



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0201A

API Number 051233853700			WPC ID 1CO0761010			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) 12,475.0				
Original Spud Date 3/3/2014			Completion Date 6/16/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 789.0		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	Range 58 W	Range E/W Dir Meridian						
Lateral/Horizontal - Original Hole, 10/8/2014 3:52:08 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		1/1/2014		20		16.8		96.8				
							Original Hole		3/3/2014		13 1/2		96.8		1,831.0				
							Original Hole		3/5/2014		8 3/4		1,831.0		6,345.0				
							Original Hole		3/9/2014		6		6,345.0		12,475.0				
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, 1,816.2ftKB																			
OD (in)							Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des		
9 5/8							36.00		J-55		16.7		16.7		0.00		Landing Joint		
9 5/8							36.00		J-55		16.7		21.7		5.00		Pup Joint		
9 5/8							36.00		J-55		21.7		1,769.1		1,747.34		Casing Joints		
9 5/8							36.00		J-55		1,769.1		1,770.6		1.50		Float Collar		
9 5/8							36.00		J-55		1,770.6		1,814.7		44.12		Casing Joints		
9 5/8							36.00		J-55		1,814.7		1,816.2		1.50		Float Shoe		
Intermediate Csg, 6,325.8ftKB																			
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		6,279.7		6,257.87		Casing Joints		
7							29.00		L-80		6,279.7		6,281.2		1.50		Float Collar		
7							29.00		L-80		6,281.2		6,324.3		43.09		Casing Joints		
7							29.00		L-80		6,324.3		6,325.8		1.50		Float shoe		
Liner, 12,473.0ftKB																			
OD (in)							Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des		
4 1/2							11.60		L-80		5,123.5		5,123.5		0.00		Casing Joints		
4 1/2							11.60		L-80		5,123.5		5,136.0		12.47		Tie Back Extension		
4 1/2							11.60		L-80		5,136.0		5,144.6		8.57		ZXP Liner Top Packer		
4 1/2							11.60		L-80		5,144.6		5,151.2		6.67		HMC Liner Hanger		
4 1/2							11.60		L-80		5,151.2		5,152.7		1.49		Combo Collar		
4 1/2							11.60		L-80		5,152.7		5,158.2		5.48		Casing Pup		
4 1/2							11.60		L-80		5,158.2		12,324.5		7,166.32		Casing Joints		
4 1/2							11.60		L-80		12,324.5		12,330.6		6.05		4-1/2" 11.6# Pup Joint		
4 1/2							11.60		L-80		12,330.6		12,334.3		3.75		Alpha Sleeve		
4 1/2							11.60		L-80		12,334.3		12,336.4		2.06		4-1/2" 11.6# Pup Joint		
4 1/2							11.60		L-80		12,336.4		12,380.4		44.04		Casing Joints		
4 1/2							11.60		L-80		12,380.4		12,381.8		1.41		TYPE II LANDING COLLAR		
4 1/2							11.60		L-80		12,381.8		12,382.8		1.00		SINGLE VALVE FLOAT COLLAR		
4 1/2							11.60		L-80		12,382.8		12,470.5		87.66		Casing Joints		
4 1/2							11.60		L-80		12,470.5		12,473.0		2.52		Float collar		
Cement Stages																			
Des							Pump Start Date		Drill Out Date		Top (ftKB)		Btm (ftKB)		Top Meas Meth				
Conductor Cement							1/1/2014				16.8		96.8						
Surface Casing Cement							3/4/2014				16.8		1,816.2		Returns to Surface				
Intermediate Casing Cement							3/8/2014				16.8		6,325.0		Returns to Surface				
Liner Cement							3/12/2014				5,123.0		12,475.0		Volume Calculations				
Perforations																			
Type of Hole							Date		Top (ftKB)		Btm (ftKB)		Zone						
Perforated Liner							6/10/2014		6,360.0		6,362.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,392.0		6,394.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,430.0		6,432.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,510.0		6,512.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,542.0		6,544.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,571.0		6,573.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,657.0		6,659.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,694.0		6,696.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,716.0		6,718.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,820.0		6,822.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,844.0		6,846.0		Niobrara, Original Hole						
Perforated Liner							6/10/2014		6,872.0		6,874.0		Niobrara, Original Hole						
Perforated Liner							6/9/2014		6,960.0		6,962.0		Niobrara, Original Hole						
Perforated Liner							6/9/2014		6,996.0		6,998.0		Niobrara, Original Hole						
Perforated Liner							6/9/2014		7,020.0		7,022.0		Niobrara, Original Hole						
Perforated Liner							6/9/2014		7,107.0		7,109.0		Niobrara, Original Hole						
Perforated Liner							6/9/2014		7,147.0		7,149.0		Niobrara, Original Hole						
Perforated Liner		6/9/2014		7,174.0		7,176.0		Niobrara, Original Hole											
Perforated Liner		6/9/2014		7,260.0		7,262.0		Niobrara, Original Hole											
Perforated Liner		6/9/2014		7,300.0		7,302.0		Niobrara, Original Hole											



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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) 12,475.0	
Original Spud Date 3/3/2014		Completion Date 6/16/2014		Asset Group Redtail		Responsible Engineer Andrew Fish		N/S Dist (ft) 2,321.0		N/S Ref FNL	
E/W Dist (ft) 789.0		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		Range E/W Dir W		Meridian							

Lateral/Horizontal - Original Hole, 10/8/2014 3:52:10 PM					Perforations					
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	Vertical schematic (actual)	Logs	Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
52.8	52.9	53			Perforated Liner	6/9/2014	7,325.0	7,327.0	Niobrara, Original Hole	
1,814.6	1,815.5	1,816			Perforated Liner	6/9/2014	7,411.0	7,413.0	Niobrara, Original Hole	
3,402.6	3,403.5	3,404			Perforated Liner	6/9/2014	7,436.0	7,438.0	Niobrara, Original Hole	
4,929.1	4,930.0	4,931			Perforated Liner	6/9/2014	7,459.0	7,461.0	Niobrara, Original Hole	
5,123.4	5,124.3	5,125			Perforated Liner	6/9/2014	7,562.0	7,564.0	Niobrara, Original Hole	
5,158.1	5,159.0	5,160			Perforated Liner	6/9/2014	7,587.0	7,589.0	Niobrara, Original Hole	
6,035.8	6,036.7	6,037			Perforated Liner	6/9/2014	7,627.0	7,629.0	Niobrara, Original Hole	
6,324.1	6,325.0	6,326			Perforated Liner	6/9/2014	7,714.0	7,716.0	Niobrara, Original Hole	
6,361.9	6,362.8	6,363			Perforated Liner	6/9/2014	7,750.0	7,752.0	Niobrara, Original Hole	
6,509.8	6,510.7	6,511			Perforated Liner	6/9/2014	7,780.0	7,782.0	Niobrara, Original Hole	
6,573.2	6,574.1	6,575			Perforated Liner	6/9/2014	7,780.0	7,782.0	Niobrara, Original Hole	
6,715.9	6,716.8	6,717			Perforated Liner	6/9/2014	7,870.0	7,872.0	Niobrara, Original Hole	
6,846.1	6,847.0	6,848			Perforated Liner	6/9/2014	7,870.0	7,872.0	Niobrara, Original Hole	
6,996.1	6,997.0	6,998			Perforated Liner	6/9/2014	7,894.0	7,896.0	Niobrara, Original Hole	
7,108.9	7,109.8	7,110			Perforated Liner	6/9/2014	7,894.0	7,896.0	Niobrara, Original Hole	
7,259.8	7,260.7	7,261			Perforated Liner	6/9/2014	7,928.0	7,930.0	Niobrara, Original Hole	
7,327.1	7,328.0	7,329			Perforated Liner	6/9/2014	8,015.0	8,017.0	Niobrara, Original Hole	
7,459.0	7,460.0	7,461			Perforated Liner	6/9/2014	8,052.0	8,054.0	Niobrara, Original Hole	
7,588.9	7,589.8	7,590			Perforated Liner	6/9/2014	8,089.0	8,091.0	Niobrara, Original Hole	
7,750.0	7,751.0	7,752			Perforated Liner	6/9/2014	8,176.0	8,178.0	Niobrara, Original Hole	
7,872.0	7,873.0	7,874			Perforated Liner	6/9/2014	8,202.0	8,204.0	Niobrara, Original Hole	
8,015.1	8,016.0	8,017			Perforated Liner	6/9/2014	8,230.0	8,232.0	Niobrara, Original Hole	
8,090.9	8,091.8	8,092			Perforated Liner	6/9/2014	8,317.0	8,319.0	Niobrara, Original Hole	
8,230.0	8,231.0	8,232			Perforated Liner	6/9/2014	8,355.0	8,357.0	Niobrara, Original Hole	
8,357.0	8,358.0	8,359			Perforated Liner	6/9/2014	8,381.0	8,383.0	Niobrara, Original Hole	
8,509.8	8,510.7	8,511			Perforated Liner	6/9/2014	8,470.0	8,472.0	Niobrara, Original Hole	
8,622.0	8,623.0	8,624			Perforated Liner	6/9/2014	8,510.0	8,512.0	Niobrara, Original Hole	
8,774.9	8,775.8	8,776			Perforated Liner	6/9/2014	8,532.0	8,534.0	Niobrara, Original Hole	
8,836.0	8,837.0	8,838			Perforated Liner	6/9/2014	8,620.0	8,622.0	Niobrara, Original Hole	
8,974.1	8,975.0	8,976			Perforated Liner	6/9/2014	8,656.0	8,658.0	Niobrara, Original Hole	
9,103.0	9,104.0	9,105			Perforated Liner	6/9/2014	8,687.0	8,689.0	Niobrara, Original Hole	
9,270.0	9,271.0	9,272			Perforated Liner	6/9/2014	8,775.0	8,777.0	Niobrara, Original Hole	
9,383.9	9,384.8	9,385			Perforated Liner	6/9/2014	8,800.0	8,802.0	Niobrara, Original Hole	
9,523.9	9,524.8	9,525			Perforated Liner	6/9/2014	8,834.0	8,836.0	Niobrara, Original Hole	
9,585.0	9,586.0	9,587			Perforated Liner	6/9/2014	8,834.0	8,836.0	Niobrara, Original Hole	
9,738.8	9,739.7	9,740			Perforated Liner	6/9/2014	8,924.0	8,926.0	Niobrara, Original Hole	
9,863.8	9,864.7	9,865			Perforated Liner	6/9/2014	8,924.0	8,926.0	Niobrara, Original Hole	
10,013.1	10,014.0	10,015			Perforated Liner	6/9/2014	8,950.0	8,952.0	Niobrara, Original Hole	
10,131.9	10,132.8	10,133			Perforated Liner	6/9/2014	8,950.0	8,952.0	Niobrara, Original Hole	
10,275.9	10,276.8	10,277			Perforated Liner	6/9/2014	8,974.0	8,976.0	Niobrara, Original Hole	
10,344.2	10,345.1	10,346			Perforated Liner	6/9/2014	9,077.0	9,079.0	Niobrara, Original Hole	
10,490.2	10,491.1	10,492			Perforated Liner	6/9/2014	9,101.0	9,103.0	Niobrara, Original Hole	
10,619.1	10,620.0	10,621			Perforated Liner	6/9/2014	9,135.0	9,137.0	Niobrara, Original Hole	
10,762.1	10,763.0	10,764			Perforated Liner	6/9/2014	9,222.0	9,224.0	Niobrara, Original Hole	
10,881.9	10,882.8	10,883			Perforated Liner	6/9/2014	9,270.0	9,272.0	Niobrara, Original Hole	
11,038.1	11,039.0	11,039			Perforated Liner	6/9/2014	9,270.0	9,272.0	Niobrara, Original Hole	
11,099.1	11,100.0	11,101			Perforated Liner	6/9/2014	9,296.0	9,298.0	Niobrara, Original Hole	
11,253.9	11,254.8	11,255			Perforated Liner	6/9/2014	9,382.0	9,384.0	Niobrara, Original Hole	
11,372.0	11,373.0	11,374			Perforated Liner	6/9/2014	9,382.0	9,384.0	Niobrara, Original Hole	
11,522.0	11,523.0	11,524		Perforated Liner	6/9/2014	9,408.0	9,410.0	Niobrara, Original Hole		
11,642.1	11,643.0	11,644		Perforated Liner	6/9/2014	9,437.0	9,439.0	Niobrara, Original Hole		
11,787.1	11,788.0	11,789		Perforated Liner	6/9/2014	9,524.0	9,526.0	Niobrara, Original Hole		
11,861.9	11,862.8	11,863		Perforated Liner	6/9/2014	9,561.0	9,563.0	Niobrara, Original Hole		
12,002.0	12,003.0	12,004		Perforated Liner	6/9/2014	9,561.0	9,563.0	Niobrara, Original Hole		
12,128.9	12,129.8	12,130		Perforated Liner	6/9/2014	9,583.0	9,585.0	Niobrara, Original Hole		
12,266.1	12,267.0	12,268		Perforated Liner	6/9/2014	9,672.0	9,674.0	Niobrara, Original Hole		
12,330.7	12,331.6	12,332		Perforated Liner	6/9/2014	9,712.0	9,714.0	Niobrara, Original Hole		
12,382.9	12,383.8	12,384		Perforated Liner	6/9/2014	9,739.0	9,741.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	9,825.0	9,827.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	9,862.0	9,864.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	9,862.0	9,864.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	9,885.0	9,887.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	9,973.0	9,975.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,013.0	10,015.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,041.0	10,043.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,130.0	10,132.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,169.0	10,171.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,191.0	10,193.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,276.0	10,278.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,315.0	10,317.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,342.0	10,344.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,429.0	10,431.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,466.0	10,468.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,490.0	10,492.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,580.0	10,582.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,617.0	10,619.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,644.0	10,646.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,740.0	10,742.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,762.0	10,764.0	Niobrara, Original Hole		
				Perforated Liner	6/9/2014	10,795.0	10,797.0	Niobrara, Original Hole		



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Well Name: RAZOR 11E-0201A

API Number 051233853700		WPC ID 1CO0761010		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) 12,475.0		
Original Spud Date 3/3/2014		Completion Date 6/16/2014		Asset Group Redtail			Responsible Engineer Andrew Fish		N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 789.0		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 3:52:12 PM					Perforations							
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	Vertical schematic (actual)	Logs	Type of Hole		Date	Top (ftKB)	Btm (ftKB)	Zone	
						Perforated Liner		5/24/2014	10,880.0	10,882.0	Niobrara, Original Hole	
						Perforated Liner		5/24/2014	10,919.0	10,921.0	Niobrara, Original Hole	
						Perforated Liner		5/24/2014	10,936.0	10,938.0	Niobrara, Original Hole	
52.8	52.8	52.8	52.8			Perforated Liner		5/24/2014	11,038.0	11,040.0	Niobrara, Original Hole	
1,814.6	1,814.6	1,814.6	1,814.6			Perforated Liner		5/24/2014	11,064.0	11,066.0	Niobrara, Original Hole	
3,402.6	3,402.6	3,402.6	3,402.6			Perforated Liner		5/24/2014	11,097.0	11,099.0	Niobrara, Original Hole	
4,929.1	4,929.1	4,929.1	4,929.1			Perforated Liner		5/24/2014	11,183.0	11,185.0	Niobrara, Original Hole	
5,123.4	5,123.4	5,123.4	5,123.4			Perforated Liner		5/24/2014	11,220.0	11,222.0	Niobrara, Original Hole	
5,158.1	5,158.1	5,158.1	5,158.1			Perforated Liner		5/24/2014	11,254.0	11,256.0	Niobrara, Original Hole	
6,035.8	6,035.8	6,035.8	6,035.8			Perforated Liner		5/24/2014	11,328.0	11,330.0	Niobrara, Original Hole	
6,324.1	6,324.1	6,324.1	6,324.1			Perforated Liner		5/24/2014	11,370.0	11,372.0	Niobrara, Original Hole	
6,361.9	6,361.9	6,361.9	6,361.9			Perforated Liner		5/24/2014	11,398.0	11,400.0	Niobrara, Original Hole	
6,509.8	6,509.8	6,509.8	6,509.8			Perforated Liner		5/24/2014	11,485.0	11,487.0	Niobrara, Original Hole	
6,573.2	6,573.2	6,573.2	6,573.2			Perforated Liner		5/24/2014	11,522.0	11,524.0	Niobrara, Original Hole	
6,715.9	6,715.9	6,715.9	6,715.9			Perforated Liner		5/24/2014	11,554.0	11,556.0	Niobrara, Original Hole	
6,846.1	6,846.1	6,846.1	6,846.1			Perforated Liner		5/23/2014	11,640.0	11,642.0	Niobrara, Original Hole	
6,996.1	6,996.1	6,996.1	6,996.1			Perforated Liner		5/23/2014	11,682.0	11,684.0	Niobrara, Original Hole	
7,108.9	7,108.9	7,108.9	7,108.9			Perforated Liner		5/23/2014	11,682.0	11,684.0	Niobrara, Original Hole	
7,259.8	7,259.8	7,259.8	7,259.8			Perforated Liner		5/23/2014	11,700.0	11,702.0	Niobrara, Original Hole	
7,327.1	7,327.1	7,327.1	7,327.1			Perforated Liner		5/23/2014	11,787.0	11,789.0	Niobrara, Original Hole	
7,459.0	7,459.0	7,459.0	7,459.0			Perforated Liner		5/23/2014	11,824.0	11,826.0	Niobrara, Original Hole	
7,588.9	7,588.9	7,588.9	7,588.9			Perforated Liner		5/23/2014	11,860.0	11,862.0	Niobrara, Original Hole	
7,750.0	7,750.0	7,750.0	7,750.0			Perforated Liner		5/23/2014	11,946.0	11,948.0	Niobrara, Original Hole	
7,872.0	7,872.0	7,872.0	7,872.0			Perforated Liner		5/23/2014	11,972.0	11,974.0	Niobrara, Original Hole	
8,015.1	8,015.1	8,015.1	8,015.1			Perforated Liner		5/23/2014	12,002.0	12,004.0	Niobrara, Original Hole	
8,090.9	8,090.9	8,090.9	8,090.9			Perforated Liner		5/23/2014	12,088.0	12,090.0	Niobrara, Original Hole	
8,230.0	8,230.0	8,230.0	8,230.0			Perforated Liner		5/23/2014	12,127.0	12,129.0	Niobrara, Original Hole	
8,357.0	8,357.0	8,357.0	8,357.0			Perforated Liner		5/23/2014	12,149.0	12,151.0	Niobrara, Original Hole	
8,509.8	8,509.8	8,509.8	8,509.8			Perforated Liner		5/23/2014	12,149.0	12,151.0	Niobrara, Original Hole	
8,622.0	8,622.0	8,622.0	8,622.0			Perforated Liner		5/23/2014	12,229.0	12,231.0	Niobrara, Original Hole	
8,774.9	8,774.9	8,774.9	8,774.9			Perforated Liner		5/23/2014	12,229.0	12,231.0	Niobrara, Original Hole	
8,836.0	8,836.0	8,836.0	8,836.0			Perforated Liner		5/22/2014	12,266.0	12,268.0	Niobrara, Original Hole	
8,974.1	8,974.1	8,974.1	8,974.1			Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole	
9,103.0	9,103.0	9,103.0	9,103.0		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
9,270.0	9,270.0	9,270.0	9,270.0		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
9,383.9	9,383.9	9,383.9	9,383.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
9,523.9	9,523.9	9,523.9	9,523.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
9,585.0	9,585.0	9,585.0	9,585.0		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
9,738.8	9,738.8	9,738.8	9,738.8		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
9,863.8	9,863.8	9,863.8	9,863.8		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,013.1	10,013.1	10,013.1	10,013.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,131.9	10,131.9	10,131.9	10,131.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,275.9	10,275.9	10,275.9	10,275.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,344.2	10,344.2	10,344.2	10,344.2		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,490.2	10,490.2	10,490.2	10,490.2		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,619.1	10,619.1	10,619.1	10,619.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,762.1	10,762.1	10,762.1	10,762.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
10,881.9	10,881.9	10,881.9	10,881.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,038.1	11,038.1	11,038.1	11,038.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,099.1	11,099.1	11,099.1	11,099.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,253.9	11,253.9	11,253.9	11,253.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,372.0	11,372.0	11,372.0	11,372.0		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,522.0	11,522.0	11,522.0	11,522.0		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,642.1	11,642.1	11,642.1	11,642.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,787.1	11,787.1	11,787.1	11,787.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
11,861.9	11,861.9	11,861.9	11,861.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
12,002.0	12,002.0	12,002.0	12,002.0		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
12,128.9	12,128.9	12,128.9	12,128.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
12,266.1	12,266.1	12,266.1	12,266.1		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
12,330.7	12,330.7	12,330.7	12,330.7		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		
12,382.9	12,382.9	12,382.9	12,382.9		Perforated Liner		5/22/2014	12,303.0	12,305.0	Niobrara, Original Hole		

Stimulations & Treatments										
Sand Frac on 5/23/2014 06:00										
Comment Treatment End Date:6/10/2014; Number of staged intervals: 40; Total Acid used: 766 bbl (202bbl BENZOIC ACID and 564 bbl 15% CHI); Min frac gradient: 0.77 psi/ft; Number of perfs: 1440								Min Top De...	Max Btm De...	Frac Length (ft)
								6,360.0	12,305.0	6,149.00
Total Clean Volu...	Vol Slurry Tot (bbl)	Proppant Desig...	Proppant Frm (lb)	P Max (psi)	Avg Treat...	Avg Treat...	Max Tre...	Frac Gr...		
116888.50	122421.70	5,336,000.0	5,139,423.2	7,771.0	4,494.0	49.10	64.80	0.77		
Stim/Treat Fluids										
Fluid Name										
ClearStar XL Gel; Linear Gel; 15% HCl										
QuadraFrac XL Gel; Linear Gel; Benzoic Acid										
Stim/Treat Stages										
Interval 1										
Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
1	5/23/2014	12,229.0	12,305.0	2930.70	3019.50	Quadrafrac XL Gel:1635 bbl; Linear Gel:502 bbl; Slickwater:768 bbl; Benzoic Acid:26bbl				
Stim/Treat Additives										
Stg #	Add	Type			Amount	Units	Sand Size			
1	Proppant	16/30 WS			78,669.0	lb	16/30			
1	Proppant	40/70 WS			3,840.0	lb	40/70			
Interval 2										
Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
2	5/23/2014	12,088.0	12,151.0	2800.30	2896.30	Quadrafrac XL Gel:1664 bbl; Linear Gel:492 bbl; Slickwater:624 bbl; Benzoic Acid:20bbl				
Stim/Treat Additives										
Stg #	Add	Type			Amount	Units	Sand Size			
2	Proppant	16/30 WS			86,219.0	lb	16/30			
2	Proppant	40/70 WS			2,996.0	lb	40/70			
Interval 3										
Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
3	5/23/2014	11,946.0	12,004.0	2693.30	2793.60	Quadrafrac XL Gel:1550 bbl; Linear Gel:496 bbl; Slickwater:624 bbl; Benzoic Acid:24bbl				
Stim/Treat Additives										
Stg #	Add	Type			Amount	Units	Sand Size			
3	Proppant	16/30 WS			89,997.0	lb	16/30			
3	Proppant	40/70 WS			3,170.0	lb	40/70			
Interval 4										
Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
4	5/23/2014	11,787.0	11,862.0	3312.70	3469.90	Quadrafrac XL Gel:1853 bbl; Linear Gel:803 bbl; Slickwater:637 bbl; Benzoic Acid:21bbl				



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0201A

API Number 051233853700				WPC ID 1CO0761010				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) 12,475.0					
Original Spud Date 3/3/2014				Completion Date 6/16/2014				Asset Group Redtail				Responsible Engineer Andrew Fish				N/S Dist (ft) 2,321.0				N/S Ref FNL		E/W Dist (ft) 789.0				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		Range E/W Dir W		Meridian			
Lateral/Horizontal - Original Hole, 10/8/2014 3:52:14 PM										Stim/Treat Additives																	
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Stg #		Add		Type		Amount		Units		Sand Size										
							4	Proppant	16/30 WS		143,016.0		lb		16/30												
							4	Proppant	40/70 WS		2,993.0		lb		40/70												
52.8	024	01					Interval 5																				
1,814.6	1,815.2	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
3,402.6	3,397.1	01				5	5/23/2014	11,640.0	11,702.0	2754.60	2861.70	Quadrafrac XL Gel:1582 bbl; Linear Gel:496 bbl; Slickwater:653 bbl; Benzoic Acid:25bbl															
4,929.1	4,936.1	01				Stim/Treat Additives																					
5,123.4	5,115.2	01				Stg #	Add		Type		Amount		Units		Sand Size												
5,158.1	5,147.8	01				5	Proppant		16/30 WS		95,873.0		lb		16/30												
6,035.8	6,063.2	01				5	Proppant		40/70 WS		3,652.0		lb		40/70												
6,324.1	6,302.6	01				Interval 6																					
6,361.9	6,350.1	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
6,509.8	6,501.2	01				6	5/24/2014	11,485.0	11,556.0	2997.00	3149.60	Quadrafrac XL Gel:1809 bbl; Linear Gel:512 bbl; Slickwater:653 bbl; Benzoic Acid:22bbl															
6,573.2	6,594.1	01				Stim/Treat Additives																					
6,715.9	6,807.7	01				Stg #	Add		Type		Amount		Units		Sand Size												
6,846.1	6,800.2	01				6	Proppant		16/30 WS		138,630.0		lb		16/30												
6,996.1	6,985.4	01				6	Proppant		40/70 WS		3,102.0		lb		40/70												
7,108.9	7,100.1	01				Interval 7																					
7,259.8	7,250.1	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
7,327.1	7,385.4	01				7	5/24/2014	11,328.0	11,400.0	2991.40	3143.40	Quadrafrac XL Gel:1839 bbl; Linear Gel:486 bbl; Slickwater:643 bbl; Benzoic Acid:23bbl															
7,459.0	7,490.2	01				Stim/Treat Additives																					
7,588.9	7,594.1	01				Stg #	Add		Type		Amount		Units		Sand Size												
7,750.0	7,855.4	01				7	Proppant		16/30 WS		138,104.0		lb		16/30												
7,872.0	7,882.2	01				7	Proppant		40/70 WS		3,063.0		lb		40/70												
8,015.1	8,000.2	01				Interval 8																					
8,090.9	8,090.1	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
8,230.0	8,207.4	01				8	5/24/2014	11,183.0	11,256.0	3095.90	3225.60	Quadrafrac XL Gel:1753 bbl; Linear Gel:693 bbl; Slickwater:631 bbl; Benzoic Acid:19bbl															
8,357.0	8,363.2	01				Stim/Treat Additives																					
8,509.8	8,505.4	01				Stg #	Add		Type		Amount		Units		Sand Size												
8,622.0	8,604.1	01				8	Proppant		16/30 WS		117,126.0		lb		16/30												
8,774.9	8,805.4	01				8	Proppant		40/70 WS		3,306.0		lb		40/70												
8,836.0	8,801.1	01				Interval 9																					
8,974.1	8,923.4	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
9,103.0	9,064.7	01				9	5/24/2014	11,038.0	11,099.0	2913.10	3054.60	Quadrafrac XL Gel:1783 bbl; Linear Gel:496 bbl; Slickwater:610 bbl; Benzoic Acid:24bbl															
9,270.0	9,300.4	01				Stim/Treat Additives																					
9,383.9	9,380.1	01				Stg #	Add		Type		Amount		Units		Sand Size												
9,523.9	9,539.4	01				9	Proppant		16/30 WS		128,553.0		lb		16/30												
9,585.0	9,587.7	01				9	Proppant		40/70 WS		2,894.0		lb		40/70												
9,738.8	9,801.1	01				Interval 10																					
9,863.8	9,880.2	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
10,013.1	10,077.2	01				10	6/6/2014	10,880.0	10,938.0	4769.10	4910.10	ClearStar XL Gel:2264 bbl; Linear Gel:1396 bbl; Slickwater:1085 bbl; 15% HCl:24bbl															
10,131.9	10,077.2	01				Stim/Treat Additives																					
10,275.9	10,305.4	01				Stg #	Add		Type		Amount		Units		Sand Size												
10,344.2	10,364.7	01				10	Proppant		16/30 WS		126,812.2		lb		16/30												
10,490.2	10,504.4	01				10	Proppant		40/70 WS		4,178.4		lb		40/70												
10,619.1	10,601.1	01				Interval 11																					
10,762.1	10,805.4	01				Stg #	Add		Type		Amount		Units		Sand Size												
10,881.9	10,804.4	01				11	Proppant		16/30 WS		139,159.4		lb		16/30												
11,038.1	11,000.1	01				11	Proppant		40/70 WS		3,935.4		lb		40/70												
11,099.1	11,091.2	01				Interval 12																					
11,253.9	11,000.1	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
11,372.0	11,004.4	01				12	6/6/2014	10,580.0	10,646.0	2809.90	2961.70	ClearStar XL Gel:1820 bbl; Linear Gel:363 bbl; Slickwater:605 bbl; 15% HCl:23bbl															
11,522.0	11,000.1	01				Stim/Treat Additives																					
11,642.1	11,000.1	01				Stg #	Add		Type		Amount		Units		Sand Size												
11,787.1	11,000.1	01				12	Proppant		16/30 WS		136,475.4		lb		16/30												
11,861.9	11,000.1	01				12	Proppant		40/70 WS		4,477.4		lb		40/70												
12,002.0	11,000.1	01				Interval 13																					
12,128.9	11,000.1	01				Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment															
12,266.1	11,000.1	01				13	6/6/2014	10,429.0	10,492.0	2736.60	2883.50	ClearStar XL Gel:1777 bbl; Linear Gel:323 bbl; Slickwater:614 bbl; 15% HCl:23bbl															
12,330.7	11,000.1	01				Stim/Treat Additives																					
12,382.9	11,000.1	01				Stg #	Add		Type		Amount		Units		Sand Size												
						13	Proppant		16/30 WS		132,566.7		lb		16/30												
						13	Proppant		40/70 WS		3,889.3		lb		40/70												



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0201A

API Number 051233853700			WPC ID 1CO0761010			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) 12,475.0								
Original Spud Date 3/3/2014			Completion Date 6/16/2014			Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0			N/S Ref FNL			E/W Dist (ft) 789.0			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		Range E/W Dir W		Meridian	
Lateral/Horizontal - Original Hole, 10/8/2014 3:52:16 PM										Stim/Treat Stages															
MD (ftKB)	D (ft K B)	n (C B)	Vertical schematic (actual)	Logs	Interval 14																				
					Stg #	14	Start Date 6/6/2014	Top (ftKB) 10,276.0	Btm (ftKB) 10,344.0	Vol Clean... 3475.90	Vol Slurry... 3577.60	Comment ClearStar XL Gel:2110 bbl; Linear Gel:339 bbl; Slickwater:999 bbl; 15% HCl:27bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					14	Proppant			16/30 WS			87,875.5			lb			16/30							
					14	Proppant			40/70 WS			6,583.8			lb			40/70							
					Interval 15																				
					Stg #	15	Start Date 6/7/2014	Top (ftKB) 10,130.0	Btm (ftKB) 10,193.0	Vol Clean... 2330.70	Vol Slurry... 2406.50	Comment ClearStar XL Gel:1345 bbl; Linear Gel:358 bbl; Slickwater:604 bbl; 15% HCl:25bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					15	Proppant			16/30 WS			67,072.2			lb			16/30							
					15	Proppant			40/70 WS			3,309.9			lb			40/70							
					Interval 16																				
					Stg #	16	Start Date 6/7/2014	Top (ftKB) 9,973.0	Btm (ftKB) 10,043.0	Vol Clean... 2715.30	Vol Slurry... 2862.00	Comment ClearStar XL Gel:1773 bbl; Linear Gel:345 bbl; Slickwater:574 bbl; 15% HCl:24bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					16	Proppant			16/30 WS			133,437.3			lb			16/30							
					16	Proppant			40/70 WS			2,783.7			lb			40/70							
					Interval 17																				
					Stg #	17	Start Date 6/7/2014	Top (ftKB) 9,825.0	Btm (ftKB) 9,887.0	Vol Clean... 2711.90	Vol Slurry... 2856.80	Comment ClearStar XL Gel:1766 bbl; Linear Gel:346 bbl; Slickwater:576 bbl; 15% HCl:24bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					17	Proppant			16/30 WS			130,778.0			lb			16/30							
					17	Proppant			40/70 WS			3,856.3			lb			40/70							
					Interval 18																				
					Stg #	18	Start Date 6/7/2014	Top (ftKB) 9,672.0	Btm (ftKB) 9,741.0	Vol Clean... 2762.00	Vol Slurry... 2912.30	Comment ClearStar XL Gel:1796 bbl; Linear Gel:320 bbl; Slickwater:620 bbl; 15% HCl:26bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					18	Proppant			16/30 WS			135,262.4			lb			16/30							
					18	Proppant			40/70 WS			4,313.5			lb			40/70							
					Interval 19																				
					Stg #	19	Start Date 6/7/2014	Top (ftKB) 9,524.0	Btm (ftKB) 9,585.0	Vol Clean... 2723.50	Vol Slurry... 2865.80	Comment ClearStar XL Gel:1755 bbl; Linear Gel:363 bbl; Slickwater:580 bbl; 15% HCl:26bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					19	Proppant			16/30 WS			129,089.9			lb			16/30							
					19	Proppant			40/70 WS			3,117.2			lb			40/70							
					Interval 20																				
					Stg #	20	Start Date 6/7/2014	Top (ftKB) 9,382.0	Btm (ftKB) 9,439.0	Vol Clean... 2752.10	Vol Slurry... 2900.70	Comment ClearStar XL Gel:1791 bbl; Linear Gel:351 bbl; Slickwater:587 bbl; 15% HCl:24bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					20	Proppant			16/30 WS			134,256.7			lb			16/30							
					20	Proppant			40/70 WS			3,794.5			lb			40/70							
					Interval 21																				
					Stg #	21	Start Date 6/7/2014	Top (ftKB) 9,222.0	Btm (ftKB) 9,298.0	Vol Clean... 2714.50	Vol Slurry... 2860.70	Comment ClearStar XL Gel:1767 bbl; Linear Gel:380 bbl; Slickwater:547 bbl; 15% HCl:20bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					21	Proppant			16/30 WS			131,945.4			lb			16/30							
					21	Proppant			40/70 WS			3,879.3			lb			40/70							
					Interval 22																				
					Stg #	22	Start Date 6/7/2014	Top (ftKB) 9,077.0	Btm (ftKB) 9,137.0	Vol Clean... 2713.10	Vol Slurry... 2857.30	Comment ClearStar XL Gel:1773 bbl; Linear Gel:347 bbl; Slickwater:568 bbl; 15% HCl:24bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					22	Proppant			16/30 WS			130,497.0			lb			16/30							
					22	Proppant			40/70 WS			3,453.7			lb			40/70							
					Interval 23																				
					Stg #	23	Start Date 6/7/2014	Top (ftKB) 8,924.0	Btm (ftKB) 8,976.0	Vol Clean... 2741.90	Vol Slurry... 2895.50	Comment ClearStar XL Gel:1800 bbl; Linear Gel:349 bbl; Slickwater:569 bbl; 15% HCl:25bbl													
					Stim/Treat Additives																				
					Stg #	Add			Type			Amount			Units			Sand Size							
					23	Proppant			16/30 WS			138,906.0			lb			16/30							
					23	Proppant			40/70 WS			3,810.3			lb			40/70							



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0201A

API Number 051233853700		WPC ID 1CO0761010		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) 12,475.0															
Original Spud Date 3/3/2014		Completion Date 6/16/2014		Asset Group Redtail		Responsible Engineer Andrew Fish		N/S Dist (ft) 2,321.0		N/S Ref FNL		E/W Dist (ft) 789.0		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		Range E/W Dir W		Meridian	
Lateral/Horizontal - Original Hole, 10/8/2014 3:52:18 PM																Stim/Treat Stages									
MD (ftKB)	D (ft K B)	n c l (<div><div>Vertical schematic (actual)</div><div></div></div>	Logs	Interval 24																				
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment														
52.8	02A	11		Logs	24	6/8/2014	8,775.0	8,836.0	2761.80	2909.10	ClearStar XL Gel:1760 bbl; Linear Gel:347 bbl; Slickwater:626 bbl; 15% HCl:29bbl														
Stim/Treat Additives																									
1,814.6	11212	32			Stg #	Add		Type		Amount		Units	Sand Size												
3,402.6	03071	31			24	Proppant		16/30 WS		133,953.1		lb	16/30												
4,929.1	01004	31			24	Proppant		40/70 WS		2,894.4		lb	40/70												
5,123.4	01102	31			Interval 25																				
5,158.1	01070	30			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment														
6,035.8	03062	30			25	6/8/2014	8,620.0	8,689.0	2935.80	3067.00	ClearStar XL Gel:1976 bbl; Linear Gel:357 bbl; Slickwater:579 bbl; 15% HCl:24bbl														
6,324.1	03024	30			Stim/Treat Additives																				
6,361.9	03020	30			Stg #	Add		Type		Amount		Units	Sand Size												
6,509.8	03012	30			25	Proppant		16/30 WS		117,771.2		lb	16/30												
6,573.2	03011	30			25	Proppant		40/70 WS		4,066.2		lb	40/70												
6,715.9	03017	30			Interval 26																				
6,846.1	03012	30			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment														
6,996.1	03014	30			26	6/8/2014	8,470.0	8,534.0	2715.50	2866.30	ClearStar XL Gel:1791 bbl; Linear Gel:345 bbl; Slickwater:555 bbl; 15% HCl:25bbl														
7,108.9	03010	30			Stim/Treat Additives																				
7,259.8	03010	30			Stg #	Add		Type		Amount		Units	Sand Size												
7,327.1	03014	30			26	Proppant		16/30 WS		137,418.9		lb	16/30												
7,459.0	03010	30			26	Proppant		40/70 WS		2,664.3		lb	40/70												
7,588.9	03010	30			Interval 27																				
7,750.0	03010	30	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment																
7,872.0	03012	30	27	6/8/2014	8,317.0	8,383.0	2620.20	2725.60	ClearStar XL Gel:1582 bbl; Linear Gel:355 bbl; Slickwater:657 bbl; 15% HCl:26bbl																
8,015.1	03010	30	Stim/Treat Additives																						
8,090.9	03010	30	Stg #	Add		Type		Amount		Units	Sand Size														
8,230.0	03070	30	27	Proppant		16/30 WS		93,680.4		lb	16/30														
8,357.0	03010	30	27	Proppant		40/70 WS		4,176.9		lb	40/70														
8,509.8	03010	30	Interval 28																						
8,622.0	03010	30	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment																
8,774.9	03010	30	28	6/8/2014	8,176.0	8,232.0	4140.50	4287.80	ClearStar XL Gel:2336 bbl; Linear Gel:967 bbl; Slickwater:814 bbl; 15% HCl:24bbl																
8,836.0	03010	30	Stim/Treat Additives																						
8,974.1	03010	30	Stg #	Add		Type		Amount		Units	Sand Size														
9,103.0	03010	30	28	Proppant		16/30 WS		133,736.1		lb	16/30														
9,270.0	03010	30	28	Proppant		40/70 WS		3,101.4		lb	40/70														
9,383.9	03010	30	Interval 29																						
9,523.9	03010	30	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment																
9,585.0	03010	30	30	6/8/2014	7,870.0	7,930.0	3267.00	3417.10	ClearStar XL Gel:2215 bbl; Linear Gel:349 bbl; Slickwater:703 bbl; 15% HCl:0bbl																
9,738.8	03011	30	Stim/Treat Additives																						
9,863.8	03010	30	Stg #	Add		Type		Amount		Units	Sand Size														
10,013.1	03077	30	30	Proppant		16/30 WS		135,245.7		lb	16/30														
10,131.9	03070	30	30	Proppant		40/70 WS		4,202.8		lb	40/70														
10,275.9	03010	30	Interval 30																						
10,344.2	03010	30	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment																
10,490.2	03010	30	31	6/9/2014	7,714.0	7,782.0	3459.80	3606.30	ClearStar XL Gel:1712 bbl; Linear Gel:534 bbl; Slickwater:1186 bbl; 15% HCl:28bbl																
10,619.1	03011	30	Stim/Treat Additives																						
10,762.1	03010	30	Stg #	Add		Type		Amount		Units	Sand Size														
10,881.9	03010	30	31	Proppant		16/30 WS		131,829.2		lb	16/30														
11,038.1	03010	30	31	Proppant		40/70 WS		4,238.7		lb	40/70														
11,099.1	03010	30	Interval 31																						
11,253.9	03010	30	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment																
11,372.0	03014	30	32	6/9/2014	7,562.0	7,629.0	2734.00	2880.00	ClearStar XL Gel:1745 bbl; Linear Gel:389 bbl; Slickwater:577 bbl; 15% HCl:24bbl																
11,522.0	03010	30	Stim/Treat Additives																						
11,642.1	03010	30	Stg #	Add		Type		Amount		Units	Sand Size														
11,787.1	03010	30	32	Proppant		16/30 WS		131,467.2		lb	16/30														
11,861.9	03010	30	32	Proppant		40/70 WS		4,153.9		lb	40/70														
12,002.0	03010	30	Interval 32																						
12,128.9	03010	30	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment																
12,266.1	03010	30	33	6/9/2014	7,411.0	7,461.0	3359.50	3502.90	ClearStar XL Gel:2193 bbl; Linear Gel:571 bbl; Slickwater:596 bbl; 15% HCl:0bbl																
12,330.7	03010	30	Stim/Treat Additives																						
12,382.9	03010	30	Stg #	Add		Type		Amount		Units	Sand Size														
			33	Proppant		16/30 WS		128,404.7		lb	16/30														
			33	Proppant		40/70 WS		4,793.7		lb	40/70														



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0201A

API Number 051233853700		WPC ID 1CO0761010		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) 12,475.0					
Original Spud Date 3/3/2014		Completion Date 6/16/2014		Asset Group Redtail		Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0		N/S Ref FNL	E/W Dist (ft) 789.0		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	Range 58	Range E/W Dir W	Meridian				
Lateral/Horizontal - Original Hole, 10/8/2014 3:52:20 PM						Stim/Treat Stages											
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Interval 34										
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
							34	6/9/2014	7,260.0	7,327.0	2664.30	2815.10	ClearStar XL Gel:1714 bbl; Linear Gel:399 bbl; Slickwater:551 bbl; 15% HCl:0bbl				
							Stim/Treat Additives										
		Stg #		Add		Type		Amount		Units		Sand Size					
		34		Proppant		16/30 WS		136,095.7		lb		16/30					
		34		Proppant		40/70 WS		3,978.5		lb		40/70					
							Interval 35										
		Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment			
		35		6/9/2014		7,107.0		7,176.0		2640.90		2789.40		ClearStar XL Gel:1743 bbl; Linear Gel:426 bbl; Slickwater:472 bbl; 15% HCl:0bbl			
						Stim/Treat Additives											
		Stg #		Add		Type		Amount		Units		Sand Size					
		35		Proppant		16/30 WS		134,151.3		lb		16/30					
		35		Proppant		40/70 WS		3,736.9		lb		40/70					
							Interval 36										
		Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment			
		36		6/9/2014		6,960.0		7,022.0		2694.40		2846.80		ClearStar XL Gel:1735 bbl; Linear Gel:360 bbl; Slickwater:576 bbl; 15% HCl:24bbl			
						Stim/Treat Additives											
		Stg #		Add		Type		Amount		Units		Sand Size					
		36		Proppant		16/30 WS		137,891.3		lb		16/30					
		36		Proppant		40/70 WS		3,620.5		lb		40/70					
							Interval 37										
		Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment			
		37		6/9/2014		6,820.0		6,874.0		2883.60		3028.10		ClearStar XL Gel:1990 bbl; Linear Gel:387 bbl; Slickwater:507 bbl; 15% HCl:0bbl			
						Stim/Treat Additives											
		Stg #		Add		Type		Amount		Units		Sand Size					
		37		Proppant		16/30 WS		129,572.1		lb		16/30					
		37		Proppant		40/70 WS		4,611.1		lb		40/70					
							Interval 38										
		Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment			
		38		6/10/2014		6,657.0		6,718.0		2375.20		2471.20		ClearStar XL Gel:1464 bbl; Linear Gel:393 bbl; Slickwater:519 bbl; 15% HCl:0bbl			
						Stim/Treat Additives											
		Stg #		Add		Type		Amount		Units		Sand Size					
		38		Proppant		16/30 WS		85,449.9		lb		16/30					
		38		Proppant		40/70 WS		3,716.8		lb		40/70					
							Interval 39										
		Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment			
		39		6/10/2014		6,510.0		6,573.0		2799.50		2982.30		ClearStar XL Gel:1933 bbl; Linear Gel:352 bbl; Slickwater:515 bbl; 15% HCl:0bbl			
						Stim/Treat Additives											
		Stg #		Add		Type		Amount		Units		Sand Size					
		39		Proppant		16/30 WS		166,095.8		lb		16/30					
		39		Proppant		40/70 WS		3,673.7		lb		40/70					
							Interval 40										
		Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment			
		40		6/10/2014		6,360.0		6,432.0		2711.80		2880.70		ClearStar XL Gel:1797 bbl; Linear Gel:302 bbl; Slickwater:614 bbl; 15% HCl:0bbl			
						Stim/Treat Additives											
		Stg #		Add		Type		Amount		Units		Sand Size					
		40		Proppant		16/30 WS		150,305.5		lb		16/30					
		40		Proppant		40/70 WS		6,560.9		lb		40/70					
							Tubing - Production set at 6,047.0ftKB on 6/16/2014 09:00										
		Set Depth (ftKB)		Comment		Run Date		Pull Date									
		6,047.0				6/16/2014											
						Item Des		OD (in)		ID (in)		Len (ft)		Top (ftKB)		Btm (ftKB)	
						Tubing		2 7/8		2.441		31.79		21.2		53.0	
						Tubing Subs, 10', 8', 2'		2 7/8				20.00		53.0		73.0	
						Tubing		2 7/8		2.441		1,969.77		73.0		2,042.7	
						Gas Lift Mandrel		2 7/8				4.05		2,042.7		2,046.8	
						Tubing		2 7/8		2.441		1,355.94		2,046.8		3,402.7	
						Gas Lift Mandrel		2 7/8				4.05		3,402.7		3,406.8	
						Tubing		2 7/8		2.441		869.89		3,406.8		4,276.7	
						Gas Lift Mandrel		2 7/8				4.05		4,276.7		4,280.7	
						Tubing		2 7/8		2.441		644.31		4,280.7		4,925.0	
						Gas Lift Mandrel		2 7/8				4.05		4,925.0		4,929.1	
						Tubing		2 7/8		2.441		161.31		4,929.1		5,090.4	
						Cup Seating Nipple		2 7/8				1.10		5,090.4		5,091.5	
						Cross Over 2-7/8" x 2-3/8"		2 7/8				0.50		5,091.5		5,092.0	
						Tubing		2 3/8		1.995		306.86		5,092.0		5,398.8	
						Gas Lift Mandrel		2 3/8				4.05		5,398.8		5,402.9	
						Tubing		2 3/8		1.995		535.03		5,402.9		5,937.9	
						Gas Lift Mandrel		2 3/8				4.05		5,937.9		5,942.0	
						Tubing		2 3/8		1.995		93.69		5,942.0		6,035.7	
						On-Off Tool		2 3/8				1.34		6,035.7		6,037.0	



Lease Review All - Frac Summary

Well Name: RAZOR 11E-0201A

API Number 051233853700			WPC ID 1CO0761010			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) 12,475.0				
Original Spud Date 3/3/2014			Completion Date 6/16/2014			Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,321.0			N/S Ref FNL		E/W Dist (ft) 789.0		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		Range 58 W		Range E/W Dir		Meridian		
Lateral/Horizontal - Original Hole, 10/8/2014 3:52:22 PM									Item Des Packer / AS-1 production pkr			OD (in) 4 1/2		ID (in)		Len (ft) 10.00		Top (ftKB) 6,037.0		Btm (ftKB) 6,047.0	
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Rod Strings <des> on <dttmrun>														
							Rod Description						Run Date				Pull Date				
52.8	028	11	11	11			Item Des			OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)					
1,814.6	10252	11	11	11			Other Strings														
							Set Depth (ftKB)		Comment								Run Date		Pull Date		
3,402.6	33071	11	11	11			Item Des		OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)						
4,929.1	43956	11	11	11			Other In Hole														
							Des		OD (in)		Run Date		Pull Date		Top (ftKB)		Btm (ftKB)				
5,123.4	51553	11	11	11			CFP		4 6/10/2014		6/14/2013		6,454.0		6,456.0						
							CFP		4 6/10/2014		6/14/2013		6,610.0		6,612.0						
5,158.1	51478	11	11	11			CFP		4 6/10/2014		6/14/2013		6,756.0		6,758.0						
							CFP		4 6/10/2014		6/14/2013		6,911.0		6,913.0						
6,035.8	63863	11	11	11			CFP		4 6/9/2014		6/14/2013		7,056.0		7,058.0						
							CFP		4 6/9/2014		6/14/2013		7,216.0		7,218.0						
6,324.1	63026	11	11	11			CFP		4 6/9/2014		6/14/2013		7,362.0		7,364.0						
							CFP		4 6/9/2014		6/14/2013		7,520.0		7,522.0						
6,361.9	63035	11	11	11			CFP		4 6/9/2014		6/14/2013		7,660.0		7,662.0						
							CFP		4 6/9/2014		6/14/2013		7,824.0		7,826.0						
6,509.8	63002	11	11	11			CFP		4 6/9/2014		6/14/2013		7,968.0		7,970.0						
							CFP		4 6/9/2014		6/14/2013		8,132.0		8,134.0						
6,573.2	63961	11	11	11			CFP		4 6/8/2014		6/14/2013		8,269.0		8,271.0						
							CFP		4 6/8/2014		6/14/2013		8,424.0		8,426.0						
6,715.9	63077	11	11	11			CFP		4 6/8/2014		6/14/2013		8,568.0		8,570.0						
							CFP		4 6/8/2014		6/14/2013		8,730.0		8,732.0						
6,846.1	63002	11	11	11			CFP		4 6/8/2014		6/14/2013		8,873.0		8,875.0						
							CFP		4 6/8/2014		6/14/2013		9,020.0		9,022.0						
6,996.1	63051	11	11	11			CFP		4 6/7/2014		6/14/2013		9,175.0		9,177.0						
							CFP		4 6/7/2014		6/14/2013		9,340.0		9,342.0						
7,108.9	63061	11	11	11			CFP		4 6/7/2014		6/14/2013		9,476.0		9,478.0						
							CFP		4 6/7/2014		6/14/2013		9,627.0		9,629.0						
7,259.8	63041	11	11	11			CFP		4 6/7/2014		6/14/2013		9,750.0		9,752.0						
							CFP		4 6/7/2014		6/14/2013		9,929.0		9,931.0						
7,327.1	63051	11	11	11			CFP		4 6/7/2014		6/14/2013		10,080.0		10,082.0						
							CFP		4 6/7/2014		6/14/2013		10,226.0		10,228.0						
7,459.0	63061	11	11	11			CFP		4 6/6/2014		6/14/2013		10,385.0		10,387.0						
							CFP		4 6/6/2014		6/14/2013		10,532.0		10,534.0						
7,588.9	63041	11	11	11			CFP		4 6/6/2014		6/14/2013		10,688.0		10,690.0						
							CFP		4 6/6/2014		6/14/2013		10,834.0		10,836.0						
7,750.0	63051	11	11	11			CFP		4 5/24/2014		6/15/2014		10,978.0		10,980.0						
							CFP		4 5/24/2014		6/15/2014		11,136.0		11,138.0						
7,872.0	63061	11	11	11			CFP		4 5/24/2014		6/15/2014		11,280.0		11,282.0						
							CFP		4 5/24/2014		6/15/2014		11,438.0		11,440.0						
8,015.1	63002	11	11	11			CFP		4 5/24/2014		6/15/2014		11,578.0		11,580.0						
							CFP		4 5/23/2014		6/15/2014		11,739.0		11,741.0						
8,090.9	63061	11	11	11			CFP		4 5/23/2014		6/15/2014		11,884.0		11,886.0						
							CFP		4 5/23/2014		6/15/2014		12,049.0		12,051.0						
8,230.0	63071	11	11	11			CFP		4 5/23/2014		6/15/2014		12,194.0		12,196.0						
							CFP		5/23/2014		6/15/2014		12,194.0		12,196.0						
8,357.0	63061	11	11	11			Bottom Hole Cores														
							Date		Core #		Top (ftKB)		Btm (ftKB)		Recov (ft)						
8,509.8	63051	11	11	11																	
8,622.0	63041	11	11	11																	
8,774.9	63035	11	11	11																	
8,836.0	63006	11	11	11																	
8,974.1	63038	11	11	11																	
9,103.0	63027	11	11	11																	
9,270.0	63069	11	11	11																	
9,383.9	63063	11	11	11																	
9,523.9	63069	11	11	11																	
9,585.0	63067	11	11	11																	
9,738.8	63061	11	11	11																	
9,863.8	63060	11	11	11																	
10,013.1	63077	11	11	11																	
10,131.9	63070	11	11	11																	
10,275.9	63056	11	11	11																	
10,344.2	63017	11	11	11																	
10,490.2	63044	11	11	11																	
10,619.1	63051	11	11	11																	
10,762.1	63056	11	11	11																	
10,881.9	63069	11	11	11																	
11,038.1	63060	11	11	11																	
11,099.1	63010	11	11	11																	
11,253.9	63020	11	11	11																	
11,372.0	63024	11	11	11																	
11,522.0	63063	11	11	11																	
11,642.1	63067	11	11	11																	
11,787.1	63067	11	11	11																	
11,861.9	63069	11	11	11																	
12,002.0	63066	11	11	11																	
12,128.9	63069	11	11	11																	
12,266.1	63060	11	11	11																	
12,330.7	63069	11	11	11																	
12,382.9	63016	11	11	11																	