Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

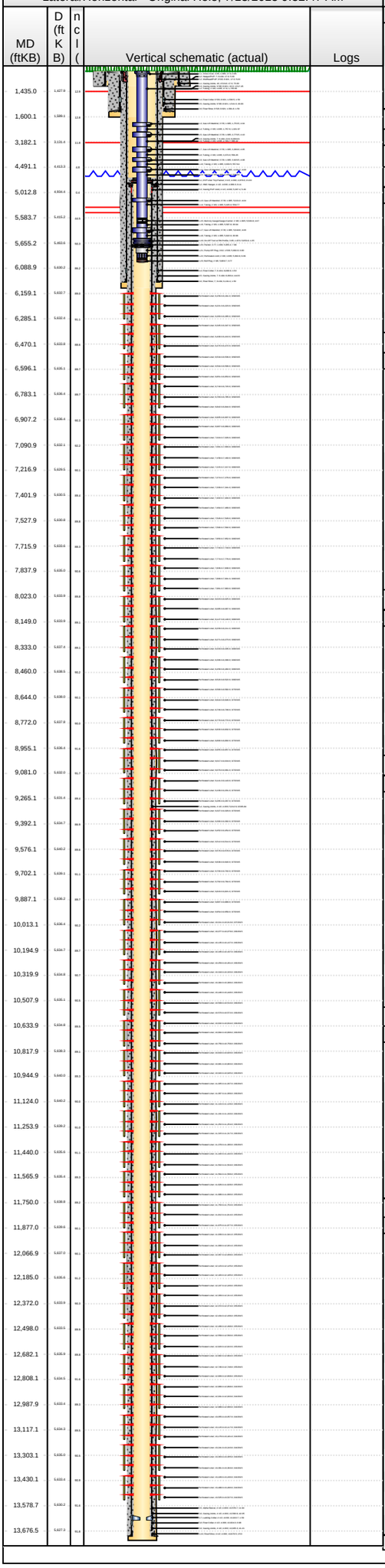
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:52:47 AM



Wellbore Sections

Wellbore Name	Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
Original Hole	4/23/2014	20	17.0	90.0
Original Hole	9/18/2014	13 1/2	90.0	1,600.0
Original Hole	9/20/2014	8 3/4	1,600.0	6,150.0
Original Hole	9/22/2014	6	6,150.0	13,684.0

Conductor Pipe, 90.0ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
16	84.00	K-55	17.0	90.0	73.00	Casing Joints

Surface Csg, 1,583.3ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
9 5/8	36.00	J-55	17.0	17.0	0.00	Landing Joint
9 5/8	36.00	J-55	17.0	22.0	5.00	Wellhead/PUP
9 5/8	36.00	J-55	22.0	1,539.5	1,517.45	Casing Joints
9 5/8	36.00	J-55	1,539.5	1,541.0	1.50	Float Collar
9 5/8	36.00	J-55	1,541.0	1,581.8	40.83	Casing Joints
9 5/8	36.00	J-55	1,581.8	1,583.3	1.50	Float Shoe

Frac String, 4,978.3ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7			17.0	17.6	0.60	Casing Hanger
4 1/2			17.6	18.6	1.00	BTC x LTC crossover
4 1/2		11.60	18.6	60.5	41.92	4.5# P-110 BTC-TXP 11.6# casing
4 1/2			60.5	73.8	13.35	4.5" BTC-TXP spaceout pup jt 8.25', 3.55', 1.55
4 1/2		11.60	73.8	4,970.8	4,896.93	4.5# P-110 BTC-TXP 11.6# casing
4 1/2			4,970.8	4,976.9	6.17	Pup Joint
5 1/4			4,976.9	4,978.3	1.33	Baker Hughes seal assembly

Intermediate Csg, 6,135.9ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7	29.00	HCL-80	17.0	17.0	0.00	Landing Joint
7	29.00	HCL-80	17.0	22.0	5.00	Hanger/PUP
7	29.00	HCL-80	22.0	6,088.9	6,066.91	Casing Joints
7	29.00	HCL-80	6,088.9	6,090.4	1.50	Float Collar
7	29.00	HCL-80	6,090.4	6,134.4	44.03	Casing Joints
7	29.00	HCL-80	6,134.4	6,135.9	1.50	Float Shoe

Liner, 13,679.0ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
4 1/2	11.60	L-80	4,978.3	4,999.3	21.00	ZXP Liner Top Packer
4 1/2	11.60	L-80	4,999.3	5,007.4	8.11	HMC Hanger
4 1/2	11.60	L-80	5,007.4	5,012.9	5.49	Casing PUP Joint
4 1/2	11.60	L-80	5,012.9	13,578.7	8,565.84	Casing Joints
4 1/2	11.60	L-80	13,578.7	13,590.6	11.94	Alpha Sleeve
4 1/2	11.60	L-80	13,590.6	13,632.7	42.05	Casing Joints
4 1/2	11.60	L-80	13,632.7	13,634.3	1.59	Landing Collar
4 1/2	11.60	L-80	13,634.3	13,635.3	0.98	Float Collar
4 1/2	11.60	L-80	13,635.3	13,676.5	41.21	Casing Joints
4 1/2	11.60	L-80	13,676.5	13,679.0	2.53	Float Shoe

Cement Stages

Des	Pump Start Date	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Conductor Cement	4/23/2014		17.0	90.0	Returns to Surface
Surface Casing Cement	9/19/2014		17.0	1,583.3	Returns to Surface
Intermediate Casing Cement	9/11/2014		17.0	6,135.9	Returns to Surface
Liner Cement	9/30/2014		4,978.3	13,679.0	Returns to Surface

Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated Liner	3/9/2015	6,159.0	6,161.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,221.0	6,223.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,283.0	6,285.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,345.0	6,347.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,408.0	6,410.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,470.0	6,472.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,534.0	6,536.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,594.0	6,596.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,651.0	6,653.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,718.0	6,720.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,783.0	6,785.0	Niobrara, Original Hole
Perforated Liner	3/9/2015	6,842.0	6,844.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	6,905.0	6,907.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	6,967.0	6,969.0	Niobrara, Original Hole

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

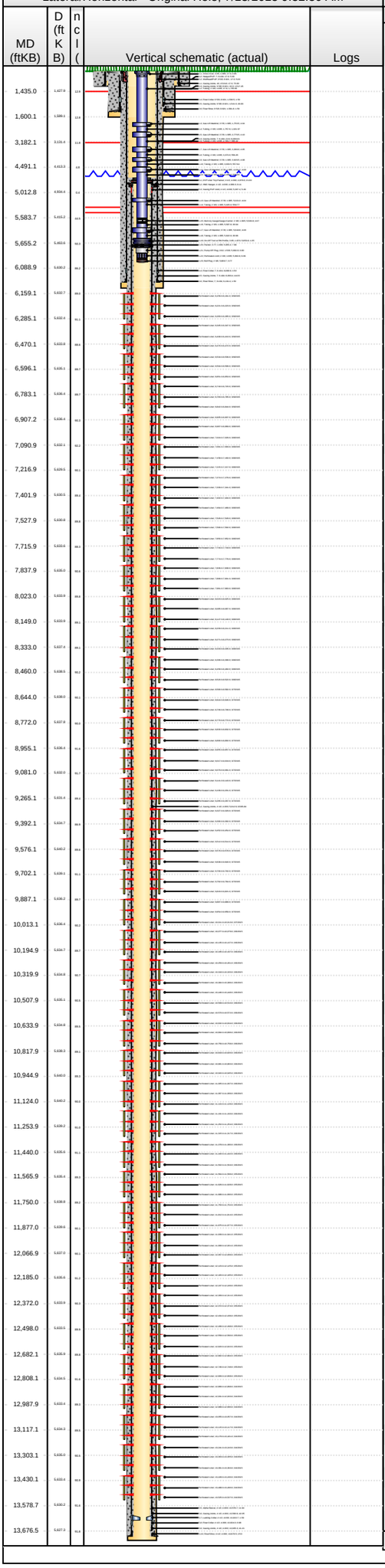
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:52:50 AM



Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated Liner	3/8/2015	7,024.0	7,026.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,091.0	7,093.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,158.0	7,160.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,215.0	7,217.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,274.0	7,276.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,339.0	7,341.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,402.0	7,404.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,464.0	7,466.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,526.0	7,528.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,590.0	7,592.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,650.0	7,652.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,716.0	7,718.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,774.0	7,776.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,836.0	7,838.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,899.0	7,901.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	7,961.0	7,963.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,023.0	8,025.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,085.0	8,087.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,147.0	8,149.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,209.0	8,211.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,271.0	8,273.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,333.0	8,335.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,396.0	8,398.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,458.0	8,460.0	Niobrara, Original Hole
Perforated Liner	3/8/2015	8,520.0	8,522.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,580.0	8,582.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,644.0	8,646.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,706.0	8,708.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,770.0	8,772.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,830.0	8,832.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,890.0	8,892.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	8,955.0	8,957.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,017.0	9,019.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,079.0	9,081.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,141.0	9,143.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,199.0	9,201.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,265.0	9,267.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,327.0	9,329.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,390.0	9,392.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,452.0	9,454.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,512.0	9,514.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,576.0	9,578.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,638.0	9,640.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,700.0	9,702.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,762.0	9,764.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,819.0	9,821.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,887.0	9,889.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	9,954.0	9,956.0	Niobrara, Original Hole
Perforated Liner	3/7/2015	10,011.0	10,013.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,077.0	10,079.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,135.0	10,137.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,195.0	10,197.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,259.0	10,261.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,318.0	10,320.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,384.0	10,386.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,446.0	10,448.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,508.0	10,510.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,570.0	10,572.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,632.0	10,634.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,694.0	10,696.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,756.0	10,758.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,818.0	10,820.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,881.0	10,883.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	10,943.0	10,945.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,005.0	11,007.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,067.0	11,069.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,124.0	11,126.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,191.0	11,193.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,252.0	11,254.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,315.0	11,317.0	Niobrara, Original Hole

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

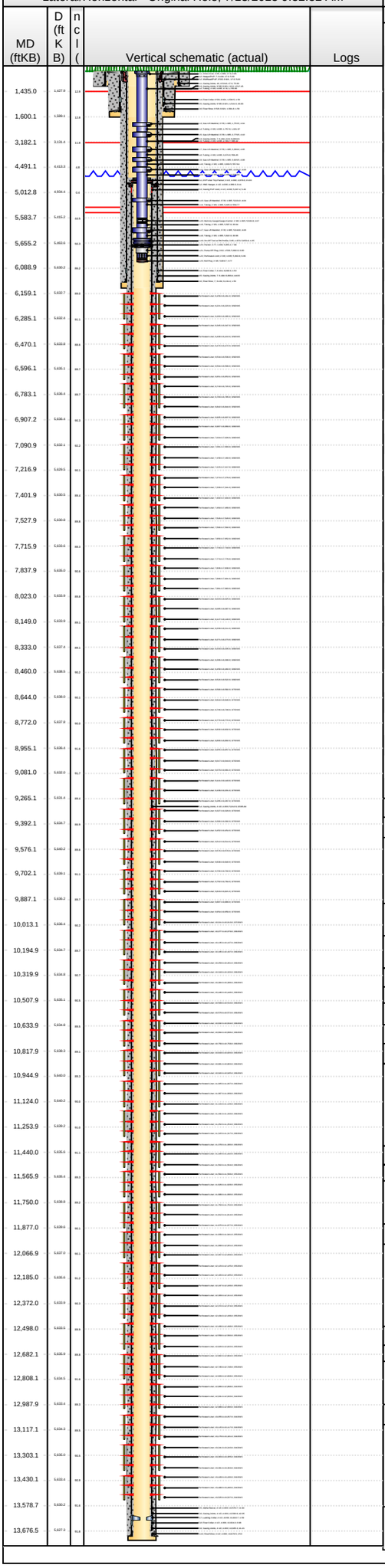
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:52:52 AM



Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated Liner	3/6/2015	11,378.0	11,380.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,440.0	11,442.0	Niobrara, Original Hole
Perforated Liner	3/6/2015	11,502.0	11,504.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,564.0	11,566.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,626.0	11,628.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,688.0	11,690.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,750.0	11,752.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,812.0	11,814.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,875.0	11,877.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,939.0	11,941.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	11,999.0	12,001.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,067.0	12,069.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,123.0	12,125.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,183.0	12,185.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,247.0	12,249.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,309.0	12,311.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,372.0	12,374.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,434.0	12,436.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,496.0	12,498.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,558.0	12,560.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,620.0	12,622.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,682.0	12,684.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,746.0	12,748.0	Niobrara, Original Hole
Perforated Liner	3/5/2015	12,806.0	12,808.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	12,866.0	12,868.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	12,931.0	12,933.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	12,988.0	12,990.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,055.0	13,057.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,115.0	13,117.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,179.0	13,181.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,241.0	13,243.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,303.0	13,305.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,361.0	13,363.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,428.0	13,430.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,488.0	13,490.0	Niobrara, Original Hole
Perforated Liner	3/4/2015	13,525.0	13,527.0	Niobrara, Original Hole

Stimulations & Treatments

Sand Frac on 3/4/2015 14:37

Comment

Treatment End Date:3/9/2015; Number of staged intervals: 40; Number of perfs: 1440; Min frac gradient: 0.85 psi/ft; pHaserFrac 22 XL Gel: 83344 bbl; 22 Linear Gel: 13250 bbl; 15% HCl: 262 bbl; Slickwater: 26452 bbl; Fresh Water: 7527 bbl

Total Clean Volu...	Vol Slurry Tot (bbl)	Proppant Desig...	Proppant Frm (lb)	P Max (psi)	Avg Treat...	Avg Treat...	Max Tre...	Frac Gr...
130835.15		6,920,000.0	6,452,409.0	6,449.0	4,188.0	50.27	54.40	0.85

Total Add Amount

Proppant 20/40 Ottawa 6333400 lb; Proppant 40/70 Ottawa 119009 lb

Stim/Treat Fluids

Fluid Name
pHaserFrac 22 XL Gel; 22 Linear Gel; 15% HCl

Stim/Treat Stages

Interval 1

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
1	3/4/2015	13,428.0	13,527.0	3692.81		pHaserFrac 22 XL Gel:1753 bbl; 22 Linear Gel:469 bbl; 15 % HCl:24 bbl; Slickwater:977 bbl; Wireline Fresh Water:296 bbl; Fresh Water:174 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
1	Proppant	20/40 Ottawa	107,127.0	lb	20/40
1	Proppant	40/70 Ottawa	2,822.0	lb	40/70

Interval 2

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
2	3/4/2015	13,241.0	13,363.0	3162.62		pHaserFrac 22 XL Gel:1718 bbl; 22 Linear Gel:333 bbl; 15 % HCl:24 bbl; Slickwater:707 bbl; Wireline Fresh Water:344 bbl; Fresh Water:37 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
2	Proppant	20/40 Ottawa	103,328.0	lb	20/40
2	Proppant	40/70 Ottawa	3,960.0	lb	40/70

Interval 3

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
3	3/4/2015	13,055.0	13,181.0	3101.40		pHaserFrac 22 XL Gel:1729 bbl; 22 Linear Gel:332 bbl; 15 % HCl:24 bbl; Slickwater:694 bbl; Wireline Fresh Water:305 bbl; Fresh Water:18 bbl

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

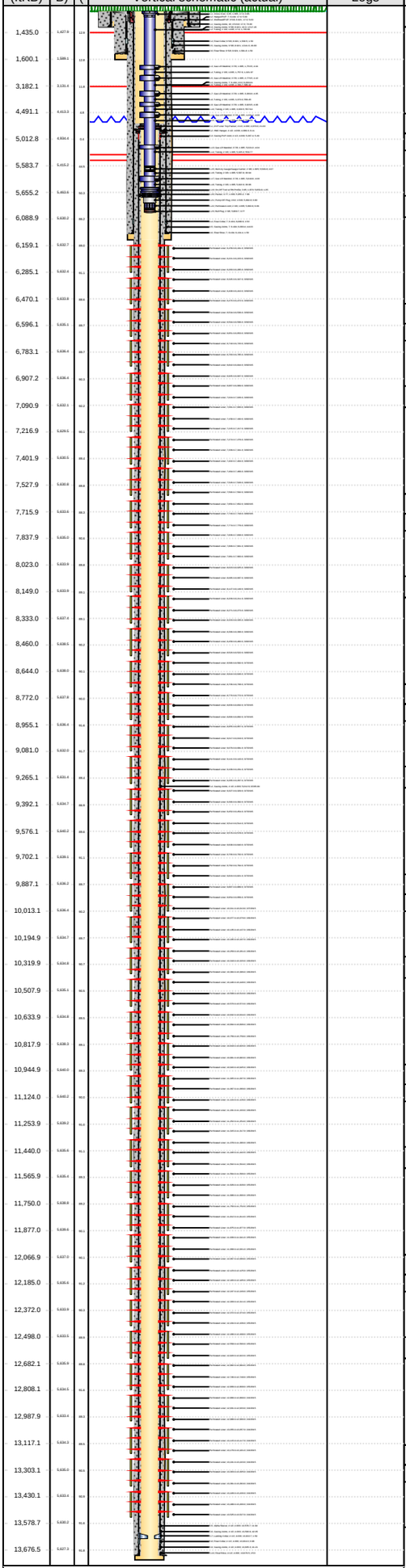
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:52:55 AM



Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
3	Proppant	20/40 Ottawa	106,043.0	lb	20/40
3	Proppant	40/70 Ottawa	3,106.0	lb	40/70

Interval 4

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
4	3/4/2015	12,866.0	12,990.0	3474.00		pHaserFrac 22 XL Gel:2099 bbl; 22 Linear Gel:326 bbl; 15 % HCl:24 bbl; Slickwater:692 bbl; Wireline Fresh Water:306 bbl; Fresh Water:27 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
4	Proppant	20/40 Ottawa	169,880.0	lb	20/40
4	Proppant	40/70 Ottawa	2,857.0	lb	40/70

Interval 5

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
5	3/4/2015	12,682.0	12,808.0	3487.71		pHaserFrac 22 XL Gel:2113 bbl; 22 Linear Gel:324 bbl; 15 % HCl:24 bbl; Slickwater:689 bbl; Wireline Fresh Water:312 bbl; Fresh Water:27 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
5	Proppant	20/40 Ottawa	166,814.0	lb	20/40
5	Proppant	40/70 Ottawa	2,264.0	lb	40/70

Interval 6

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
6	3/5/2015	12,496.0	12,622.0	3509.02		pHaserFrac 22 XL Gel:2098 bbl; 22 Linear Gel:360 bbl; 15 % HCl:24 bbl; Slickwater:708 bbl; Wireline Fresh Water:289 bbl; Fresh Water:31 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
6	Proppant	20/40 Ottawa	161,961.0	lb	20/40
6	Proppant	40/70 Ottawa	2,804.0	lb	40/70

Interval 7

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
7	3/5/2015	12,309.0	12,436.0	3479.52		pHaserFrac 22 XL Gel:2116 bbl; 22 Linear Gel:331 bbl; 15 % HCl:24 bbl; Slickwater:693 bbl; Wireline Fresh Water:284 bbl; Fresh Water:31 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
7	Proppant	20/40 Ottawa	168,463.0	lb	20/40
7	Proppant	40/70 Ottawa	2,975.0	lb	40/70

Interval 8

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
8	3/5/2015	12,123.0	12,249.0	3435.81		pHaserFrac 22 XL Gel:2095 bbl; 22 Linear Gel:327 bbl; 15 % HCl:24 bbl; Slickwater:682 bbl; Wireline Fresh Water:275 bbl; Fresh Water:32 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
8	Proppant	20/40 Ottawa	159,612.0	lb	20/40
8	Proppant	40/70 Ottawa	2,939.0	lb	40/70

Interval 9

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
9	3/5/2015	11,939.0	12,069.0	3435.83		pHaserFrac 22 XL Gel:2129 bbl; 22 Linear Gel:312 bbl; 15 % HCl:24 bbl; Slickwater:678 bbl; Wireline Fresh Water:264 bbl; Fresh Water:28 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
9	Proppant	20/40 Ottawa	162,295.0	lb	20/40
9	Proppant	40/70 Ottawa	3,074.0	lb	40/70

Interval 10

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
10	3/5/2015	11,750.0	11,877.0	3407.26		pHaserFrac 22 XL Gel:2110 bbl; 22 Linear Gel:324 bbl; 15 % HCl:24 bbl; Slickwater:672 bbl; Wireline Fresh Water:255 bbl; Fresh Water:22 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
10	Proppant	20/40 Ottawa	167,765.0	lb	20/40
10	Proppant	40/70 Ottawa	3,066.0	lb	40/70

Interval 11

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
11	3/5/2015	11,564.0	11,690.0	3390.40		pHaserFrac 22 XL Gel:2087 bbl; 22 Linear Gel:344 bbl; 15 % HCl:24 bbl; Slickwater:670 bbl; Wireline Fresh Water:242 bbl; Fresh Water:24 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
11	Proppant	20/40 Ottawa	162,516.0	lb	20/40
11	Proppant	40/70 Ottawa	3,038.0	lb	40/70

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

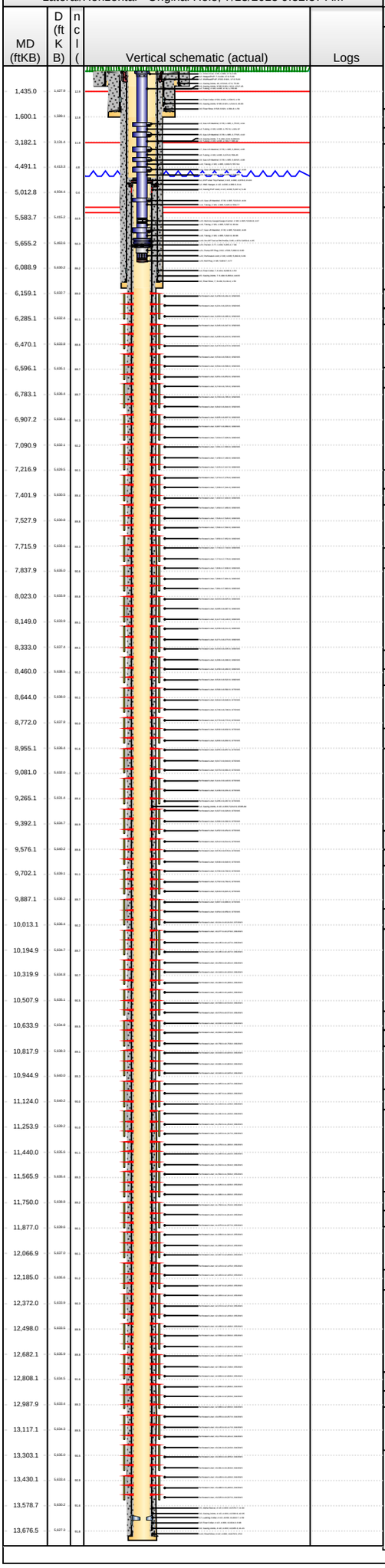
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:52:57 AM



Stim/Treat Stages

Interval 12

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
12	3/5/2015	11,378.0	11,504.0	3343.88		pHaserFrac 22 XL Gel:2098 bbl; 22 Linear Gel:335 bbl; 15 % HCl:0 bbl; Slickwater:669 bbl; Wireline Fresh Water:242 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
12	Proppant	20/40 Ottawa	163,172.0	lb	20/40
12	Proppant	40/70 Ottawa	3,966.0	lb	40/70

Interval 13

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
13	3/6/2015	11,191.0	11,317.0	3370.50		pHaserFrac 22 XL Gel:2146 bbl; 22 Linear Gel:333 bbl; 15 % HCl:0 bbl; Slickwater:665 bbl; Wireline Fresh Water:227 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
13	Proppant	20/40 Ottawa	167,798.0	lb	20/40
13	Proppant	40/70 Ottawa	3,254.0	lb	40/70

Interval 14

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
14	3/6/2015	11,005.0	11,126.0	3367.88		pHaserFrac 22 XL Gel:2097 bbl; 22 Linear Gel:331 bbl; 15 % HCl:0 bbl; Slickwater:685 bbl; Wireline Fresh Water:255 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
14	Proppant	20/40 Ottawa	155,170.0	lb	20/40
14	Proppant	40/70 Ottawa	2,208.0	lb	40/70

Interval 15

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
15	3/6/2015	10,818.0	10,945.0	3317.26		pHaserFrac 22 XL Gel:2089 bbl; 22 Linear Gel:345 bbl; 15 % HCl:0 bbl; Slickwater:663 bbl; Wireline Fresh Water:220 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
15	Proppant	20/40 Ottawa	163,392.0	lb	20/40
15	Proppant	40/70 Ottawa	1,952.0	lb	40/70

Interval 16

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
16	3/6/2015	10,632.0	10,758.0	3299.52		pHaserFrac 22 XL Gel:2127 bbl; 22 Linear Gel:299 bbl; 15 % HCl:0 bbl; Slickwater:657 bbl; Wireline Fresh Water:217 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
16	Proppant	20/40 Ottawa	165,209.0	lb	20/40
16	Proppant	40/70 Ottawa	3,143.0	lb	40/70

Interval 17

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
17	3/6/2015	10,446.0	10,572.0	3309.24		pHaserFrac 22 XL Gel:2181 bbl; 22 Linear Gel:271 bbl; 15 % HCl:0 bbl; Slickwater:652 bbl; Wireline Fresh Water:206 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
17	Proppant	20/40 Ottawa	164,845.0	lb	20/40
17	Proppant	40/70 Ottawa	2,610.0	lb	40/70

Interval 18

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
18	3/6/2015	10,259.0	10,386.0	3264.29		pHaserFrac 22 XL Gel:2125 bbl; 22 Linear Gel:299 bbl; 15 % HCl:0 bbl; Slickwater:651 bbl; Wireline Fresh Water:189 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
18	Proppant	20/40 Ottawa	161,229.0	lb	20/40
18	Proppant	40/70 Ottawa	2,744.0	lb	40/70

Interval 19

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
19	3/7/2015	10,077.0	10,197.0	3258.10		pHaserFrac 22 XL Gel:2131 bbl; 22 Linear Gel:298 bbl; 15 % HCl:0 bbl; Slickwater:650 bbl; Wireline Fresh Water:179 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
19	Proppant	20/40 Ottawa	166,323.0	lb	20/40
19	Proppant	40/70 Ottawa	2,628.0	lb	40/70

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

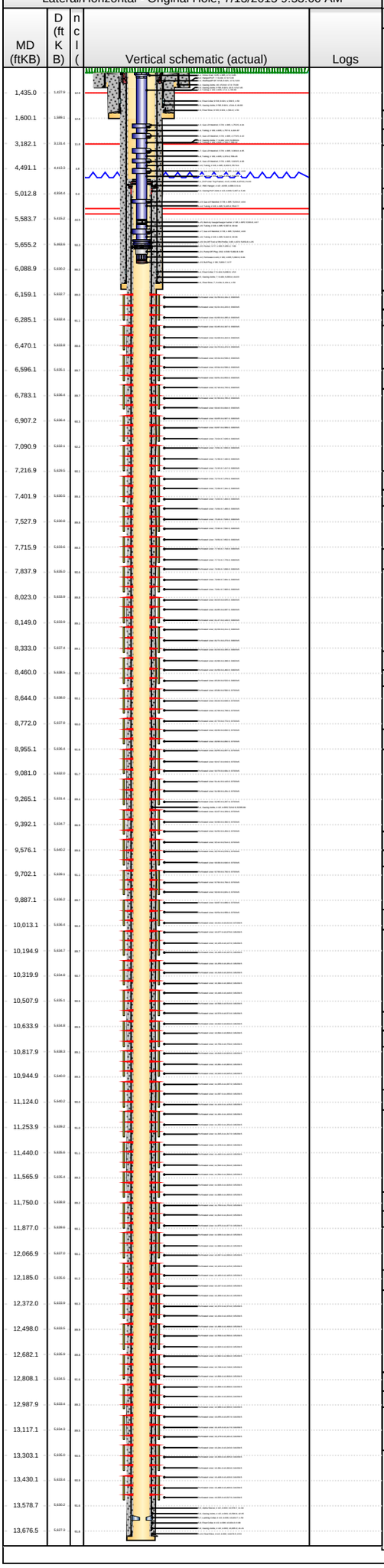
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:53:00 AM



Stim/Treat Stages

Interval 20

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
20	3/7/2015	9,887.0	10,013.0	3243.88		pHaserFrac 22 XL Gel:2094 bbl; 22 Linear Gel:331 bbl; 15 % HCl:0 bbl; Slickwater:645 bbl; Wireline Fresh Water:174 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
20	Proppant	20/40 Ottawa	160,929.0	lb	20/40
20	Proppant	40/70 Ottawa	3,147.0	lb	40/70

Interval 21

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
21	3/7/2015	9,700.0	9,821.0	3251.79		pHaserFrac 22 XL Gel:2106 bbl; 22 Linear Gel:335 bbl; 15 % HCl:0 bbl; Slickwater:641 bbl; Wireline Fresh Water:170 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
21	Proppant	20/40 Ottawa	163,298.0	lb	20/40
21	Proppant	40/70 Ottawa	3,178.0	lb	40/70

Interval 22

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
22	3/7/2015	9,512.0	9,640.0	3276.02		pHaserFrac 22 XL Gel:2104 bbl; 22 Linear Gel:353 bbl; 15 % HCl:0 bbl; Slickwater:650 bbl; Wireline Fresh Water:169 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
22	Proppant	20/40 Ottawa	164,136.0	lb	20/40
22	Proppant	40/70 Ottawa	2,964.0	lb	40/70

Interval 23

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
23	3/7/2015	9,327.0	9,454.0	3226.24		pHaserFrac 22 XL Gel:2104 bbl; 22 Linear Gel:322 bbl; 15 % HCl:0 bbl; Slickwater:641 bbl; Wireline Fresh Water:159 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
23	Proppant	20/40 Ottawa	158,940.0	lb	20/40
23	Proppant	40/70 Ottawa	2,750.0	lb	40/70

Interval 24

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
24	3/7/2015	9,141.0	9,267.0	3224.95		pHaserFrac 22 XL Gel:2104 bbl; 22 Linear Gel:329 bbl; 15 % HCl:0 bbl; Slickwater:639 bbl; Wireline Fresh Water:153 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
24	Proppant	20/40 Ottawa	161,724.0	lb	20/40
24	Proppant	40/70 Ottawa	3,185.0	lb	40/70

Interval 25

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
25	3/7/2015	8,955.0	9,081.0	3216.48		pHaserFrac 22 XL Gel:2145 bbl; 22 Linear Gel:298 bbl; 15 % HCl:0 bbl; Slickwater:630 bbl; Wireline Fresh Water:144 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
25	Proppant	20/40 Ottawa	159,648.0	lb	20/40
25	Proppant	40/70 Ottawa	3,195.0	lb	40/70

Interval 26

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
26	3/7/2015	8,770.0	8,892.0	3195.88		pHaserFrac 22 XL Gel:2142 bbl; 22 Linear Gel:297 bbl; 15 % HCl:0 bbl; Slickwater:626 bbl; Wireline Fresh Water:130 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
26	Proppant	20/40 Ottawa	160,751.0	lb	20/40
26	Proppant	40/70 Ottawa	3,005.0	lb	40/70

Interval 27

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
27	3/7/2015	8,580.0	8,708.0	3224.07		pHaserFrac 22 XL Gel:2142 bbl; 22 Linear Gel:308 bbl; 15 % HCl:0 bbl; Slickwater:641 bbl; Wireline Fresh Water:134 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
27	Proppant	20/40 Ottawa	156,518.0	lb	20/40
27	Proppant	40/70 Ottawa	2,836.0	lb	40/70

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

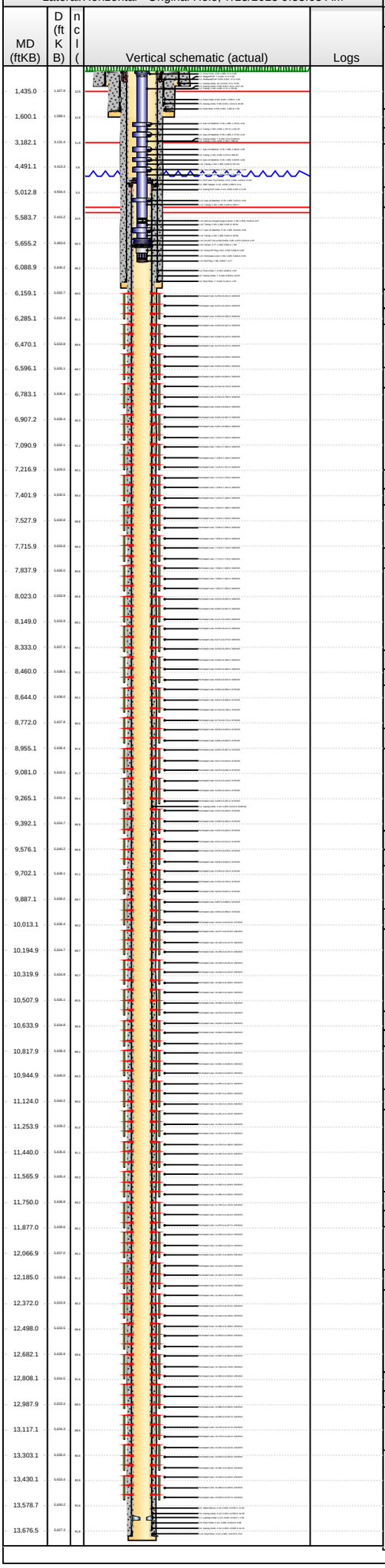
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:53:03 AM



Stim/Treat Stages

Interval 28

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
28	3/8/2015	8,396.0	8,522.0	3174.43		pHaserFrac 22 XL Gel:2142 bbl; 22 Linear Gel:300 bbl; 15 % HCl:0 bbl; Slickwater:620 bbl; Wireline Fresh Water:113 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
28	Proppant	20/40 Ottawa	160,598.0	lb	20/40
28	Proppant	40/70 Ottawa	2,927.0	lb	40/70

Interval 29

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
29	3/8/2015	8,209.0	8,335.0	3182.83		pHaserFrac 22 XL Gel:2118 bbl; 22 Linear Gel:329 bbl; 15 % HCl:0 bbl; Slickwater:621 bbl; Wireline Fresh Water:115 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
29	Proppant	20/40 Ottawa	160,645.0	lb	20/40
29	Proppant	40/70 Ottawa	3,008.0	lb	40/70

Interval 30

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
30	3/8/2015	8,023.0	8,149.0	3167.55		pHaserFrac 22 XL Gel:2121 bbl; 22 Linear Gel:334 bbl; 15 % HCl:0 bbl; Slickwater:614 bbl; Wireline Fresh Water:99 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
30	Proppant	20/40 Ottawa	160,394.0	lb	20/40
30	Proppant	40/70 Ottawa	2,677.0	lb	40/70

Interval 31

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
31	3/8/2015	7,836.0	7,963.0	3177.92		pHaserFrac 22 XL Gel:2144 bbl; 22 Linear Gel:322 bbl; 15 % HCl:0 bbl; Slickwater:613 bbl; Wireline Fresh Water:99 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
31	Proppant	20/40 Ottawa	170,652.0	lb	20/40
31	Proppant	40/70 Ottawa	3,078.0	lb	40/70

Interval 32

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
32	3/8/2015	7,650.0	7,776.0	3126.18		pHaserFrac 22 XL Gel:2095 bbl; 22 Linear Gel:329 bbl; 15 % HCl:0 bbl; Slickwater:611 bbl; Wireline Fresh Water:91 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
32	Proppant	20/40 Ottawa	162,427.0	lb	20/40
32	Proppant	40/70 Ottawa	2,946.0	lb	40/70

Interval 33

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
33	3/8/2015	7,464.0	7,592.0	3124.10		pHaserFrac 22 XL Gel:2144 bbl; 22 Linear Gel:298 bbl; 15 % HCl:0 bbl; Slickwater:607 bbl; Wireline Fresh Water:76 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
33	Proppant	20/40 Ottawa	163,998.0	lb	20/40
33	Proppant	40/70 Ottawa	2,962.0	lb	40/70

Interval 34

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
34	3/8/2015	7,274.0	7,404.0	3111.81		pHaserFrac 22 XL Gel:2139 bbl; 22 Linear Gel:297 bbl; 15 % HCl:0 bbl; Slickwater:604 bbl; Wireline Fresh Water:72 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
34	Proppant	20/40 Ottawa	165,858.0	lb	20/40
34	Proppant	40/70 Ottawa	3,024.0	lb	40/70

Interval 35

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
35	3/8/2015	7,091.0	7,217.0	3095.62		pHaserFrac 22 XL Gel:2129 bbl; 22 Linear Gel:298 bbl; 15 % HCl:0 bbl; Slickwater:607 bbl; Wireline Fresh Water:61 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
35	Proppant	20/40 Ottawa	165,819.0	lb	20/40
35	Proppant	40/70 Ottawa	3,003.0	lb	40/70

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

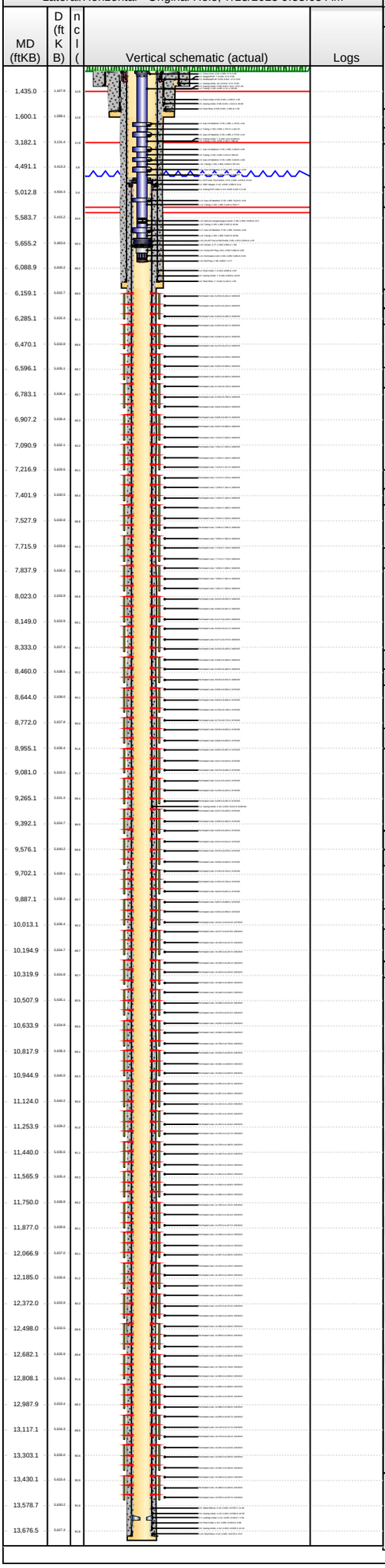
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:53:05 AM



Stim/Treat Stages

Interval 36

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
36	3/8/2015	6,905.0	7,026.0	3048.36		pHaserFrac 22 XL Gel:1780 bbl; 22 Linear Gel:298 bbl; 15 % HCl:0 bbl; Slickwater:914 bbl; Wireline Fresh Water:56 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
36	Proppant	20/40 Ottawa	89,703.0	lb	20/40
36	Proppant	40/70 Ottawa	3,003.0	lb	40/70

Interval 37

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
37	3/9/2015	6,718.0	6,844.0	3241.36		pHaserFrac 22 XL Gel:2255 bbl; 22 Linear Gel:333 bbl; 15 % HCl:0 bbl; Slickwater:608 bbl; Wireline Fresh Water:46 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
37	Proppant	20/40 Ottawa	205,414.0	lb	20/40
37	Proppant	40/70 Ottawa	4,214.0	lb	40/70

Interval 38

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
38	3/9/2015	6,534.0	6,653.0	3466.29		pHaserFrac 22 XL Gel:2218 bbl; 22 Linear Gel:567 bbl; 15 % HCl:0 bbl; Slickwater:635 bbl; Wireline Fresh Water:47 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
38	Proppant	20/40 Ottawa	188,008.0	lb	20/40
38	Proppant	40/70 Ottawa	3,347.0	lb	40/70

Interval 39

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
39	3/9/2015	6,345.0	6,472.0	3022.74		pHaserFrac 22 XL Gel:2069 bbl; 22 Linear Gel:330 bbl; 15 % HCl:0 bbl; Slickwater:590 bbl; Wireline Fresh Water:34 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
39	Proppant	20/40 Ottawa	162,607.0	lb	20/40
39	Proppant	40/70 Ottawa	2,603.0	lb	40/70

Interval 40

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clean...	Vol Slurry...	Comment
40	3/9/2015	6,159.0	6,285.0	2929.60		pHaserFrac 22 XL Gel:2009 bbl; 22 Linear Gel:351 bbl; 15 % HCl:0 bbl; Slickwater:542 bbl; Wireline Fresh Water:27 bbl; Fresh Water:0 bbl

Stim/Treat Additives

Stg #	Add	Type	Amount	Units	Sand Size
40	Proppant	20/40 Ottawa	148,391.0	lb	20/40
40	Proppant	40/70 Ottawa	2,547.0	lb	40/70

Tubing - Production set at 5,670.5ftKB on 4/10/2015 06:00

Set Depth (ftKB)	Comment	Run Date	Pull Date
5,670.5		4/10/2015	

Item Des	OD (in)	ID (in)	Len (ft)	Top (ftKB)	Btm (ftKB)
Cross Over	3.05	1.995	0.85	17.0	17.8
Tubing	2 3/8	1.995	1,735.69	17.8	1,753.5
Gas Lift Mandrel	3 7/8	1.995	4.04	1,753.5	1,757.6
Tubing	2 3/8	1.995	1,021.97	1,757.6	2,779.6
Gas Lift Mandrel	3 7/8	1.995	4.10	2,779.6	2,783.7
Tubing	2 3/8	1.995	585.32	2,783.7	3,369.0
Gas Lift Mandrel	3 7/8	1.995	4.05	3,369.0	3,373.0
Tubing	2 3/8	1.995	556.45	3,373.0	3,929.5
Gas Lift Mandrel	3 7/8	1.995	4.08	3,929.5	3,933.6
Tubing	2 3/8	1.995	557.64	3,933.6	4,491.2
Gas Lift Mandrel	3 7/8	1.995	4.08	4,491.2	4,495.3
Tubing	2 3/8	1.995	525.69	4,495.3	5,021.0
Gas Lift Mandrel	3 7/8	1.995	4.04	5,021.0	5,025.0
Tubing	2 3/8	1.995	558.77	5,025.0	5,583.8
Memory Gauge/Gauge Carrier	2 3/8	1.995	4.07	5,583.8	5,587.8
Tubing	2 3/8	1.995	30.94	5,587.8	5,618.8
Gas Lift Mandrel	3 7/8	1.995	4.08	5,618.8	5,622.9
Tubing	2 3/8	1.995	30.96	5,622.9	5,653.8
On-Off Tool w/ RN Profile	3.65	1.870	1.35	5,653.8	5,655.2
Packer	3.771	1.930	7.68	5,655.2	5,662.9
Pump Off Plug	2.622	1.500	0.80	5,662.9	5,663.7
Perforated Joint	2 3/8	1.995	6.06	5,663.7	5,669.7
Bull Plug	2 3/8		0.77	5,669.7	5,670.5

Report Printed: 7/13/2015

Lease Review All - Frac Summary

Well Name: HORSETAIL 30F-1944

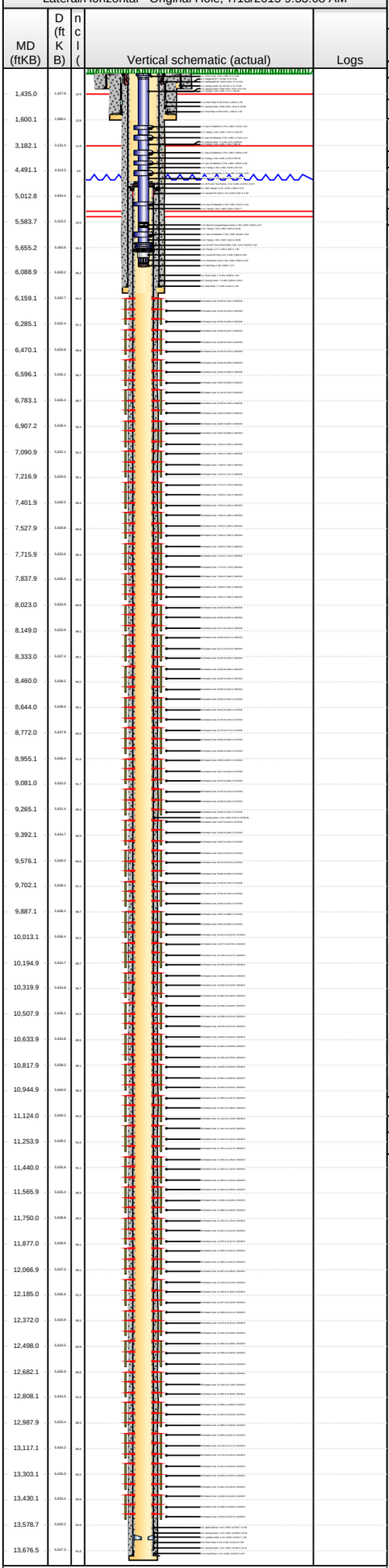
API Number	WPC ID	Well Permit Number	Field Name	County	State
051233874100	1CO0761015		DJ Horizontal Niobrara	Weld	CO

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	4,800.00	4,783.00			13,684.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
9/18/2014	3/9/2015	Redtail	Charles Ohlson	2,323.0	FNL	1,950.0	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
	SE	NW			30			10	N	57	W	

Lateral/Horizontal - Original Hole, 7/13/2015 9:53:08 AM



Rod Strings

<des> on <dttmrun>

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	3/9/2015	4/5/2015	6,317.0	6,319.0
CFP	4	3/9/2015	4/5/2015	6,501.0	6,503.0
CFP	4	3/9/2015	4/5/2015	6,687.0	6,689.0
CFP	4	3/9/2015	4/5/2015	6,873.0	6,875.0
CFP	4	3/8/2015	4/5/2015	7,060.0	7,062.0
CFP	4	3/8/2015	4/5/2015	7,246.0	7,248.0
CFP	4	3/8/2015	4/5/2015	7,433.0	7,435.0
CFP	4	3/8/2015	4/5/2015	7,613.0	7,615.0
CFP	4	3/8/2015	4/5/2015	7,805.0	7,807.0
CFP	4	3/8/2015	4/5/2015	7,992.0	7,994.0
CFP	4	3/8/2015	4/5/2015	8,178.0	8,180.0
CFP	4	3/8/2015	4/5/2015	8,364.0	8,366.0
CFP	4	3/8/2015	4/5/2015	8,551.0	8,553.0
CFP	4	3/7/2015	4/6/2015	8,737.0	8,739.0
CFP	4	3/7/2015	4/6/2015	8,924.0	8,926.0
CFP	4	3/7/2015	4/6/2015	9,110.0	9,112.0
CFP	4	3/7/2015	4/6/2015	9,300.0	9,302.0
CFP	4	3/7/2015	4/6/2015	9,483.0	9,485.0
CFP	4	3/7/2015	4/6/2015	9,669.0	9,671.0
CFP	4	3/7/2015	4/6/2015	9,856.0	9,858.0
CFP	4	3/7/2015	4/6/2015	10,042.0	10,044.0
CFP	4	3/6/2015	4/6/2015	10,228.0	10,230.0
CFP	4	3/6/2015	4/6/2015	10,415.0	10,417.0
CFP	4	3/6/2015	4/6/2015	10,601.0	10,603.0
CFP	4	3/6/2015	4/6/2015	10,783.0	10,785.0
CFP	4	3/6/2015	4/6/2015	10,974.0	10,976.0
CFP	4	3/6/2015	4/6/2015	11,160.0	11,162.0
CFP	4	3/6/2015	4/6/2015	11,349.0	11,351.0
CFP	4	3/6/2015	4/6/2015	11,533.0	11,535.0
CFP	4	3/5/2015	4/6/2015	11,717.0	11,719.0
CFP	4	3/5/2015	4/6/2015	11,906.0	11,908.0
CFP	4	3/5/2015	4/6/2015	12,092.0	12,094.0
CFP	4	3/5/2015	4/6/2015	12,281.0	12,283.0
CFP	4	3/5/2015	4/6/2015	12,465.0	12,467.0
CFP	4	3/5/2015	4/6/2015	12,651.0	12,653.0
CFP	4	3/5/2015	4/6/2015	12,838.0	12,840.0
CFP	4	3/4/2015	4/6/2015	13,024.0	13,026.0
CFP	4	3/4/2015	4/6/2015	13,215.0	13,217.0
CFP	4	3/4/2015	4/6/2015	13,397.0	13,399.0
CFP	4	3/4/2015	4/6/2015	13,554.0	13,556.0

Bottom Hole Cores

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

Report Printed: 7/13/2015