftKB																
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des				
9 5/8		36.00		J-55		16.8		16.8		0.00		Landing Joint				
9 5/8		36.00		J-55		16.8		21.5		4.70		Well Head				
9 5/8		36.00		J-55		21.5		1,780.0		1,758.57		Casing Joints				
9 5/8		36.00		J-55		1,780.0		1,781.5		1.50		Float Collar				
9 5/8		36.00		J-55		1,781.5		1,823.5		41.97		Casing Joints				
9 5/8		36.00		J-55		1,823.5		1,825.0		1.50		Float Shoe				
Frac String, 5,348.2ftKB																
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des				
						14.0		16.0		2.00		Casing Hanger				
4 1/2		15.10		P-110		16.0		45.7		29.70		Casing Joints				
4 1/2		15.10		P-110		45.7		73.6		27.89		Pup Joint				
4 1/2		15.10		P-110		73.6		5,338.2		5,264.57		Casing Joints				
5 1/4						5,338.2		5,348.2		10.00		PBR seal assembly				
Intermediate Csg, 6,425.3ftKB																
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des				
7		29.00		L-80		16.8		16.8		0.00		Landing Joint				
7		29.00		L-80		16.8		21.8		5.00		Pup joint				
7		29.00		L-80		21.8		6,378.2		6,356.41		Casing Joints				
7		29.00		L-80		6,378.2		6,379.7		1.50		Float Collar				
7		29.00		L-80		6,379.7		6,423.8		44.07		Casing Joints				
7		29.00		L-80		6,423.8		6,425.3		1.50		Float Shoe				
Liner, 12,983.0ftKB																
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des				
4 1/2		11.60		L-80		5,345.2		5,366.1		20.92		ZXP Liner Top Packer				
4 1/2		11.60		L-80		5,366.1		5,372.7		6.64		HMC Liner Hanger				
4 1/2		11.60		L-80		5,372.7		5,373.7		1.02		Cross Over				
4 1/2		11.60		L-80		5,373.7		5,379.2		5.46		Casing Pup				
4 1/2		11.60		L-80		5,379.2		12,834.0		7,454.85		JT 4.5" 11.6# LTC CSG				
4 1/2		11.60		L-80		12,834.0		12,845.9		11.87		Alpha Sleeve				
4 1/2		11.60		L-80		12,845.9		12,890.0		44.06		JT 4.5" 11.6# LTC CSG				
4 1/2		11.60		L-80		12,890.0		12,891.4		1.42		TYPE II LANDING COLLAR				
4 1/2		11.60		L-80		12,891.4		12,892.4		1.00		SINGLE VALVE FLOAT COLLAR				
4 1/2		11.60		L-80		12,892.4		12,980.5		88.09		JT 4.5" 11.6# LTC CSG				
4 1/2		11.60		L-80		12,980.5		12,983.0		2.52		FLOAT SHOE				
Cement Stages																
Des			Pump Start Date			Drill Out Date			Top (ftKB)		Btm (ftKB)		Top Meas Meth			
Conductor Cement			2/10/2014						16.8		96.8					
Surface Casing Cement			2/22/2014						16.8		1,825.0		Returns to Surface			
Intermediate Casing Cement			2/25/2014						16.8		6,425.0		Returns to Surface			
Liner Cement			3/3/2014						5,348.0		12,983.0		Volume Calculations			
Perforations																
Type of Hole				Date			Top (ftKB)		Btm (ftKB)		Zone					
Perforated Liner				5/28/2014			6,524.0		6,526.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,574.0		6,576.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,624.0		6,626.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,695.0		6,697.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,745.0		6,747.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,792.0		6,794.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,860.0		6,862.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,900.0		6,902.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			6,945.0		6,947.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,010.0		7,012.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,045.0		7,047.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,090.0		7,092.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,156.0		7,158.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,245.0		7,247.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,310.0		7,312.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,345.0		7,347.0		Niobrara, Original Hole					
Perforated Liner				5/28/2014			7,390.0		7,392.0		Niobrara, Original Hole					



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Original Spud Date 2/21/2014		Completion Date 6/18/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 822.0		E/W Ref FWL
Lot	Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type		Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian		

Lateral/Horizontal - Original Hole, 10/8/2014 4:10:55 PM						Perforations				
MD (ftKB)	D (ft K B)	n c l (	Vertical schematic (actual)	Logs	Type of Hole		Date	Top (ftKB)	Btm (ftKB)	Zone
21.3	21.4	114			Perforated Liner		5/28/2014	7,460.0	7,462.0	Niobrara, Original Hole
73.5	73.6	114			Perforated Liner		5/28/2014	7,510.0	7,512.0	Niobrara, Original Hole
1,825.1	1,825.1	117			Perforated Liner		5/28/2014	7,546.0	7,548.0	Niobrara, Original Hole
3,322.2	3,322.2	117			Perforated Liner		5/27/2014	7,610.0	7,612.0	Niobrara, Original Hole
5,203.1	5,203.1	119			Perforated Liner		5/27/2014	7,645.0	7,647.0	Niobrara, Original Hole
5,348.1	5,348.1	119			Perforated Liner		5/27/2014	7,645.0	7,647.0	Niobrara, Original Hole
5,399.3	5,399.3	121			Perforated Liner		5/27/2014	7,695.0	7,697.0	Niobrara, Original Hole
6,088.9	6,088.9	121			Perforated Liner		5/27/2014	7,695.0	7,697.0	Niobrara, Original Hole
6,424.9	6,424.9	121			Perforated Liner		5/27/2014	7,760.0	7,762.0	Niobrara, Original Hole
6,574.1	6,574.1	121			Perforated Liner		5/27/2014	7,788.0	7,790.0	Niobrara, Original Hole
6,696.9	6,696.9	121			Perforated Liner		5/27/2014	7,834.0	7,836.0	Niobrara, Original Hole
6,859.9	6,859.9	121			Perforated Liner		5/27/2014	7,912.0	7,914.0	Niobrara, Original Hole
6,946.8	6,946.8	121			Perforated Liner		5/27/2014	7,945.0	7,947.0	Niobrara, Original Hole
7,089.9	7,089.9	121			Perforated Liner		5/27/2014	7,988.0	7,990.0	Niobrara, Original Hole
7,247.0	7,247.0	121			Perforated Liner		5/27/2014	8,050.0	8,052.0	Niobrara, Original Hole
7,390.1	7,390.1	121			Perforated Liner		5/27/2014	8,094.0	8,096.0	Niobrara, Original Hole
7,512.1	7,512.1	121			Perforated Liner		5/27/2014	8,140.0	8,142.0	Niobrara, Original Hole
7,645.0	7,645.0	121			Perforated Liner		5/27/2014	8,210.0	8,212.0	Niobrara, Original Hole
7,762.1	7,762.1	121			Perforated Liner		5/27/2014	8,220.0	8,222.0	Niobrara, Original Hole
7,912.1	7,912.1	121			Perforated Liner		5/27/2014	8,245.0	8,247.0	Niobrara, Original Hole
7,990.2	7,990.2	121			Perforated Liner		5/27/2014	8,284.0	8,286.0	Niobrara, Original Hole
8,140.1	8,140.1	121			Perforated Liner		5/27/2014	8,352.0	8,354.0	Niobrara, Original Hole
8,222.1	8,222.1	121			Perforated Liner		5/27/2014	8,395.0	8,397.0	Niobrara, Original Hole
8,352.0	8,352.0	121			Perforated Liner		5/27/2014	8,440.0	8,442.0	Niobrara, Original Hole
8,441.9	8,441.9	121			Perforated Liner		5/27/2014	8,510.0	8,512.0	Niobrara, Original Hole
8,589.9	8,589.9	121			Perforated Liner		5/27/2014	8,546.0	8,548.0	Niobrara, Original Hole
8,696.9	8,696.9	121			Perforated Liner		5/27/2014	8,590.0	8,592.0	Niobrara, Original Hole
8,850.1	8,850.1	121			Perforated Liner		5/26/2014	8,655.0	8,657.0	Niobrara, Original Hole
8,961.9	8,961.9	121			Perforated Liner		5/26/2014	8,695.0	8,697.0	Niobrara, Original Hole
9,109.9	9,109.9	121			Perforated Liner		5/26/2014	8,745.0	8,747.0	Niobrara, Original Hole
9,190.0	9,190.0	121			Perforated Liner		5/26/2014	8,814.0	8,816.0	Niobrara, Original Hole
9,345.1	9,345.1	121			Perforated Liner		5/26/2014	8,850.0	8,852.0	Niobrara, Original Hole
9,452.1	9,452.1	121			Perforated Liner		5/26/2014	8,891.0	8,893.0	Niobrara, Original Hole
9,595.1	9,595.1	121			Perforated Liner		5/26/2014	8,960.0	8,962.0	Niobrara, Original Hole
9,708.0	9,708.0	121			Perforated Liner		5/26/2014	9,000.0	9,002.0	Niobrara, Original Hole
9,857.9	9,857.9	121			Perforated Liner		5/26/2014	9,042.0	9,044.0	Niobrara, Original Hole
9,946.9	9,946.9	121			Perforated Liner		5/26/2014	9,110.0	9,112.0	Niobrara, Original Hole
10,095.1	10,095.1	121			Perforated Liner		5/26/2014	9,146.0	9,148.0	Niobrara, Original Hole
10,196.9	10,196.9	121			Perforated Liner		5/26/2014	9,188.0	9,190.0	Niobrara, Original Hole
10,339.9	10,339.9	121			Perforated Liner		5/26/2014	9,255.0	9,257.0	Niobrara, Original Hole
10,470.1	10,470.1	121			Perforated Liner		5/26/2014	9,295.0	9,297.0	Niobrara, Original Hole
10,616.1	10,616.1	121			Perforated Liner		5/26/2014	9,345.0	9,347.0	Niobrara, Original Hole
10,690.0	10,690.0	121			Perforated Liner		5/26/2014	9,410.0	9,412.0	Niobrara, Original Hole
10,836.0	10,836.0	121			Perforated Liner		5/26/2014	9,450.0	9,452.0	Niobrara, Original Hole
10,941.9	10,941.9	121			Perforated Liner		5/26/2014	9,492.0	9,494.0	Niobrara, Original Hole
11,095.1	11,095.1	121			Perforated Liner		5/26/2014	9,492.0	9,494.0	Niobrara, Original Hole
11,210.0	11,210.0	121			Perforated Liner		5/26/2014	9,552.0	9,554.0	Niobrara, Original Hole
11,355.0	11,355.0	121			Perforated Liner		5/26/2014	9,595.0	9,597.0	Niobrara, Original Hole
11,446.9	11,446.9	121			Perforated Liner		5/26/2014	9,630.0	9,632.0	Niobrara, Original Hole
11,580.1	11,580.1	121			Perforated Liner		5/26/2014	9,706.0	9,708.0	Niobrara, Original Hole
11,696.9	11,696.9	121			Perforated Liner		5/26/2014	9,745.0	9,747.0	Niobrara, Original Hole
11,845.1	11,845.1	121			Perforated Liner		5/26/2014	9,790.0	9,792.0	Niobrara, Original Hole
11,952.1	11,952.1	121			Perforated Liner		5/26/2014	9,858.0	9,860.0	Niobrara, Original Hole
12,102.0	12,102.0	121			Perforated Liner		5/26/2014	9,895.0	9,897.0	Niobrara, Original Hole
12,178.1	12,178.1	121			Perforated Liner		5/26/2014	9,945.0	9,947.0	Niobrara, Original Hole
12,345.1	12,345.1	121			Perforated Liner		5/25/2014	10,010.0	10,012.0	Niobrara, Original Hole
12,463.9	12,463.9	121			Perforated Liner		5/25/2014	10,052.0	10,054.0	Niobrara, Original Hole
12,634.0	12,634.0	121			Perforated Liner		5/25/2014	10,095.0	10,097.0	Niobrara, Original Hole
12,830.0	12,830.0	121			Perforated Liner		5/25/2014	10,160.0	10,162.0	Niobrara, Original Hole
12,980.6	12,980.6	121			Perforated Liner		5/25/2014	10,195.0	10,197.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,226.0	10,228.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,298.0	10,300.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,340.0	10,342.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,386.0	10,388.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,468.0	10,470.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,495.0	10,497.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,545.0	10,547.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,616.0	10,618.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,640.0	10,642.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,688.0	10,690.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,760.0	10,762.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,795.0	10,797.0	Niobrara, Original Hole
					Perforated Liner		5/25/2014	10,836.0	10,838.0	Niobrara, Original Hole



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Lateral/Horizontal - Original Hole, 10/8/2014 4:10:57 PM				Perforations									
MD (ftKB)	D (ft K B)	n c l (Vertical schematic (actual)	Logs	Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone				
21.3	214	52			Perforated Liner	5/25/2014	10,900.0	10,902.0	Niobrara, Original Hole				
73.5	735	52		Perforated Liner	5/25/2014	10,940.0	10,942.0	Niobrara, Original Hole					
1,825.1	1,825.1	52		Perforated Liner	5/25/2014	11,000.0	11,002.0	Niobrara, Original Hole					
3,322.2	3,322.2	52		Perforated Liner	5/25/2014	11,065.0	11,067.0	Niobrara, Original Hole					
5,203.1	5,203.1	52		Perforated Liner	5/25/2014	11,095.0	11,097.0	Niobrara, Original Hole					
5,348.1	5,348.1	52		Perforated Liner	5/25/2014	11,145.0	11,147.0	Niobrara, Original Hole					
5,399.3	5,399.3	52		Perforated Liner	5/24/2014	11,208.0	11,210.0	Niobrara, Original Hole					
6,088.9	6,088.9	52		Perforated Liner	5/24/2014	11,240.0	11,242.0	Niobrara, Original Hole					
6,424.9	6,424.9	52		Perforated Liner	5/24/2014	11,285.0	11,287.0	Niobrara, Original Hole					
6,574.1	6,574.1	52		Perforated Liner	5/24/2014	11,355.0	11,357.0	Niobrara, Original Hole					
6,696.9	6,696.9	52		Perforated Liner	5/24/2014	11,395.0	11,397.0	Niobrara, Original Hole					
6,859.9	6,859.9	52		Perforated Liner	5/24/2014	11,445.0	11,447.0	Niobrara, Original Hole					
6,946.8	6,946.8	52		Perforated Liner	5/24/2014	11,509.0	11,511.0	Niobrara, Original Hole					
7,089.9	7,089.9	52		Perforated Liner	5/24/2014	11,545.0	11,547.0	Niobrara, Original Hole					
7,247.0	7,247.0	52		Perforated Liner	5/24/2014	11,580.0	11,582.0	Niobrara, Original Hole					
7,390.1	7,390.1	52		Perforated Liner	5/24/2014	11,650.0	11,652.0	Niobrara, Original Hole					
7,512.1	7,512.1	52		Perforated Liner	5/24/2014	11,695.0	11,697.0	Niobrara, Original Hole					
7,645.0	7,645.0	52		Perforated Liner	5/24/2014	11,745.0	11,747.0	Niobrara, Original Hole					
7,762.1	7,762.1	52		Perforated Liner	5/24/2014	11,816.0	11,818.0	Niobrara, Original Hole					
7,912.1	7,912.1	52		Perforated Liner	5/24/2014	11,845.0	11,847.0	Niobrara, Original Hole					
7,990.2	7,990.2	52		Perforated Liner	5/24/2014	11,890.0	11,892.0	Niobrara, Original Hole					
8,140.1	8,140.1	52		Perforated Liner	5/23/2014	11,950.0	11,952.0	Niobrara, Original Hole					
8,222.1	8,222.1	52		Perforated Liner	5/23/2014	11,995.0	11,997.0	Niobrara, Original Hole					
8,352.0	8,352.0	52		Perforated Liner	5/23/2014	12,034.0	12,036.0	Niobrara, Original Hole					
8,441.9	8,441.9	52		Perforated Liner	5/23/2014	12,102.0	12,104.0	Niobrara, Original Hole					
8,589.9	8,589.9	52		Perforated Liner	5/23/2014	12,145.0	12,147.0	Niobrara, Original Hole					
8,696.9	8,696.9	52		Perforated Liner	5/23/2014	12,176.0	12,178.0	Niobrara, Original Hole					
8,850.1	8,850.1	52		Perforated Liner	5/23/2014	12,252.0	12,254.0	Niobrara, Original Hole					
8,961.9	8,961.9	52		Perforated Liner	5/23/2014	12,295.0	12,297.0	Niobrara, Original Hole					
9,109.9	9,109.9	52		Perforated Liner	5/23/2014	12,345.0	12,347.0	Niobrara, Original Hole					
9,190.0	9,190.0	52		Perforated Liner	5/23/2014	12,416.0	12,418.0	Niobrara, Original Hole					
9,345.1	9,345.1	52		Perforated Liner	5/23/2014	12,462.0	12,464.0	Niobrara, Original Hole					
9,452.1	9,452.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
9,595.1	9,595.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
9,708.0	9,708.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
9,857.9	9,857.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
9,946.9	9,946.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,095.1	10,095.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,196.9	10,196.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,339.9	10,339.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,470.1	10,470.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,616.1	10,616.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,690.0	10,690.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,836.0	10,836.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
10,941.9	10,941.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,095.1	11,095.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,210.0	11,210.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,355.0	11,355.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,446.9	11,446.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,580.1	11,580.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,696.9	11,696.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,845.1	11,845.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
11,952.1	11,952.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
12,102.0	12,102.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
12,178.1	12,178.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
12,345.1	12,345.1	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
12,463.9	12,463.9	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
12,834.0	12,834.0	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
12,980.6	12,980.6	52		Perforated Liner	5/23/2014	12,505.0	12,507.0	Niobrara, Original Hole					
					Stimulations & Treatments								
					Sand Frac on 5/23/2014 06:00								
					Comment Treatment End Date:5/28/2014; Number of staged intervals: 40; Total 15% HCl used: 948 bbl; Min frac gradient:0.761 psi/ft; Number of perfs: 1440								
					Min Top De...		Max Btm De...		Frac Length (ft)				
					6,524.0		12,507.0		6,571.00				
					Total Clean Volu...	Vol Slurry Tot (bbl)	Proppant Desig...	Proppant Frm (lb)	P Max (psi)	Avg Treat...	Avg Treat...	Max Tre...	Frac Gr...
					117235.00	122813.50	5,336,000.0	5,181,440.4	9,044.0	4,582.0	49.60	68.50	0.79
					Stim/Treat Fluids								
					Fluid Name								
					QuadraFrac 25 XL Gel; 25# Linear Gel; 15% HCl								
					Stim/Treat Stages								
					Interval 1								
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
					1	5/23/2014	12,416.0	12,507.0	3701.30	3800.30	QuadraFrac XL Gel:1601 bbl; Linear Gel:496 bbl; Slickwater:1582 bbl; 15% HCl:23bbl		
					Stim/Treat Additives								
					Stg #	Add	Type		Amount		Units	Sand Size	
					1	Proppant	16/30 WS		85,396.8		lb	16/30	
					1	Proppant	40/70 WS		6,527.5		lb	40/70	
					Interval 2								
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
					2	5/23/2014	12,252.0	12,347.0	3050.20	3149.40	QuadraFrac XL Gel:1881 bbl; Linear Gel:497 bbl; Slickwater:646 bbl; 15% HCl:25bbl		
					Stim/Treat Additives								
					Stg #	Add	Type		Amount		Units	Sand Size	
					2	Proppant	16/30 WS		87,480.6		lb	16/30	
					2	Proppant	40/70 WS		4,700.1		lb	40/70	
					Interval 3								
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
					3	5/23/2014	12,102.0	12,178.0	2712.50	2816.20	QuadraFrac XL Gel:1567 bbl; Linear Gel:504 bbl; Slickwater:618 bbl; 15% HCl:23bbl		
					Stim/Treat Additives								
					Stg #	Add	Type		Amount		Units	Sand Size	
					3	Proppant	16/30 WS		91,874.1		lb	16/30	
					3	Proppant	40/70 WS		4,487.3		lb	40/70	
					Interval 4								
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
					4	5/23/2014	11,950.0	12,036.0	2968.40	3117.60	QuadraFrac XL Gel:1813 bbl; Linear Gel:506 bbl; Slickwater:628 bbl; 15% HCl:22bbl		



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0202B

API Number 051233853100			WPC ID 1CO0761006			Well Permit Number			Field Name DJ Horizontal Niobrara			County Weld			State CO
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 5,018.60		Ground Elevation (ft) 5,001.80		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 12,996.0			
Original Spud Date 2/21/2014		Completion Date 6/18/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 822.0		E/W Ref FWL
Lot	Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type		Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian		

Lateral/Horizontal - Original Hole, 10/8/2014 4:10:59 PM					Stim/Treat Additives						
MD (ftKB)	D (ft K B)	n c l (Vertical schematic (actual)	Logs	Stg #	Add	Type	Amount	Units	Sand Size	
					4	Proppant	16/30 WS	133,935.6	lb	16/30	
						4	Proppant	40/70 WS	4,643.4	lb	40/70
21.3	21.4	124			Interval 5						
73.5	75.5	124			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
					5	5/24/2014	11,816.0	11,892.0	3012.90	3145.60	QuadraFrac XL Gel:1774 bbl; Linear Gel:509 bbl; Slickwater:706 bbl; 15% HCl:25bbl
1,825.1	1,822.1	121			Stim/Treat Additives						
3,322.2	3,325.4	127			Stg #	Add	Type	Amount	Units	Sand Size	
5,203.1	5,162.2	124			5	Proppant	16/30 WS	118,838.0	lb	16/30	
5,348.1	5,386.3	124			5	Proppant	40/70 WS	4,392.7	lb	40/70	
5,399.3	5,388.0	121			Interval 6						
6,088.9	6,055.1	84.1			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
6,424.9	6,011.2	84.2			6	5/24/2014	11,650.0	11,747.0	3322.40	3471.70	QuadraFrac XL Gel:1947 bbl; Linear Gel:600 bbl; Slickwater:754 bbl; 15% HCl:21bbl
6,574.1	6,214.6	84.1			Stim/Treat Additives						
6,696.9	6,255.5	84.4		Stg #	Add	Type	Amount	Units	Sand Size		
6,859.9	6,252.2	84.5		6	Proppant	16/30 WS	132,062.9	lb	16/30		
6,946.8	6,255.4	84.7		6	Proppant	40/70 WS	6,653.6	lb	40/70		
7,089.9	6,254.8	84.2		Interval 7							
7,247.0	6,247.7	84.1		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
7,390.1	6,256.0	84.5		7	5/24/2014	11,509.0	11,582.0	3079.70	3233.30	QuadraFrac XL Gel:1824 bbl; Linear Gel:507 bbl; Slickwater:725 bbl; 15% HCl:24bbl	
7,512.1	6,255.8	84.5		Stim/Treat Additives							
7,645.0	6,244.7	84.4		Stg #	Add	Type	Amount	Units	Sand Size		
7,762.1	6,255.6	84.2		7	Proppant	16/30 WS	136,716.1	lb	16/30		
7,912.1	6,254.5	84.4		7	Proppant	40/70 WS	5,963.0	lb	40/70		
7,990.2	6,256.4	84.2		Interval 8							
8,140.1	6,254.0	84.2		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
8,222.1	6,255.0	84.4		8	5/24/2014	11,355.0	11,447.0	2940.80	3095.00	QuadraFrac XL Gel:1812 bbl; Linear Gel:492 bbl; Slickwater:615 bbl; 15% HCl:22bbl	
8,352.0	6,258.5	84.1		Stim/Treat Additives							
8,441.9	6,255.5	84.2		Stg #	Add	Type	Amount	Units	Sand Size		
8,589.9	6,261.7	84.5		8	Proppant	16/30 WS	138,870.9	lb	16/30		
8,696.9	6,260.1	84.4		8	Proppant	40/70 WS	4,323.3	lb	40/70		
8,850.1	6,264.2	84.2		Interval 9							
8,961.9	6,266.7	84.4		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
9,109.9	6,267.0	84.5		9	5/24/2014	11,208.0	11,287.0	2979.10	3127.50	QuadraFrac XL Gel:1826 bbl; Linear Gel:502 bbl; Slickwater:629 bbl; 15% HCl:22bbl	
9,190.0	6,267.1	84.5		Stim/Treat Additives							
9,345.1	6,267.0	84.4		Stg #	Add	Type	Amount	Units	Sand Size		
9,452.1	6,267.4	84.2		9	Proppant	16/30 WS	133,414.8	lb	16/30		
9,595.1	6,266.4	84.1		9	Proppant	40/70 WS	4,451.0	lb	40/70		
9,708.0	6,261.7	84.5		Interval 10							
9,857.9	6,257.7	84.5		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
9,946.9	6,252.4	84.4		10	5/24/2014	11,065.0	11,147.0	2957.30	3107.50	QuadraFrac XL Gel:1828 bbl; Linear Gel:498 bbl; Slickwater:610 bbl; 15% HCl:21bbl	
10,095.1	6,252.9	84.4		Stim/Treat Additives							
10,196.9	6,253.4	84.4		Stg #	Add	Type	Amount	Units	Sand Size		
10,339.9	6,255.2	84.7		10	Proppant	16/30 WS	135,523.1	lb	16/30		
10,470.1	6,252.2	84.4		10	Proppant	40/70 WS	3,954.3	lb	40/70		
10,616.1	6,264.4	84.4		Interval 11							
10,690.0	6,267.2	84.4		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
10,836.0	6,261.4	84.4		11	5/25/2014	10,900.0	11,002.0	2936.60	3076.50	QuadraFrac XL Gel:1809 bbl; Linear Gel:504 bbl; Slickwater:597 bbl; 15% HCl:26bbl	
10,941.9	6,267.0	84.5		Stim/Treat Additives							
11,095.1	6,264.2	84.4		Stg #	Add	Type	Amount	Units	Sand Size		
11,210.0	6,265.4	84.4		11	Proppant	16/30 WS	125,555.2	lb	16/30		
11,355.0	6,264.1	84.4		11	Proppant	40/70 WS	4,359.6	lb	40/70		
11,446.9	6,264.1	84.5		Interval 12							
11,580.1	6,267.4	84.5		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
11,696.9	6,262.4	84.1		12	5/25/2014	10,760.0	10,838.0	3196.00	3349.10	QuadraFrac XL Gel:1833 bbl; Linear Gel:711 bbl; Slickwater:628 bbl; 15% HCl:24bbl	
11,845.1	6,265.4	84.7		Stim/Treat Additives							
11,952.1	6,266.1	84.1		Stg #	Add	Type	Amount	Units	Sand Size		
12,102.0	6,266.0	84.5		12	Proppant	16/30 WS	137,436.2	lb	16/30		
12,178.1	6,265.5	84.5		12	Proppant	40/70 WS	4,761.6	lb	40/70		
12,345.1	6,260.4	84.4		Interval 13							
12,463.9	6,262.2	84.4		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
12,834.0	6,264.1	84.4		13	5/25/2014	10,616.0	10,690.0	2993.40	3143.10	QuadraFrac XL Gel:1796 bbl; Linear Gel:505 bbl; Slickwater:670 bbl; 15% HCl:22bbl	
12,980.6	6,255.7	84.7		Stim/Treat Additives							
				Stg #	Add	Type	Amount	Units	Sand Size		
				13	Proppant	16/30 WS	132,534.6	lb	16/30		



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0202B

WPI Number 051233853100		WPC ID 1CO0761006		Well Permit Number		Field Name DJ Horizontal Niobrara		County Weld		State CO						
Well Configuration Type Lateral/Horizontal			Orig KB Elv (ft) 5,018.60		Ground Elevation (ft) 5,001.80		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 12,996.0					
Original Spud Date 2/21/2014		Completion Date 6/18/2014		Asset Group Redtail		Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 822.0	E/W Ref FWL			
Lot		Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type	Township 10 N		Township N/S Dir N	Range 58	E/W Dir W	Meridian		
Lateral/Horizontal - Original Hole, 10/8/2014 4:11:01 PM						Stim/Treat Additives										
MD (ftKB)	D (ft K B)	n (in)	c (in)	l (in)	Vertical schematic (actual)	Logs	Stg #		Add		Type		Amount		Units	Sand Size
							13		Proppant		40/70 WS		6,496.0		lb	40/70
Interval 14																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
21.3	21.4	1.6					14	5/25/2014	10,468.0	10,547.0	2977.70	3133.00	QuadraFrac XL Gel:1835 bbl; Linear Gel:506 bbl; Slickwater:613 bbl; 15% HCl:24bbl			
Stim/Treat Additives																
Interval 15																
							Stg #	Add		Type		Amount		Units	Sand Size	
3.322.2	3.315.4	6.8					14	Proppant		16/30 WS		139,237.9		lb	16/30	
5.203.1	5.190.2	11.2					14	Proppant		40/70 WS		4,988.7		lb	40/70	
Interval 16																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
5.399.3	5.389.5	9.8					15	5/25/2014	10,298.0	10,388.0	2924.10	3069.20	QuadraFrac XL Gel:1801 bbl; Linear Gel:491 bbl; Slickwater:608 bbl; 15% HCl:23bbl			
Stim/Treat Additives																
Interval 17																
							Stg #	Add		Type		Amount		Units	Sand Size	
6.696.9	6.685.4	11.5					15	Proppant		16/30 WS		129,722.6		lb	16/30	
6.859.9	6.851.2	8.8					15	Proppant		40/70 WS		5,065.9		lb	40/70	
Interval 18																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
6.946.8	6.935.4	11.5					16	5/25/2014	10,160.0	10,228.0	2885.40	3037.90	QuadraFrac XL Gel:1783 bbl; Linear Gel:488 bbl; Slickwater:591 bbl; 15% HCl:23bbl			
Stim/Treat Additives																
Interval 19																
							Stg #	Add		Type		Amount		Units	Sand Size	
7.512.1	7.502.4	10.0					16	Proppant		16/30 WS		137,112.7		lb	16/30	
7.645.0	7.634.7	10.3					16	Proppant		40/70 WS		4,510.9		lb	40/70	
Interval 20																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
7.762.1	7.752.4	9.8					17	5/25/2014	10,010.0	10,097.0	2857.70	2994.80	QuadraFrac XL Gel:1726 bbl; Linear Gel:483 bbl; Slickwater:632 bbl; 15% HCl:16bbl			
Stim/Treat Additives																
Interval 21																
							Stg #	Add		Type		Amount		Units	Sand Size	
8.222.1	8.212.0	10.0					17	Proppant		16/30 WS		122,240.1		lb	16/30	
8.352.0	8.342.0	10.0					17	Proppant		40/70 WS		5,108.5		lb	40/70	
Interval 22																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
8.441.9	8.431.4	10.5					18	5/25/2014	9,858.0	9,947.0	2878.40	3032.90	QuadraFrac XL Gel:1792 bbl; Linear Gel:493 bbl; Slickwater:561 bbl; 15% HCl:32bbl			
Stim/Treat Additives																
Interval 23																
							Stg #	Add		Type		Amount		Units	Sand Size	
8.589.9	8.579.7	11.2					18	Proppant		16/30 WS		138,920.2		lb	16/30	
8.696.9	8.686.1	10.8					18	Proppant		40/70 WS		4,558.2		lb	40/70	
Interval 24																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
9.109.9	9.099.4	10.5					19	5/26/2014	9,706.0	9,792.0	2896.70	3048.30	QuadraFrac XL Gel:1807 bbl; Linear Gel:480 bbl; Slickwater:586 bbl; 15% HCl:24bbl			
Stim/Treat Additives																
Interval 25																
							Stg #	Add		Type		Amount		Units	Sand Size	
9.190.0	9.180.1	9.9					19	Proppant		16/30 WS		136,051.9		lb	16/30	
9.345.1	9.335.0	10.1					19	Proppant		40/70 WS		4,730.1		lb	40/70	
Interval 26																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
9.452.1	9.442.0	10.1					20	5/26/2014	9,552.0	9,632.0	2900.40	3054.90	QuadraFrac XL Gel:1794 bbl; Linear Gel:499 bbl; Slickwater:584 bbl; 15% HCl:24bbl			
Stim/Treat Additives																
Interval 27																
							Stg #	Add		Type		Amount		Units	Sand Size	
9.595.1	9.585.0	10.1					20	Proppant		16/30 WS		138,733.7		lb	16/30	
9.708.0	9.697.7	10.3					20	Proppant		40/70 WS		4,755.3		lb	40/70	
Interval 28																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
9.857.9	9.847.7	11.2					21	5/26/2014	9,410.0	9,494.0	3047.90	3201.50	QuadraFrac XL Gel:1957 bbl; Linear Gel:493 bbl; Slickwater:575 bbl; 15% HCl:23bbl			
Stim/Treat Additives																
Interval 29																
							Stg #	Add		Type		Amount		Units	Sand Size	
9.946.9	9.936.8	10.1					21	Proppant		16/30 WS		137,966.2		lb	16/30	
10.095.1	10.085.0	10.1					21	Proppant		40/70 WS		4,674.9		lb	40/70	
Interval 30																
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
10.196.9	10.186.8	10.1					22	5/26/2014	9,255.0	9,347.0	2883.90	3036.50	QuadraFrac XL Gel:1799 bbl; Linear Gel:504 bbl; Slickwater:557 bbl; 15% HCl:24bbl			
Stim/Treat Additives																
Interval 31																
							Stg #	Add		Type		Amount		Units	Sand Size	
10.339.9	10.329.8	10.1					22	Proppant		16/30 WS		137,323.8		lb	16/30	
10.470.1	10.460.0	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 32																
							Stg #	Add		Type		Amount		Units	Sand Size	
10.616.1	10.606.0	10.1					22	Proppant		16/30 WS		137,323.8		lb	16/30	
10.690.0	10.680.0	10.0					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 33																
							Stg #	Add		Type		Amount		Units	Sand Size	
10.836.0	10.826.0	10.0					22	Proppant		16/30 WS		137,323.8		lb	16/30	
10.941.9	10.931.8	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 34																
							Stg #	Add		Type		Amount		Units	Sand Size	
11.095.1	11.085.0	10.1					22	Proppant		16/30 WS		137,323.8		lb	16/30	
11.210.0	11.200.0	10.0					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 35																
							Stg #	Add		Type		Amount		Units	Sand Size	
11.355.0	11.345.0	10.0					22	Proppant		16/30 WS		137,323.8		lb	16/30	
11.446.9	11.436.8	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 36																
							Stg #	Add		Type		Amount		Units	Sand Size	
11.580.1	11.570.0	10.1					22	Proppant		16/30 WS		137,323.8		lb	16/30	
11.696.9	11.686.8	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 37																
							Stg #	Add		Type		Amount		Units	Sand Size	
11.845.1	11.835.0	10.1					22	Proppant		16/30 WS		137,323.8		lb	16/30	
11.952.1	11.942.0	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 38																
							Stg #	Add		Type		Amount		Units	Sand Size	
12.102.0	12.092.0	10.0					22	Proppant		16/30 WS		137,323.8		lb	16/30	
12.178.1	12.168.0	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 39																
							Stg #	Add		Type		Amount		Units	Sand Size	
12.345.1	12.335.0	10.1					22	Proppant		16/30 WS		137,323.8		lb	16/30	
12.463.9	12.453.8	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	
Interval 40																
							Stg #	Add		Type		Amount		Units	Sand Size	
12.834.0	12.824.0	10.0					22	Proppant		16/30 WS		137,323.8		lb	16/30	
12.980.6	12.970.5	10.1					22	Proppant		40/70 WS		4,444.7		lb	40/70	



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0202B

API Number 051233853100		WPC ID 1CO0761006		Well Permit Number		Field Name DJ Horizontal Niobrara		County Weld		State CO															
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 5,018.60		Ground Elevation (ft) 5,001.80		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 12,996.0													
Original Spud Date 2/21/2014		Completion Date 6/18/2014		Asset Group Redtail		Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL		E/W Dist (ft) 822.0		E/W Ref FWL										
Lot		Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11		Section Suffix	Township 10		Township N/S Dir N		Range 58		Range E/W Dir W		Meridian								
Lateral/Horizontal - Original Hole, 10/8/2014 4:11:03 PM						Stim/Treat Stages																			
MD (ftKB)		D (ft K B)		n (K B)		c (K B)		l (K B)		Vertical schematic (actual)		Logs		Interval 23											
														Stg # 23	Start Date 5/26/2014	Top (ftKB) 9,110.0	Btm (ftKB) 9,190.0	Vol Clean... 3077.30	Vol Slurry... 3232.30	Comment QuadraFrac XL Gel:1904 bbl; Linear Gel:513 bbl; Slickwater:637 bbl; 15% HCl:23bbl					
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
														23		Proppant		16/30 WS		138,492.0		lb		16/30	
														23		Proppant		40/70 WS		5,466.4		lb		40/70	
														Interval 24											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												24		5/26/2014	8,960.0	9,044.0	2960.90	3112.70	QuadraFrac XL Gel:1803 bbl; Linear Gel:503 bbl; Slickwater:630 bbl; 15% HCl:25bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												24		Proppant		16/30 WS		136,232.6		lb		16/30			
												24		Proppant		40/70 WS		4,805.8		lb		40/70			
														Interval 25											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												25		5/26/2014	8,814.0	8,893.0	2921.60	3073.40	QuadraFrac XL Gel:1834 bbl; Linear Gel:458 bbl; Slickwater:605 bbl; 15% HCl:24bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												25		Proppant		16/30 WS		136,811.6		lb		16/30			
												25		Proppant		40/70 WS		4,206.6		lb		40/70			
														Interval 26											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												26		5/26/2014	8,655.0	8,747.0	2649.40	2721.40	QuadraFrac XL Gel:1415 bbl; Linear Gel:514 bbl; Slickwater:698 bbl; 15% HCl:23bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												26		Proppant		16/30 WS		62,609.4		lb		16/30			
												26		Proppant		40/70 WS		4,276.0		lb		40/70			
														Interval 27											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												27		5/27/2014	8,510.0	8,592.0	3073.80	3227.90	QuadraFrac XL Gel:1789 bbl; Linear Gel:493 bbl; Slickwater:768 bbl; 15% HCl:23bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												27		Proppant		16/30 WS		137,857.5		lb		16/30			
												27		Proppant		40/70 WS		5,263.0		lb		40/70			
														Interval 28											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												28		5/27/2014	8,352.0	8,442.0	964.30	968.10	QuadraFrac XL Gel:0 bbl; Linear Gel:55 bbl; Slickwater:887 bbl; 15% HCl:22bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												28		Proppant		40/70 WS		3,527.1		lb		40/70			
														Interval 29											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												29		5/27/2014	8,220.0	8,286.0	3393.90	3538.40	QuadraFrac XL Gel:2264 bbl; Linear Gel:553 bbl; Slickwater:553 bbl; 15% HCl:23bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												29		Proppant		16/30 WS		129,881.6		lb		16/30			
												29		Proppant		40/70 WS		4,305.9		lb		40/70			
														Interval 30											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												30		5/27/2014	8,094.0	8,212.0	2997.30	3147.20	QuadraFrac XL Gel:1841 bbl; Linear Gel:531 bbl; Slickwater:598 bbl; 15% HCl:27bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												30		Proppant		16/30 WS		134,337.2		lb		16/30			
												30		Proppant		40/70 WS		4,898.8		lb		40/70			
														Interval 31											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												31		5/27/2014	7,945.0	8,052.0	3435.60	3586.00	QuadraFrac XL Gel:2090 bbl; Linear Gel:742 bbl; Slickwater:583 bbl; 15% HCl:21bbl						
														Stim/Treat Additives											
												Stg #		Add		Type		Amount		Units		Sand Size			
												31		Proppant		16/30 WS		134,944.0		lb		16/30			
												31		Proppant		40/70 WS		4,714.3		lb		40/70			
														Interval 32											
												Stg #		Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment						
												32		5/27/2014	7,788.0	7,914.0	2827.80	2972.00	QuadraFrac XL Gel:1762 bbl; Linear Gel:476 bbl; Slickwater:566 bbl; 15% HCl:24bbl						



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0202B

API Number 051233853100				WPC ID 1CO0761006				Well Permit Number				Field Name DJ Horizontal Niobrara				County Weld		State CO									
Well Configuration Type Lateral/Horizontal						Orig KB Elv (ft) 5,018.60		Ground Elevation (ft) 5,001.80		Casing Flange Elevation (ft)				Tubing Head Elevation (ft)				Total Depth (ftKB) 12,996.0									
Original Spud Date 2/21/2014				Completion Date 6/18/2014		Asset Group Redtail				Responsible Engineer Andrew Fish				N/S Dist (ft) 2,321.0		N/S Ref FNL		E/W Dist (ft) 822.0		E/W Ref FWL							
Lot		Quarter 1 SW		Quarter 2 NW		Quarter 3		Quarter 4		Section 11		Section Suffix		Section Type		Township 10 N		Township N/S Dir N		Range 58 W		Range E/W Dir W		Meridian			
Lateral/Horizontal - Original Hole, 10/8/2014 4:11:06 PM										Stim/Treat Additives																	
MD (ftKB)		D (ft K B)		n (		c)		Vertical schematic (actual)		Logs		Stg #		Add		Type		Amount		Units		Sand Size			
												32		Proppant		16/30 WS		128,881.2		lb		16/30					
												32		Proppant		40/70 WS		5,099.0		lb		40/70					
Interval 33																											
21.3		21.4		1.0		1.0						Stg #		33		5/27/2014		Top (ftKB) 7,645.0		Btm (ftKB) 7,762.0		Vol Clean... 2841.70		Vol Slurry... 2987.00		Comment QuadraFrac XL Gel:1778 bbl; Linear Gel:474 bbl; Slickwater:565 bbl; 15% HCl:25bbl	
73.5		73.5		1.0		1.0						Stim/Treat Additives															
1,825.1		1,822.1		3.0		3.0						Stg #						Amount		Units		Sand Size					
3,322.2		3,319.9		2.3		2.3						33		Proppant		16/30 WS		129,919.1		lb		16/30					
5,203.1		5,199.2		3.9		3.9						33		Proppant		40/70 WS		5,013.9		lb		40/70					
Interval 34																											
5,348.1		5,346.9		1.2		1.2						Stg #		34		5/27/2014		Top (ftKB) 7,510.0		Btm (ftKB) 7,612.0		Vol Clean... 2881.10		Vol Slurry... 3034.60		Comment QuadraFrac XL Gel:1779 bbl; Linear Gel:492 bbl; Slickwater:586 bbl; 15% HCl:24bbl	
5,399.3		5,398.0		1.3		1.3						Stim/Treat Additives															
6,088.9		6,085.4		3.5		3.5						Stg #						Amount		Units		Sand Size					
6,424.9		6,421.2		3.7		3.7						34		Proppant		16/30 WS		138,218.7		lb		16/30					
6,574.1		6,570.4		3.7		3.7						34		Proppant		40/70 WS		4,365.9		lb		40/70					
Interval 35																											
6,696.9		6,693.0		3.9		3.9						Stg #		35		5/28/2014		Top (ftKB) 7,345.0		Btm (ftKB) 7,462.0		Vol Clean... 2889.20		Vol Slurry... 3039.90		Comment QuadraFrac XL Gel:1787 bbl; Linear Gel:495 bbl; Slickwater:580 bbl; 15% HCl:26bbl	
6,859.9		6,856.2		3.7		3.7						Stim/Treat Additives															
6,946.8		6,943.4		3.4		3.4						Stg #						Amount		Units		Sand Size					
7,089.9		7,086.9		3.0		3.0						35		Proppant		16/30 WS		133,936.7		lb		16/30					
7,247.0		7,243.7		3.3		3.3						35		Proppant		40/70 WS		6,081.3		lb		40/70					
Interval 36																											
7,390.1		7,386.3		3.8		3.8						Stg #		36		5/28/2014		Top (ftKB) 7,156.0		Btm (ftKB) 7,312.0		Vol Clean... 2878.00		Vol Slurry... 3027.60		Comment QuadraFrac XL Gel:1767 bbl; Linear Gel:492 bbl; Slickwater:594 bbl; 15% HCl:26bbl	
7,512.1		7,508.4		3.7		3.7						Stim/Treat Additives															
7,645.0		7,641.7		3.3		3.3						Stg #						Amount		Units		Sand Size					
7,762.1		7,758.4		3.7		3.7						36		Proppant		16/30 WS		133,817.3		lb		16/30					
7,912.1		7,908.5		3.6		3.6						36		Proppant		40/70 WS		5,166.8		lb		40/70					
Interval 37																											
7,990.2		7,986.4		3.8		3.8						Stg #		37		5/28/2014		Top (ftKB) 7,010.0		Btm (ftKB) 7,092.0		Vol Clean... 2873.20		Vol Slurry... 3016.90		Comment QuadraFrac XL Gel:1706 bbl; Linear Gel:493 bbl; Slickwater:650 bbl; 15% HCl:24bbl	
8,140.1		8,136.3		3.8		3.8						Stim/Treat Additives															
8,222.1		8,218.3		3.8		3.8						Stg #						Amount		Units		Sand Size					
8,352.0		8,348.2		3.8		3.8						37		Proppant		16/30 WS		128,629.5		lb		16/30					
8,441.9		8,438.1		3.8		3.8						37		Proppant		40/70 WS		4,843.6		lb		40/70					
Interval 38																											
8,589.9		8,586.1		3.8		3.8						Stg #		38		5/28/2014		Top (ftKB) 6,860.0		Btm (ftKB) 6,947.0		Vol Clean... 2768.10		Vol Slurry... 2899.50		Comment QuadraFrac XL Gel:1681 bbl; Linear Gel:504 bbl; Slickwater:558 bbl; 15% HCl:26bbl	
8,696.9		8,693.1		3.8		3.8						Stim/Treat Additives															
8,850.1		8,846.3		3.8		3.8						Stg #						Amount		Units		Sand Size					
8,961.9		8,958.1		3.8		3.8						38		Proppant		16/30 WS		116,811.5		lb		16/30					
9,109.9		9,106.1		3.8		3.8						38		Proppant		40/70 WS		5,223.6		lb		40/70					
Interval 39																											
9,190.0		9,186.2		3.8		3.8						Stg #		39		5/28/2014		Top (ftKB) 6,695.0		Btm (ftKB) 6,794.0		Vol Clean... 2849.30		Vol Slurry... 2988.10		Comment QuadraFrac XL Gel:1715 bbl; Linear Gel:451 bbl; Slickwater:658 bbl; 15% HCl:24bbl	
9,345.1		9,341.3		3.8		3.8						Stim/Treat Additives															
9,452.1		9,448.3		3.8		3.8						Stg #						Amount		Units		Sand Size					
9,595.1		9,591.3		3.8		3.8						39		Proppant		16/30 WS		123,780.1		lb		16/30					
9,708.0		9,704.2		3.8		3.8						39		Proppant		40/70 WS		5,097.4		lb		40/70					
Interval 40																											
9,857.9		9,854.1		3.8		3.8						Stg #		40		5/28/2014		Top (ftKB) 6,524.0		Btm (ftKB) 6,626.0		Vol Clean... 2849.70		Vol Slurry... 2998.70		Comment QuadraFrac XL Gel:1804 bbl; Linear Gel:449 bbl; Slickwater:573 bbl; 15% HCl:24bbl	
9,946.9		9,943.1		3.8		3.8						Stim/Treat Additives															
10,095.1		10,091.3		3.8		3.8						Stg #						Amount		Units		Sand Size					
10,196.9		10,193.1		3.8		3.8						40		Proppant		16/30 WS		134,412.1		lb		16/30					
10,339.9		10,336.1		3.8		3.8						40		Proppant		40/70 WS		4,014.3		lb		40/70					
Tubing - Production set at 6,099.0ftKB on 6/17/2014 10:00																											
12,102.0		12,102.0		0.0		0.0						Set Depth (ftKB)		6,099.0		Comment		Run Date 6/17/2014		Pull Date							
12,178.1		12,178.1		0.0		0.0						Item Des		OD (in)		ID (in)		Len (ft)		Top (ftKB)		Btm (ftKB)					
12,345.1		12,345.1		0.0		0.0						Tubing		2 7/8		2.441		32.20		17.6		49.8					
12,463.9		12,463.9		0.0		0.0						Tubing Sub		2 7/8				8.00		49.8		57.8					
12,834.0		12,834.0		0.0		0.0						Tubing		2 7/8		2.441		1,934.95		57.8		1,992.8					
12,980.6		12,980.6		0.0		0.0						Gas Lift Mandrel		2 7/8				4.05		1,992.8		1,996.8					



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0202B

API Number 051233853100				WPC ID 1CO0761006				Well Permit Number				Field Name DJ Horizontal Niobrara				County Weld		State CO													
Well Configuration Type Lateral/Horizontal						Orig KB Elv (ft) 5,018.60				Ground Elevation (ft) 5,001.80				Casing Flange Elevation (ft)				Tubing Head Elevation (ft)				Total Depth (ftKB) 12,996.0									
Original Spud Date 2/21/2014				Completion Date 6/18/2014				Asset Group Redtail				Responsible Engineer Andrew Fish				N/S Dist (ft) 2,321.0				N/S Ref FNL		E/W Dist (ft) 822.0				E/W Ref FWL					
Lot		Quarter 1 SW		Quarter 2 NW		Quarter 3		Quarter 4		Section 11		Section Suffix		Section Type		Township 10		Township N/S Dir N		Range 58		Range E/W Dir W		Meridian							
Lateral/Horizontal - Original Hole, 10/8/2014 4:11:08 PM										Item Des				OD (in)		ID (in)		Len (ft)		Top (ftKB)		Btm (ftKB)									
MD (ftKB)		D (ft K B)		n c l (		Vertical schematic (actual)						Logs						Tubing		2 7/8		2.441		1,321.29		1,996.8		3,318.1			
																		Gas Lift Mandrel		2 7/8				4.05		3,318.1		3,322.2			
																		Tubing		2 7/8		2.441		871.78		3,322.2		4,194.0			
																		Gas Lift Mandrel		2 7/8				4.05		4,194.0		4,198.0			
21.3		21.4		12														Tubing		2 7/8		2.441		645.38		4,198.0		4,843.4			
73.5		73.5		12														Gas Lift Mandrel		2 7/8				4.05		4,843.4		4,847.4			
1,825.1		1,825.1		517														Tubing		2 7/8		2.441		355.74		4,847.4		5,203.2			
3,322.2		3,322.2		517														Cup Seating Nipple		2 7/8				1.10		5,203.2		5,204.3			
5,203.1		5,203.1		124														Cross Over 2-7/8" x 2-3/8"		2 7/8				0.50		5,204.3		5,204.8			
5,348.1		5,348.1		124														Tubing		2 3/8		1.995		194.55		5,204.8		5,399.3			
5,399.3		5,399.3		124														Gas Lift Mandrel		2 3/8				4.05		5,399.3		5,403.4			
6,088.9		6,088.9		124														Tubing		2 3/8		1.995		616.19		5,403.4		6,019.6			
6,424.9		6,424.9		124														Gas Lift Mandrel		2 3/8				4.05		6,019.6		6,023.6			
6,574.1		6,574.1		124														Tubing		2 3/8		1.995		64.89		6,023.6		6,088.5			
6,696.9		6,696.9		124														On-Off Tool		2 3/8				0.50		6,088.5		6,089.0			
6,859.9		6,859.9		124														Packer AS-1 production pkr		4 1/2				10.00		6,089.0		6,099.0			
6,946.8		6,946.8		124														Rod Strings													
7,089.9		7,089.9		124														<des> on <dtmrun>													
7,247.0		7,247.0		124														Rod Description				Run Date				Pull Date					
7,390.1		7,390.1		124														Item Des				OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)			
7,512.1		7,512.1		124																											
7,645.0		7,645.0		124														Other Strings													
7,762.1		7,762.1		124														Set Depth (ftKB)				Comment				Run Date				Pull Date	
7,912.1		7,912.1		124														Item Des				OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)			
7,990.2		7,990.2		124																											
8,140.1		8,140.1		124														Other In Hole													
8,222.1		8,222.1		124														Des				OD (in)		Run Date		Pull Date		Top (ftKB)		Btm (ftKB)	
8,352.0		8,352.0		124														CFP				4		5/28/2014		6/15/2014		6,655.0		6,657.0	
8,441.9		8,441.9		124														CFP				4		5/28/2014		6/15/2014		6,820.0		6,822.0	
8,589.9		8,589.9		124														CFP				4		5/28/2014		6/15/2014		6,970.0		6,972.0	
8,696.9		8,696.9		124														CFP				4		5/28/2014		6/15/2014		7,120.0		7,122.0	
8,850.1		8,850.1		124														CFP				4		5/28/2014		6/15/2014		7,270.0		7,272.0	
8,961.9		8,961.9		124														CFP				4		5/28/2014		6/16/2014		7,420.0		7,422.0	
9,109.9		9,109.9		124														CFP				4		5/28/2014		6/16/2014		7,570.0		7,572.0	
9,190.0		9,190.0		124														CFP				4		5/27/2014		6/16/2014		7,720.0		7,722.0	
9,345.1		9,345.1		124														CFP				4		5/27/2014		6/16/2014		7,870.0		7,872.0	
9,452.1		9,452.1		124														CFP				4		5/27/2014		6/16/2014		8,008.0		8,010.0	
9,595.1		9,595.1		124														CFP				4		5/27/2014		6/16/2014		8,170.0		8,172.0	
9,708.0		9,708.0		124														CFP				4		5/27/2014		6/16/2014		8,320.0		8,322.0	
9,857.9		9,857.9		124														CFP				4		5/27/2014		6/16/2014		8,470.0		8,472.0	
9,946.9		9,946.9		124														CFP				4		5/27/2014		6/16/2014		8,614.0		8,616.0	
10,095.1		10,095.1		124														CFP				4		5/26/2014		6/16/2014		8,770.0		8,772.0	
10,196.9		10,196.9		124														CFP				4		5/26/2014		6/16/2014		8,918.0		8,920.0	
10,339.9		10,339.9		124														CFP				4		5/26/2014		6/16/2014		9,070.0		9,072.0	
10,470.1		10,470.1		124														CFP				4		5/26/2014		6/16/2014		9,220.0		9,222.0	
10,616.1		10,616.1		124														CFP				4		5/26/2014		6/16/2014		9,370.0		9,372.0	
10,690.0		10,690.0		124														CFP				4		5/26/2014		6/16/2014		9,512.0		9,514.0	
10,836.0		10,836.0		124														CFP				4		5/26/2014		6/16/2014		9,660.0		9,662.0	
10,941.9		10,941.9		124														CFP				4		5/26/2014		6/16/2014		9,810.0		9,812.0	
11,095.1		11,095.1		124														CFP				4		5/26/2014		6/16/2014		9,970.0		9,972.0	
11,210.0		11,210.0		124														CFP				4		5/25/2014		6/16/2014		10,120.0		10,122.0	
11,355.0		11,355.0		124														CFP				4		5/25/2014		6/16/2014		10,252.0		10,254.0	
11,446.9		11,446.9		124														CFP				4		5/25/2014		6/16/2014		10,420.0		10,422.0	
11,580.1		11,580.1		124														CFP				4		5/25/2014		6/16/2014		10,574.0		10,576.0	
11,696.9		11,696.9		124														CFP				4		5/25/2014		6/16/2014		10,720.0		10,722.0	
11,845.1		11,845.1		124														CFP				4		5/25/2014		6/16/2014		10,860.0		10,862.0	
11,952.1		11,952.1		124														CFP				4		5/25/2014		6/16/2014		11,020.0		11,022.0	
12,102.0		12,102.0		124														CFP				4		5/25/2014		6/16/2014		11,170.0		11,172.0	
12,178.1		12,178.1		124														CFP				4		5/24/2014		6/16/2014		11,310.0		11,312.0	
12,345.1		12,345.1		124														CFP				4		5/24/2014		6/16/2014		11,470.0		11,472.0	
12,463.9		12,463.9		124														CFP				4		5/24/2014		6/16/2014		11,608.0		11,610.0	
12,534.0		12,534.0		124														CFP				4		5/24/2014		6/16/2014		11,774.0		11,776.0	
12,980.6		12,980.6		124														CFP				4		5/24/2014		6/16/2014		11,910.0		11,912.0	
																		CFP				4		5/23/2014		6/16/2014		12,054.0		12,056.0	
																		CFP				4		5/23/2014		6/16/2014		12,210.0		12,212.0	
																		CFP				4		5/23/2014		6/16/2014		12,376.0		12,378.0	
																		CIBP				4		5/23/2014				12,550.0		12,557.0	
Bottom Hole Cores																															
Date					Core #					Top (ftKB)					Btm (ftKB)					Recov (ft)											