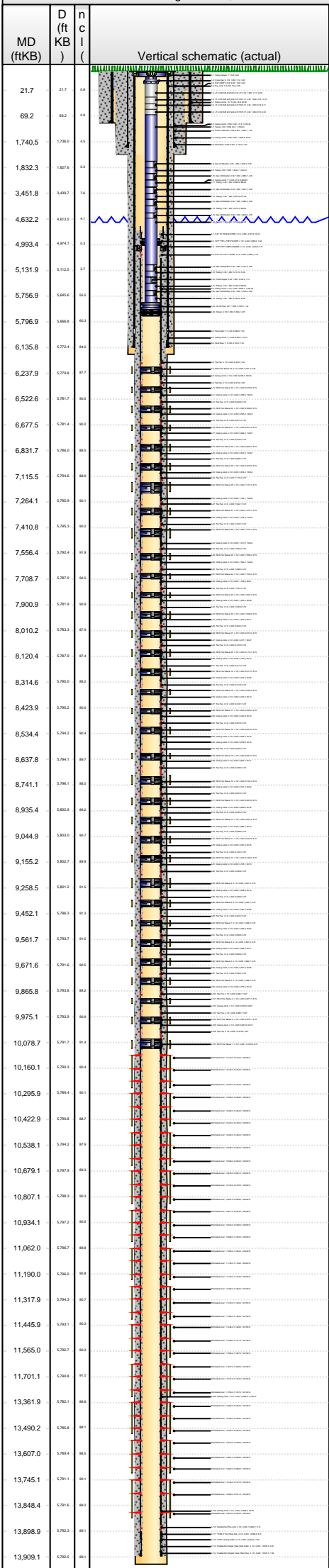




Lease Review  
Well Name: RAZOR 21B-0909

API Number 051233952900	WPC ID 1CO0761114	Well Permit Number	Field Name DJ Horizontal Niobrara	County Weld	State CO
Well Configuration Type Lateral/Horizontal	Orig KB Elv (ft) 4,854.10	Ground Elevation (ft) 4,837.30	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB) 13,915.0
Original Spud Date 10/14/2014	Completion Date 12/23/2014	Asset Group Redtail	Responsible Engineer Charles Ohlson	N/S Dist (ft) 327.0 N/S Ref FNL	E/W Dist (ft) 2,161.0 E/W Ref FEL
Lot	Quarter 1 NW	Quarter 2 NE	Quarter 3	Quarter 4	Section 21
			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, 3/13/2015 2:10:27 PM



Wellbore Sections

Section Des	Wellbore Name	Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
Conductor	Original Hole	9/13/2014	20	16.8	96.8
Surface	Original Hole	10/14/2014	13 1/2	96.8	1,757.0
Intermediate	Original Hole	10/15/2014	8 3/4	1,757.0	6,152.0
Lateral	Original Hole	10/17/2014	6 1/8	6,152.0	13,915.0

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, 1,742.0ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
9 5/8	36.00	J-55	16.6	16.6	0.00	LANDING JOINT
9 5/8	36.00	J-55	16.6	21.6	5.00	PUP JOINT
9 5/8	36.00	J-55	21.6	1,698.1	1,676.49	Casing Joints
9 5/8	36.00	J-55	1,698.1	1,699.6	1.50	FLOAT COLLAR
9 5/8	36.00	J-55	1,699.6	1,740.5	40.93	Casing Joints
9 5/8	36.00	J-55	1,740.5	1,742.0	1.50	Float Shoe

Intermediate Csg, 6,135.8ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7	29.00	HCP-110	16.8	16.8	0.00	Landing Joint
7	29.00	HCP-110	16.8	21.8	5.00	Pup Joint
7	29.00	HCP-110	21.8	6,088.6	6,066.85	Casing Joints
7	29.00	HCP-110	6,088.6	6,090.1	1.50	Float Collar
7	29.00	HCP-110	6,090.1	6,134.3	44.16	Casing Joints
7	29.00	HCP-110	6,134.3	6,135.8	1.50	Float Shoe

Liner, 13,909.0ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
4 1/2	11.60	P-110	4,973.6	4,989.9	16.34	5.25" ID TIE BACK PBR
4 1/2	11.60	P-110	4,989.9	4,993.3	3.40	WTF "TSP L-TOP PACKER
4 1/2	11.60	P-110	4,993.3	4,999.0	5.71	WTF"CTH" LINER HANGER
4 1/2	11.60	P-110	4,999.0	4,999.8	0.74	WTF 4.5" LTC X-OVER
4 1/2	11.60	P-110	4,999.8	6,225.2	1,225.49	Casing Joints
4 1/2	11.60	P-110	6,225.2	6,231.2	5.97	Top Pup
4 1/2	11.60	P-110	6,231.2	6,238.0	6.79	NCS Frac Sleeve 34
4 1/2	11.60	P-110	6,238.0	6,373.8	135.83	Casing Joints
4 1/2	11.60	P-110	6,373.8	6,379.8	5.97	Top Pup
4 1/2	11.60	P-110	6,379.8	6,386.6	6.79	NCS Frac Sleeve 33
4 1/2	11.60	P-110	6,386.6	6,522.6	136.03	Casing Joints
4 1/2	11.60	P-110	6,522.6	6,528.6	5.97	Top Pup
4 1/2	11.60	P-110	6,528.6	6,535.4	6.79	NCS Frac Sleeve 32
4 1/2	11.60	P-110	6,535.4	6,671.4	136.04	Casing Joints
4 1/2	11.60	P-110	6,671.4	6,677.4	5.97	Top Pup
4 1/2	11.60	P-110	6,677.4	6,684.2	6.79	NCS Frac Sleeve 31
4 1/2	11.60	P-110	6,684.2	6,819.1	134.87	Casing Joints
4 1/2	11.60	P-110	6,819.1	6,825.0	5.97	Top Pup
4 1/2	11.60	P-110	6,825.0	6,831.8	6.79	NCS Frac Sleeve 30
4 1/2	11.60	P-110	6,831.8	6,966.7	134.87	Casing Joints
4 1/2	11.60	P-110	6,966.7	6,972.7	5.97	Top Pup
4 1/2	11.60	P-110	6,972.7	6,979.4	6.79	NCS Frac Sleeve 29
4 1/2	11.60	P-110	6,979.4	7,115.4	135.94	Casing Joints
4 1/2	11.60	P-110	7,115.4	7,121.4	5.97	Top Pup
4 1/2	11.60	P-110	7,121.4	7,128.1	6.79	NCS Frac Sleeve 28
4 1/2	11.60	P-110	7,128.1	7,264.1	135.99	Casing Joints
4 1/2	11.60	P-110	7,264.1	7,270.1	5.97	Top Pup
4 1/2	11.60	P-110	7,270.1	7,276.9	6.79	NCS Frac Sleeve 27
4 1/2	11.60	P-110	7,276.9	7,404.7	127.83	Casing Joints
4 1/2	11.60	P-110	7,404.7	7,410.7	5.97	Top Pup
4 1/2	11.60	P-110	7,410.7	7,417.5	6.79	NCS Frac Sleeve 26
4 1/2	11.60	P-110	7,417.5	7,550.4	132.92	Casing Joints
4 1/2	11.60	P-110	7,550.4	7,556.4	5.97	Top Pup
4 1/2	11.60	P-110	7,556.4	7,563.2	6.79	NCS Frac Sleeve 25
4 1/2	11.60	P-110	7,563.2	7,696.1	132.89	Casing Joints
4 1/2	11.60	P-110	7,696.1	7,702.0	5.97	Top Pup
4 1/2	11.60	P-110	7,702.0	7,708.8	6.79	NCS Frac Sleeve 24
4 1/2	11.60	P-110	7,708.8	7,797.4	88.61	Casing Joints
4 1/2	11.60	P-110	7,797.4	7,803.4	5.97	Top Pup
4 1/2	11.60	P-110	7,803.4	7,810.2	6.79	NCS Frac Sleeve 23
4 1/2	11.60	P-110	7,810.2	7,900.9	90.69	Casing Joints



Lease Review  
Well Name: RAZOR 21B-0909

API Number 051233952900		WPC ID 1CO0761114		Well Permit Number		Field Name DJ Horizontal Niobrara				County Weld		State CO					
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 4,854.10		Ground Elevation (ft) 4,837.30		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,915.0					
Original Spud Date 10/14/2014		Completion Date 12/23/2014		Asset Group Redtail		Responsible Engineer Charles Ohlson				N/S Dist (ft) 327.0		N/S Ref FNL		E/W Dist (ft) 2,161.0		E/W Ref FEL	
Lot		Quarter 1 NW	Quarter 2 NE	Quarter 3	Quarter 4	Section 21	Section Suffix	Section Type	Township 10 N	Township N/S Dir	Range 58 W		Range E/W Dir	Meridian			
Lateral/Horizontal - Original Hole, 3/13/2015 2:10:30 PM							OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des				
MD (ftKB)	D (ft KB)	n ( )	c ( )	l ( )	Vertical schematic (actual)	Logs	4 1/2	11.60	P-110	7,900.9	7,906.8	5.97	Top Pup				
							4 1/2	11.60	P-110	7,906.8	7,913.6	6.79	NCS Frac Sleeve 22				
							4 1/2	11.60	P-110	7,913.6	8,004.3	90.71	Casing Joints				
							4 1/2	11.60	P-110	8,004.3	8,010.3	5.97	Top Pup				
21.7	21.7	0.8					4 1/2	11.60	P-110	8,010.3	8,017.1	6.79	NCS Frac Sleeve 21				
69.2	69.2	0.8					4 1/2	11.60	P-110	8,017.1	8,107.8	90.67	Casing Joints				
1,740.5	1,736.0	4.5					4 1/2	11.60	P-110	8,107.8	8,113.7	5.97	Top Pup				
1,832.3	1,827.6	4.7					4 1/2	11.60	P-110	8,113.7	8,120.5	6.79	NCS Frac Sleeve 20				
3,451.8	3,439.7	12.1					4 1/2	11.60	P-110	8,120.5	8,211.2	90.70	Casing Joints				
4,632.2	4,615.0	17.2					4 1/2	11.60	P-110	8,211.2	8,217.2	5.97	Top Pup				
4,993.4	4,974.1	19.3					4 1/2	11.60	P-110	8,217.2	8,224.0	6.79	NCS Frac Sleeve 19				
5,131.9	5,112.0	19.9					4 1/2	11.60	P-110	8,224.0	8,314.6	90.58	Casing Joints				
5,756.9	5,695.0	61.9					4 1/2	11.60	P-110	8,314.6	8,320.5	5.97	Top Pup				
5,796.9	5,665.8	131.1					4 1/2	11.60	P-110	8,320.5	8,327.3	6.79	NCS Frac Sleeve 18				
5,796.9	5,665.8	131.1					4 1/2	11.60	P-110	8,327.3	8,418.1	90.74	Casing Joints				
6,135.8	5,775.4	360.4					4 1/2	11.60	P-110	8,418.1	8,424.0	5.97	Top Pup				
6,237.9	5,778.8	459.1					4 1/2	11.60	P-110	8,424.0	8,430.8	6.79	NCS Frac Sleeve 17				
6,522.6	5,781.7	740.9					4 1/2	11.60	P-110	8,430.8	8,521.6	90.73	Casing Joints				
6,677.5	5,781.4	896.1					4 1/2	11.60	P-110	8,521.6	8,527.5	5.97	Top Pup				
6,831.7	5,780.0	1,051.7					4 1/2	11.60	P-110	8,527.5	8,534.3	6.79	NCS Frac Sleeve 16				
6,831.7	5,780.0	1,051.7					4 1/2	11.60	P-110	8,534.3	8,579.7	45.33	Casing Joints				
7,115.5	5,784.0	1,331.5					4 1/2	11.60	P-110	8,579.7	8,625.0	45.34	Casing Joints				
7,264.1	5,785.0	1,479.1					4 1/2	11.60	P-110	8,625.0	8,631.0	5.97	Top Pup				
7,410.8	5,785.0	1,624.8					4 1/2	11.60	P-110	8,631.0	8,637.8	6.79	NCS Frac Sleeve 15				
7,556.4	5,782.0	1,774.4					4 1/2	11.60	P-110	8,637.8	8,728.5	90.71	Casing Joints				
7,556.4	5,782.0	1,774.4					4 1/2	11.60	P-110	8,728.5	8,734.4	5.97	Top Pup				
7,708.7	5,781.0	1,926.7					4 1/2	11.60	P-110	8,734.4	8,741.2	6.79	NCS Frac Sleeve 14				
7,900.9	5,781.0	2,118.9					4 1/2	11.60	P-110	8,741.2	8,831.9	90.64	Casing Joints				
8,010.2	5,781.0	2,310.2					4 1/2	11.60	P-110	8,831.9	8,837.8	5.97	Top Pup				
8,120.4	5,781.0	2,501.4					4 1/2	11.60	P-110	8,837.8	8,844.6	6.79	NCS Frac Sleeve 13				
8,120.4	5,781.0	2,501.4					4 1/2	11.60	P-110	8,844.6	8,935.4	90.76	Casing Joints				
8,314.6	5,785.0	2,638.9					4 1/2	11.60	P-110	8,935.4	8,941.4	5.97	Top Pup				
8,423.9	5,785.0	2,638.9					4 1/2	11.60	P-110	8,941.4	8,948.1	6.79	NCS Frac Sleeve 12				
8,534.4	5,784.0	2,753.4					4 1/2	11.60	P-110	8,948.1	9,038.8	90.70	Casing Joints				
8,637.8	5,784.0	2,857.8					4 1/2	11.60	P-110	9,038.8	9,044.8	5.97	Top Pup				
8,741.1	5,784.0	2,857.8					4 1/2	11.60	P-110	9,044.8	9,051.6	6.79	NCS Frac Sleeve 11				
8,935.4	5,882.0	398.3					4 1/2	11.60	P-110	9,051.6	9,142.4	90.75	Casing Joints				
9,044.9	5,882.0	398.3					4 1/2	11.60	P-110	9,142.4	9,148.3	5.97	Top Pup				
9,044.9	5,882.0	398.3					4 1/2	11.60	P-110	9,148.3	9,155.1	6.79	NCS Frac Sleeve 10				
9,155.2	5,882.7	396.5					4 1/2	11.60	P-110	9,155.1	9,245.8	90.73	Casing Joints				
9,258.5	5,881.2	391.3					4 1/2	11.60	P-110	9,245.8	9,251.8	5.97	Top Pup				
9,452.1	5,786.0	391.3					4 1/2	11.60	P-110	9,251.8	9,258.6	6.79	NCS Frac Sleeve 9				
9,561.7	5,782.7	391.5					4 1/2	11.60	P-110	9,258.6	9,348.8	90.16	Casing Joints				
9,671.6	5,781.0	392.5					4 1/2	11.60	P-110	9,348.8	9,354.7	5.97	Top Pup				
9,671.6	5,781.0	392.5					4 1/2	11.60	P-110	9,354.7	9,361.5	6.79	NCS Frac Sleeve 8				
9,865.8	5,783.8	392.0					4 1/2	11.60	P-110	9,361.5	9,452.2	90.69	Casing Joints				
9,975.1	5,783.8	392.0					4 1/2	11.60	P-110	9,452.2	9,458.2	5.97	Top Pup				
10,078.7	5,781.7	391.4					4 1/2	11.60	P-110	9,458.2	9,465.0	6.79	NCS Frac Sleeve 7				
10,160.1	5,782.0	391.4					4 1/2	11.60	P-110	9,465.0	9,555.6	90.62	Casing Joints				
10,295.9	5,784.4	380.1					4 1/2	11.60	P-110	9,555.6	9,561.6	5.97	Top Pup				
10,422.9	5,786.8	380.7					4 1/2	11.60	P-110	9,561.6	9,568.4	6.79	NCS Frac Sleeve 6				
10,422.9	5,786.8	380.7					4 1/2	11.60	P-110	9,568.4	9,658.8	90.41	Casing Joints				
10,538.1	5,784.2	389.9					4 1/2	11.60	P-110	9,658.8	9,664.7	5.97	Top Pup				
10,679.1	5,782.0	392.0					4 1/2	11.60	P-110	9,664.7	9,671.5	6.79	NCS Frac Sleeve 5				
10,807.1	5,786.0	388.0					4 1/2	11.60	P-110	9,671.5	9,762.2	90.69	Casing Joints				
10,934.1	5,782.0	388.0					4 1/2	11.60	P-110	9,762.2	9,768.2	5.97	Top Pup				
11,062.0	5,786.7	391.6					4 1/2	11.60	P-110	9,768.2	9,775.0	6.79	NCS Frac Sleeve 4				
11,062.0	5,786.7	391.6					4 1/2	11.60	P-110	9,775.0	9,865.7	90.72	Casing Joints				
11,190.0	5,786.0	392.8					4 1/2	11.60	P-110	9,865.7	9,871.7	5.97	Top Pup				
11,317.9	5,784.0	387.7					4 1/2	11.60	P-110	9,871.7	9,878.5	6.79	NCS Frac Sleeve 3				
11,445.9	5,785.0	388.0					4 1/2	11.60	P-110	9,878.5	9,969.1	90.67	Casing Joints				
11,565.0	5,782.7	388.0					4 1/2	11.60	P-110	9,969.1	9,975.1	5.97	Top Pup				
11,701.1	5,786.8	391.0					4 1/2	11.60	P-110	9,975.1	9,981.9	6.79	NCS Frac Sleeve 2				
13,361.9	5,782.1	388.8					4 1/2	11.60	P-110	9,981.9	10,072.6	90.70	Casing Joints				
13,361.9	5,782.1	388.8					4 1/2	11.60	P-110	10,072.6	10,078.6	5.97	Top Pup				
13,490.2	5,785.8	388.1					4 1/2	11.60	P-110	10,078.6	10,085.3	6.79	NCS Frac Sleeve 1				
13,607.0	5,784.4	391.5					4 1/2	11.60	P-110	10,085.3	13,848.4	3,763.07	Casing Joints				
13,745.1	5,781.0	388.1					4 1/2	11.60	P-110	13,848.4	13,893.7	45.32	Casing Joints				
13,848.4	5,781.0	388.0					4 1/2	11.60	P-110	13,893.7	13,898.8	5.10	Weatherford Pup Joint				
13,898.9	5,782.0	388.1					4 1/2	11.60	P-110								



Lease Review  
Well Name: RAZOR 21B-0909

Well Number 051233952900			WPC ID 1CO0761114			Well Permit Number			Field Name DJ Horizontal Niobrara			County Weld			State CO										
Well Configuration Type Lateral/Horizontal						Orig KB Elv (ft) 4,854.10			Ground Elevation (ft) 4,837.30			Casing Flange Elevation (ft)			Tubing Head Elevation (ft)			Total Depth (ftKB) 13,915.0							
Original Spud Date 10/14/2014			Completion Date 12/23/2014			Asset Group Redtail			Responsible Engineer Charles Ohlson			N/S Dist (ft) 327.0			N/S Ref FNL			E/W Dist (ft) 2,161.0			E/W Ref FEL				
Lot		Quarter 1 NW		Quarter 2 NE		Quarter 3		Quarter 4		Section 21		Section Suffix		Section Type		Township 10 N		Township N/S Dir		Range 58		Range E/W Dir W		Meridian	
Lateral/Horizontal - Original Hole, 3/13/2015 2:10:34 PM											OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des								
MD (ftKB)	D (ft KB)	nc ( )	Vertical schematic (actual)								Logs	4 1/2	11.60	P-110	13,905.4	13,907.4	2.00	Weatherford Single Valve Float Collar							
												4 1/2	11.60	P-110	13,907.4	13,909.0	1.58	Weatherford Double Vlave Float Shoe							
21.7	21.7	0.0									Logs	Cement Stages													
69.2	69.2	0.0										Des				Pump Start Date		Drill Out Date		Top (ftKB)	Btm (ftKB)	Top Meas Meth			
1,740.5	1,736.0	4.5									Logs	Conductor Cement				9/13/2014				16.8	96.8	Returns to Surface			
1,832.3	1,807.6	5.0										Surface Casing Cement				10/15/2014				16.8	1,757.0				
3,451.8	3,403.7	18.1									Logs	Intermediate Casing Cement				10/17/2014				16.8	6,135.8	Returns to Surface			
4,632.2	4,603.2	4.1										Liner Cement				10/22/2014				4,974.0	13,909.0	Volume Calculations			
4,993.4	4,874.1	12.3									Logs	Perforations													
5,131.9	5,110.2	2.7										Type of Hole				Date				Top (ftKB)	Btm (ftKB)	Zone			
5,756.9	5,645.0	00.5									Logs	Perforated Liner				12/9/2014		10,140.0	10,142.0	Niobrara, Original Hole					
5,796.9	5,686.0	00.0										Perforated Liner				12/9/2014		10,160.0	10,162.0	Niobrara, Original Hole					
6,135.8	5,772.4	04.0									Logs	Perforated Liner				12/9/2014		10,232.0	10,234.0	Niobrara, Original Hole					
6,237.9	5,774.6	00.7										Perforated Liner				12/8/2014		10,296.0	10,298.0	Niobrara, Original Hole					
6,522.6	5,781.7	00.5									Logs	Perforated Liner				12/8/2014		10,362.0	10,364.0	Niobrara, Original Hole					
6,677.5	5,781.4	00.0										Perforated Liner				12/8/2014		10,423.0	10,425.0	Niobrara, Original Hole					
6,831.7	5,786.0	00.5									Logs	Perforated Liner				12/8/2014		10,480.0	10,482.0	Niobrara, Original Hole					
7,115.5	5,784.0	00.0										Perforated Liner				12/8/2014		10,538.0	10,540.0	Niobrara, Original Hole					
7,264.1	5,785.0	00.1									Logs	Perforated Liner				12/8/2014		10,598.0	10,600.0	Niobrara, Original Hole					
7,410.8	5,786.3	00.0										Perforated Liner				12/8/2014		10,679.0	10,681.0	Niobrara, Original Hole					
7,556.4	5,782.4	01.0									Logs	Perforated Liner				12/8/2014		10,743.0	10,745.0	Niobrara, Original Hole					
7,708.7	5,780.0	00.0										Perforated Liner				12/8/2014		10,807.0	10,809.0	Niobrara, Original Hole					
7,900.9	5,781.0	00.0									Logs	Perforated Liner				12/8/2014		10,871.0	10,873.0	Niobrara, Original Hole					
8,010.2	5,783.0	01.0										Perforated Liner				12/8/2014		10,934.0	10,936.0	Niobrara, Original Hole					
8,120.4	5,787.0	01.0									Logs	Perforated Liner				12/8/2014		10,998.0	11,000.0	Niobrara, Original Hole					
8,314.6	5,786.0	00.0										Perforated Liner				12/8/2014		11,062.0	11,064.0	Niobrara, Original Hole					
8,423.9	5,786.2	00.0									Logs	Perforated Liner				12/8/2014		11,126.0	11,128.0	Niobrara, Original Hole					
8,534.4	5,784.2	00.0										Perforated Liner				12/8/2014		11,190.0	11,192.0	Niobrara, Original Hole					
8,637.8	5,784.1	00.7									Logs	Perforated Liner				12/7/2014		11,260.0	11,262.0	Niobrara, Original Hole					
8,741.1	5,786.1	00.0										Perforated Liner				12/7/2014		11,318.0	11,320.0	Niobrara, Original Hole					
8,935.4	5,802.0	00.0									Logs	Perforated Liner				12/7/2014		11,382.0	11,384.0	Niobrara, Original Hole					
9,044.9	5,803.0	00.7										Perforated Liner				12/7/2014		11,446.0	11,448.0	Niobrara, Original Hole					
9,155.2	5,802.7	00.0									Logs	Perforated Liner				12/7/2014		11,509.0	11,511.0	Niobrara, Original Hole					
9,258.5	5,801.2	01.0										Perforated Liner				12/7/2014		11,565.0	11,567.0	Niobrara, Original Hole					
9,452.1	5,786.2	01.0									Logs	Perforated Liner				12/7/2014		11,637.0	11,639.0	Niobrara, Original Hole					
9,561.7	5,783.7	01.0										Perforated Liner				12/7/2014		11,701.0	11,703.0	Niobrara, Original Hole					
9,671.6	5,781.0	00.0									Logs	Perforated Liner				12/7/2014		11,765.0	11,767.0	Niobrara, Original Hole					
9,865.8	5,783.8	00.0										Perforated Liner				12/7/2014		11,765.0	11,767.0	Niobrara, Original Hole					
9,975.1	5,783.0	00.0									Logs	Perforated Liner				12/5/2014		13,362.0	13,364.0	Niobrara, Original Hole					
10,078.7	5,781.7	01.0										Perforated Liner				12/5/2014		13,426.0	13,428.0	Niobrara, Original Hole					
10,160.1	5,786.3	00.0									Logs	Perforated Liner				12/5/2014		13,490.0	13,492.0	Niobrara, Original Hole					
10,295.9	5,780.4	00.1										Perforated Liner				12/5/2014		13,544.0	13,546.0	Niobrara, Original Hole					
10,422.9	5,786.0	00.7									Logs	Perforated Liner				12/5/2014		13,607.0	13,609.0	Niobrara, Original Hole					
10,538.1	5,784.5	01.0										Perforated Liner				12/5/2014		13,664.0	13,666.0	Niobrara, Original Hole					
10,679.1	5,787.0	00.0									Logs	Perforated Liner				12/5/2014		13,745.0	13,747.0	Niobrara, Original Hole					
10,807.1	5,786.3	00.0										Perforated Liner				12/5/2014		13,809.0	13,811.0	Niobrara, Original Hole					
10,934.1	5,787.2	00.0									Logs	Perforated Liner				12/5/2014		13,873.0	13,875.0	Niobrara, Original Hole					
11,062.0	5,786.7	00.0										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
11,190.0	5,786.0	00.0									Logs	Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
11,317.9	5,784.2	00.7										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
11,445.9	5,786.1	00.0									Logs	Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
11,565.0	5,780.7	00.0										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
11,701.1	5,786.8	01.0									Logs	Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,361.9	5,782.1	00.0										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,490.2	5,786.0	00.1									Logs	Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,607.0	5,784.4	00.5										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,745.1	5,781.1	00.1									Logs	Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,848.4	5,781.6	00.0										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,898.9	5,780.3	00.1									Logs	Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					
13,909.1	5,780.2	00.0										Perforated Liner				12/5/2014		13,909.0	13,911.0	Niobrara, Original Hole					





Lease Review  
Well Name: RAZOR 21B-0909

WPC Number 051233952900		WPC ID 1CO0761114		Well Permit Number		Field Name DJ Horizontal Niobrara		County Weld		State CO							
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 4,854.10		Ground Elevation (ft) 4,837.30		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,915.0					
Original Spud Date 10/14/2014		Completion Date 12/23/2014		Asset Group Redtail		Responsible Engineer Charles Ohlson			N/S Dist (ft) 327.0		N/S Ref FNL		E/W Dist (ft) 2,161.0		E/W Ref FEL		
Lot		Quarter 1 NW	Quarter 2 NE	Quarter 3	Quarter 4	Section 21	Section Suffix	Section Type	Township 10	Township N/S Dir N	Range 58		Range E/W Dir W	Meridian			
Lateral/Horizontal - Original Hole, 3/13/2015 2:10:37 PM						Proppant			Type 40/70 WS		Amount 3,042.5		Units lb	Sand Size 40/70			
MD (ftKB)	D (ft KB)	n (ft KB)	c (ft KB)	l (ft KB)	Vertical schematic (actual)	Logs	Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
							4	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
21.7	21.7	0.0					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
69.2	69.2	0.0					5	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
1,740.5	1,736.0	4.5					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
1,832.3	1,827.6	4.7					6	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
3,451.8	3,439.7	12.1					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
4,632.2	4,633.0	0.8					7	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
4,993.4	4,974.1	19.3					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
5,131.9	5,112.0	19.9					8	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
5,756.9	5,685.0	71.9					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
5,796.9	5,866.8	69.9					9	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
6,135.8	5,772.4	363.4					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
6,237.9	5,778.4	359.5					10	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
6,522.6	5,781.7	740.9					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
6,677.5	5,781.4	892.1					11	12/7/2014						0.00		0.00	
						Additive	Type			Amount		Units	Sand Size				
6,831.7	5,786.0	945.7					Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
7,115.5	5,784.0	988.5					12	12/7/2014		11,637.0		11,767.0		2809.80		2917.74	
						Additive	Type			Amount		Units	Sand Size				
7,264.1	5,795.8	968.3					Proppant	Type 20/40 WS			97,152.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
7,410.8	5,795.3	963.0					Proppant	Type 40/70 WS			3,105.2		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
7,556.4	5,792.4	971.9					13	12/7/2014		11,446.0		11,567.0		3159.60		3314.59	
						Additive	Type			Amount		Units	Sand Size				
7,708.7	5,787.0	968.7					Proppant	Type 20/40 WS			140,960.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
7,900.9	5,781.0	988.9					Proppant	Type 40/70 WS			3,000.7		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
8,010.2	5,783.3	977.9					14	12/7/2014		11,260.0		11,384.0		3288.60		3476.29	
						Additive	Type			Amount		Units	Sand Size				
8,120.4	5,787.0	971.4					Proppant	Type 20/40 WS			171,589.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
8,314.6	5,785.0	982.6					Proppant	Type 40/70 WS			2,748.7		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
8,423.9	5,795.2	965.7					15	12/7/2014		11,062.0		11,192.0		2805.10		2915.39	
						Additive	Type			Amount		Units	Sand Size				
8,534.4	5,794.2	964.5					Proppant	Type 20/40 WS			99,648.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
8,637.8	5,794.1	961.7					Proppant	Type 40/70 WS			2,794.7		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
8,741.1	5,786.1	980.0					16	12/8/2014		10,871.0		11,000.0		3257.40		3443.39	
						Additive	Type			Amount		Units	Sand Size				
8,935.4	5,802.0	982.2					Proppant	Type 20/40 WS			169,897.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
9,044.9	5,803.0	987.7					Proppant	Type 40/70 WS			2,861.6		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
9,155.2	5,802.7	988.9					17	12/8/2014		10,679.0		10,809.0		3240.50		3427.08	
						Additive	Type			Amount		Units	Sand Size				
9,258.5	5,801.2	974.3					Proppant	Type 20/40 WS			170,585.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
9,452.1	5,786.2	971.9					Proppant	Type 40/70 WS			2,720.5		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
9,561.7	5,793.7	971.0					18	12/8/2014		10,480.0		10,600.0		3392.10		3576.49	
						Additive	Type			Amount		Units	Sand Size				
9,671.6	5,791.0	965.6					Proppant	Type 20/40 WS			168,284.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
9,865.8	5,788.8	987.0					Proppant	Type 40/70 WS			2,982.9		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
9,975.1	5,789.3	984.4					19	12/8/2014		10,296.0		10,425.0		3105.80		3286.09	
						Additive	Type			Amount		Units	Sand Size				
10,078.7	5,786.2	981.5					Proppant	Type 20/40 WS			164,478.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
10,160.1	5,788.4	981.1					Proppant	Type 40/70 WS			2,987.1		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
10,295.9	5,788.4	981.1					20	12/8/2014		10,140.0		10,234.0		3146.30		3306.78	
						Additive	Type			Amount		Units	Sand Size				
10,422.9	5,790.8	987.7					Proppant	Type 20/40 WS			146,239.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
10,538.1	5,794.0	977.9					Proppant	Type 40/70 WS			2,824.0		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
10,679.1	5,797.0	981.5					21	12/17/2014		10,078.6		10,085.3		2417.90		2484.96	
						Additive	Type			Amount		Units	Sand Size				
10,807.1	5,786.2	981.5					Proppant	Type 20/40 WS			59,724.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
10,934.1	5,797.2	985.0					Proppant	Type 40/70 WS			2,566.0		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
11,062.0	5,786.7	988.0					22	12/18/2014		9,975.1		9,981.9		2191.10		2271.94	
						Additive	Type			Amount		Units	Sand Size				
11,190.0	5,786.0	981.9					Proppant	Type 20/40 WS			59,724.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
11,317.9	5,794.2	987.7					Proppant	Type 40/70 WS			2,566.0		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
11,445.9	5,792.1	983.0					22	12/18/2014		9,975.1		9,981.9		2191.10		2271.94	
						Additive	Type			Amount		Units	Sand Size				
11,565.0	5,792.7	983.0					Proppant	Type 20/40 WS			59,724.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
11,701.1	5,796.8	971.0					Proppant	Type 40/70 WS			2,566.0		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
13,361.9	5,782.1	984.0					22	12/18/2014		9,975.1		9,981.9		2191.10		2271.94	
						Additive	Type			Amount		Units	Sand Size				
13,490.2	5,785.0	981.1					Proppant	Type 20/40 WS			59,724.0		lb	20/40			
						Additive	Type			Amount		Units	Sand Size				
13,607.0	5,788.4	981.0					Proppant	Type 40/70 WS			2,566.0		lb	40/70			
						Stg #	Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)		
13,745.1	5,791.1	981.0					22	12/18/2014		9,975.1		9,981.9		2191.10		2271.94	
						Additive	Type			Amount		Units	Sand Size				
13,848.4	5,791.6	982.0					Proppant	Type 40/70 WS			2,566.0		lb	40/70			
						St											



Lease Review  
Well Name: RAZOR 21B-0909

API Number 051233952900		WPC ID 1CO0761114		Well Permit Number		Field Name DJ Horizontal Niobrara		County Weld		State CO																			
Well Configuration Type Lateral/Horizontal				Orig KB Elv (ft) 4,854.10		Ground Elevation (ft) 4,837.30		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,915.0																	
Original Spud Date 10/14/2014		Completion Date 12/23/2014		Asset Group Redtail		Responsible Engineer Charles Ohlson				N/S Dist (ft) 327.0		N/S Ref FNL		E/W Dist (ft) 2,161.0		E/W Ref FEL													
Lot		Quarter 1 NW	Quarter 2 NE	Quarter 3	Quarter 4	Section 21	Section Suffix	Section Type	Township 10 N		Township N/S Dir		Range 58 W		Range E/W Dir		Meridian												
Lateral/Horizontal - Original Hole, 3/13/2015 2:10:41 PM																	Additive Proppant		Type 20/40 WS		Amount 72,642.0		Units lb		Sand Size 20/40				
MD (ftKB)	D (ft)	n (in)	c (in)	l (in)	Vertical schematic (actual)												Logs	Additive Proppant		Type 40/70 WS		Amount 2,446.5		Units lb		Sand Size 40/70			
																		Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
																		23		12/18/2014		9,871.7		9,878.5		2412.90		2484.27	
21.7	21.7	0.8																Additive Proppant		Type 20/40 WS		Amount 63,417.0		Units lb		Sand Size 20/40			
69.2	69.2	0.8																Additive Proppant		Type 40/70 WS		Amount 2,878.0		Units lb		Sand Size 40/70			
1,740.5	1,736.0	4.5																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
1,832.3	1,827.6	4.5																24		12/19/2014		9,768.2		9,775.0		2602.10		2663.85	
3,451.8	3,439.7	12.1																Additive Proppant		Type 20/40 WS		Amount 54,653.0		Units lb		Sand Size 20/40			
4,632.2	4,619.0	3.2																Additive Proppant		Type 40/70 WS		Amount 2,701.6		Units lb		Sand Size 40/70			
4,993.4	4,974.1	19.3																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
5,131.9	5,112.5	19.4																25		12/19/2014		9,664.7		9,671.5		2422.50		2519.92	
5,756.9	5,685.0	71.9																Additive Proppant		Type 20/40 WS		Amount 88,003.0		Units lb		Sand Size 20/40			
5,796.9	5,866.8	69.9																Additive Proppant		Type 40/70 WS		Amount 2,487.0		Units lb		Sand Size 40/70			
6,135.8	5,775.2	360.6																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
6,237.9	5,778.8	459.1																26		12/19/2014		9,561.6		9,568.4		1911.50		1954.75	
6,522.6	5,781.7	740.9																Additive Proppant		Type 20/40 WS		Amount 37,415.0		Units lb		Sand Size 20/40			
6,677.5	5,781.4	796.1																Additive Proppant		Type 40/70 WS		Amount 2,758.1		Units lb		Sand Size 40/70			
6,831.7	5,786.0	745.7																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
7,115.5	5,784.0	331.5																27		12/19/2014		9,458.2		9,465.0		2573.10		2690.21	
7,264.1	5,785.0	379.1																Additive Proppant		Type 20/40 WS		Amount 105,902.0		Units lb		Sand Size 20/40			
7,410.8	5,785.3	325.5																Additive Proppant		Type 40/70 WS		Amount 2,875.0		Units lb		Sand Size 40/70			
7,556.4	5,782.4	374.0																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
7,708.7	5,780.0	368.7																28		12/19/2014		9,354.7		9,361.5		2285.10		2367.39	
7,900.9	5,781.8	369.1																Additive Proppant		Type 20/40 WS		Amount 73,477.0		Units lb		Sand Size 20/40			
8,010.2	5,783.4	366.8																Additive Proppant		Type 40/70 WS		Amount 2,956.7		Units lb		Sand Size 40/70			
8,120.4	5,787.8	332.6																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
8,314.6	5,786.0	328.6																29		12/19/2014		9,251.8		9,258.6		2862.30		2979.39	
8,423.9	5,785.2	338.7																Additive Proppant		Type 20/40 WS		Amount 106,081.0		Units lb		Sand Size 20/40			
8,534.4	5,784.2	350.2																Additive Proppant		Type 40/70 WS		Amount 2,677.0		Units lb		Sand Size 40/70			
8,637.8	5,784.1	353.7																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
8,741.1	5,786.1	355.0																30		12/20/2014		9,148.3		9,155.1		2142.90		2201.52	
8,935.4	5,802.0	353.4																Additive Proppant		Type 20/40 WS		Amount 51,832.2		Units lb		Sand Size 20/40			
9,044.9	5,803.0	341.9																Additive Proppant		Type 40/70 WS		Amount 2,616.9		Units lb		Sand Size 40/70			
9,155.2	5,802.7	352.5																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
9,258.5	5,801.2	357.3																31		12/20/2014		9,044.8		9,051.6		2363.20		2455.88	
9,258.5	5,801.2	357.3																Additive Proppant		Type 20/40 WS		Amount 83,237.0		Units lb		Sand Size 20/40			
9,452.1	5,786.2	363.9																Additive Proppant		Type 40/70 WS		Amount 2,849.0		Units lb		Sand Size 40/70			
9,561.7	5,786.7	365.0																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
9,671.6	5,791.0	360.6																32		12/20/2014		8,941.4		8,948.1		2375.30		2470.55	
9,865.8	5,783.8	368.2																Additive Proppant		Type 20/40 WS		Amount 85,593.2		Units lb		Sand Size 20/40			
9,975.1	5,785.9	369.1																Additive Proppant		Type 40/70 WS		Amount 2,877.3		Units lb		Sand Size 40/70			
10,078.7	5,781.7	357.0																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
10,160.1	5,786.3	363.8																33		12/20/2014		8,837.8		8,844.6		2505.30		2618.72	
10,295.9	5,788.4	361.1																Additive Proppant		Type 20/40 WS		Amount 102,506.0		Units lb		Sand Size 20/40			
10,422.9	5,786.8	356.1																Additive Proppant		Type 40/70 WS		Amount 2,844.0		Units lb		Sand Size 40/70			
10,538.1	5,784.5	353.6																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
10,679.1	5,787.8	361.3																34		12/20/2014		8,734.4		8,741.2		2486.40		2590.04	
10,807.1	5,788.3	368.8																Additive Proppant		Type 20/40 WS		Amount 93,363.6		Units lb		Sand Size 20/40			
10,934.1	5,787.2	366.9																Additive Proppant		Type 40/70 WS		Amount 2,900.3		Units lb		Sand Size 40/70			
11,062.0	5,786.7	365.3																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
11,190.0	5,786.0	364.0																35		12/20/2014		8,631.0		8,637.8		2483.10		2599.59	
11,317.9	5,784.2	363.7																Additive Proppant		Type 20/40 WS		Amount 105,255.0		Units lb		Sand Size 20/40			
11,445.9	5,782.1	363.8																Additive Proppant		Type 40/70 WS		Amount 2,943.0		Units lb		Sand Size 40/70			
11,565.0	5,782.7	362.3																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
11,701.1	5,786.8	364.7																36		12/20/2014		8,527.5		8,534.3		2579.40		2700.45	
13,361.9	5,782.1	368.8																Additive Proppant		Type 20/40 WS		Amount 109,541.1		Units lb		Sand Size 20/40			
13,490.2	5,785.8	364.1																Additive Proppant		Type 40/70 WS		Amount 2,890.9		Units lb		Sand Size 40/70			
13,607.0	5,788.4	360.6																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
13,745.1	5,781.1	364.1																37		12/20/2014		8,424.0		8,430.8		2561.00		2681.76	
13,848.4	5,781.6	366.8																Additive Proppant		Type 20/40 WS		Amount 109,301.0		Units lb		Sand Size 20/40			
13,898.9	5,782.3	366.1																Additive Proppant		Type 40/70 WS		Amount 2,864.0		Units lb		Sand Size 40/70			
13,909.1	5,782.0	367.1																Stg #		Start Date		Top Depth (ftKB)		Bottom Depth (ftKB)		Vol Clean Pump (bbl)		Vol Slurry (bbl)	
																		38		12/20/2014		8,320.5		8,327.3		2574.90		2695.87	



Lease Review  
Well Name: RAZOR 21B-0909

API Number 051233952900			WPC ID 1CO0761114			Well Permit Number			Field Name DJ Horizontal Niobrara			County Weld			State CO																										
Well Configuration Type Lateral/Horizontal						Orig KB Elv (ft) 4,854.10			Ground Elevation (ft) 4,837.30			Casing Flange Elevation (ft)			Tubing Head Elevation (ft)			Total Depth (ftKB) 13,915.0																							
Original Spud Date 10/14/2014			Completion Date 12/23/2014			Asset Group Redtail			Responsible Engineer Charles Ohlson			N/S Dist (ft) 327.0			N/S Ref FNL		E/W Dist (ft) 2,161.0		E/W Ref FEL																						
Lot		Quarter 1 NW		Quarter 2 NE		Quarter 3		Quarter 4		Section 21		Section Suffix		Section Type		Township 10 N		Township N/S Dir		Range 58 W		Meridian																			
Lateral/Horizontal - Original Hole, 3/13/2015 2:10:44 PM												Additive Proppant			Type 20/40 WS			Amount 109,386.5		Units lb		Sand Size 20/40																			
MD (ftKB)		D (ft)		n (in)		c (in)		l (in)		Vertical schematic (actual)												Logs		Additive Proppant			Type 40/70 WS			Amount 2,979.7		Units lb		Sand Size 40/70							
																								Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)		
21.7		21.7		3.8																		39			12/20/2014			8,217.2			8,224.0			2238.60			2319.39				
69.2		69.2		3.8																		Additive Proppant			Type 20/40 WS			Amount 72,065.0		Units lb		Sand Size 20/40									
1,740.5		1,736.0		4.5																		Additive Proppant			Type 40/70 WS			Amount 2,977.0		Units lb		Sand Size 40/70									
1,832.3		1,827.6		4.5																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
3,451.8		3,439.7		7.6																		40			12/20/2014			8,113.7			8,120.5			2569.60			2690.43				
4,632.2		4,633.2		4.1																		Additive Proppant			Type 20/40 WS			Amount 109,384.7		Units lb		Sand Size 20/40									
4,993.4		4,974.1		3.3																		Additive Proppant			Type 40/70 WS			Amount 2,849.1		Units lb		Sand Size 40/70									
5,131.9		5,112.5		3.7																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
5,756.9		5,685.0		38.5																		41			12/21/2014			8,010.3			8,017.1			2569.20			2690.41				
5,796.9		5,866.8		39.0																		Additive Proppant			Type 20/40 WS			Amount 109,819.0		Units lb		Sand Size 20/40									
6,135.8		5,772.4		34.0																		Additive Proppant			Type 40/70 WS			Amount 2,762.0		Units lb		Sand Size 40/70									
6,237.9		5,778.4		39.7																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
6,522.6		5,781.7		39.5																		42			12/21/2014			7,906.8			7,913.6			2380.60			2480.23				
6,677.5		5,781.4		39.0																		Additive Proppant			Type 20/40 WS			Amount 89,565.6		Units lb		Sand Size 20/40									
6,831.7		5,786.0		39.5																		Additive Proppant			Type 40/70 WS			Amount 2,978.7		Units lb		Sand Size 40/70									
7,115.5		5,784.0		38.8																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
7,264.1		5,785.0		39.1																		43			12/21/2014			7,803.4			7,810.2			2550.20			2669.76				
7,410.8		5,785.0		39.0																		Additive Proppant			Type 20/40 WS			Amount 108,266.0		Units lb		Sand Size 20/40									
7,556.4		5,785.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 2,786.0		Units lb		Sand Size 40/70									
7,708.7		5,785.0		39.5																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
7,900.9		5,781.0		39.0																		44			12/21/2014			7,702.0			7,708.8			2533.20			2653.17				
8,010.2		5,783.0		39.0																		Additive Proppant			Type 20/40 WS			Amount 108,553.5		Units lb		Sand Size 20/40									
8,120.4		5,787.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 2,879.4		Units lb		Sand Size 40/70									
8,314.6		5,785.0		39.0																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
8,423.9		5,785.0		39.5																		45			12/21/2014			7,556.4			7,563.2			2544.00			2665.69				
8,534.4		5,784.2		39.0																		Additive Proppant			Type 20/40 WS			Amount 110,088.0		Units lb		Sand Size 20/40									
8,637.8		5,784.1		39.7																		Additive Proppant			Type 40/70 WS			Amount 2,946.0		Units lb		Sand Size 40/70									
8,741.1		5,786.1		39.0																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
8,935.4		5,802.0		39.0																		46			12/21/2014			7,410.7			7,417.5			2507.90			2627.53				
9,044.9		5,803.0		39.7																		Additive Proppant			Type 20/40 WS			Amount 108,203.5		Units lb		Sand Size 20/40									
9,155.2		5,802.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 2,918.1		Units lb		Sand Size 40/70									
9,258.5		5,801.2		39.5																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
9,452.1		5,786.0		39.0																		47			12/21/2014			7,270.1			7,276.9			2538.10			2659.48				
9,561.7		5,783.0		39.5																		Additive Proppant			Type 20/40 WS			Amount 109,832.0		Units lb		Sand Size 20/40									
9,671.6		5,781.0		39.5																		Additive Proppant			Type 40/70 WS			Amount 2,910.0		Units lb		Sand Size 40/70									
9,865.8		5,783.0		39.0																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
9,975.1		5,783.0		39.0																		48			12/21/2014			7,121.4			7,128.1			2538.90			2660.30				
10,078.7		5,781.0		39.0																		Additive Proppant			Type 20/40 WS			Amount 109,779.5		Units lb		Sand Size 20/40									
10,160.1		5,786.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 2,983.9		Units lb		Sand Size 40/70									
10,295.9		5,784.4		39.5																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
10,422.9		5,786.0		39.7																		49			12/21/2014			6,972.7			6,979.4			2552.00			2674.92				
10,538.1		5,784.2		39.0																		Additive Proppant			Type 20/40 WS			Amount 111,158.0		Units lb		Sand Size 20/40									
10,679.1		5,787.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 3,017.0		Units lb		Sand Size 40/70									
10,807.1		5,786.0		39.0																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
10,934.1		5,787.2		39.5																		50			12/21/2014			6,825.0			6,831.8			2531.00			2653.22				
11,062.0		5,786.7		39.5																		Additive Proppant			Type 20/40 WS			Amount 110,682.5		Units lb		Sand Size 20/40									
11,190.0		5,786.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 2,838.6		Units lb		Sand Size 40/70									
11,317.9		5,784.5		39.7																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
11,445.9		5,785.1		39.0																		51			12/22/2014			6,677.4			6,684.2			2536.40			2658.90				
11,565.0		5,782.7		39.0																		Additive Proppant			Type 20/40 WS			Amount 110,756.0		Units lb		Sand Size 20/40									
11,701.1		5,786.0		39.0																		Additive Proppant			Type 40/70 WS			Amount 3,028.0		Units lb		Sand Size 40/70									
13,361.9		5,782.1		39.8																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
13,490.2		5,785.0		39.1																		52			12/22/2014			6,528.6			6,535.4			2546.30			2667.84				
13,607.0		5,784.4		39.5																		Additive Proppant			Type 20/40 WS			Amount 109,791.6		Units lb		Sand Size 20/40									
13,745.1		5,781.1		39.1																		Additive Proppant			Type 40/70 WS			Amount 2,989.0		Units lb		Sand Size 40/70									
13,848.4		5,781.0		39.0																		Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
13,898.9		5,782.0		39.1																		53			12/22/2014			6,379.8			6,386.6			2539.30			2661.66				
13,909.1		5,782.0		39.1																		Additive Proppant			Type 20/40 WS			Amount 110,665.0		Units lb		Sand Size 20/40									
																						Additive Proppant			Type 40/70 WS			Amount 2,989.0		Units lb		Sand Size 40/70									
																						Stg #			Start Date			Top Depth (ftKB)			Bottom Depth (ftKB)			Vol Clean Pump (bbl)			Vol Slurry (bbl)				
										54			12/22/2014			6,231.2			6,238.0			2705.70			2827.29																





Lease Review  
Well Name: RAZOR 21B-0909

API Number 051233952900				WPC ID 1CO0761114				Well Permit Number				Field Name DJ Horizontal Niobrara				County Weld				State CO									
Well Configuration Type Lateral/Horizontal								Orig KB Elv (ft) 4,854.10				Ground Elevation (ft) 4,837.30				Casing Flange Elevation (ft)				Tubing Head Elevation (ft)				Total Depth (ftKB) 13,915.0					
Original Spud Date 10/14/2014				Completion Date 12/23/2014				Asset Group Redtail				Responsible Engineer Charles Ohlson				N/S Dist (ft) 327.0				N/S Ref FNL		E/W Dist (ft) 2,161.0				E/W Ref FEL			
Lot		Quarter 1 NW		Quarter 2 NE		Quarter 3		Quarter 4		Section 21		Section Suffix		Section Type		Township 10 N		Township N/S Dir		Range 58		Range E/W Dir W		Meridian					
Lateral/Horizontal - Original Hole, 3/13/2015 2:10:47 PM												Additive Proppant				Type 20/40 WS				Amount 110,086.9		Units lb		Sand Size 20/40					
MD (ftKB)		D (ft KB)		n (		c )		l (		Vertical schematic (actual)		Logs		Additive Proppant				Type 40/70 WS				Amount 2,850.1		Units lb		Sand Size 40/70			
Tubing - Production set at 5,797.0ftKB on 1/18/2015 07:16																													
Set Depth (ftKB) 5,797.0								Comment												Run Date 1/18/2015				Pull Date					
Item Des								OD (in)				ID (in)				Len (ft)				Top (ftKB)				Btm (ftKB)					
Tubing Hanger								7								0.60				16.8				17.4					
Cross Over								2 7/8				1.950				0.35				17.4				17.8					
JT 2-3/8 EUE 8rd N-80 4.7# JT								2.3875				1.950				30.09				17.8				47.8					
JT 2-3/8 EUE 8rd N-80 4.7# PUP								2.3875				1.950				10.10				47.8				57.9					
JT																													
JT 2-3/8 EUE 8rd N-80 4.7# PUP								2.3875				1.950				9.11				57.9				67.1					
JT																													
JT 2-3/8 EUE 8rd N-80 4.7# PUP								2.3875				1.950				2.03				67.1				69.1					
JT																													
Tubing								2.3875				1.950				1,759.23				69.1				1,828.3					
Gas Lift Mandrel								2.3875				1.950				4.05				1,828.3				1,832.4					
Tubing								2.3875				1.950				1,024.37				1,832.4				2,856.7					
Gas Lift Mandrel								2.3875				1.950				4.05				2,856.7				2,860.8					
Tubing								2.3875				1.950				586.93				2,860.8				3,447.7					
Gas Lift Mandrel								2.3875				1.950				4.05				3,447.7				3,451.8					
Tubing								2.3875				1.950				617.54				3,451.8				4,069.3					
Gas Lift Mandrel								2.3875				1.950				4.05				4,069.3				4,073.4					
Tubing								2.3875				1.950				554.92				4,073.4				4,628.3					
Gas Lift Mandrel								2.3875				1.950				4.05				4,628.3				4,632.3					
Tubing								2.3875				1.950				495.49				4,632.3				5,127.8					
Gas Lift Mandrel								2.3875				1.950				4.05				5,127.8				5,131.9					
Tubing								2.3875				1.950				31.09				5,131.9				5,163.0					
Profile Nipple								2.3875				1.950				1.10				5,163.0				5,164.1					
Tubing								2.3875				1.950				588.80				5,164.1				5,752.9					
Gas Lift Mandrel								2.3875				1.950				4.05				5,752.9				5,756.9					
Tubing								2.3875				1.950				30.92				5,756.9				5,787.8					
On-Off Tool								3.81				1.950				1.34				5,787.8				5,789.2					
Packer								3 7/8				1.950				6.75				5,789.2				5,795.9					
Pump Out Plug												1.950				1.10				5,795.9				5,797.0					
																				5,797.0				5,797.0					
Rod Strings																													
Rod Description												Run Date								Pull Date									
Item Des								OD (in)				Len (ft)				Top (ftKB)				Btm (ftKB)									
Other Strings																													
Set Depth (ftKB)								Comment												Run Date				Pull Date					
Item Des								OD (in)				Len (ft)				Top (ftKB)				Btm (ftKB)									
Other In Hole																													
Des								OD (in)				Run Date				Pull Date				Top (ftKB)				Btm (ftKB)					
CFP								4				12/9/2014				1/17/2015				10,270.0				10,272.0					
CFP								4				12/8/2014				1/17/2015				10,455.0				10,457.0					
CFP								4				12/8/2014				1/17/2015				10,619.0				10,621.0					
CFP								4				12/8/2014				1/17/2015				10,839.0				10,841.0					
CFP								4				12/8/2014				1/17/2015				11,032.0				11,034.0					
CFP								4				12/8/2014				1/17/2015				11,222.0				11,224.0					
CFP								4				12/7/2014				1/17/2015				11,414.0				11,416.0					
CFP								4				12/7/2014				1/17/2015				11,600.0				11,602.0					
CFP								4				12/7/2014				1/17/2015				11,782.0				11,784.0					
CFP								4				12/7/2014				1/17/2015				13,530.0				13,532.0					
CFP								4				12/5/2014				1/17/2015				13,685.0				13,687.0					
Bottom Hole Cores																													
Date								Core #				Top (ftKB)				Btm (ftKB)				Recov (ft)									