



Lease Review All
Well Name: WILDHORSE 16-42H

API Number 0512334749		WPC ID 1CO076839		Well Permit Number		Field Name Wildcat			County Weld		State CO			
Well Configuration Type Lateral/Horizontal			Orig KB Elv (ft) 5,022.00		Ground Elevation (ft) 5,007.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 10,864.0			
Original Spud Date 1/4/2012		Completion Date 3/13/2012		Asset Group Central Rockies Asset Group		Responsible Engineer Gary Nordlander			N/S Dist (ft) 330.0		N/S Ref FSL	E/W Dist (ft) 660.0		E/W Ref FWL
Lot	Quarter 1 S	Quarter 2 W	Quarter 3 S	Quarter 4 W	Section 16	Section Suffix	Section Type	Township 9 N	Township N/S Dir	Range 59	Range E/W Dir W	Meridian		

Lateral/Horizontal - Original Hole, 7/3/2012 2:19:04 PM					Wellbore Sections						
MD (ftKB)	TV D (ftKB)	In cl (°)	Vertical schematic (actual)	Logs	Wellbore Name		Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
					Original Hole		1/4/2012	13 1/2	15.0	1,550.0	
					Original Hole		1/6/2012	8 3/4	1,550.0	6,672.0	
					Original Hole		1/10/2012	6	6,672.0	10,864.0	
Surface Csg, 1,538.0ftKB											
OD (in)		Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des				
9 5/8		36.00	K-55	14.9	14.9	0.00	Casing Joints				
9 5/8		36.00	K-55	14.9	16.9	2.00	Well Head				
9 5/8		36.00	K-55	16.9	1,537.0	1,520.07	Casing Joints				
9 3/4				1,537.0	1,538.0	1.00	Guide Shoe				
Intermediate Csg, 6,651.7ftKB											
OD (in)		Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des				
7		29.00	HCL-80	15.0	15.0	0.00	Landing Joint				
7		29.00	HCL-80	15.0	19.5	4.50	Liner Hanger				
7		29.00	HCL-80	19.5	6,558.2	6,538.74	Casing Joints				
7		29.00	HCL-80	6,558.2	6,559.4	1.20	Float Collar				
7		29.00	HCL-80	6,559.4	6,604.8	45.36	Casing Joints				
7		29.00	HCL-80	6,604.8	6,650.1	45.34	Casing Joints				
7				6,650.1	6,651.7	1.60	Float Shoe				
Liner, 10,851.0ftKB											
OD (in)		Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des				
4 1/2		11.60	S-90	5,605.8	5,605.8	0.00	Casing Joints				
6.184		11.60	S-90	5,605.8	5,620.9	15.04	Running tool				
4 1/2		11.60	S-90	5,620.9	5,633.1	12.18	TBR				
4 1/2		11.60	S-90	5,633.1	5,647.2	14.10	X-Over				
4 1/2		11.60	S-90	5,647.2	6,595.0	947.81	Casing Joints				
4 1/2		11.60	S-90	6,595.0	6,610.1	15.11	Swell Packer				
4 1/2		11.60	S-90	6,610.1	6,790.6	180.56	Casing Joints				
4 1/2		11.60	S-90	6,790.6	6,803.5	12.85	Frac Sleeve 3.301"				
4 1/2		11.60	S-90	6,803.5	6,893.8	90.30	Casing Joints				
4 1/2		11.60	S-90	6,893.8	6,909.0	15.22	Swell Packer				
4 1/2		11.60	S-90	6,909.0	6,999.3	90.29	Casing Joints				
4 1/2		11.60	S-90	6,999.3	7,012.1	12.79	Frac Sleeve 3.201"				
4 1/2		11.60	S-90	7,012.1	7,102.4	90.27	Casing Joints				
4 1/2		11.60	S-90	7,102.4	7,117.5	15.12	Swell Packer				
4 1/2		11.60	S-90	7,117.5	7,207.7	90.26	Casing Joints				
4 1/2		11.60	S-90	7,207.7	7,220.5	12.72	Frac Sleeve 3.104"				
4 1/2		11.60	S-90	7,220.5	7,310.7	90.25	Casing Joints				
4 1/2		11.60	S-90	7,310.7	7,325.9	15.17	Swell Packer				
4 1/2		11.60	S-90	7,325.9	7,416.1	90.20	Casing Joints				
4 1/2		11.60	S-90	7,416.1	7,428.9	12.79	Frac Sleeve 3.009				
4 1/2		11.60	S-90	7,428.9	7,519.2	90.29	Casing Joints				
4 1/2		11.60	S-90	7,519.2	7,534.3	15.10	Swell Packer				
4 1/2		11.60	S-90	7,534.3	7,624.5	90.23	Casing Joints				
4 1/2		11.60	S-90	7,624.5	7,637.3	12.82	Frac Sleeve 2.925"				
4 1/2		11.60	S-90	7,637.3	7,727.6	90.26	Casing Joints				
4 1/2		11.60	S-90	7,727.6	7,742.7	15.12	Swell Packer				
4 1/2		11.60	S-90	7,742.7	7,832.9	90.26	Casing Joints				
4 1/2		11.60	S-90	7,832.9	7,845.8	12.82	Frac Sleeve 2.842"				
4 1/2		11.60	S-90	7,845.8	7,936.1	90.34	Casing Joints				
4 1/2		11.60	S-90	7,936.1	7,951.3	15.16	Swell Packer				
4 1/2		11.60	S-90	7,951.3	8,041.1	89.87	Casing Joints				
4 1/2		11.60	S-90	8,041.1	8,054.0	12.84	Frac Sleeve 2.761"				
4 1/2		11.60	S-90	8,054.0	8,143.9	89.92	Casing Joints				
4 1/2		11.60	S-90	8,143.9	8,159.0	15.15	Swell Packer				
4 1/2		11.60	S-90	8,159.0	8,248.9	89.87	Casing Joints				
4 1/2		11.60	S-90	8,248.9	8,261.7	12.83	Frac Sleeve 2.681"				
4 1/2		11.60	S-90	8,261.7	8,352.0	90.28	Casing Joints				
4 1/2		11.60	S-90	8,352.0	8,367.2	15.13	Swell Packer				
4 1/2		11.60	S-90	8,367.2	8,457.4	90.24	Casing Joints				
4 1/2		11.60	S-90	8,457.4	8,470.2	12.84	Frac Sleeve 2.603"				
4 1/2		11.60	S-90	8,470.2	8,559.7	89.48	Casing Joints				
4 1/2		11.60	S-90	8,559.7	8,574.9	15.17	Swell Packer				
4 1/2		11.60	S-90	8,574.9	8,665.8	90.92	Casing Joints				
4 1/2		11.60	S-90	8,665.8	8,678.6	12.77	Frac Sleeve 2.527"				
4 1/2		11.60	S-90	8,678.6	8,768.9	90.30	Casing Joints				
4 1/2		11.60	S-90	8,768.9	8,784.0	15.15	Swell Packer				
4 1/2		11.60	S-90	8,784.0	8,874.3	90.30	Casing Joints				
4 1/2		11.60	S-90	8,874.3	8,887.1	12.80	Frac Sleeve 2.452"				
4 1/2		11.60	S-90	8,887.1	8,977.0	89.83	Casing Joints				
4 1/2		11.60	S-90	8,977.0	8,992.1	15.18	Swell Packer				
4 1/2		11.60	S-90	8,992.1	9,081.6	89.51	Casing Joints				



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Well Configuration Type Lateral/Horizontal					Orig KB Elv (ft) 5,022.00		Ground Elevation (ft) 5,007.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)			Total Depth (ftKB) 10,864.0		
Original Spud Date 1/4/2012		Completion Date 3/13/2012		Asset Group Central Rockies Asset Group				Responsible Engineer Gary Nordlander			N/S Dist (ft) 330.0		N/S Ref FSL	E/W Dist (ft) 660.0		E/W Ref FWL
Lot	Quarter 1 S	Quarter 2 W	Quarter 3 S	Quarter 4 W	Section 16	Section Suffix	Section Type	Township 9 N	Township N/S Dir	Range 59	Range E/W Dir W	Meridian				

Lateral/Horizontal - Original Hole, 7/3/2012 2:19:06 PM				OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des	
MD (ftKB)	TV D (ftKB B)	In cl (°)	Vertical schematic (actual)	Logs	4 1/2	11.60	S-90	9,081.6	9,094.5	12.85	Frac Sleeve 2.379"
					4 1/2	11.60	S-90	9,094.5	9,184.0	89.51	Casing Joints
					4 1/2	11.60	S-90	9,184.0	9,199.2	15.15	Swell Packer
					4 1/2	11.60	S-90	9,199.2	9,289.0	89.81	Casing Joints
					4 1/2	11.60	S-90	9,289.0	9,301.8	12.85	Frac Sleeve 2.307"
					4 1/2	11.60	S-90	9,301.8	9,391.7	89.90	Casing Joints
					4 1/2	11.60	S-90	9,391.7	9,406.9	15.14	Swell Packer
					4 1/2	11.60	S-90	9,406.9	9,496.3	89.48	Casing Joints
					4 1/2	11.60	S-90	9,496.3	9,509.1	12.81	Frac Sleeve 2.236"
					4 1/2	11.60	S-90	9,509.1	9,599.4	90.24	Casing Joints
					4 1/2	11.60	S-90	9,599.4	9,614.5	15.13	Swell Packer
					4 1/2	11.60	S-90	9,614.5	9,704.3	89.80	Casing Joints
					4 1/2	11.60	S-90	9,704.3	9,717.2	12.84	Frac Sleeve 2.167"
					4 1/2	11.60	S-90	9,717.2	9,807.5	90.35	Casing Joints
					4 1/2	11.60	S-90	9,807.5	9,822.6	15.14	Swell Packer
					4 1/2	11.60	S-90	9,822.6	9,912.9	90.30	Casing Joints
					4 1/2	11.60	S-90	9,912.9	9,925.8	12.82	Frac Sleeve 2.099"
					4 1/2	11.60	S-90	9,925.8	10,015.7	89.95	Casing Joints
					4 1/2	11.60	S-90	10,015.7	10,030.9	15.14	Swell Packer
					4 1/2	11.60	S-90	10,030.9	10,120.7	89.88	Casing Joints
					4 1/2	11.60	S-90	10,120.7	10,133.6	12.86	Frac Sleeve 2.033"
					4 1/2	11.60	S-90	10,133.6	10,223.9	90.29	Casing Joints
					4 1/2	11.60	S-90	10,223.9	10,239.0	15.15	Swell Packer
					4 1/2	11.60	S-90	10,239.0	10,329.3	90.28	Casing Joints
					4 1/2	11.60	S-90	10,329.3	10,342.1	12.78	Frac Sleeve 1.968"
					4 1/2	11.60	S-90	10,342.1	10,432.4	90.29	Casing Joints
					4 1/2	11.60	S-90	10,432.4	10,447.6	15.18	Swell Packer
					4 1/2	11.60	S-90	10,447.6	10,537.1	89.58	Casing Joints
					4 1/2	11.60	S-90	10,537.1	10,550.0	12.85	Frac Sleeve 1.904"
					4 1/2	11.60	S-90	10,550.0	10,640.3	90.28	Casing Joints
					4 1/2	11.60	S-90	10,640.3	10,655.4	15.15	Swell Packer
					4 1/2	11.60	S-90	10,655.4	10,745.6	90.20	Casing Joints
					4 1/2	11.60	S-90	10,745.6	10,758.4	12.80	Frac Sleeve 1.841"
					4 1/2	11.60	S-90	10,758.4	10,803.5	45.10	Casing Joints
					4 1/2	11.60	S-90	10,803.5	10,804.7	1.14	Float Collar
					4 1/2	11.60	S-90	10,804.7	10,849.8	45.11	Casing Joints
								10,849.8	10,851.0	1.23	Float Shoe
Cement Stages											
Des		Pump Start Date		Drill Out Date		Top (ftKB)		Btm (ftKB)		Top Meas Meth	
Surface Casing Cement		1/5/2012				15.0		1,538.0		Volume Calculations	
Intermediate Casing Cement		1/9/2012		1/10/2012		15.0		6,651.7		Returns to Surface	
Perforations											
Type of Hole		Date		Top (ftKB)		Btm (ftKB)		Zone			
Stim/Treat Stages											
Stage Type		Start Date		Top (ftKB)		Btm (ftKB)		Stim/Treat Fluid		Vol Clean Pump (bbl)	
Frac		3/11/2012		6,790.6		6,803.5		97640# 20/40, 20009# 40/70, 21348# SB Excel, Slick Water		2813.00	
Frac		3/11/2012		6,999.3		7,012.1		83872# 20/40, 19998# 40/70, 21550# SB Excel, Slick Water		2481.00	
Frac		3/11/2012		7,207.7		7,220.5		83024# 20/40, 20014# 40/70, 20467# SB Excel, Slick Water		2510.00	
Frac		3/10/2012		7,416.1		7,428.9		84785# 20/40, 20001# 40/70, 21474# SB Excel, Slick Water		2489.00	
Frac		3/10/2012		7,624.5		7,637.3		84022# 20/40, 20004# 40/70, 17880# SB Excel, Slick Water		2485.00	
Frac		3/10/2012		7,832.9		7,845.8		80374# 20/40, 19985# 40/70, 20342# SB Excel, Slick Water		2481.00	
Frac		3/10/2012		8,041.1		8,054.0		84772# 20/40, 19974# 40/70, 20664# SB Excel, Slick Water		2530.00	
Frac		3/10/2012		8,248.9		8,261.7		81005# 20/40, 18566# 40/70, 21960# SB Excel, Slick Water		2490.00	
Frac		3/10/2012		8,457.4		8,470.2		85650# 20/40, 20057# 40/70, 20999# SB Excel, Slick Water		2518.00	



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Well Configuration Type Lateral/Horizontal			Orig KB Elv (ft) 5,022.00		Ground Elevation (ft) 5,007.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 10,864.0				
Original Spud Date 1/4/2012		Completion Date 3/13/2012		Asset Group Central Rockies Asset Group			Responsible Engineer Gary Nordlander			N/S Dist (ft) 330.0		N/S Ref FSL	E/W Dist (ft) 660.0		E/W Ref FWL
Lot	Quarter 1 S	Quarter 2 W	Quarter 3 S	Quarter 4 W	Section 16	Section Suffix	Section Type	Township 9 N	Township N/S Dir	Range 59	Range E/W Dir W	Meridian			

Lateral/Horizontal - Original Hole, 7/3/2012 2:19:08 PM				Stim/Treat Stages							
MD (ftKB)	TV D (ftKB B)	In cl (°)	Vertical schematic (actual)	Logs	Stage Type	Start Date	Top (ftKB)	Btm (ftKB)	Stim/Treat Fluid	Vol Clean Pump (bbl)	
15.1	15.1	0.0			Frac	3/10/2012	8,665.8	8,678.6	82271# 20/40, 20059# 40/70, 21334# SB Excel, Slick Water	2490.00	
19.4	19.4	0.0			Frac	3/10/2012	8,874.3	8,887.1	83222# 20/40, 20085# 40/70, 20539# SB Excel, Slick Water	2501.00	
1,538.1	1,538.0	0.9			Frac	3/10/2012	9,081.6	9,094.5	85349# 20/40, 20570# 40/70, 19008# SB Excel, Slick Water	2531.00	
5,466.9	5,466.1	1.5			Frac	3/9/2012	9,289.0	9,301.8	85613# 20/40, 20020# 40/70, 20808# SB Excel, Slick Water	2757.00	
5,476.4	5,476.6	1.5			Frac	3/9/2012	9,496.3	9,509.1	85200# 20/40, 19993# 40/70, 21375# SB Excel, Slick Water	2580.00	
5,490.2	5,489.3	1.4			Frac	3/9/2012	9,704.3	9,717.2	87476# 20/40, 18146# 40/70, 10752# SB Excel, Slick Water	2607.00	
5,606.0	5,605.1	1.4			Frac	3/9/2012	9,912.9	9,925.8	86002# 20/40, 20041# 40/70, 20200# SB Excel, Slick Water	2894.00	
5,633.2	5,632.3	1.5			Frac	3/8/2012	10,120.7	10,133.6	85060# 20/40, 18991# 40/70, 20789# SB Excel, Slick Water	2920.00	
6,558.1	6,271.0	81.8			Frac	3/8/2012	10,329.3	10,342.1	85557# 20/40, 20008# 40/70, 20153# SB Excel, Slick Water	2892.00	
6,594.8	6,274.9	85.5			Frac	3/8/2012	10,537.1	10,550.0	85991# 20/40, 22581# 40/70, 19092# SB Excel, Slick Water	2761.00	
6,606.0	6,276.1	86.6			Frac	3/8/2012	10,745.0	10,758.0	85566# 20/40, 20016# 40/70, 20064# SB Excel, Slick Water	2612.00	
6,650.3	6,277.3	89.4			Frac	3/8/2012	10,745.6	10,758.4	0# 20/40, 19680# 40/70, 0# SB Excel , Slick Water	1112.00	
6,651.9	6,277.3	89.5			Tubing - Production set at 5,496.0ftKB on 3/26/2012 07:00						
6,790.7	6,276.6	90.4			Set Depth (ftKB)		Comment				Run Date
6,893.7	6,277.6	88.7			5,496.0		Run tbg for jet pump system				3/26/2012
6,999.3	6,279.8	89.5			Item Des		OD (in)	ID (in)	Len (ft)	Top (ftKB)	Btm (ftKB)
7,102.4	6,279.9	90.3			Tubing		2 7/8	2.441	5,460.00	7.0	5,467.0
7,207.7	6,279.8	90.0			Tubing Pup Jnt		2 7/8	2.441	6.00	5,467.0	5,473.0
7,310.7	6,279.4	90.1			Hydraulic Pump Cavity		2 7/8	2.441	3.50	5,473.0	5,476.5
7,416.0	6,278.1	90.7			Tubing Pup Jnt		2 7/8	2.441	6.00	5,476.5	5,482.5
7,519.0	6,277.5	89.8			Packer		6 1/2	2.441	7.50	5,482.5	5,490.0
7,624.3	6,278.3	89.5			Tubing Pup Jnt		2 7/8	2.441	6.00	5,490.0	5,496.0
7,727.7	6,278.3	90.2			<des> on <dtmrun>						
7,833.0	6,277.2	90.6			Rod Description					Run Date	
7,936.0	6,276.5	90.3			Item Des		OD (in)	Len (ft)	Top (ftKB)	Btm (ftKB)	
8,041.0	6,276.6	89.4									
8,054.1	6,276.7	89.4									
8,159.1	6,275.8	90.7			Other String Components						
8,261.8	6,276.9	88.5			Item Des		OD (in)	Len (ft)	Top (ftKB)	Btm (ftKB)	
8,367.1	6,280.1	88.8									
8,470.1	6,280.2	91.1			Other In Hole						
8,574.8	6,277.6	92.2			Des		OD (in)	Run Date	Pull Date	Top (ftKB)	Btm (ftKB)
8,678.5	6,277.5	91.9									
8,784.1	6,269.6	90.8			Bottom Hole Cores						
8,887.1	6,267.1	91.7			Date		Core #	Top (ftKB)	Btm (ftKB)	Recov (ft)	
8,992.1	6,264.5	91.9									
9,094.5	6,259.3	93.6									
9,199.1	6,251.7	94.4									
9,301.8	6,244.5	93.5									
9,406.8	6,239.4	91.6									
9,509.2	6,237.9	90.6									
9,614.5	6,236.5	90.9									
9,717.2	6,234.8	90.9									
9,822.5	6,233.2	91.0									
9,925.9	6,231.8	90.5									
10,030.8	6,230.7	91.1									
10,133.5	6,230.2	89.7									
10,239.2	6,230.5	90.8									
10,342.2	6,229.3	90.5									
10,447.5	6,227.3	90.4									
10,549.9	6,227.3	90.1									
10,655.5	6,225.3	92.2									
10,745.7	6,221.0	93.1									
10,758.5	6,220.3	93.1									
10,804.8	6,217.6	93.5									
10,851.0	6,214.7	93.6									