



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1401A

API Number 051233852900			WPC ID 1CO0761008			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 13,465.0		
Original Spud Date 1/17/2014		Completion Date 6/15/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,396.0		N/S Ref FNL	E/W Dist (ft) 789.0		E/W Ref FWL
Lot	Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type		Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian		

Lateral/Horizontal - Original Hole, 10/13/2014 3:11:24 PM					Perforations					
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	Vertical schematic (actual)	Logs	Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
						Perforated Liner	5/12/2014	7,514.0	7,516.0	Niobrara, Original Hole
						Perforated Liner	5/12/2014	7,612.0	7,614.0	Niobrara, Original Hole
74.8	74.8	74.8	74.8			Perforated Liner	5/12/2014	7,655.0	7,657.0	Niobrara, Original Hole
1,842.5	1,842.5	1,842.5	1,842.5			Perforated Liner	5/12/2014	7,689.0	7,691.0	Niobrara, Original Hole
3,406.2	3,406.2	3,406.2	3,406.2			Perforated Liner	5/12/2014	7,787.0	7,789.0	Niobrara, Original Hole
4,962.6	4,962.6	4,962.6	4,962.6			Perforated Liner	5/12/2014	7,830.0	7,832.0	Niobrara, Original Hole
5,101.4	5,101.4	5,101.4	5,101.4			Perforated Liner	5/12/2014	7,864.0	7,866.0	Niobrara, Original Hole
5,282.5	5,282.5	5,282.5	5,282.5			Perforated Liner	5/12/2014	7,962.0	7,964.0	Niobrara, Original Hole
5,955.1	5,955.1	5,955.1	5,955.1			Perforated Liner	5/12/2014	8,006.0	8,008.0	Niobrara, Original Hole
6,365.2	6,365.2	6,365.2	6,365.2			Perforated Liner	5/12/2014	8,039.0	8,041.0	Niobrara, Original Hole
6,462.9	6,462.9	6,462.9	6,462.9			Perforated Liner	5/12/2014	8,137.0	8,139.0	Niobrara, Original Hole
6,607.0	6,607.0	6,607.0	6,607.0			Perforated Liner	5/12/2014	8,181.0	8,183.0	Niobrara, Original Hole
6,779.9	6,779.9	6,779.9	6,779.9			Perforated Liner	5/12/2014	8,214.0	8,216.0	Niobrara, Original Hole
6,914.0	6,914.0	6,914.0	6,914.0			Perforated Liner	5/12/2014	8,312.0	8,314.0	Niobrara, Original Hole
7,086.9	7,086.9	7,086.9	7,086.9			Perforated Liner	5/12/2014	8,356.0	8,358.0	Niobrara, Original Hole
7,165.0	7,165.0	7,165.0	7,165.0			Perforated Liner	5/12/2014	8,389.0	8,391.0	Niobrara, Original Hole
7,337.9	7,337.9	7,337.9	7,337.9			Perforated Liner	5/11/2014	8,487.0	8,489.0	Niobrara, Original Hole
7,482.0	7,482.0	7,482.0	7,482.0			Perforated Liner	5/11/2014	8,531.0	8,533.0	Niobrara, Original Hole
7,654.9	7,654.9	7,654.9	7,654.9			Perforated Liner	5/11/2014	8,564.0	8,566.0	Niobrara, Original Hole
7,789.0	7,789.0	7,789.0	7,789.0			Perforated Liner	5/11/2014	8,663.0	8,665.0	Niobrara, Original Hole
7,961.9	7,961.9	7,961.9	7,961.9			Perforated Liner	5/11/2014	8,706.0	8,708.0	Niobrara, Original Hole
8,041.0	8,041.0	8,041.0	8,041.0			Perforated Liner	5/11/2014	8,739.0	8,741.0	Niobrara, Original Hole
8,213.9	8,213.9	8,213.9	8,213.9			Perforated Liner	5/11/2014	8,838.0	8,840.0	Niobrara, Original Hole
8,357.9	8,357.9	8,357.9	8,357.9			Perforated Liner	5/11/2014	8,881.0	8,883.0	Niobrara, Original Hole
8,530.8	8,530.8	8,530.8	8,530.8			Perforated Liner	5/11/2014	8,914.0	8,916.0	Niobrara, Original Hole
8,665.0	8,665.0	8,665.0	8,665.0			Perforated Liner	5/11/2014	9,013.0	9,015.0	Niobrara, Original Hole
8,837.9	8,837.9	8,837.9	8,837.9			Perforated Liner	5/11/2014	9,056.0	9,058.0	Niobrara, Original Hole
8,916.0	8,916.0	8,916.0	8,916.0			Perforated Liner	5/11/2014	9,090.0	9,092.0	Niobrara, Original Hole
9,089.9	9,089.9	9,089.9	9,089.9			Perforated Liner	5/11/2014	9,188.0	9,190.0	Niobrara, Original Hole
9,232.9	9,232.9	9,232.9	9,232.9			Perforated Liner	5/11/2014	9,231.0	9,233.0	Niobrara, Original Hole
9,405.8	9,405.8	9,405.8	9,405.8			Perforated Liner	5/11/2014	9,264.0	9,266.0	Niobrara, Original Hole
9,540.0	9,540.0	9,540.0	9,540.0			Perforated Liner	5/10/2014	9,363.0	9,365.0	Niobrara, Original Hole
9,712.9	9,712.9	9,712.9	9,712.9			Perforated Liner	5/10/2014	9,406.0	9,408.0	Niobrara, Original Hole
9,792.0	9,792.0	9,792.0	9,792.0			Perforated Liner	5/10/2014	9,439.0	9,441.0	Niobrara, Original Hole
9,964.9	9,964.9	9,964.9	9,964.9			Perforated Liner	5/10/2014	9,538.0	9,540.0	Niobrara, Original Hole
10,099.1	10,099.1	10,099.1	10,099.1			Perforated Liner	5/10/2014	9,581.0	9,583.0	Niobrara, Original Hole
10,282.2	10,282.2	10,282.2	10,282.2			Perforated Liner	5/10/2014	9,615.0	9,617.0	Niobrara, Original Hole
10,415.0	10,415.0	10,415.0	10,415.0			Perforated Liner	5/10/2014	9,713.0	9,715.0	Niobrara, Original Hole
10,588.9	10,588.9	10,588.9	10,588.9			Perforated Liner	5/10/2014	9,756.0	9,758.0	Niobrara, Original Hole
10,667.0	10,667.0	10,667.0	10,667.0			Perforated Liner	5/10/2014	9,790.0	9,792.0	Niobrara, Original Hole
10,841.9	10,841.9	10,841.9	10,841.9			Perforated Liner	5/9/2014	9,878.0	9,880.0	Niobrara, Original Hole
10,985.9	10,985.9	10,985.9	10,985.9			Perforated Liner	5/9/2014	9,921.0	9,923.0	Niobrara, Original Hole
11,160.1	11,160.1	11,160.1	11,160.1			Perforated Liner	5/9/2014	9,965.0	9,967.0	Niobrara, Original Hole
11,292.0	11,292.0	11,292.0	11,292.0			Perforated Liner	5/9/2014	10,053.0	10,055.0	Niobrara, Original Hole
11,456.0	11,456.0	11,456.0	11,456.0			Perforated Liner	5/9/2014	10,097.0	10,099.0	Niobrara, Original Hole
11,545.9	11,545.9	11,545.9	11,545.9			Perforated Liner	5/9/2014	10,140.0	10,142.0	Niobrara, Original Hole
11,710.0	11,710.0	11,710.0	11,710.0			Perforated Liner	5/9/2014	10,238.0	10,240.0	Niobrara, Original Hole
11,854.0	11,854.0	11,854.0	11,854.0			Perforated Liner	5/9/2014	10,282.0	10,284.0	Niobrara, Original Hole
12,025.9	12,025.9	12,025.9	12,025.9			Perforated Liner	5/9/2014	10,315.0	10,317.0	Niobrara, Original Hole
12,160.1	12,160.1	12,160.1	12,160.1			Perforated Liner	5/9/2014	10,413.0	10,415.0	Niobrara, Original Hole
12,334.0	12,334.0	12,334.0	12,334.0			Perforated Liner	5/9/2014	10,457.0	10,459.0	Niobrara, Original Hole
12,416.0	12,416.0	12,416.0	12,416.0			Perforated Liner	5/9/2014	10,490.0	10,492.0	Niobrara, Original Hole
12,587.9	12,587.9	12,587.9	12,587.9			Perforated Liner	5/9/2014	10,589.0	10,591.0	Niobrara, Original Hole
12,725.1	12,725.1	12,725.1	12,725.1			Perforated Liner	5/9/2014	10,632.0	10,634.0	Niobrara, Original Hole
12,889.1	12,889.1	12,889.1	12,889.1			Perforated Liner	5/9/2014	10,665.0	10,667.0	Niobrara, Original Hole
13,032.2	13,032.2	13,032.2	13,032.2			Perforated Liner	5/8/2014	10,764.0	10,766.0	Niobrara, Original Hole
13,205.1	13,205.1	13,205.1	13,205.1			Perforated Liner	5/8/2014	10,807.0	10,809.0	Niobrara, Original Hole
13,292.0	13,292.0	13,292.0	13,292.0			Perforated Liner	5/8/2014	10,842.0	10,844.0	Niobrara, Original Hole
13,367.1	13,367.1	13,367.1	13,367.1			Perforated Liner	5/8/2014	10,939.0	10,941.0	Niobrara, Original Hole
13,464.9	13,464.9	13,464.9	13,464.9			Perforated Liner	5/8/2014	10,984.0	10,986.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,018.0	11,020.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,114.0	11,116.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,160.0	11,162.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,194.0	11,196.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,290.0	11,292.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,326.0	11,328.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,358.0	11,360.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,456.0	11,458.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,510.0	11,512.0	Niobrara, Original Hole
						Perforated Liner	5/8/2014	11,544.0	11,546.0	Niobrara, Original Hole



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1401A

API Number 051233852900			WPC ID 1CO0761008			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) 13,465.0		
Original Spud Date 1/17/2014		Completion Date 6/15/2014		Asset Group Redtail			Responsible Engineer Andrew Fish			N/S Dist (ft) 2,396.0		N/S Ref FNL	E/W Dist (ft) 789.0		E/W Ref FWL
Lot	Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type		Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian		

Lateral/Horizontal - Original Hole, 10/13/2014 3:11:26 PM					Perforations							
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	Vertical schematic (actual)	Logs	Type of Hole		Date	Top (ftKB)	Btm (ftKB)	Zone	
						Perforated Liner		5/7/2014	11,632.0	11,634.0	Niobrara, Original Hole	
						Perforated Liner		5/7/2014	11,678.0	11,680.0	Niobrara, Original Hole	
74.8	74.8	74.8	74.8			Perforated Liner		5/7/2014	11,710.0	11,712.0	Niobrara, Original Hole	
1,842.5	1,842.5	1,842.5	1,842.5			Perforated Liner		5/7/2014	11,820.0	11,822.0	Niobrara, Original Hole	
3,406.2	3,406.2	3,406.2	3,406.2			Perforated Liner		5/7/2014	11,852.0	11,854.0	Niobrara, Original Hole	
4,962.6	4,962.6	4,962.6	4,962.6			Perforated Liner		5/7/2014	11,896.0	11,898.0	Niobrara, Original Hole	
5,101.4	5,101.4	5,101.4	5,101.4			Perforated Liner		5/7/2014	11,982.0	11,984.0	Niobrara, Original Hole	
5,282.5	5,282.5	5,282.5	5,282.5			Perforated Liner		5/7/2014	12,026.0	12,028.0	Niobrara, Original Hole	
5,955.1	5,955.1	5,955.1	5,955.1			Perforated Liner		5/7/2014	12,060.0	12,062.0	Niobrara, Original Hole	
6,365.2	6,365.2	6,365.2	6,365.2			Perforated Liner		5/7/2014	12,158.0	12,160.0	Niobrara, Original Hole	
6,462.9	6,462.9	6,462.9	6,462.9			Perforated Liner		5/6/2014	12,202.0	12,204.0	Niobrara, Original Hole	
6,607.0	6,607.0	6,607.0	6,607.0			Perforated Liner		5/6/2014	12,236.0	12,238.0	Niobrara, Original Hole	
6,779.9	6,779.9	6,779.9	6,779.9			Perforated Liner		5/6/2014	12,334.0	12,336.0	Niobrara, Original Hole	
6,914.0	6,914.0	6,914.0	6,914.0			Perforated Liner		5/6/2014	12,380.0	12,382.0	Niobrara, Original Hole	
7,086.9	7,086.9	7,086.9	7,086.9			Perforated Liner		5/6/2014	12,414.0	12,416.0	Niobrara, Original Hole	
7,165.0	7,165.0	7,165.0	7,165.0			Perforated Liner		5/6/2014	12,510.0	12,512.0	Niobrara, Original Hole	
7,337.9	7,337.9	7,337.9	7,337.9			Perforated Liner		5/6/2014	12,554.0	12,556.0	Niobrara, Original Hole	
7,482.0	7,482.0	7,482.0	7,482.0			Perforated Liner		5/6/2014	12,588.0	12,590.0	Niobrara, Original Hole	
7,654.9	7,654.9	7,654.9	7,654.9			Perforated Liner		5/6/2014	12,676.0	12,678.0	Niobrara, Original Hole	
7,789.0	7,789.0	7,789.0	7,789.0			Perforated Liner		5/6/2014	12,723.0	12,725.0	Niobrara, Original Hole	
7,961.9	7,961.9	7,961.9	7,961.9			Perforated Liner		5/6/2014	12,766.0	12,768.0	Niobrara, Original Hole	
8,041.0	8,041.0	8,041.0	8,041.0			Perforated Liner		5/5/2014	12,855.0	12,857.0	Niobrara, Original Hole	
8,213.9	8,213.9	8,213.9	8,213.9			Perforated Liner		5/5/2014	12,889.0	12,891.0	Niobrara, Original Hole	
8,357.9	8,357.9	8,357.9	8,357.9			Perforated Liner		5/5/2014	12,941.0	12,943.0	Niobrara, Original Hole	
8,530.8	8,530.8	8,530.8	8,530.8			Perforated Liner		5/5/2014	13,030.0	13,032.0	Niobrara, Original Hole	
8,665.0	8,665.0	8,665.0	8,665.0			Perforated Liner		5/5/2014	13,073.0	13,075.0	Niobrara, Original Hole	
8,837.9	8,837.9	8,837.9	8,837.9			Perforated Liner		5/5/2014	13,116.0	13,118.0	Niobrara, Original Hole	
8,916.0	8,916.0	8,916.0	8,916.0			Perforated Liner		4/30/2014	13,205.0	13,207.0	Niobrara, Original Hole	
9,089.9	9,089.9	9,089.9	9,089.9			Perforated Liner		4/30/2014	13,248.0	13,250.0	Niobrara, Original Hole	
9,232.9	9,232.9	9,232.9	9,232.9			Perforated Liner		4/30/2014	13,290.0	13,292.0	Niobrara, Original Hole	
9,405.8	9,405.8	9,405.8	9,405.8			Stimulations & Treatments						
9,540.0	9,540.0	9,540.0	9,540.0			Sand Frac on 5/5/2014 10:05						
9,712.9	9,712.9	9,712.9	9,712.9			Comment Treatment End Date:5/13/2014; Number of staged intervals: 40; Total 15% HCL used: 981bbl; Min frac gradient: 0.73 psi/ft; Number of perfs: 1440; Slickwater vol. 31494bbl; QuadraFrac Crosslink Gel 67935bbl; Liner Gel 20045bbl.						
9,792.0	9,792.0	9,792.0	9,792.0			Total Clean Volu... Vol Slurry Tot (bbl) Proppant Desig... Proppant Frm (lb) P Max (psi) Avg Treat... Avg Treat... Max Tre... Frac Gr...						
9,964.9	9,964.9	9,964.9	9,964.9			120456.10 125901.50 5,335,998.0 5,058,189.3 8,376.0 4,462.0 44.90 67.60 0.73						
10,099.1	10,099.1	10,099.1	10,099.1			Total Add Amount Proppant 16/30 WS 4938099.5 lb; Proppant 40/70 WS 120089.8 lb						
10,282.2	10,282.2	10,282.2	10,282.2			Stim/Treat Fluids						
10,415.0	10,415.0	10,415.0	10,415.0			Fluid Name						
10,588.9	10,588.9	10,588.9	10,588.9			QuadraFrac XL Gel; Linear Gel; 15% HCl						
10,667.0	10,667.0	10,667.0	10,667.0			Stim/Treat Stages						
10,841.9	10,841.9	10,841.9	10,841.9			Interval 1						
10,985.9	10,985.9	10,985.9	10,985.9			Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
11,160.1	11,160.1	11,160.1	11,160.1			1	5/5/2014	13,205.0	13,292.0	3104.80	3205.10	QuadraFrac XL Gel:1877 bbl; Linear Gel:642 bbl; Slickwater:563 bbl; 15% HCl:22bbl
11,292.0	11,292.0	11,292.0	11,292.0		Stim/Treat Additives							
11,456.0	11,456.0	11,456.0	11,456.0		Stg #	Add	Type	Amount	Units	Sand Size		
11,545.9	11,545.9	11,545.9	11,545.9		1	Proppant	16/30 WS	88,307.1	lb	16/30		
11,710.0	11,710.0	11,710.0	11,710.0		1	Proppant	40/70 WS	4,887.8	lb	40/70		
11,854.0	11,854.0	11,854.0	11,854.0		Interval 2							
12,025.9	12,025.9	12,025.9	12,025.9		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
12,160.1	12,160.1	12,160.1	12,160.1		2	5/5/2014	13,030.0	13,118.0	2848.60	2948.10	QuadraFrac XL Gel:1460 bbl; Linear Gel:356 bbl; Slickwater:1009 bbl; 15% HCl:23bbl	
12,334.0	12,334.0	12,334.0	12,334.0		Stim/Treat Additives							
12,416.0	12,416.0	12,416.0	12,416.0		Stg #	Add	Type	Amount	Units	Sand Size		
12,587.9	12,587.9	12,587.9	12,587.9		2	Proppant	16/30 WS	90,213.4	lb	16/30		
12,725.1	12,725.1	12,725.1	12,725.1		2	Proppant	40/70 WS	2,174.6	lb	40/70		
12,889.1	12,889.1	12,889.1	12,889.1		Interval 3							
13,032.2	13,032.2	13,032.2	13,032.2		Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
13,205.1	13,205.1	13,205.1	13,205.1		3	5/5/2014	12,855.0	12,943.0	2848.50	2953.20	QuadraFrac XL Gel:1501 bbl; Linear Gel:360 bbl; Slickwater:966 bbl; 15% HCl:22bbl	
13,292.0	13,292.0	13,292.0	13,292.0		Stim/Treat Additives							
13,367.1	13,367.1	13,367.1	13,367.1		Stg #	Add	Type	Amount	Units	Sand Size		
13,464.9	13,464.9	13,464.9	13,464.9		3	Proppant	16/30 WS	94,028.2	lb	16/30		
					3	Proppant	40/70 WS	3,177.0	lb	40/70		
					Interval 4							
					Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment	
					4	5/6/2014	12,676.0	12,768.0	2892.20	2994.50	QuadraFrac XL Gel:1494 bbl; Linear Gel:569 bbl; Slickwater:806 bbl; 15% HCl:23bbl	



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1401A

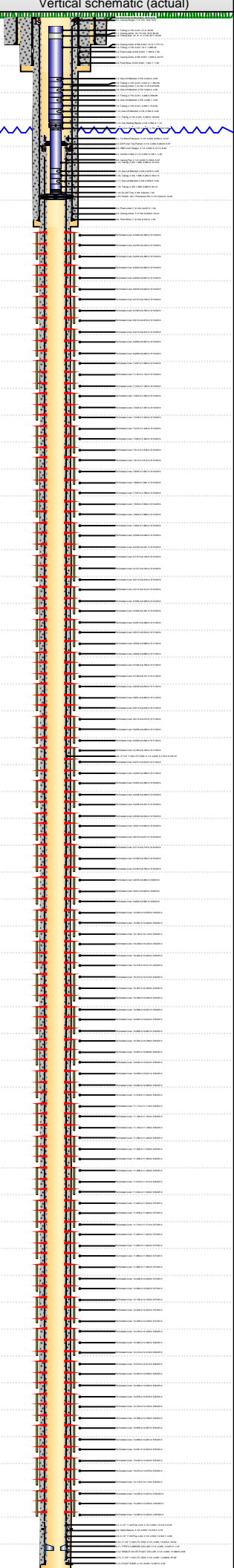
API Number 051233852900		WPC ID 1CO0761008		Well Permit Number		Field Name DJ Horizontal Niobrara		County Weld		State CO								
Well Configuration Type Lateral/Horizontal			Orig KB Elv (ft) 5,018.60		Ground Elevation (ft) 5,001.80		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 13,465.0							
Original Spud Date 1/17/2014		Completion Date 6/15/2014		Asset Group Redtail		Responsible Engineer Andrew Fish		N/S Dist (ft) 2,396.0		N/S Ref FNL		E/W Dist (ft) 789.0	E/W Ref FWL					
Lot		Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type	Township 10 N	Township N/S Dir	Range 58 W	Meridian						
Lateral/Horizontal - Original Hole, 10/13/2014 3:11:28 PM						Stim/Treat Additives												
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Stg #		Add		Type		Amount		Units		Sand Size	
							4	Proppant	16/30 WS		91,878.3		lb		16/30			
							4	Proppant	40/70 WS		3,149.1		lb		40/70			
Interval 5																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							5	5/6/2014	12,510.0	12,590.0	3156.00	3306.30	QuadraFrac XL Gel:1753 bbl; Linear Gel:246 bbl; Slickwater:1134 bbl; 15% HCl:23bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							5	Proppant		16/30 WS		136,404.0		lb		16/30		
							5	Proppant		40/70 WS		3,162.4		lb		40/70		
Interval 6																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							6	5/6/2014	12,334.0	12,416.0	3163.80	3317.60	QuadraFrac XL Gel:1764 bbl; Linear Gel:549 bbl; Slickwater:828 bbl; 15% HCl:24bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							6	Proppant		16/30 WS		139,485.9		lb		16/30		
							6	Proppant		40/70 WS		3,352.4		lb		40/70		
Interval 7																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							7	5/6/2014	12,158.0	12,238.0	2491.10	2557.60	QuadraFrac XL Gel:1191 bbl; Linear Gel:556 bbl; Slickwater:721 bbl; 15% HCl:23bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							7	Proppant		16/30 WS		58,549.0		lb		16/30		
							7	Proppant		40/70 WS		3,258.6		lb		40/70		
Interval 8																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							8	5/7/2014	11,982.0	12,062.0	3295.00	3430.50	QuadraFrac XL Gel:1662 bbl; Linear Gel:963 bbl; Slickwater:654 bbl; 15% HCl:16bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							8	Proppant		16/30 WS		123,232.3		lb		16/30		
							8	Proppant		40/70 WS		2,658.5		lb		40/70		
Interval 9																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							9	5/7/2014	11,820.0	11,898.0	3215.50	3370.70	QuadraFrac XL Gel:1958 bbl; Linear Gel:477 bbl; Slickwater:754 bbl; 15% HCl:27bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							9	Proppant		16/30 WS		141,316.9		lb		16/30		
							9	Proppant		40/70 WS		2,863.0		lb		40/70		
Interval 10																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							10	5/7/2014	11,632.0	11,712.0	3157.00	3312.00	QuadraFrac XL Gel:1802 bbl; Linear Gel:546 bbl; Slickwater:779 bbl; 15% HCl:30bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							10	Proppant		16/30 WS		141,510.3		lb		16/30		
							10	Proppant		40/70 WS		2,483.0		lb		40/70		
Interval 11																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							11	5/8/2014	11,456.0	11,546.0	3057.60	3190.10	QuadraFrac XL Gel:1715 bbl; Linear Gel:522 bbl; Slickwater:794 bbl; 15% HCl:28bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							11	Proppant		16/30 WS		120,815.5		lb		16/30		
							11	Proppant		40/70 WS		2,268.4		lb		40/70		
Interval 12																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							12	5/8/2014	11,290.0	11,360.0	3170.40	3327.60	QuadraFrac XL Gel:1779 bbl; Linear Gel:531 bbl; Slickwater:837 bbl; 15% HCl:24bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							12	Proppant		16/30 WS		142,897.9		lb		16/30		
							12	Proppant		40/70 WS		3,116.7		lb		40/70		
Interval 13																		
							Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
							13	5/8/2014	11,114.0	11,196.0	3500.50	3660.30	QuadraFrac XL Gel:1831 bbl; Linear Gel:465 bbl; Slickwater:1181 bbl; 15% HCl:24bbl					
Stim/Treat Additives																		
							Stg #	Add		Type		Amount		Units		Sand Size		
							13	Proppant		16/30 WS		145,197.5		lb		16/30		



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1401A

API Number 051233852900		WPC ID 1CO0761008		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) 13,465.0				
Original Spud Date 1/17/2014		Completion Date 6/15/2014		Asset Group Redtail			Responsible Engineer Andrew Fish		N/S Dist (ft) 2,396.0		N/S Ref FNL		E/W Dist (ft) 789.0		E/W Ref FWL	
Lot		Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type	Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian			

Lateral/Horizontal - Original Hole, 10/13/2014 3:11:30 PM										Stim/Treat Additives						
MD (ftKB)	D (ft K B)	n (ft K B)	c (ft K B)	Vertical schematic (actual)	Logs	Stg #	Add		Type		Amount		Units	Sand Size		
						13	Proppant		40/70 WS		3,239.6		lb	40/70		
Interval 14																
						Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment			
74.8	74.8	100	100			14	5/8/2014		10,939.0	11,020.0	2939.10	3097.70	QuadraFrac XL Gel:1781 bbl; Linear Gel:390 bbl; Slickwater:744 bbl; 15% HCl:24bbl			
1,842.5	1,842.5	100	100		Stim/Treat Additives											
3,406.2	3,406.2	100	100		Stg #	Add		Type		Amount		Units	Sand Size			
4,962.6	4,962.6	100	100		14	Proppant		16/30 WS		144,754.2		lb	16/30			
5,101.4	5,101.4	100	100		14	Proppant		40/70 WS		2,540.1		lb	40/70			
5,282.5	5,282.5	100	100		Interval 15											
5,955.1	5,955.1	100	100		Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
6,365.2	6,365.2	100	100		15	5/8/2014		10,764.0	10,844.0	2869.90	3027.70	QuadraFrac XL Gel:1800 bbl; Linear Gel:339 bbl; Slickwater:709 bbl; 15% HCl:22bbl				
6,462.9	6,462.9	100	100		Stim/Treat Additives											
6,607.0	6,607.0	100	100		Stg #	Add		Type		Amount		Units	Sand Size			
6,779.9	6,779.9	100	100		15	Proppant		16/30 WS		143,511.8		lb	16/30			
6,914.0	6,914.0	100	100		15	Proppant		40/70 WS		3,103.2		lb	40/70			
7,086.9	7,086.9	100	100		Interval 16											
7,165.0	7,165.0	100	100		Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment				
7,337.9	7,337.9	100	100		16	5/8/2014		10,589.0	10,667.0	2888.40	3050.10	QuadraFrac XL Gel:1795 bbl; Linear Gel:337 bbl; Slickwater:729 bbl; 15% HCl:28bbl				
7,482.0	7,482.0	100	100		Stim/Treat Additives											
7,654.9	7,654.9	100	100		Stg #	Add		Type		Amount		Units	Sand Size			
7,789.0	7,789.0	100	100		16	Proppant		16/30 WS		147,167.6		lb	16/30			
7,961.9	7,961.9	100	100		16	Proppant		40/70 WS		3,060.8		lb	40/70			
8,041.0	8,041.0	100	100		Interval 17											
8,213.9	8,213.9	100	100	Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
8,357.9	8,357.9	100	100	17	5/9/2014		10,413.0	10,492.0	2816.10	2970.50	QuadraFrac XL Gel:1769 bbl; Linear Gel:345 bbl; Slickwater:702 bbl; 15% HCl:0bbl					
8,530.8	8,530.8	100	100	Stim/Treat Additives												
8,665.0	8,665.0	100	100	Stg #	Add		Type		Amount		Units	Sand Size				
8,837.9	8,837.9	100	100	17	Proppant		16/30 WS		140,781.3		lb	16/30				
8,916.0	8,916.0	100	100	17	Proppant		40/70 WS		2,665.2		lb	40/70				
9,089.9	9,089.9	100	100	Interval 18												
9,232.9	9,232.9	100	100	Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
9,405.8	9,405.8	100	100	18	5/9/2014		10,238.0	10,317.0	2873.70	3019.20	QuadraFrac XL Gel:1658 bbl; Linear Gel:544 bbl; Slickwater:671 bbl; 15% HCl:0bbl					
9,540.0	9,540.0	100	100	Stim/Treat Additives												
9,712.9	9,712.9	100	100	Stg #	Add		Type		Amount		Units	Sand Size				
9,792.0	9,792.0	100	100	18	Proppant		16/30 WS		132,214.9		lb	16/30				
9,964.9	9,964.9	100	100	18	Proppant		40/70 WS		2,902.1		lb	40/70				
10,099.1	10,099.1	100	100	Interval 19												
10,282.2	10,282.2	100	100	Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
10,415.0	10,415.0	100	100	19	5/9/2014		10,053.0	10,142.0	2770.40	2908.60	QuadraFrac XL Gel:1684 bbl; Linear Gel:343 bbl; Slickwater:743 bbl; 15% HCl:0bbl					
10,588.9	10,588.9	100	100	Stim/Treat Additives												
10,667.0	10,667.0	100	100	Stg #	Add		Type		Amount		Units	Sand Size				
10,841.9	10,841.9	100	100	19	Proppant		16/30 WS		125,384.3		lb	16/30				
10,985.9	10,985.9	100	100	19	Proppant		40/70 WS		3,012.7		lb	40/70				
11,160.1	11,160.1	100	100	Interval 20												
11,292.0	11,292.0	100	100	Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
11,456.0	11,456.0	100	100	20	5/9/2014		9,878.0	9,967.0	2859.00	2967.00	QuadraFrac XL Gel:1575 bbl; Linear Gel:433 bbl; Slickwater:826 bbl; 15% HCl:24bbl					
11,545.9	11,545.9	100	100	Stim/Treat Additives												
11,710.0	11,710.0	100	100	Stg #	Add		Type		Amount		Units	Sand Size				
11,854.0	11,854.0	100	100	20	Proppant		16/30 WS		97,412.3		lb	16/30				
12,025.9	12,025.9	100	100	20	Proppant		40/70 WS		2,930.0		lb	40/70				
12,160.1	12,160.1	100	100	Interval 21												
12,334.0	12,334.0	100	100	Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
12,416.0	12,416.0	100	100	21	5/10/2014		9,713.0	9,792.0	3038.00	3175.80	QuadraFrac XL Gel:1702 bbl; Linear Gel:536 bbl; Slickwater:775 bbl; 15% HCl:26bbl					
12,587.9	12,587.9	100	100	Stim/Treat Additives												
12,725.1	12,725.1	100	100	Stg #	Add		Type		Amount		Units	Sand Size				
12,889.1	12,889.1	100	100	21	Proppant		16/30 WS		124,743.1		lb	16/30				
13,032.2	13,032.2	100	100	21	Proppant		40/70 WS		3,274.2		lb	40/70				
13,205.1	13,205.1	100	100	Interval 22												
13,292.0	13,292.0	100	100	Stg #	Start Date		Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment					
13,367.1	13,367.1	100	100	22	5/10/2014		9,538.0	9,617.0	3106.00	3241.40	QuadraFrac XL Gel:1721 bbl; Linear Gel:527 bbl; Slickwater:834 bbl; 15% HCl:24bbl					
13,464.9	13,464.9	100	100	Stim/Treat Additives												
				Stg #	Add		Type		Amount		Units	Sand Size				
				22	Proppant		16/30 WS		122,830.5		lb	16/30				
				22	Proppant		40/70 WS		2,927.8		lb	40/70				

Lease Review All - Frac Summary													
Well Name: RAZOR 11E-1401A													
API Number		WPC ID		Well Permit Number		Field Name		County		State			
051233852900		1CO0761008				DJ Horizontal Niobrara		Weld		CO			
Well Configuration Type		Orig KB Elv (ft)		Ground Elevation (ft)		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB)			
Lateral/Horizontal		5,018.60		5,001.80						13,465.0			
Original Spud Date		Completion Date		Asset Group		Responsible Engineer		N/S Dist (ft)		N/S Ref		E/W Dist (ft)	
1/17/2014		6/15/2014		Redtail		Andrew Fish		2,396.0		FNL		789.0	
Lot		Quarter 1		Quarter 2		Quarter 3		Quarter 4		Section		Section Suffix	
		SW		NW						11			
										Section Type		Township	
										10		N	
										Range		58	
										Range E/W Dir		W	
												Meridian	
Lateral/Horizontal - Original Hole, 10/13/2014 3:11:33 PM													
Stim/Treat Stages													
Interval 23													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
23		5/10/2014		9,363.0		9,441.0		2949.40		3082.80		QuadraFrac XL Gel:1687 bbl; Linear Gel:523 bbl; Slickwater:715 bbl; 15% HCl:24bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
23		Proppant		16/30 WS		120,721.4		lb		16/30			
23		Proppant		40/70 WS		3,151.3		lb		40/70			
Interval 24													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
24		5/11/2014		9,188.0		9,266.0		3230.00		3273.30		QuadraFrac XL Gel:1264 bbl; Linear Gel:476 bbl; Slickwater:1422 bbl; 15% HCl:68bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
24		Proppant		16/30 WS		35,646.5		lb		16/30			
24		Proppant		40/70 WS		4,561.6		lb		40/70			
Interval 25													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
25		5/11/2014		9,013.0		9,092.0		3016.80		3173.10		QuadraFrac XL Gel:1784 bbl; Linear Gel:510 bbl; Slickwater:699 bbl; 15% HCl:24bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
25		Proppant		16/30 WS		140,910.0		lb		16/30			
25		Proppant		40/70 WS		4,258.7		lb		40/70			
Interval 26													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
26		5/11/2014		8,838.0		8,916.0		2986.50		3134.10		QuadraFrac XL Gel:1765 bbl; Linear Gel:512 bbl; Slickwater:686 bbl; 15% HCl:24bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
26		Proppant		16/30 WS		134,450.6		lb		16/30			
26		Proppant		40/70 WS		2,671.9		lb		40/70			
Interval 27													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
27		5/11/2014		8,663.0		8,741.0		2840.40		2956.00		QuadraFrac XL Gel:1604 bbl; Linear Gel:507 bbl; Slickwater:705 bbl; 15% HCl:24bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
27		Proppant		16/30 WS		104,736.5		lb		16/30			
27		Proppant		40/70 WS		2,657.4		lb		40/70			
Interval 28													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
28		5/11/2014		8,487.0		8,566.0		3025.60		3198.10		QuadraFrac XL Gel:1768 bbl; Linear Gel:535 bbl; Slickwater:699 bbl; 15% HCl:24bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
28		Proppant		16/30 WS		157,295.4		lb		16/30			
28		Proppant		40/70 WS		2,936.7		lb		40/70			
Interval 29													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
29		5/11/2014		8,312.0		8,391.0		3058.70		3160.00		QuadraFrac XL Gel:1484 bbl; Linear Gel:564 bbl; Slickwater:984 bbl; 15% HCl:26bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
29		Proppant		16/30 WS		90,921.3		lb		16/30			
29		Proppant		40/70 WS		3,163.6		lb		40/70			
Interval 30													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
30		5/12/2014		8,137.0		8,216.0		3229.90		3329.20		QuadraFrac XL Gel:1691 bbl; Linear Gel:527 bbl; Slickwater:969 bbl; 15% HCl:44bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
30		Proppant		16/30 WS		89,141.7		lb		16/30			
30		Proppant		40/70 WS		3,127.8		lb		40/70			
Interval 31													
Stg #		Start Date		Top (ftKB)		Btm (ftKB)		Vol Clean...		Vol Slurry...		Comment	
31		5/12/2014		7,962.0		8,041.0		3012.60		3160.50		QuadraFrac XL Gel:1692 bbl; Linear Gel:547 bbl; Slickwater:727 bbl; 15% HCl:47bbl	
Stim/Treat Additives													
Stg #		Add		Type		Amount		Units		Sand Size			
31		Proppant		16/30 WS		134,444.3		lb		16/30			
31		Proppant		40/70 WS		2,933.4		lb		40/70			

MD (ftKB)

D (ft KB)

n (K B)

c (K B)

l (K B)

Vertical schematic (actual)

Logs

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Lease Review All - Frac Summary

Well Name: RAZOR 11E-1401A

API Number 051233852900		WPC ID 1CO0761008		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 13,465.0	
Original Spud Date 1/17/2014		Completion Date 6/15/2014		Asset Group Redtail		Responsible Engineer Andrew Fish		N/S Dist (ft) 2,396.0		N/S Ref FNL	E/W Dist (ft) 789.0	E/W Ref FWL
Lot	Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type	Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian

Lateral/Horizontal - Original Hole, 10/13/2014 3:11:35 PM					Stim/Treat Stages						
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	Vertical schematic (actual)	Logs	Interval 32					
						Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...
74.8	74.8	13	13		32	5/12/2014	7,787.0	7,866.0	2985.70	3139.00	QuadraFrac XL Gel:1766 bbl; Linear Gel:602 bbl; Slickwater:593 bbl; 15% HCl:24bbl
1,842.5	1,842.5	13	Stim/Treat Additives								
3,406.2	3,406.2	13	32		Proppant	16/30 WS		139,712.7	lb	16/30	
4,962.6	4,962.6	13	32		Proppant	40/70 WS		2,692.0	lb	40/70	
5,101.4	5,101.4	13	Interval 33								
5,282.5	5,282.5	13	33		5/12/2014	7,612.0	7,691.0	3033.80	3184.80	QuadraFrac XL Gel:1825 bbl; Linear Gel:519 bbl; Slickwater:666 bbl; 15% HCl:24bbl	
5,955.1	5,955.1	13	Stim/Treat Additives								
6,365.2	6,365.2	13	33		Proppant	16/30 WS		137,608.8	lb	16/30	
6,462.9	6,462.9	13	33		Proppant	40/70 WS		2,660.7	lb	40/70	
6,607.0	6,607.0	13	Interval 34								
6,779.9	6,779.9	13	34		5/12/2014	7,437.0	7,516.0	3007.00	3161.20	QuadraFrac XL Gel:1776 bbl; Linear Gel:516 bbl; Slickwater:691 bbl; 15% HCl:24bbl	
6,914.0	6,914.0	13	Stim/Treat Additives								
7,086.9	7,086.9	13	34		Proppant	16/30 WS		140,696.7	lb	16/30	
7,165.0	7,165.0	13	34		Proppant	40/70 WS		2,538.9	lb	40/70	
7,337.9	7,337.9	13	Interval 35								
7,482.0	7,482.0	13	35		5/12/2014	7,262.0	7,340.0	2926.40	3064.30	QuadraFrac XL Gel:1709 bbl; Linear Gel:514 bbl; Slickwater:680 bbl; 15% HCl:24bbl	
7,654.9	7,654.9	13	Stim/Treat Additives								
7,789.0	7,789.0	13	35		Proppant	16/30 WS		124,985.8	lb	16/30	
7,961.9	7,961.9	13	35		Proppant	40/70 WS		3,126.7	lb	40/70	
8,041.0	8,041.0	13	Interval 36								
8,213.9	8,213.9	13	36	5/13/2014	7,087.0	7,165.0	2975.30	3123.60	QuadraFrac XL Gel:1751 bbl; Linear Gel:554 bbl; Slickwater:646 bbl; 15% HCl:25bbl		
8,357.9	8,357.9	13	Stim/Treat Additives								
8,530.8	8,530.8	13	36	Proppant	16/30 WS		135,256.8	lb	16/30		
8,665.0	8,665.0	13	36	Proppant	40/70 WS		2,502.0	lb	40/70		
8,837.9	8,837.9	13	Interval 37								
8,916.0	8,916.0	13	37	5/13/2014	6,912.0	6,990.0	3028.30	3186.70	QuadraFrac XL Gel:1782 bbl; Linear Gel:535 bbl; Slickwater:687 bbl; 15% HCl:25bbl		
9,089.9	9,089.9	13	Stim/Treat Additives								
9,232.9	9,232.9	13	37	Proppant	16/30 WS		144,293.0	lb	16/30		
9,405.8	9,405.8	13	37	Proppant	40/70 WS		2,840.7	lb	40/70		
9,540.0	9,540.0	13	Interval 38								
9,712.9	9,712.9	13	38	5/13/2014	6,737.0	6,815.0	3065.40	3211.80	QuadraFrac XL Gel:1839 bbl; Linear Gel:530 bbl; Slickwater:670 bbl; 15% HCl:27bbl		
9,792.0	9,792.0	13	Stim/Treat Additives								
9,964.9	9,964.9	13	38	Proppant	16/30 WS		133,541.9	lb	16/30		
10,099.1	10,099.1	13	38	Proppant	40/70 WS		2,448.4	lb	40/70		
10,282.2	10,282.2	13	Interval 39								
10,415.0	10,415.0	13	39	5/13/2014	6,562.0	6,640.0	3034.60	3188.30	QuadraFrac XL Gel:1772 bbl; Linear Gel:526 bbl; Slickwater:711 bbl; 15% HCl:25bbl		
10,588.9	10,588.9	13	Stim/Treat Additives								
10,667.0	10,667.0	13	39	Proppant	16/30 WS		141,076.4	lb	16/30		
10,841.9	10,841.9	13	39	Proppant	40/70 WS		1,644.9	lb	40/70		
10,985.9	10,985.9	13	Interval 40								
11,160.1	11,160.1	13	40	5/13/2014	6,388.0	6,465.0	2988.10	3143.10	QuadraFrac XL Gel:1702 bbl; Linear Gel:477 bbl; Slickwater:786 bbl; 15% HCl:24bbl		
11,292.0	11,292.0	13	Stim/Treat Additives								
11,456.0	11,456.0	13	40	Proppant	16/30 WS		140,023.4	lb	16/30		
11,545.9	11,545.9	13	40	Proppant	40/70 WS		3,965.9	lb	40/70		
11,710.0	11,710.0	13									
11,854.0	11,854.0	13									
12,025.9	12,025.9	13									
12,160.1	12,160.1	13									
12,334.0	12,334.0	13									
12,416.0	12,416.0	13									
12,587.9	12,587.9	13									
12,725.1	12,725.1	13									
12,889.1	12,889.1	13									
13,032.2	13,032.2	13									
13,205.1	13,205.1	13									
13,292.0	13,292.0	13									
13,367.1	13,367.1	13									
13,464.9	13,464.9	13									



Lease Review All - Frac Summary

Well Name: RAZOR 11E-1401A

API Number 051233852900		WPC ID 1CO0761008		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) 13,465.0		
Original Spud Date 1/17/2014		Completion Date 6/15/2014		Asset Group Redtail			Responsible Engineer Andrew Fish		N/S Dist (ft) 2,396.0		N/S Ref FNL	E/W Dist (ft) 789.0		E/W Ref FWL
Lot	Quarter 1 SW	Quarter 2 NW	Quarter 3	Quarter 4	Section 11	Section Suffix	Section Type	Township 10	Township N/S Dir N	Range 58	Range E/W Dir W	Meridian		

Lateral/Horizontal - Original Hole, 10/13/2014 3:11:37 PM					Tubing - Production set at 5,955.0ftKB on 6/14/2014 10:00												
MD (ftKB)	D (ft K B)	n (K B)	c (K B)	l (K B)	Vertical schematic (actual)	Logs	Set Depth (ftKB)		Comment		Run Date		Pull Date				
							5,955.0				6/14/2014						
							Item Des	OD (in)	ID (in)	Len (ft)		Top (ftKB)	Btm (ftKB)				
							Tubing	2 7/8	2.441	30.84		21.8	52.7				
74.8	74.8	74.8	74.8	74.8			Tubing Sub 10', 8', 4'	2 7/8		22.00		52.7	74.7				
1,842.5	1,842.5	1,842.5	1,842.5	1,842.5			Tubing	2 7/8	2.441	1,968.49		74.7	2,043.2				
3,406.2	3,406.2	3,406.2	3,406.2	3,406.2			Gas Lift Mandrel	2 7/8		4.05		2,043.2	2,047.2				
4,962.6	4,962.6	4,962.6	4,962.6	4,962.6			Tubing	2 7/8	2.441	1,354.94		2,047.2	3,402.2				
5,101.4	5,101.4	5,101.4	5,101.4	5,101.4			Gas Lift Mandrel	2 7/8		4.05		3,402.2	3,406.2				
5,282.5	5,282.5	5,282.5	5,282.5	5,282.5			Tubing	2 7/8	2.441	839.86		3,406.2	4,246.1				
5,955.1	5,955.1	5,955.1	5,955.1	5,955.1			Gas Lift Mandrel	2 7/8		4.05		4,246.1	4,250.1				
6,365.2	6,365.2	6,365.2	6,365.2	6,365.2			Tubing	2 7/8	2.441	514.29		4,250.1	4,764.4				
6,462.9	6,462.9	6,462.9	6,462.9	6,462.9			Gas Lift Mandrel	2 7/8		4.05		4,764.4	4,768.5				
6,607.0	6,607.0	6,607.0	6,607.0	6,607.0			Tubing	2 7/8	2.441	193.99		4,768.5	4,962.5				
6,779.9	6,779.9	6,779.9	6,779.9	6,779.9			Cup Seating Nipple	2 7/8		1.10		4,962.5	4,963.6				
6,914.0	6,914.0	6,914.0	6,914.0	6,914.0			Cross Over 2-7/8" x 2-3/8"	2 7/8		0.50		4,963.6	4,964.1				
7,086.9	7,086.9	7,086.9	7,086.9	7,086.9			Tubing	2 3/8	1.995	314.23		4,964.1	5,278.3				
7,165.0	7,165.0	7,165.0	7,165.0	7,165.0			Gas Lift Mandrel	2 3/8		4.05		5,278.3	5,282.3				
7,337.9	7,337.9	7,337.9	7,337.9	7,337.9			Tubing	2 3/8	1.995	594.13		5,282.3	5,876.5				
7,482.0	7,482.0	7,482.0	7,482.0	7,482.0			Gas Lift Mandrel	2 3/8		4.05		5,876.5	5,880.5				
7,654.9	7,654.9	7,654.9	7,654.9	7,654.9			Tubing	2 3/8	1.995	63.10		5,880.5	5,943.6				
7,789.0	7,789.0	7,789.0	7,789.0	7,789.0			On-Off Tool	2 3/8		1.34		5,943.6	5,945.0				
7,961.9	7,961.9	7,961.9	7,961.9	7,961.9			Packer AS-1 Production Pkr	4 1/2		10.00		5,945.0	5,955.0				
Rod Strings																	
<des> on <dttrun>																	
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		5/13/2014		6/13/2014		6,508.0		6,510.0	
CFP								4		5/13/2014		6/13/2014		6,683.0		6,685.0	
CFP								4		5/13/2014		6/13/2014		6,858.0		6,860.0	
CFP								4		5/13/2014		6/13/2014		7,034.0		7,036.0	
CFP								4		5/13/2014		6/13/2014		7,209.0		7,211.0	
CFP								4		5/13/2014		6/13/2014		7,384.0		7,386.0	
CFP								4		5/12/2014		6/13/2014		7,559.0		7,561.0	
CFP								4		5/12/2014		6/13/2014		7,734.0		7,736.0	
CFP								4		5/12/2014		6/13/2014		7,909.0		7,911.0	
CFP								4		5/12/2014		6/13/2014		8,084.0		8,086.0	
CFP								4		5/12/2014		6/13/2014		8,259.0		8,261.0	
CFP								4		5/12/2014		6/13/2014		8,434.0		8,436.0	
CFP								4		5/11/2014		6/13/2014		8,609.0		8,611.0	
CFP								4		5/11/2014		6/13/2014		8,784.0		8,786.0	
CFP								4		5/11/2014		6/13/2014		8,959.0		8,961.0	
CFP								4		5/11/2014		6/13/2014		9,135.0		9,137.0	
CFP								4		5/11/2014		6/13/2014		9,310.0		9,312.0	
CFP								4		5/10/2014		6/13/2014		9,485.0		9,487.0	
CFP								4		5/10/2014		6/13/2014		9,660.0		9,662.0	
CFP								4		5/10/2014		6/13/2014		9,835.0		9,837.0	
CFP								4		5/9/2014		6/13/2014		10,010.0		10,012.0	
CFP								4		5/9/2014		6/13/2014		10,185.0		10,187.0	
CFP								4		5/9/2014		6/13/2014		10,360.0		10,362.0	
CFP								4		5/9/2014		6/13/2014		10,535.0		10,537.0	
CFP								4		5/9/2014		6/13/2014		10,712.0		10,714.0	
CFP								4		5/8/2014		6/13/2014		10,888.0		10,890.0	
CFP								4		5/8/2014		6/13/2014		11,065.0		11,067.0	
CFP								4		5/8/2014		6/13/2014		11,240.0		11,242.0	
CFP								4		5/8/2014		6/13/2014		11,416.0		11,418.0	
CFP								4		5/8/2014		6/13/2014		11,588.0		11,590.0	
CFP								4		5/7/2014		6/13/2014		11,764.0		11,766.0	
CFP								4		5/7/2014		6/13/2014		11,940.0		11,942.0	
CFP								4		5/7/2014		6/13/2014		12,115.0		12,117.0	
CFP								4		5/7/2014		6/13/2014		12,280.0		12,282.0	
CFP								4		5/6/2014		6/13/2014		12,458.0		12,460.0	
CFP								4		5/6/2014		6/13/2014		12,636.0		12,638.0	
CFP								4		5/6/2014		6/13/2014		12,811.0		12,813.0	
CFP								4		5/5/2014		6/13/2014		12,984.0		12,986.0	



Lateral/Horizontal - Original Hole, 10/13/2014 3:11:39 PM				Other In Hole					
MD	D (ft)	n c		Des	OD (in)	Run Date	Pull Date	Top (ftKB)	Btm (ftKB)
				CFP	4	5/5/2014	6/13/2014	13,162.0	13,164.0