Lease Review

Well Name: RAZOR 26L-3502B

API Number	WPC ID	Well Permit Number	Field Name	County	State
051233799200	1CO0761035		DJ Horizontal Niobrara	Weld	CO

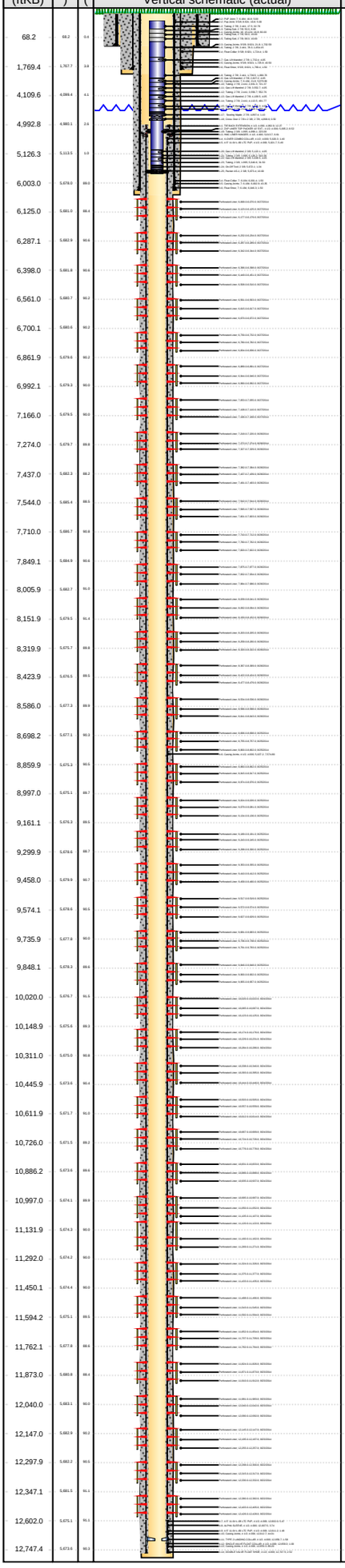
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,751.00	4,734.20			12,760.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
4/15/2014	8/28/2014	Redtail	Andrew Fish	2,244.0	FSL	626.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	NW	SW			26			10	N	58	W	

Lateral/Horizontal - Original Hole, 12/26/2014 10:10:54 AM

MD (ftKB)	D (ftKB)	nc l (	Vertical schematic (actual)	Logs



Wellbore Sections

Section Des	Wellbore Name	Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
Conductor	Original Hole	3/28/2014	20	16.8	96.8
Surface	Original Hole	4/15/2014	13 1/2	96.8	1,790.0
Intermediate	Original Hole	4/17/2014	8 3/4	1,790.0	6,060.0
Lateral	Original Hole	4/20/2014	6	6,060.0	12,760.0

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, 1,770.9ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
9 5/8	36.00	J-55	16.8	16.8	0.00	Landing Joint
9 5/8	36.00	J-55	16.8	21.8	5.00	Pup Joint
9 5/8	36.00	J-55	21.8	1,724.4	1,702.59	Casing Joints
9 5/8	36.00	J-55	1,724.4	1,725.9	1.50	Float Collar
9 5/8	36.00	J-55	1,725.9	1,769.4	43.50	Casing Joints
9 5/8	36.00	J-55	1,769.4	1,770.9	1.50	Float Shoe

Intermediate Csg, 6,047.8ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7	29.00	L-80	16.8	16.8	0.00	Landing Joint
7	29.00	L-80	16.8	21.8	5.00	PUP Joint
7	29.00	L-80	21.8	6,001.5	5,979.66	Casing Joints
7	29.00	L-80	6,001.5	6,003.0	1.50	Float Collar
7	29.00	L-80	6,003.0	6,046.3	43.35	Casing Joints
7	29.00	L-80	6,046.3	6,047.8	1.50	Float Shoe

Liner, 12,750.0ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
4 1/2	11.60	L-80	4,992.9	5,005.2	12.27	TIE BACK EXTENSION
4 1/2	11.60	L-80	5,005.2	5,013.7	8.52	ZXP LINER TOP PACKER 10' EXT.
4 1/2	11.60	L-80	5,013.7	5,020.3	6.61	HMC LINER HANGER
4 1/2	11.60	L-80	5,020.3	5,021.7	1.40	X-OVER COMBO COLLAR
4 1/2	11.60	L-80	5,021.7	5,027.2	5.49	4.5" 11.6# L-80 LTC PUP
4 1/2	11.60	L-80	5,027.2	12,602.0	7,574.80	Casing Joints
4 1/2	11.60	L-80	12,602.0	12,607.5	5.47	4.5" 11.6# L-08 LTC PUP
4 1/2	11.60	L-80	12,607.5	12,611.2	3.74	ALPHA SLEEVE
4 1/2	11.60	L-80	12,611.2	12,612.7	1.49	4.5" 11.6# L-80 LTC PUP
4 1/2	11.60	L-80	12,612.7	12,656.7	44.01	Casing Joints
4 1/2	11.60	L-80	12,656.7	12,658.3	1.58	TYPE 2 LANDING COLLAR
4 1/2	11.60	L-80	12,658.3	12,659.3	1.00	SINGLE VALVE FLOAT COLLAR
4 1/2	11.60	L-80	12,659.3	12,747.5	88.20	Casing Joints
4 1/2	11.60	L-80	12,747.5	12,750.0	2.52	DOUBLE VALVE FLOAT SHOE

Cement Stages

Des	Pump Start Date	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Conductor Cement	3/28/2014		16.8	96.8	Returns to Surface
Surface Casing Cement	4/16/2014		16.8	1,770.9	Returns to Surface
Intermediate Casing Cement	4/20/2014		16.8	6,048.0	Returns to Surface
Liner Cement	4/24/2014		4,992.9	12,750.0	Volume Calculations

Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated Liner	8/27/2014	6,068.0	6,070.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,123.0	6,125.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,177.0	6,179.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,232.0	6,234.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,287.0	6,289.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,342.0	6,344.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,396.0	6,398.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,449.0	6,451.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,508.0	6,510.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,561.0	6,563.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,615.0	6,617.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,670.0	6,672.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,730.0	6,732.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,780.0	6,782.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,834.0	6,836.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,889.0	6,891.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,944.0	6,946.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	6,990.0	6,992.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	7,053.0	7,055.0	Niobrara, Original Hole
Perforated Liner	8/27/2014	7,108.0	7,110.0	Niobrara, Original Hole

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Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	NW	SW			26			10	N	58	W	

Lateral/Horizontal - Original Hole, 12/26/2014 10:10:55 AM

MD (ftKB)	D (ftKB)	Vertical schematic (actual)	Logs
68.2	68.2		
1,769.4	1,767.7		
4,109.6	4,099.4		
4,992.8	4,980.1		
5,126.3	5,113.5		
6,003.0	5,978.0		
6,125.0	5,981.0		
6,287.1	5,982.9		
6,398.0	5,981.8		
6,561.0	5,980.7		
6,700.1	5,980.6		
6,861.9	5,979.6		
6,992.1	5,979.3		
7,166.0	5,979.5		
7,274.0	5,979.7		
7,437.0	5,982.3		
7,544.0	5,985.4		
7,710.0	5,986.7		
7,849.1	5,984.9		
8,005.9	5,982.7		
8,151.9	5,979.5		
8,319.9	5,975.7		
8,423.9	5,976.5		
8,586.0	5,977.3		
8,698.2	5,977.1		
8,859.9	5,975.3		
8,997.0	5,975.1		
9,161.1	5,976.3		
9,299.9	5,978.6		
9,458.0	5,979.9		
9,574.1	5,978.6		
9,735.9	5,977.8		
9,848.1	5,978.3		
10,020.0	5,976.7		
10,148.9	5,975.6		
10,311.0	5,975.0		
10,445.9	5,973.6		
10,611.9	5,971.7		
10,726.0	5,971.5		
10,886.2	5,973.6		
10,997.0	5,974.1		
11,131.9	5,974.3		
11,292.0	5,974.2		
11,450.1	5,974.4		
11,594.2	5,975.1		
11,762.1	5,977.8		
11,873.0	5,980.0		
12,040.0	5,983.1		
12,147.0	5,982.9		
12,297.9	5,982.2		
12,347.1	5,981.5		
12,602.0	5,975.1		
12,747.4	5,973.6		

Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated Liner	8/27/2014	7,166.0	7,168.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,218.0	7,220.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,272.0	7,274.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,327.0	7,329.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,382.0	7,384.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,437.0	7,439.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,491.0	7,493.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,542.0	7,544.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,565.0	7,567.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,601.0	7,603.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,710.0	7,712.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,760.0	7,762.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,820.0	7,822.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,875.0	7,877.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,932.0	7,934.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	7,984.0	7,986.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,039.0	8,041.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,092.0	8,094.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,150.0	8,152.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,203.0	8,205.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,258.0	8,260.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,320.0	8,322.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,367.0	8,369.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,422.0	8,424.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,477.0	8,479.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,534.0	8,536.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,586.0	8,588.0	Niobrara, Original Hole
Perforated Liner	8/26/2014	8,641.0	8,643.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	8,696.0	8,698.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	8,755.0	8,757.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	8,800.0	8,802.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	8,860.0	8,862.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	8,915.0	8,917.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	8,974.0	8,976.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,024.0	9,026.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,079.0	9,081.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,134.0	9,136.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,189.0	9,191.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,243.0	9,245.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,298.0	9,300.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,353.0	9,355.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,410.0	9,412.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,458.0	9,460.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,517.0	9,519.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,572.0	9,574.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,627.0	9,629.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,681.0	9,683.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,736.0	9,738.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,791.0	9,793.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,846.0	9,848.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,900.0	9,902.0	Niobrara, Original Hole
Perforated Liner	8/25/2014	9,955.0	9,957.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,020.0	10,022.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,065.0	10,067.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,123.0	10,125.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,174.0	10,176.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,229.0	10,231.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,284.0	10,286.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,338.0	10,340.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,393.0	10,395.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,444.0	10,446.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,503.0	10,505.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,557.0	10,559.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,612.0	10,614.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,667.0	10,669.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,724.0	10,726.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,776.0	10,778.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,831.0	10,833.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,886.0	10,888.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,935.0	10,937.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	10,995.0	10,997.0	Niobrara, Original Hole

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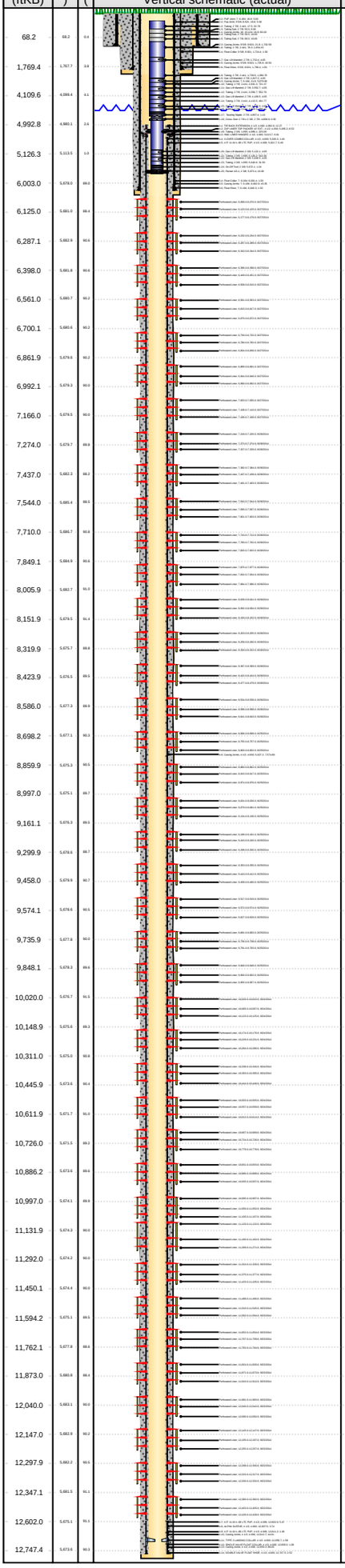
Lateral/Horizontal - Original Hole, 12/26/2014 10:10:57 AM

MD (ftKB)	D (ftKB)	nci(	Vertical schematic (actual)	Logs



Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated Liner	8/24/2014	11,050.0	11,052.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	11,105.0	11,107.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	11,120.0	11,122.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	11,160.0	11,162.0	Niobrara, Original Hole
Perforated Liner	8/24/2014	11,269.0	11,271.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,324.0	11,326.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,375.0	11,377.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,433.0	11,435.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,488.0	11,490.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,543.0	11,545.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,592.0	11,594.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,652.0	11,654.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,707.0	11,709.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,762.0	11,764.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,824.0	11,826.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,871.0	11,873.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,910.0	11,912.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	11,981.0	11,983.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	12,040.0	12,042.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	12,090.0	12,092.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	12,145.0	12,147.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	12,195.0	12,197.0	Niobrara, Original Hole
Perforated Liner	8/23/2014	12,255.0	12,257.0	Niobrara, Original Hole
Perforated Liner	8/22/2014	12,298.0	12,300.0	Niobrara, Original Hole
Perforated Liner	8/22/2014	12,315.0	12,317.0	Niobrara, Original Hole
Perforated Liner	8/22/2014	12,330.0	12,332.0	Niobrara, Original Hole
Perforated Liner	8/22/2014	12,380.0	12,382.0	Niobrara, Original Hole
Perforated Liner	8/22/2014	12,403.0	12,405.0	Niobrara, Original Hole
Perforated Liner	8/22/2014	12,426.0	12,428.0	Niobrara, Original Hole

Sand Frac on 8/22/2014 06:00

Comment	Min Top De...	Max Btm D...	Frac Length (ft)
Treatment End Date:8/27/2014; Number of staged intervals: 40; Total 28%HCl used: 732bbl; Min frac gradient: 0.801 psi/ft; Number of perfs: 1440; 202572 bbl Slickwater	6,068.0	12,428.0	6,360.00

Stim/Treat Fluids

Slickwater; 28% HCl, <fluidtyp>

Proppant Frm (lb)	Total Clean Vol...	Avg Treat Rate...	Max Treat Rate...	Avg Treat Press...	P Max (psi)	Frac Gradient (p...
4,414,402.5	203304.70	61.20	73.60	5,120.0	6,241.0	0.84

Stim/Treat Stages

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
1	8/22/2014	12,380.0	12,428.0	7820.60	7928.40

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	97,585.0	lb	30/50
Proppant	40/70 WS	2,585.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
2	8/22/2014	12,298.0	12,332.0	5299.80	5014.40

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	100,521.0	lb	30/50
Proppant	40/70 WS	2,206.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
3	8/22/2014	12,145.0	12,257.0	5236.60	5030.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	103,636.0	lb	30/50
Proppant	40/70 WS	2,666.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
4	8/23/2014	11,981.0	12,092.0	5222.30	5032.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,586.0	lb	30/50
Proppant	40/70 WS	2,582.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
5	8/23/2014	11,824.0	11,912.0	5163.80	5018.70

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	100,421.0	lb	30/50
Proppant	40/70 WS	2,546.7	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
6	8/23/2014	11,652.0	11,764.0	4983.80	4847.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,494.0	lb	30/50
Proppant	40/70 WS	3,158.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
7	8/23/2014	11,488.0	11,594.0	5216.40	5091.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,097.0	lb	30/50
Proppant	40/70 WS	3,019.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
8	8/23/2014	11,324.0	11,435.0	5240.90	5132.40

Lease Review

Well Name: RAZOR 26L-3502B

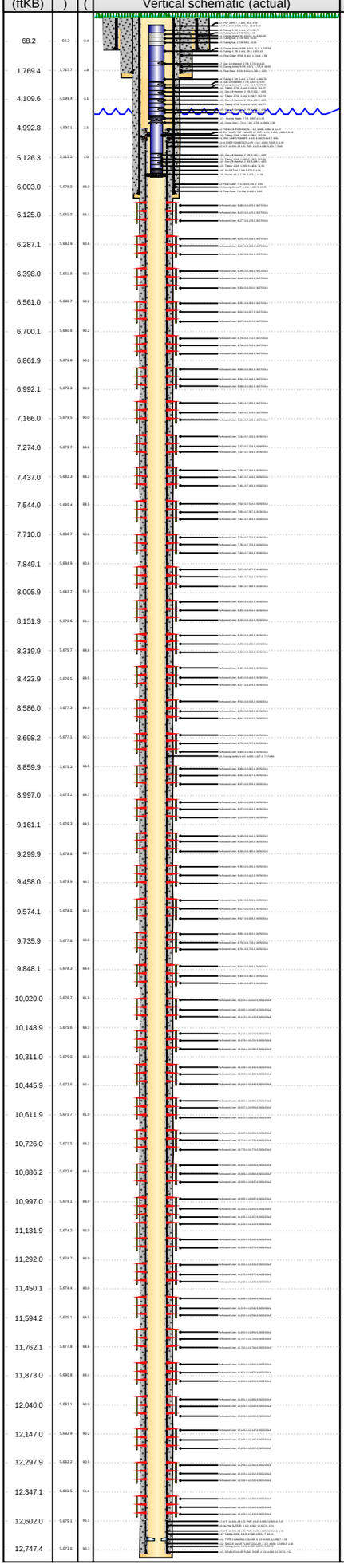
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233799200	1CO0761035		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,751.00	4,734.20			12,760.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
4/15/2014	8/28/2014	Redtail	Andrew Fish	2,244.0	FSL	626.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	NW	SW			26			10	N	58	W	

Lateral/Horizontal - Original Hole, 12/26/2014 10:10:58 AM



Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,672.0	lb	30/50
Proppant	40/70 WS	3,243.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
9	8/23/2014	11,120.0	11,271.0	5152.80	5050.90

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	111,140.0	lb	30/50
Proppant	40/70 WS	3,195.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
10	8/24/2014	10,995.0	11,107.0	5205.50	5106.70

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	110,236.0	lb	30/50
Proppant	40/70 WS	3,255.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
11	8/24/2014	10,831.0	10,937.0	5155.30	5053.90

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	107,475.0	lb	30/50
Proppant	40/70 WS	2,701.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
12	8/24/2014	10,667.0	10,778.0	5092.40	5003.80

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	104,270.0	lb	30/50
Proppant	40/70 WS	2,945.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
13	8/24/2014	10,503.0	10,614.0	5024.80	4951.50

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	101,922.0	lb	30/50
Proppant	40/70 WS	2,780.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
14	8/24/2014	10,338.0	10,446.0	5025.50	4947.80

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	106,235.0	lb	30/50
Proppant	40/70 WS	2,762.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
15	8/24/2014	10,174.0	10,286.0	4995.00	4929.80

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	105,433.0	lb	30/50
Proppant	40/70 WS	3,097.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
16	8/24/2014	10,020.0	10,125.0	5072.80	4990.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	109,862.0	lb	30/50
Proppant	40/70 WS	2,699.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
17	8/25/2014	9,846.0	9,957.0	5028.60	4980.90

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,785.0	lb	30/50
Proppant	40/70 WS	2,997.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
18	8/25/2014	9,681.0	9,793.0	5077.10	5046.40

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	112,370.0	lb	30/50
Proppant	40/70 WS	3,061.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
19	8/25/2014	9,517.0	9,629.0	5054.50	4999.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	109,232.0	lb	30/50
Proppant	40/70 WS	2,953.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
20	8/25/2014	9,353.0	9,460.0	5002.30	4979.80

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	106,093.0	lb	30/50
Proppant	40/70 WS	3,064.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
21	8/25/2014	9,189.0	9,300.0	5139.40	5083.00

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,885.0	lb	30/50
Proppant	40/70 WS	3,172.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
22	8/25/2014	9,024.0	9,136.0	5001.30	4963.40

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	108,580.0	lb	30/50
Proppant	40/70 WS	2,934.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
23	8/25/2014	8,860.0	8,976.0	4990.80	4955.10

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	107,886.0	lb	30/50
Proppant	40/70 WS	2,935.0	lb	40/70

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
24	8/25/2014	8,696.0	8,802.0	4961.60	4955.20

Report Printed: 12/26/2014

Lease Review

Well Name: RAZOR 26L-3502B

API Number	WPC ID	Well Permit Number	Field Name	County	State
051233799200	1CO0761035		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	4,751.00	4,734.20			12,760.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
4/15/2014	8/28/2014	Redtail	Andrew Fish	2,244.0	FSL	626.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	NW	SW			26			10	N	58	W	

Lateral/Horizontal - Original Hole, 12/26/2014 10:11:00 AM

MD (ftKB)	D (ftKB)	nci(	Vertical schematic (actual)	Logs
68.2	68.2	0.4		
1,769.4	1,767.7	3.8		
4,109.6	4,099.4	4.1		
4,992.8	4,980.1	2.6		
5,126.3	5,113.5	1.0		
6,003.0	5,478.0	88.0		
6,125.0	5,481.0	88.4		
6,287.1	5,482.9	90.6		
6,398.0	5,481.8	90.6		
6,561.0	5,480.7	90.2		
6,700.1	5,480.6	90.2		
6,861.9	5,479.6	90.2		
6,992.1	5,479.3	90.0		
7,166.0	5,479.5	90.0		
7,274.0	5,479.7	89.8		
7,437.0	5,482.3	88.2		
7,544.0	5,485.4	88.5		
7,710.0	5,486.7	90.8		
7,849.1	5,484.9	90.6		
8,005.9	5,482.7	91.0		
8,151.9	5,479.5	91.4		
8,319.9	5,475.7	89.8		
8,423.9	5,476.5	88.5		
8,586.0	5,477.3	89.8		
8,698.2	5,477.1	90.3		
8,859.9	5,475.3	90.5		
8,997.0	5,475.1	89.7		
9,161.1	5,476.3	88.5		
9,299.9	5,476.6	88.7		
9,458.0	5,476.9	91.7		
9,574.1	5,478.6	90.5		
9,735.9	5,477.8	90.0		
9,848.1	5,478.3	88.6		
10,020.0	5,476.7	91.3		
10,148.9	5,475.6	89.3		
10,311.0	5,475.0	90.8		
10,445.9	5,473.6	90.4		
10,611.9	5,471.7	91.0		
10,726.0	5,471.5	89.2		
10,886.2	5,473.6	89.6		
10,997.0	5,474.1	89.9		
11,131.9	5,474.3	90.0		
11,292.0	5,474.2	90.0		
11,450.1	5,474.4	90.0		
11,594.2	5,475.1	90.5		
11,762.1	5,477.8	88.6		
11,873.0	5,480.0	88.4		
12,040.0	5,483.1	90.0		
12,147.0	5,482.9	90.2		
12,297.9	5,482.2	90.5		
12,347.1	5,481.5	91.1		
12,602.0	5,475.1	91.1		
12,747.4	5,473.6	90.3		

Stg #	Start Date	Top Depth (ftKB)	Bottom Depth (ftKB)	Vol Clean Pump (bbl)	Vol Slurry (bbl)
25	8/25/2014	8,534.0	8,643.0	4954.90	4954.60
26	8/26/2014	8,367.0	8,479.0	4961.20	4955.10
27	8/26/2014	8,203.0	8,322.0	4912.50	4926.70
28	8/26/2014	8,039.0	8,152.0	5017.40	5040.70
29	8/26/2014	7,875.0	7,986.0	4983.00	5003.80
30	8/26/2014	7,710.0	7,822.0	4887.20	4918.90
31	8/26/2014	7,542.0	7,603.0	4902.00	4934.00
32	8/26/2014	7,382.0	7,493.0	4848.90	4892.30
33	8/26/2014	7,218.0	7,329.0	4812.60	4862.00
34	8/26/2014	7,053.0	7,168.0	4843.50	4879.20
35	8/27/2014	6,889.0	6,992.0	4761.80	4820.90
36	8/27/2014	6,730.0	6,836.0	4809.10	4870.50
37	8/27/2014	6,561.0	6,672.0	4826.60	4889.00
38	8/27/2014	6,396.0	6,510.0	4806.90	4875.80
39	8/27/2014	6,232.0	6,344.0	4898.60	4984.20
40	8/27/2014	6,068.0	6,179.0	4914.60	4999.40

Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	109,155.0	lb	30/50
Proppant	40/70 WS	2,875.0	lb	40/70
Proppant	30/50 WS	108,174.0	lb	30/50
Proppant	40/70 WS	2,978.0	lb	40/70
Proppant	30/50 WS	108,336.0	lb	30/50
Proppant	40/70 WS	3,026.0	lb	40/70
Proppant	30/50 WS	106,088.0	lb	30/50
Proppant	40/70 WS	2,829.0	lb	40/70
Proppant	30/50 WS	108,791.0	lb	30/50
Proppant	40/70 WS	2,986.0	lb	40/70
Proppant	30/50 WS	110,255.0	lb	30/50
Proppant	40/70 WS	2,925.0	lb	40/70
Proppant	30/50 WS	106,498.0	lb	30/50
Proppant	40/70 WS	2,842.0	lb	40/70
Proppant	30/50 WS	111,260.0	lb	30/50
Proppant	40/70 WS	2,965.0	lb	40/70
Proppant	30/50 WS	109,816.0	lb	30/50
Proppant	40/70 WS	2,984.0	lb	40/70
Proppant	30/50 WS	109,724.0	lb	30/50
Proppant	40/70 WS	3,001.0	lb	40/70
Proppant	30/50 WS	106,714.0	lb	30/50
Proppant	40/70 WS	2,903.0	lb	40/70
Proppant	30/50 WS	107,862.0	lb	30/50
Proppant	40/70 WS	2,906.0	lb	40/70
Proppant	30/50 WS	108,044.0	lb	30/50
Proppant	40/70 WS	1,894.0	lb	40/70
Proppant	30/50 WS	104,389.8	lb	30/50
Proppant	40/70 WS	2,756.0	lb	40/70
Proppant	30/50 WS	104,018.0	lb	30/50
Proppant	40/70 WS	2,714.0	lb	40/70
Proppant	30/50 WS	113,849.0	lb	30/50
Proppant	40/70 WS	2,843.0	lb	40/70

Report Printed: 12/26/2014

Lease Review

Well Name: RAZOR 26L-3502B

API Number	WPC ID	Well Permit Number	Field Name	County	State
051233799200	1CO0761035		DJ Horizontal Niobrara	Weld	CO

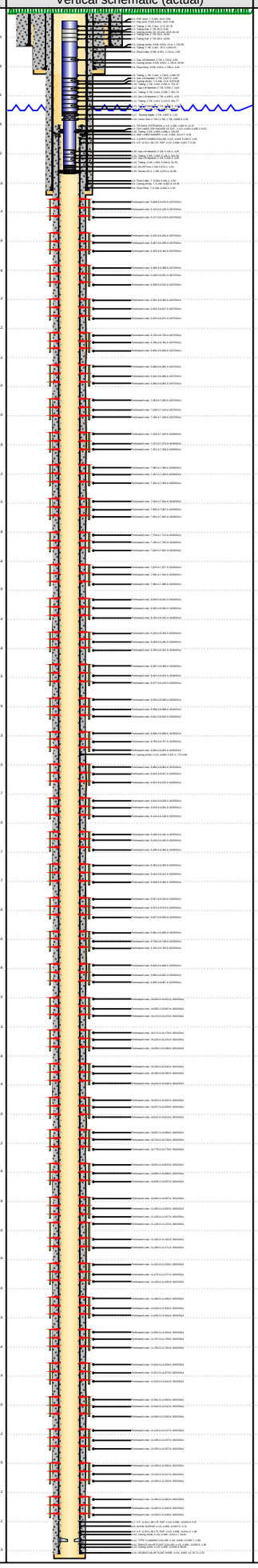
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,751.00	4,734.20			12,760.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
4/15/2014	8/28/2014	Redtail	Andrew Fish	2,244.0	FSL	626.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	NW	SW			26			10	N	58	W	

Lateral/Horizontal - Original Hole, 12/26/2014 10:11:01 AM

MD (ftKB)	D (ftKB)	nci(	Vertical schematic (actual)	Logs



Additive	Type	Amount	Units	Sand Size
Proppant	30/50 WS	112,488.0	lb	30/50
Proppant	40/70 WS	2,542.0	lb	40/70

Tubing - Production set at 5,683.4ftKB on 9/30/2014 12:00

Set Depth (ftKB)	Comment	Run Date	Pull Date
5,683.4		9/30/2014	

Item Des	OD (in)	ID (in)	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing Hanger			0.50	17.0	17.5
Tubing	2 7/8	2.441	32.78	17.5	50.3
Tubing Sub	2 7/8		8.00	50.3	58.3
Tubing Sub	2 7/8		10.00	58.3	68.3
Tubing Sub	2 7/8		10.00	68.3	78.3
Tubing	2 7/8	2.441	1,654.15	78.3	1,732.4
Gas Lift Mandrel	2 7/8		4.05	1,732.4	1,736.5
Tubing	2 7/8	2.441	1,090.76	1,736.5	2,827.2
Gas Lift Mandrel	2 7/8		4.05	2,827.2	2,831.3
Tubing	2 7/8	2.441	721.37	2,831.3	3,552.7
Gas Lift Mandrel	2 7/8		4.05	3,552.7	3,556.7
Tubing	2 7/8	2.441	552.76	3,556.7	4,109.5
Gas Lift Mandrel	2 7/8		4.05	4,109.5	4,113.5
Tubing	2 7/8	2.441	491.77	4,113.5	4,605.3
Gas Lift Mandrel	2 7/8		4.05	4,605.3	4,609.3
Tubing	2 7/8	2.441	288.11	4,609.3	4,897.5
Seating Nipple	2 7/8		1.10	4,897.5	4,898.6
Cross Over 2 7/8 x 2 3/8	2 7/8		0.50	4,898.6	4,899.1
Tubing	2 3/8	1.995	223.09	4,899.1	5,122.1
Gas Lift Mandrel	2 3/8		4.05	5,122.1	5,126.2
Tubing	2 3/8	1.995	510.36	5,126.2	5,636.6
Gas Lift Mandrel	2 3/8		4.05	5,636.6	5,640.6
Tubing	2 3/8	1.995	31.50	5,640.6	5,672.1
On-Off Tool	2 3/8		1.34	5,672.1	5,673.4
Packer AS-1	2 3/8		10.00	5,673.4	5,683.4

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		9/28/2014	6,205.0	6,207.0
CFP	4		9/28/2014	6,375.0	6,377.0
CFP	4		9/28/2014	6,533.0	6,535.0
CFP	4		9/28/2014	6,698.0	6,700.0
CFP	4		9/28/2014	6,862.0	6,864.0
CFP	4		9/28/2014	7,010.0	7,012.0
CFP	4		9/28/2014	7,186.0	7,188.0
CFP	4		9/29/2014	7,355.0	7,357.0
CFP	4		9/29/2014	7,519.0	7,521.0
CFP	4		9/29/2014	7,685.0	7,687.0
CFP	4		9/29/2014	7,847.0	7,849.0
CFP	4		9/29/2014	8,006.0	8,008.0
CFP	4		9/29/2014	8,172.0	8,174.0
CFP	4		9/29/2014	8,340.0	8,342.0
CFP	4		9/29/2014	8,504.0	8,506.0
CFP	4		9/29/2014	8,669.0	8,671.0
CFP	4		9/29/2014	8,826.0	8,828.0
CFP	4		9/29/2014	8,995.0	8,997.0
CFP	4		9/29/2014	9,161.0	9,163.0
CFP	4		9/29/2014	9,326.0	9,328.0
CFP	4		9/29/2014	9,482.0	9,484.0
CFP	4		9/29/2014	9,654.0	9,656.0
CFP	4		9/29/2014	9,818.0	9,820.0
CFP	4		9/29/2014	9,982.0	9,984.0
CFP	4		9/29/2014	10,147.0	10,149.0
CFP	4		9/29/2014	10,311.0	10,313.0
CFP	4		9/29/2014	10,475.0	10,477.0
CFP	4		9/29/2014	10,639.0	10,641.0
CFP	4		9/29/2014	10,802.0	10,804.0
CFP	4		9/29/2014	10,968.0	10,970.0
CFP	4		9/29/2014	11,132.0	11,134.0

Report Printed: 12/26/2014

Lease Review

Well Name: RAZOR 26L-3502B

API Number	WPC ID	Well Permit Number	Field Name	County	State
051233799200	1CO0761035		DJ Horizontal Niobrara	Weld	CO

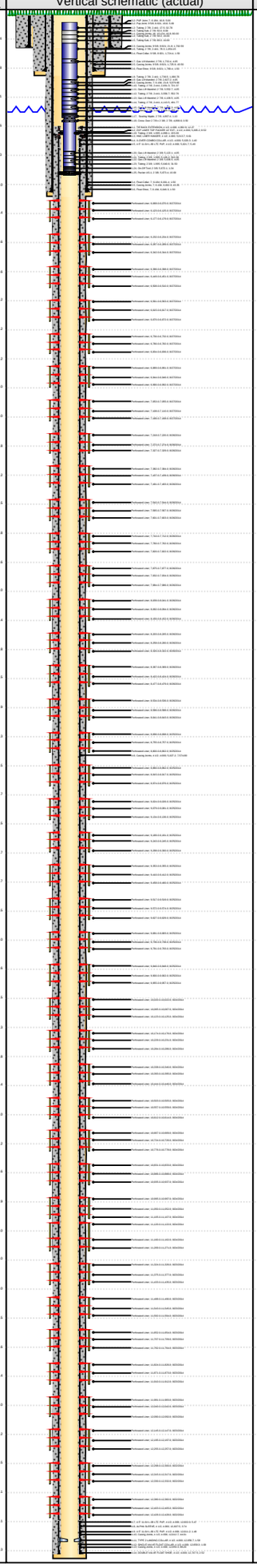
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,751.00	4,734.20			12,760.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
4/15/2014	8/28/2014	Redtail	Andrew Fish	2,244.0	FSL	626.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	NW	SW			26			10	N	58	W	

Lateral/Horizontal - Original Hole, 12/26/2014 10:11:02 AM

MD (ftKB)	D (ftKB)	Incl	Vertical schematic (actual)	Logs



Other In Hole

Des	OD (in)	Run Date	Pull Date	Top (ftKB)	Btm (ftKB)
CFP	4		9/29/2014	11,290.0	11,292.0
CFP	4		9/29/2014	11,450.0	11,452.0
CFP	4		9/29/2014	11,620.0	11,622.0
CFP	4		9/29/2014	11,789.0	11,791.0
CFP	4		9/29/2014	11,930.0	11,932.0
CFP	4		9/29/2014	12,106.0	12,108.0
CFP	4		9/29/2014	12,270.0	12,272.0
CFP	4		9/29/2014	12,345.0	12,347.0

Bottom Hole Cores

Date	Core #	Top (ftKB)	Btm (ftKB)	Recov (ft)

Report Printed: 12/26/2014