

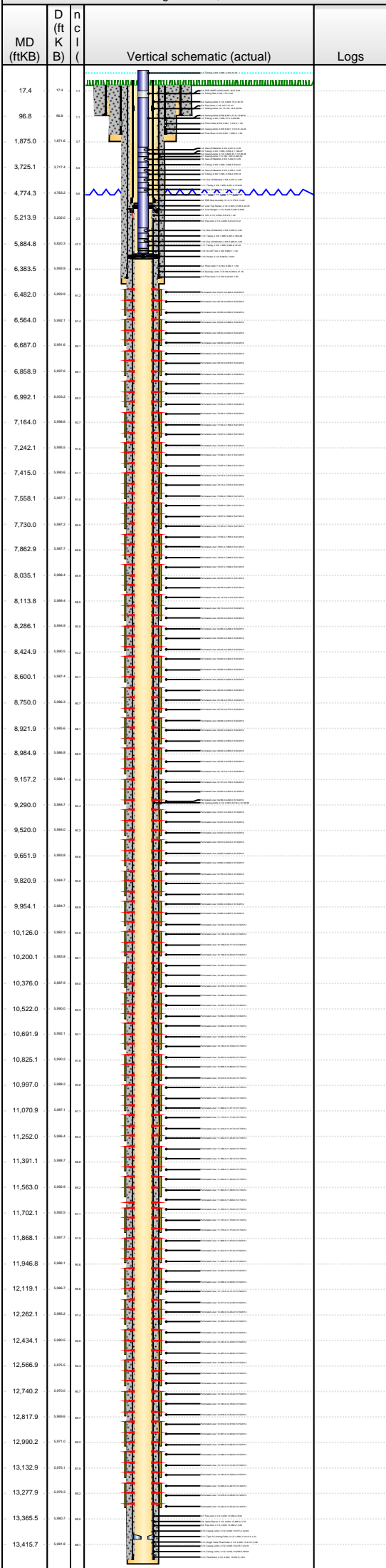


Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200		WPC ID 1CO0761003		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) 13,510.0			
Original Spud Date 2/7/2014		Completion Date 6/22/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,397.0		N/S Ref FNL	E/W Dist (ft) 888.0		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, 10/14/2014 8:07:57 AM



Wellbore Sections						
Wellbore Name		Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
Original Hole		1/1/2014	20	16.8	96.8	
Original Hole		2/7/2014	13 1/2	96.8	1,875.0	
Original Hole		2/9/2014	8 3/4	1,875.0	6,441.0	
Original Hole		2/13/2014	6 1/8	6,441.0	13,510.0	
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, 1,857.8ftKB						
OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
9 5/8	36.00	J-55	16.8	16.8		LANDING LOINT
9 5/8	36.00	J-55	16.8	21.8	5.00	PUP JOINT
9 5/8	36.00	J-55	21.8	1,812.4	1,790.61	Casing Joints
9 5/8	36.00	J-55	1,812.4	1,813.9	1.50	Float Collar
9 5/8	36.00	J-55	1,813.9	1,856.3	42.40	Casing Joints
9 5/8	36.00	J-55	1,856.3	1,857.8	1.50	Float Shoe
Frac String, 5,185.5ftKB						
OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
		P-110	13.0	15.0	2.00	Liner Hanger
4 1/2	15.10	P-110	15.0	45.7	30.70	Casing Joints
4 1/2	15.10	P-110	45.7	67.1	21.43	Pup Joints
4 1/2	15.10	P-110	67.1	5,175.5	5,108.38	Casing Joints
5 1/4			5,175.5	5,185.5	10.00	PBR Seal Assmby
Intermediate Csg, 6,426.3ftKB						
OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7	29.00	L-80	16.8	6,382.1	6,365.32	Casing Joints
7	29.00	L-80	6,382.1	6,383.6	1.50	Float collar
7	29.00	L-80	6,383.6	6,424.8	41.16	Spacing Joints
7	29.00	L-80	6,424.8	6,426.3	1.50	Float shoe
Liner, 13,500.0ftKB						
OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
4 1/2	11.60	L-80	5,185.5	5,185.5	0.00	Casing Joints
4 1/2	11.60	L-80	5,185.5	5,206.3	20.78	Liner Top Packer
4 1/2	11.60	L-80	5,206.3	5,212.9	6.65	Liner Hanger
4 1/2	11.60	L-80	5,212.9	5,214.0	1.02	X/O
4 1/2	11.60	L-80	5,214.0	5,219.4	5.47	Pup Joint
4 1/2	11.60	L-80	5,219.4	13,359.4	8,139.98	Casing Joints
4 1/2	11.60	L-80	13,359.4	13,365.4	6.02	Pup Joint
4 1/2	11.60	L-80	13,365.4	13,369.2	3.75	Alpha Sleeve
4 1/2	11.60	L-80	13,369.2	13,371.2	2.06	Pup Joint
4 1/2	11.60	L-80	13,371.2	13,413.3	42.08	Casing Joints
4 1/2	11.60	L-80	13,413.3	13,414.8	1.43	Type III Landing Collar
4 1/2	11.60	L-80	13,414.8	13,415.7	0.98	Single Valve Float Collar
4 1/2	11.60	L-80	13,415.7	13,458.9	43.16	Casing Joints
4 1/2	11.60	L-80	13,458.9	13,497.5	38.58	Casing Joints
4 1/2	11.60	L-80	13,497.5	13,500.0	2.53	Float Shoe
Cement Stages						
Des		Pump Start Date	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Conductor Cement		9/13/2013		16.8	96.8	Returns to Surface
Surface Casing Cement		2/8/2014		16.8	1,857.8	Returns to Surface
Intermediate Casing Cement		2/12/2014		16.8	6,426.2	Returns to Surface
Liner Cement		2/20/2014		5,185.5	13,500.0	Volume Calculations
Perforations						
Type of Hole		Date	Top (ftKB)	Btm (ftKB)	Zone	
Perforated Liner		5/22/2014	6,481.0	6,482.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,518.0	6,520.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,558.0	6,560.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,564.0	6,566.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,642.0	6,644.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,685.0	6,687.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,722.0	6,724.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,816.0	6,818.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,859.0	6,861.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,900.0	6,902.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	6,990.0	6,992.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	7,033.0	7,035.0	Niobrara, Original Hole	
Perforated Liner		5/22/2014	7,076.0	7,078.0	Niobrara, Original Hole	
Perforated Liner		5/21/2014	7,164.0	7,166.0	Niobrara, Original Hole	
Perforated Liner		5/21/2014	7,207.0	7,209.0	Niobrara, Original Hole	
Perforated Liner		5/21/2014	7,240.0	7,242.0	Niobrara, Original Hole	



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200		WPC ID 1CO0761003		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) 13,510.0		
Original Spud Date 2/7/2014		Completion Date 6/22/2014		Asset Group Redtail			Responsible Engineer Andrew Fish		N/S Dist (ft) 2,397.0		N/S Ref FNL	E/W Dist (ft) 888.0	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, 10/14/2014 8:07:59 AM					Perforations				
MD (ftKB)	D (ft K B)	n c l (Vertical schematic (actual)	Logs	Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
17.4	174	17			Perforated Liner	5/21/2014	7,339.0	7,341.0	Niobrara, Original Hole
96.8	968	17			Perforated Liner	5/21/2014	7,382.0	7,384.0	Niobrara, Original Hole
1,875.0	1,874.6	17			Perforated Liner	5/21/2014	7,415.0	7,417.0	Niobrara, Original Hole
3,725.1	3,717.4	17			Perforated Liner	5/21/2014	7,513.0	7,515.0	Niobrara, Original Hole
4,774.3	4,760.3	17			Perforated Liner	5/21/2014	7,556.0	7,558.0	Niobrara, Original Hole
5,213.9	5,200.0	17			Perforated Liner	5/21/2014	7,589.0	7,591.0	Niobrara, Original Hole
5,884.8	5,868.3	17			Perforated Liner	5/21/2014	7,687.0	7,689.0	Niobrara, Original Hole
6,383.5	6,368.0	17			Perforated Liner	5/21/2014	7,730.0	7,732.0	Niobrara, Original Hole
6,482.0	6,465.0	17			Perforated Liner	5/21/2014	7,763.0	7,765.0	Niobrara, Original Hole
6,564.0	6,546.0	17			Perforated Liner	5/21/2014	7,763.0	7,765.0	Niobrara, Original Hole
6,687.0	6,667.0	17			Perforated Liner	5/21/2014	7,861.0	7,863.0	Niobrara, Original Hole
6,858.9	6,837.0	17			Perforated Liner	5/21/2014	7,861.0	7,863.0	Niobrara, Original Hole
6,992.1	6,969.0	17			Perforated Liner	5/21/2014	7,904.0	7,906.0	Niobrara, Original Hole
7,164.0	7,139.0	17			Perforated Liner	5/21/2014	7,937.0	7,939.0	Niobrara, Original Hole
7,242.1	7,215.0	17			Perforated Liner	5/21/2014	8,035.0	8,037.0	Niobrara, Original Hole
7,415.0	7,385.0	17			Perforated Liner	5/21/2014	8,079.0	8,081.0	Niobrara, Original Hole
7,558.1	7,527.0	17			Perforated Liner	5/21/2014	8,112.0	8,114.0	Niobrara, Original Hole
7,730.0	7,697.0	17			Perforated Liner	5/20/2014	8,210.0	8,212.0	Niobrara, Original Hole
7,862.9	7,829.0	17			Perforated Liner	5/20/2014	8,252.0	8,254.0	Niobrara, Original Hole
8,035.1	8,000.0	17			Perforated Liner	5/20/2014	8,286.0	8,288.0	Niobrara, Original Hole
8,113.8	8,077.0	17			Perforated Liner	5/20/2014	8,382.0	8,384.0	Niobrara, Original Hole
8,286.1	8,249.0	17			Perforated Liner	5/20/2014	8,423.0	8,425.0	Niobrara, Original Hole
8,424.9	8,385.0	17			Perforated Liner	5/20/2014	8,460.0	8,462.0	Niobrara, Original Hole
8,600.1	8,559.0	17			Perforated Liner	5/20/2014	8,556.0	8,558.0	Niobrara, Original Hole
8,750.0	8,707.0	17			Perforated Liner	5/20/2014	8,600.0	8,602.0	Niobrara, Original Hole
8,921.9	8,877.0	17			Perforated Liner	5/20/2014	8,634.0	8,636.0	Niobrara, Original Hole
8,984.9	8,939.0	17			Perforated Liner	5/20/2014	8,748.0	8,750.0	Niobrara, Original Hole
9,157.2	9,110.0	17			Perforated Liner	5/20/2014	8,770.0	8,772.0	Niobrara, Original Hole
9,290.0	9,241.0	17			Perforated Liner	5/20/2014	8,808.0	8,810.0	Niobrara, Original Hole
9,520.0	9,469.0	17			Perforated Liner	5/20/2014	8,922.0	8,924.0	Niobrara, Original Hole
9,651.9	9,600.0	17			Perforated Liner	5/20/2014	8,950.0	8,952.0	Niobrara, Original Hole
9,820.9	9,767.0	17			Perforated Liner	5/20/2014	8,983.0	8,985.0	Niobrara, Original Hole
9,954.1	9,900.0	17			Perforated Liner	5/20/2014	9,076.0	9,078.0	Niobrara, Original Hole
10,126.0	10,071.0	17			Perforated Liner	5/20/2014	9,110.0	9,112.0	Niobrara, Original Hole
10,200.1	10,144.0	17			Perforated Liner	5/20/2014	9,157.0	9,159.0	Niobrara, Original Hole
10,378.0	10,321.0	17			Perforated Liner	5/20/2014	9,250.0	9,252.0	Niobrara, Original Hole
10,522.0	10,464.0	17			Perforated Liner	5/20/2014	9,288.0	9,290.0	Niobrara, Original Hole
10,691.9	10,634.0	17			Perforated Liner	5/19/2014	9,331.0	9,333.0	Niobrara, Original Hole
10,825.1	10,767.0	17			Perforated Liner	5/19/2014	9,472.0	9,474.0	Niobrara, Original Hole
10,997.0	10,939.0	17			Perforated Liner	5/19/2014	9,520.0	9,522.0	Niobrara, Original Hole
11,070.9	11,012.0	17			Perforated Liner	5/19/2014	9,610.0	9,612.0	Niobrara, Original Hole
11,252.0	11,193.0	17			Perforated Liner	5/19/2014	9,650.0	9,652.0	Niobrara, Original Hole
11,391.1	11,332.0	17			Perforated Liner	5/19/2014	9,690.0	9,692.0	Niobrara, Original Hole
11,563.0	11,504.0	17			Perforated Liner	5/19/2014	9,778.0	9,780.0	Niobrara, Original Hole
11,702.1	11,643.0	17			Perforated Liner	5/19/2014	9,821.0	9,823.0	Niobrara, Original Hole
11,868.1	11,801.0	17			Perforated Liner	5/19/2014	9,860.0	9,862.0	Niobrara, Original Hole
11,946.8	11,887.0	17			Perforated Liner	5/18/2014	9,952.0	9,954.0	Niobrara, Original Hole
12,119.1	12,063.0	17			Perforated Liner	5/18/2014	9,995.0	9,997.0	Niobrara, Original Hole
12,262.1	12,203.0	17			Perforated Liner	5/18/2014	10,032.0	10,034.0	Niobrara, Original Hole
12,434.1	12,374.0	17			Perforated Liner	5/18/2014	10,126.0	10,128.0	Niobrara, Original Hole
12,566.9	12,507.0	17			Perforated Liner	5/18/2014	10,169.0	10,171.0	Niobrara, Original Hole
12,740.2	12,680.0	17			Perforated Liner	5/18/2014	10,198.0	10,200.0	Niobrara, Original Hole
12,817.9	12,757.0	17			Perforated Liner	5/18/2014	10,300.0	10,302.0	Niobrara, Original Hole
12,990.2	12,929.0	17			Perforated Liner	5/18/2014	10,343.0	10,345.0	Niobrara, Original Hole
13,132.9	13,070.0	17			Perforated Liner	5/18/2014	10,376.0	10,378.0	Niobrara, Original Hole
13,277.9	13,215.0	17			Perforated Liner	5/18/2014	10,480.0	10,482.0	Niobrara, Original Hole
13,365.5	13,302.0	17			Perforated Liner	5/17/2014	10,520.0	10,522.0	Niobrara, Original Hole
13,415.7	13,351.0	17			Perforated Liner	5/17/2014	10,564.0	10,566.0	Niobrara, Original Hole
			Perforated Liner	5/17/2014	10,649.0	10,651.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	10,692.0	10,694.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	10,734.0	10,736.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	10,823.0	10,825.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	10,866.0	10,868.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	10,910.0	10,912.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	10,997.0	10,999.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,040.0	11,042.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,069.0	11,071.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,172.0	11,174.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,215.0	11,217.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,252.0	11,254.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,346.0	11,348.0	Niobrara, Original Hole		
			Perforated Liner	5/17/2014	11,389.0	11,391.0	Niobrara, Original Hole		



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200		WPC ID 1CO0761003		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 (ft)KB 13,510.0		
Original Spud Date 2/7/2014		Completion Date 6/22/2014		Asset Group Redtail			Responsible Engineer Andrew Fish		N/S Dist (ft) 2,397.0		N/S Ref FNL	E/W Dist (ft) 888.0	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, 10/14/2014 8:08:01 AM					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		5/17/2014	11,426.0	11,428.0	Niobrara, Original Hole										
						Perforated Liner		5/17/2014	11,520.0	11,522.0	Niobrara, Original Hole										
17.4	17.4	17.4	17.4			Perforated Liner		5/17/2014	11,563.0	11,565.0	Niobrara, Original Hole										
96.8	96.8	96.8	96.8			Perforated Liner		5/17/2014	11,640.0	11,606.0	Niobrara, Original Hole										
1,875.0	1,875.0	1,875.0	1,875.0			Perforated Liner		5/17/2014	11,700.0	11,702.0	Niobrara, Original Hole										
3,725.1	3,725.1	3,725.1	3,725.1			Perforated Liner		5/17/2014	11,737.0	11,739.0	Niobrara, Original Hole										
4,774.3	4,774.3	4,774.3	4,774.3			Perforated Liner		5/17/2014	11,770.0	11,772.0	Niobrara, Original Hole										
5,213.9	5,213.9	5,213.9	5,213.9			Perforated Liner		5/16/2014	11,868.0	11,870.0	Niobrara, Original Hole										
5,884.8	5,884.8	5,884.8	5,884.8			Perforated Liner		5/16/2014	11,912.0	11,914.0	Niobrara, Original Hole										
6,383.5	6,383.5	6,383.5	6,383.5			Perforated Liner		5/16/2014	11,945.0	11,947.0	Niobrara, Original Hole										
6,482.0	6,482.0	6,482.0	6,482.0			Perforated Liner		5/16/2014	12,043.0	12,045.0	Niobrara, Original Hole										
6,564.0	6,564.0	6,564.0	6,564.0			Perforated Liner		5/16/2014	12,086.0	12,088.0	Niobrara, Original Hole										
6,687.0	6,687.0	6,687.0	6,687.0			Perforated Liner		5/16/2014	12,119.0	12,121.0	Niobrara, Original Hole										
6,858.9	6,858.9	6,858.9	6,858.9			Perforated Liner		5/16/2014	12,217.0	12,219.0	Niobrara, Original Hole										
6,992.1	6,992.1	6,992.1	6,992.1			Perforated Liner		5/16/2014	12,260.0	12,262.0	Niobrara, Original Hole										
7,164.0	7,164.0	7,164.0	7,164.0			Perforated Liner		5/16/2014	12,300.0	12,302.0	Niobrara, Original Hole										
7,242.1	7,242.1	7,242.1	7,242.1			Perforated Liner		5/16/2014	12,391.0	12,393.0	Niobrara, Original Hole										
7,415.0	7,415.0	7,415.0	7,415.0			Perforated Liner		5/16/2014	12,434.0	12,436.0	Niobrara, Original Hole										
7,558.1	7,558.1	7,558.1	7,558.1			Perforated Liner		5/16/2014	12,467.0	12,469.0	Niobrara, Original Hole										
7,730.0	7,730.0	7,730.0	7,730.0			Perforated Liner		5/15/2014	12,565.0	12,567.0	Niobrara, Original Hole										
7,862.9	7,862.9	7,862.9	7,862.9			Perforated Liner		5/15/2014	12,608.0	12,610.0	Niobrara, Original Hole										
8,035.1	8,035.1	8,035.1	8,035.1			Perforated Liner		5/15/2014	12,641.0	12,643.0	Niobrara, Original Hole										
8,113.8	8,113.8	8,113.8	8,113.8			Perforated Liner		5/15/2014	12,740.0	12,742.0	Niobrara, Original Hole										
8,286.1	8,286.1	8,286.1	8,286.1			Perforated Liner		5/15/2014	12,783.0	12,785.0	Niobrara, Original Hole										
8,424.9	8,424.9	8,424.9	8,424.9			Perforated Liner		5/15/2014	12,816.0	12,818.0	Niobrara, Original Hole										
8,600.1	8,600.1	8,600.1	8,600.1			Perforated Liner		5/15/2014	12,914.0	12,916.0	Niobrara, Original Hole										
8,750.0	8,750.0	8,750.0	8,750.0			Perforated Liner		5/15/2014	12,957.0	12,959.0	Niobrara, Original Hole										
8,921.9	8,921.9	8,921.9	8,921.9			Perforated Liner		5/15/2014	12,990.0	12,992.0	Niobrara, Original Hole										
8,984.9	8,984.9	8,984.9	8,984.9			Perforated Liner		5/15/2014	13,088.0	13,090.0	Niobrara, Original Hole										
9,157.2	9,157.2	9,157.2	9,157.2			Perforated Liner		5/15/2014	13,131.0	13,133.0	Niobrara, Original Hole										
9,290.0	9,290.0	9,290.0	9,290.0			Perforated Liner		5/15/2014	13,164.0	13,166.0	Niobrara, Original Hole										
9,520.0	9,520.0	9,520.0	9,520.0			Perforated Liner		5/14/2014	13,265.0	13,267.0	Niobrara, Original Hole										
9,651.9	9,651.9	9,651.9	9,651.9			Perforated Liner		5/14/2014	13,278.0	13,280.0	Niobrara, Original Hole										
9,820.9	9,820.9	9,820.9	9,820.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
9,954.1	9,954.1	9,954.1	9,954.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,126.0	10,126.0	10,126.0	10,126.0			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,200.1	10,200.1	10,200.1	10,200.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,376.0	10,376.0	10,376.0	10,376.0			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,522.0	10,522.0	10,522.0	10,522.0			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,691.9	10,691.9	10,691.9	10,691.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,825.1	10,825.1	10,825.1	10,825.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
10,997.0	10,997.0	10,997.0	10,997.0			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,070.9	11,070.9	11,070.9	11,070.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,252.0	11,252.0	11,252.0	11,252.0			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,391.1	11,391.1	11,391.1	11,391.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,563.0	11,563.0	11,563.0	11,563.0			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,702.1	11,702.1	11,702.1	11,702.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,868.1	11,868.1	11,868.1	11,868.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
11,946.8	11,946.8	11,946.8	11,946.8			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,119.1	12,119.1	12,119.1	12,119.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,262.1	12,262.1	12,262.1	12,262.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,434.1	12,434.1	12,434.1	12,434.1			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,566.9	12,566.9	12,566.9	12,566.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,740.2	12,740.2	12,740.2	12,740.2			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,817.9	12,817.9	12,817.9	12,817.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
12,990.2	12,990.2	12,990.2	12,990.2			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
13,132.9	13,132.9	13,132.9	13,132.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
13,277.9	13,277.9	13,277.9	13,277.9			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
13,365.5	13,365.5	13,365.5	13,365.5			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
13,415.7	13,415.7	13,415.7	13,415.7			Perforated Liner		5/14/2014	13,322.0	13,324.0	Niobrara, Original Hole										
						Stimulations & Treatments															
						Sand Frac on 5/14/2014 06:00															
						Comment Treatment End Date:5/22/2014; Number of staged intervals: 40; Total Benzoic Acid used: 878bbl; Min frac gradient: 0.786 psi/ft; Number of perfs: 1440; Slickwater 28107bbl; QuadraFrac Crosslink Gel 67025; Linear Gel 20402.						Min Top De...	Max Btm De...	Frac Length (ft)							
						Total Clean Volu... Vol Slurry Tot (bbl) Proppant Desig... Proppant Frm (lb) P Max (psi) Avg Treat... Avg Treat... Max Tre... Frac Gr...						116689.80	121782.80	5,798,420.0	5,041,815.1	8,444.0	4,405.0	45.60	72.00	0.80	
						Total Add Amount Proppant 16/30 WS 4586625 lb; Proppant 20/40 WS 300600.1 lb; Proppant 40/70 WS 154590 lb															
						Stim/Treat Fluids															
						Fluid Name															
						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	5/14/2014	13,265.0	13,324.0	2993.40	3038.10	QuadraFrac XL Gel:1701 bbl; Linear Gel:497 bbl; Slickwater:1111 bbl; Benzoic Acid:24bbl									
						Stim/Treat Additives															
						Stg #	Add	Type		Amount		Units	Sand Size								
						1	Proppant	16/30 WS		38,736.4		lb	16/30								
						1	Proppant	40/70 WS		2,811.4		lb	40/70								
						Interval 2															
						Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment									
						2	5/14/2014	13,088.0	13,166.0	3433.00	3502.80	QuadraFrac XL Gel:1954 bbl; Linear Gel:502 bbl; Slickwater:783 bbl; Benzoic Acid:194bbl									
						Stim/Treat Additives															
						Stg #	Add	Type		Amount		Units	Sand Size								
						2	Proppant	16/30 WS		60,914.0		lb	16/30								
						2	Proppant	40/70 WS		3,953.8		lb	40/70								
						Interval 3															
						Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment									
						3	5/15/2014	12,914.0	12,992.0	3283.60	3369.30	QuadraFrac XL Gel:1470 bbl; Linear Gel:1381 bbl; Slickwater:649 bbl; Benzoic Acid:26bbl									
						Stim/Treat Additives															
						Stg #	Add	Type		Amount		Units	Sand Size								
						3	Proppant	16/30 WS		75,166.6		lb	16/30								
						3	Proppant	40/70 WS		4,464.2		lb	40/70								



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200			WPC ID 1CO0761003			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) 13,510.0				
Original Spud Date 2/7/2014			Completion Date 6/22/2014			Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,397.0		N/S Ref FNL		E/W Dist (ft) 888.0		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, 10/14/2014 8:08:03 AM										Stim/Treat Stages									
<div>MD (ftKB)</div> <div>17.4</div> <div>96.8</div> <div>1,875.0</div> <div>3,725.1</div> <div>4,774.3</div> <div>5,213.9</div> <div>5,884.8</div> <div>6,383.5</div> <div>6,482.0</div> <div>6,564.0</div> <div>6,687.0</div> <div>6,858.9</div> <div>6,992.1</div> <div>7,164.0</div> <div>7,242.1</div> <div>7,415.0</div> <div>7,558.1</div> <div>7,730.0</div> <div>7,862.9</div> <div>8,035.1</div> <div>8,113.8</div> <div>8,286.1</div> <div>8,424.9</div> <div>8,600.1</div> <div>8,750.0</div> <div>8,921.9</div> <div>8,984.9</div> <div>9,157.2</div> <div>9,290.0</div> <div>9,520.0</div> <div>9,651.9</div> <div>9,820.9</div> <div>9,954.1</div> <div>10,126.0</div> <div>10,200.1</div> <div>10,376.0</div> <div>10,522.0</div> <div>10,691.9</div> <div>10,825.1</div> <div>10,997.0</div> <div>11,070.9</div> <div>11,252.0</div> <div>11,391.1</div> <div>11,563.0</div> <div>11,702.1</div> <div>11,868.1</div> <div>11,946.8</div> <div>12,119.1</div> <div>12,262.1</div> <div>12,434.1</div> <div>12,566.9</div> <div>12,740.2</div> <div>12,817.9</div> <div>12,990.2</div> <div>13,132.9</div> <div>13,277.9</div> <div>13,365.5</div> <div>13,415.7</div>	<div>D (ft K B)</div> <div>174</div> <div>968</div> <div>1,875.0</div> <div>3,725.1</div> <div>4,774.3</div> <div>5,213.9</div> <div>5,884.8</div> <div>6,383.5</div> <div>6,482.0</div> <div>6,564.0</div> <div>6,687.0</div> <div>6,858.9</div> <div>6,992.1</div> <div>7,164.0</div> <div>7,242.1</div> <div>7,415.0</div> <div>7,558.1</div> <div>7,730.0</div> <div>7,862.9</div> <div>8,035.1</div> <div>8,113.8</div> <div>8,286.1</div> <div>8,424.9</div> <div>8,600.1</div> <div>8,750.0</div> <div>8,921.9</div> <div>8,984.9</div> <div>9,157.2</div> <div>9,290.0</div> <div>9,520.0</div> <div>9,651.9</div> <div>9,820.9</div> <div>9,954.1</div> <div>10,126.0</div> <div>10,200.1</div> <div>10,376.0</div> <div>10,522.0</div> <div>10,691.9</div> <div>10,825.1</div> <div>10,997.0</div> <div>11,070.9</div> <div>11,252.0</div> <div>11,391.1</div> <div>11,563.0</div> <div>11,702.1</div> <div>11,868.1</div> <div>11,946.8</div> <div>12,119.1</div> <div>12,262.1</div> <div>12,434.1</div> <div>12,566.9</div> <div>12,740.2</div> <div>12,817.9</div> <div>12,990.2</div> <div>13,132.9</div> <div>13,277.9</div> <div>13,365.5</div> <div>13,415.7</div>	<div>n (ft K B)</div> <div>174</div> <div>968</div> <div>1,875.0</div> <div>3,725.1</div> <div>4,774.3</div> <div>5,213.9</div> <div>5,884.8</div> <div>6,383.5</div> <div>6,482.0</div> <div>6,564.0</div> <div>6,687.0</div> <div>6,858.9</div> <div>6,992.1</div> <div>7,164.0</div> <div>7,242.1</div> <div>7,415.0</div> <div>7,558.1</div> <div>7,730.0</div> <div>7,862.9</div> <div>8,035.1</div> <div>8,113.8</div> <div>8,286.1</div> <div>8,424.9</div> <div>8,600.1</div> <div>8,750.0</div> <div>8,921.9</div> <div>8,984.9</div> <div>9,157.2</div> <div>9,290.0</div> <div>9,520.0</div> <div>9,651.9</div> <div>9,820.9</div> <div>9,954.1</div> <div>10,126.0</div> <div>10,200.1</div> <div>10,376.0</div> <div>10,522.0</div> <div>10,691.9</div> <div>10,825.1</div> <div>10,997.0</div> <div>11,070.9</div> <div>11,252.0</div> <div>11,391.1</div> <div>11,563.0</div> <div>11,702.1</div> <div>11,868.1</div> <div>11,946.8</div> <div>12,119.1</div> <div>12,262.1</div> <div>12,434.1</div> <div>12,566.9</div> <div>12,740.2</div> <div>12,817.9</div> <div>12,990.2</div> <div>13,132.9</div> <div>13,277.9</div> <div>13,365.5</div> <div>13,415.7</div>	<div>Vertical schematic (actual)</div> <div></div>	Logs	Interval 4														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					4	5/15/2014	12,740.0	12,818.0	3127.00	3213.80	QuadraFrac XL Gel:1530 bbl; Linear Gel:941 bbl; Slickwater:604 bbl; Benzoic Acid:23bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					4	Proppant	16/30 WS		76,411.7		lb	16/30							
					4	Proppant	40/70 WS		4,203.5		lb	40/70							
					Interval 5														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					5	5/15/2014	12,565.0	12,643.0	2202.40	2208.20	QuadraFrac XL Gel:1205 bbl; Linear Gel:622 bbl; Slickwater:303 bbl; Benzoic Acid:23bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					5	Proppant	16/30 WS		3,118.0		lb	16/30							
					5	Proppant	20/40 WS		3,013.2		lb	20/40							
					5	Proppant	40/70 WS		2,377.4		lb	40/70							
					Interval 6														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					6	5/16/2014	12,391.0	12,469.0	3511.00	3659.80	QuadraFrac XL Gel:2319 bbl; Linear Gel:503 bbl; Slickwater:619 bbl; Benzoic Acid:23bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					6	Proppant	16/30 WS		139,227.0		lb	16/30							
					6	Proppant	20/40 WS		134,549.6		lb	20/40							
					6	Proppant	40/70 WS		3,661.7		lb	40/70							
					Interval 7														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					7	5/16/2014	12,217.0	12,302.0	2574.70	2661.20	QuadraFrac XL Gel:1431 bbl; Linear Gel:479 bbl; Slickwater:600 bbl; Benzoic Acid:24bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					7	Proppant	16/30 WS		76,050.9		lb	16/30							
					7	Proppant	40/70 WS		4,285.4		lb	40/70							
					Interval 8														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					8	5/16/2014	12,043.0	12,121.0	3224.60	3404.30	QuadraFrac XL Gel:2083 bbl; Linear Gel:496 bbl; Slickwater:590 bbl; Benzoic Acid:25bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					8	Proppant	16/30 WS		168,705.0		lb	16/30							
					8	Proppant	20/40 WS		163,037.3		lb	20/40							
					8	Proppant	40/70 WS		3,921.0		lb	40/70							
					Interval 9														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					9	5/16/2014	11,868.0	11,947.0	3000.70	3157.60	QuadraFrac XL Gel:1857 bbl; Linear Gel:496 bbl; Slickwater:596 bbl; Benzoic Acid:25bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					9	Proppant	16/30 WS		141,532.1		lb	16/30							
					9	Proppant	40/70 WS		4,226.7		lb	40/70							
					Interval 10														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					10	5/16/2014	11,700.0	11,772.0	2940.80	3103.90	QuadraFrac XL Gel:1808 bbl; Linear Gel:498 bbl; Slickwater:611 bbl; Benzoic Acid:24bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					10	Proppant	16/30 WS		147,335.6		lb	16/30							
					10	Proppant	40/70 WS		4,129.8		lb	40/70							
					Interval 11														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					11	5/17/2014	11,520.0	11,606.0	2942.10	3095.00	QuadraFrac XL Gel:1799 bbl; Linear Gel:503 bbl; Slickwater:587 bbl; Benzoic Acid:23bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
					11	Proppant	16/30 WS		137,605.5		lb	16/30							
					11	Proppant	40/70 WS		4,409.6		lb	40/70							
					Interval 12														
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment								
					12	5/17/2014	11,346.0	11,428.0	3124.10	3288.10	QuadraFrac XL Gel:1948 bbl; Linear Gel:451 bbl; Slickwater:660 bbl; Benzoic Acid:24bbl								
					Stim/Treat Additives														
					Stg #	Add	Type		Amount		Units	Sand Size							
12	Proppant	16/30 WS		148,234.8		lb	16/30												



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200		WPC ID 1CO0761003		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 (ft)KB 13,510.0			
Original Spud Date 2/7/2014		Completion Date 6/22/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,397.0		N/S Ref FNL	E/W Dist (ft) 888.0		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, 10/14/2014 8:08:05 AM					Stim/Treat Additives								
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	Vertical schematic (actual)	Logs	Stg #	Add		Type	Amount	Units	Sand Size	
						12	Proppant		40/70 WS	4,128.5	lb	40/70	
Interval 13													
	17.4	17.4	13		13	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
	96.8	96.8	11		5/17/2014	11,172.0	11,254.0	3374.10	3524.70	QuadraFrac XL Gel:1846 bbl; Linear Gel:507 bbl; Slickwater:965 bbl; Benzoic Acid:21bbl			
Stim/Treat Additives													
	3.725.1	3.725.1	83		13	Proppant	16/30 WS	136,593.7	lb	16/30			
	4.774.3	4.774.3	84		13	Proppant	40/70 WS	3,287.8	lb	40/70			
Interval 14													
	5.213.9	5.213.9	85		14	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
	5.884.8	5.884.8	87		14	5/17/2014	10,997.0	11,071.0	2916.90	3062.50	QuadraFrac XL Gel:1810 bbl; Linear Gel:493 bbl; Slickwater:558 bbl; Benzoic Acid:24bbl		
Stim/Treat Additives													
	6.383.5	6.383.5	88		14	Proppant	16/30 WS	132,562.5	lb	16/30			
	6.482.0	6.482.0	89		14	Proppant	40/70 WS	2,715.9	lb	40/70			
Interval 15													
	6.564.0	6.564.0	90		15	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
	6.687.0	6.687.0	91		15	5/17/2014	10,823.0	10,912.0	2947.00	3096.60	QuadraFrac XL Gel:1854 bbl; Linear Gel:493 bbl; Slickwater:546 bbl; Benzoic Acid:22bbl		
Stim/Treat Additives													
	7.558.1	7.558.1	92		15	Proppant	16/30 WS	134,814.1	lb	16/30			
	7.730.0	7.730.0	93		15	Proppant	40/70 WS	4,151.7	lb	40/70			
Interval 16													
	8.035.1	8.035.1	94		16	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
	8.113.8	8.113.8	95		16	5/17/2014	10,649.0	10,736.0	2976.20	3120.40	QuadraFrac XL Gel:1837 bbl; Linear Gel:491 bbl; Slickwater:595 bbl; Benzoic Acid:25bbl		
Stim/Treat Additives													
	8.286.1	8.286.1	96	16	Proppant	16/30 WS	129,240.2	lb	16/30				
	8.424.9	8.424.9	97	16	Proppant	40/70 WS	4,692.1	lb	40/70				
Interval 17													
	8.921.9	8.921.9	98	17	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
	8.984.9	8.984.9	99	17	5/17/2014	10,480.0	10,566.0	2941.50	3087.60	QuadraFrac XL Gel:1797 bbl; Linear Gel:505 bbl; Slickwater:556 bbl; Benzoic Acid:27bbl			
Stim/Treat Additives													
	9.157.2	9.157.2	100	17	Proppant	16/30 WS	132,071.1	lb	16/30				
	9.290.0	9.290.0	101	17	Proppant	40/70 WS	3,639.9	lb	40/70				
Interval 18													
	9.520.0	9.520.0	102	18	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
	9.651.9	9.651.9	103	18	5/18/2014	10,300.0	10,378.0	2969.60	3113.80	QuadraFrac XL Gel:1804 bbl; Linear Gel:527 bbl; Slickwater:582 bbl; Benzoic Acid:24bbl			
Stim/Treat Additives													
	9.820.9	9.820.9	104	18	Proppant	16/30 WS	131,501.6	lb	16/30				
	9.954.1	9.954.1	105	18	Proppant	40/70 WS	2,440.2	lb	40/70				
Interval 19													
	10.126.0	10.126.0	106	19	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
	10.200.1	10.200.1	107	19	5/18/2014	10,126.0	10,200.0	2676.50	2782.90	QuadraFrac XL Gel:1619 bbl; Linear Gel:506 bbl; Slickwater:483 bbl; Benzoic Acid:25bbl			
Stim/Treat Additives													
	10.376.0	10.376.0	108	19	Proppant	16/30 WS	96,673.4	lb	16/30				
	10.522.0	10.522.0	109	19	Proppant	40/70 WS	2,126.3	lb	40/70				
Interval 20													
	10.691.9	10.691.9	110	20	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
	10.825.1	10.825.1	111	20	5/18/2014	9,952.0	10,034.0	2889.40	3010.80	QuadraFrac XL Gel:1740 bbl; Linear Gel:509 bbl; Slickwater:553 bbl; Benzoic Acid:30bbl			
Stim/Treat Additives													
	10.997.0	10.997.0	112	20	Proppant	16/30 WS	109,733.0	lb	16/30				
	11.070.9	11.070.9	113	20	Proppant	40/70 WS	3,038.0	lb	40/70				
Interval 21													
	11.702.1	11.702.1	114	21	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
	11.888.1	11.888.1	115	21	5/19/2014	9,778.0	9,862.0	2023.00	2044.20	QuadraFrac XL Gel:951 bbl; Linear Gel:341 bbl; Slickwater:671 bbl; Benzoic Acid:25bbl			
Stim/Treat Additives													
	11.946.8	11.946.8	116	21	Proppant	16/30 WS	17,779.4	lb	16/30				
	12.119.1	12.119.1	117	21	Proppant	40/70 WS	1,867.0	lb	40/70				



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200		WPC ID 1CO0761003			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) 13,510.0			
Original Spud Date 2/7/2014		Completion Date 6/22/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,397.0		N/S Ref FNL	E/W Dist (ft) 888.0		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, 10/14/2014 8:08:07 AM					Stim/Treat Stages						
MD (ftKB)	D (ft K B)	n c l (B)	Vertical schematic (actual)	Logs	Interval 22						
17.4	714	12			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
96.8	868	13			22	5/19/2014	9,610.0	9,692.0	2869.40	3010.00	QuadraFrac XL Gel:1808 bbl; Linear Gel:499 bbl; Slickwater:509 bbl; Benzoic Acid:23bbl
1,875.0	1,874.6	17			Stim/Treat Additives						
3,725.1	3,715.4	33			Stg #	Add	Type	Amount	Units	Sand Size	
4,774.3	4,762.2	34			22	Proppant	16/30 WS	126,986.3	lb	16/30	
5,213.9	5,200.0	23			22	Proppant	40/70 WS	3,605.7	lb	40/70	
5,884.8	5,883.0	127			Interval 23						
6,383.5	6,380.0	869			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
6,482.0	6,480.0	812			23	5/19/2014	9,331.0	9,522.0	2889.80	3035.80	QuadraFrac XL Gel:1785 bbl; Linear Gel:499 bbl; Slickwater:560 bbl; Benzoic Acid:22bbl
6,564.0	6,561.1	814			Stim/Treat Additives						
6,687.0	6,687.0	851			Stg #	Add	Type	Amount	Units	Sand Size	
6,858.9	6,857.6	867			23	Proppant	16/30 WS	131,447.4	lb	16/30	
6,992.1	6,992.0	812			23	Proppant	40/70 WS	4,155.8	lb	40/70	
7,164.0	7,163.6	827			Interval 24						
7,242.1	7,240.5	843			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
7,415.0	7,415.0	817			24	5/19/2014	9,157.0	9,290.0	2912.60	3060.20	QuadraFrac XL Gel:1808 bbl; Linear Gel:499 bbl; Slickwater:561 bbl; Benzoic Acid:24bbl
7,558.1	7,557.7	814			Stim/Treat Additives						
7,730.0	7,727.2	854			Stg #	Add	Type	Amount	Units	Sand Size	
7,862.9	7,861.7	851			24	Proppant	16/30 WS	133,366.2	lb	16/30	
8,035.1	8,034.4	864			24	Proppant	40/70 WS	3,770.9	lb	40/70	
8,113.8	8,113.4	864			Interval 25						
8,286.1	8,285.9	869			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
8,424.9	8,423.0	823			25	5/19/2014	8,983.0	9,112.0	2933.90	3089.20	QuadraFrac XL Gel:1823 bbl; Linear Gel:548 bbl; Slickwater:517 bbl; Benzoic Acid:25bbl
8,600.1	8,597.4	817			Stim/Treat Additives						
8,750.0	8,749.0	812			Stg #	Add	Type	Amount	Units	Sand Size	
8,921.9	8,918.6	867			25	Proppant	16/30 WS	140,472.8	lb	16/30	
8,984.9	8,983.0	851			25	Proppant	40/70 WS	3,806.4	lb	40/70	
9,157.2	9,156.1	812			Interval 26						
9,290.0	9,288.7	814			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
9,520.0	9,519.0	812			26	5/20/2014	8,808.0	8,952.0	2855.60	3008.00	QuadraFrac XL Gel:1791 bbl; Linear Gel:503 bbl; Slickwater:562 bbl; Benzoic Acid:0bbl
9,651.9	9,651.0	864	Stim/Treat Additives								
9,820.9	9,819.7	812	Stg #	Add	Type	Amount	Units	Sand Size			
9,954.1	9,953.7	854	26	Proppant	16/30 WS	136,520.2	lb	16/30			
10,126.0	10,125.0	864	26	Proppant	40/70 WS	5,010.1	lb	40/70			
10,200.1	10,198.8	817	Interval 27								
10,378.0	10,376.9	869	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
10,522.0	10,520.0	814	27	5/20/2014	8,634.0	8,772.0	2843.40	2995.10	QuadraFrac XL Gel:1782 bbl; Linear Gel:500 bbl; Slickwater:562 bbl; Benzoic Acid:0bbl		
10,691.9	10,691.1	817	Stim/Treat Additives								
10,825.1	10,823.2	812	Stg #	Add	Type	Amount	Units	Sand Size			
10,997.0	10,996.0	862	27	Proppant	16/30 WS	136,092.3	lb	16/30			
11,070.9	11,069.3	817	27	Proppant	40/70 WS	4,799.9	lb	40/70			
11,252.0	11,250.4	814	Interval 28								
11,391.1	11,389.7	864	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
11,563.0	11,561.0	869	28	5/20/2014	8,460.0	8,602.0	2922.00	3070.00	QuadraFrac XL Gel:1856 bbl; Linear Gel:501 bbl; Slickwater:565 bbl; Benzoic Acid:0bbl		
11,702.1	11,700.5	817	Stim/Treat Additives								
11,868.1	11,866.7	814	Stg #	Add	Type	Amount	Units	Sand Size			
11,946.8	11,945.1	864	28	Proppant	16/30 WS	132,718.0	lb	16/30			
12,119.1	12,117.7	869	28	Proppant	40/70 WS	4,738.5	lb	40/70			
12,262.1	12,260.2	812	Interval 29								
12,434.1	12,431.5	812	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
12,566.9	12,565.0	814	29	5/20/2014	8,286.0	8,425.0	2857.70	3005.20	QuadraFrac XL Gel:1784 bbl; Linear Gel:503 bbl; Slickwater:570 bbl; Benzoic Acid:0bbl		
12,740.2	12,737.0	867	Stim/Treat Additives								
12,817.9	12,816.0	812	Stg #	Add	Type	Amount	Units	Sand Size			
12,990.2	12,987.0	812	29	Proppant	16/30 WS	131,988.3	lb	16/30			
13,132.9	13,131.1	817	29	Proppant	40/70 WS	5,045.6	lb	40/70			
13,277.9	13,275.0	862	Interval 30								
13,365.5	13,363.7	864	Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment		
13,415.7	13,413.8	817	30	5/20/2014	8,112.0	8,254.0	2864.90	3019.90	QuadraFrac XL Gel:1832 bbl; Linear Gel:502 bbl; Slickwater:531 bbl; Benzoic Acid:0bbl		
			Stim/Treat Additives								
			Stg #	Add	Type	Amount	Units	Sand Size			
			30	Proppant	16/30 WS	137,186.0	lb	16/30			
			30	Proppant	40/70 WS	6,770.7	lb	40/70			



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200				WPC ID 1CO0761003				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) 13,510.0					
Original Spud Date 2/7/2014				Completion Date 6/22/2014				Asset Group Redtail				Responsible Engineer Andrew Fish				N/S Dist (ft) 2,397.0		N/S Ref FNL		E/W Dist (ft) 888.0		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		Meridian			
Lateral/Horizontal - Original Hole, 10/14/2014 8:08:11 AM										Stim/Treat Stages													
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Interval 40																
							Stg # 40	Start Date 5/22/2014	Top (ftKB) 6,481.0	Btm (ftKB) 6,560.0	Vol Clean... 4852.10	Vol Slurry... 4974.00	Comment QuadraFrac XL Gel:0 bbl; Linear Gel:0 bbl; Slickwater:4785 bbl; Benzoic Acid:26bbl										
Stim/Treat Additives																							
Stg #		Add				Type				Amount				Units		Sand Size							
40		Proppant				16/30 WS				109,980.0				lb		16/30							
40		Proppant				40/70 WS				3,267.3				lb		40/70							
Tubing - Production set at 5,993.4ftKB on 6/21/2014 06:00																							
Set Depth (ftKB) 5,993.4				Comment										Run Date 6/21/2014			Pull Date						
Item Des						OD (in)		ID (in)		Len (ft)			Top (ftKB)		Btm (ftKB)								
Tubing						2 3/8		1.995		31.25			-13.8		17.5								
Tubing Sub						2 3/8				4.00			17.5		21.5								
Tubing						2 3/8		1.995		2,009.88			21.5		2,031.4								
Gas Lift Mandrel						2 3/8				4.05			2,031.4		2,035.4								
Tubing						2 3/8		1.995		1,166.87			2,035.4		3,202.3								
Gas Lift Mandrel						2 3/8				4.05			3,202.3		3,206.3								
Tubing						2 3/8		1.995		518.81			3,206.3		3,725.1								
Gas Lift Mandrel						2 3/8				4.05			3,725.1		3,729.2								
Tubing						2 3/8		1.995		518.18			3,729.2		4,247.4								
Gas Lift Mandrel						2 3/8				4.05			4,247.4		4,251.4								
Tubing						2 3/8		1.995		518.84			4,251.4		4,770.3								
Gas Lift Mandrel						2 3/8				4.05			4,770.3		4,774.3								
Tubing						2 3/8		1.995		518.99			4,774.3		5,293.3								
Gas Lift Mandrel						2 3/8				4.05			5,293.3		5,297.4								
Tubing						2 3/8		1.995		583.46			5,297.4		5,880.8								
Gas Lift Mandrel						2 3/8				4.05			5,880.8		5,884.9								
Tubing						2 3/8		1.995		97.22			5,884.9		5,982.1								
On-Off Tool						2 3/8				1.34			5,982.1		5,983.4								
Packer						4 1/2				10.00			5,983.4		5,993.4								
Rod Strings																							
<des> on <dtmrun>																							
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		5/22/2014			6/19/2014			6,599.0		6,601.0							
CFP						4		5/22/2014			6/19/2014			6,768.0		6,770.0							
CFP						4		5/22/2014			6/19/2014			6,942.0		6,944.0							
CFP						4		5/22/2014			6/19/2014			7,115.0		7,117.0							
CFP						4		5/21/2014			6/19/2014			7,285.0		7,287.0							
CFP						4		5/21/2014			6/19/2014			7,460.0		7,462.0							
CFP						4		5/21/2014			6/19/2014			7,634.0		7,636.0							
CFP						4		5/21/2014			6/19/2014			7,808.0		7,810.0							
CFP						4		5/21/2014			6/19/2014			8,157.0		8,159.0							
CFP						4		5/20/2014			6/19/2014			8,331.0		8,333.0							
CFP						4		5/20/2014			6/19/2014			8,505.0		8,507.0							
CFP						4		5/20/2014			6/19/2014			8,677.0		8,679.0							
CFP						4		5/20/2014			6/19/2014			8,852.0		8,854.0							
CFP						4		5/20/2014			6/19/2014			9,028.0		9,030.0							
CFP						4		5/20/2014			6/19/2014			9,190.0		9,192.0							
CFP						4		5/19/2014			6/19/2014			9,370.0		9,372.0							
CFP						4		5/19/2014			6/19/2014			9,564.0		9,566.0							
CFP						4		5/19/2014			6/19/2014			9,736.0		9,738.0							
CFP						4		5/19/2014			6/19/2014			9,910.0		9,912.0							
CFP						4		5/18/2014			6/19/2014			10,080.0		10,082.0							
CFP						4		5/18/2014			6/20/2014			10,256.0		10,258.0							
CFP						4		5/18/2014			6/20/2014			10,418.0		10,420.0							
CFP						4		5/18/2014			6/20/2014			10,614.0		10,616.0							
CFP						4		5/17/2014			6/20/2014			10,782.0		10,784.0							
CFP						4		5/17/2014			6/20/2014			10,956.0		10,958.0							
CFP						4		5/17/2014			6/20/2014			11,128.0		11,130.0							
CFP						4		5/17/2014			6/20/2014			11,300.0		11,302.0							
CFP						4		5/17/2014			6/20/2014			11,474.0		11,476.0							
CFP						4		5/17/2014			6/20/2014			11,654.0		11,656.0							
CFP						4		5/17/2014			6/20/2014			11,826.0		11,828.0							



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1404B

API Number 051233853200		WPC ID 1CO0761003		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 (ft)KB 13,510.0		
Original Spud Date 2/7/2014		Completion Date 6/22/2014		Asset Group Redtail			Responsible Engineer Andrew Fish		N/S Dist (ft) 2,397.0		N/S Ref FNL	E/W Dist (ft) 888.0		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, 10/14/2014 8:08:13 AM					Other In Hole								
MD (ftKB)	D (ft K B)	n c l (Vertical schematic (actual)	Logs	Des		OD (in)	Run Date	Pull Date	Top (ftKB)	Btm (ftKB)		
17.4	174	17			CFP		4	5/16/2014	6/20/2014	12,000.0	12,002.0		
96.8	968	97			CFP		4	5/16/2014	6/20/2014	12,170.0	12,172.0		
1,875.0	1,874	97			CFP		4	5/16/2014	6/20/2014	12,340.0	12,342.0		
3,725.1	3,724	97			CFP		4	5/16/2014	6/20/2014	12,512.0	12,514.0		
4,774.3	4,703	97			CFP		4	5/15/2014	6/20/2014	12,687.0	12,689.0		
5,213.9	5,202	97			CFP		4	5/15/2014	6/20/2014	12,861.0	12,863.0		
5,884.8	5,823	97			CFP		4	5/15/2014	6/20/2014	13,035.0	13,037.0		
6,383.5	6,309	97			CFP		4	5/15/2014	6/20/2014	13,209.0	13,211.0		
6,482.0	6,389	97											
6,564.0	6,502	97											
6,687.0	6,594	97											
6,858.9	6,807	97											
6,992.1	6,922	97											
7,164.0	7,086	97											
7,242.1	7,165	97											
7,415.0	7,336	97											
7,558.1	7,477	97											
7,730.0	7,652	97											
7,862.9	7,787	97											
8,035.1	7,954	97											
8,113.8	8,034	97											
8,286.1	8,209	97											
8,424.9	8,345	97											
8,600.1	8,524	97											
8,750.0	8,663	97											
8,921.9	8,840	97											
8,984.9	8,908	97											
9,157.2	9,081	97											
9,290.0	9,207	97											
9,520.0	9,440	97											
9,651.9	9,568	97											
9,820.9	9,737	97											
9,954.1	9,867	97											
10,126.0	10,039	97											
10,200.1	10,108	97											
10,376.0	10,279	97											
10,522.0	10,435	97											
10,691.9	10,601	97											
10,825.1	10,732	97											
10,997.0	10,902	97											
11,070.9	10,971	97											
11,252.0	11,164	97											
11,391.1	11,307	97											
11,563.0	11,489	97											
11,702.1	11,625	97											
11,868.1	11,787	97											
11,946.8	11,861	97											
12,119.1	12,007	97											
12,262.1	12,160	97											
12,434.1	12,325	97											
12,566.9	12,475	97											
12,740.2	12,630	97											
12,817.9	12,684	97											
12,990.2	12,870	97											
13,132.9	13,071	97											
13,277.9	13,173	97											
13,365.5	13,267	97											
13,415.7	13,318	97											
					Bottom Hole Cores								
					Date	Core #	Top (ftKB)	Btm (ftKB)	Recov (ft)				