



Lease Review All  
Well Name: LION GOVERNMENT 11-26

API Number 0508107209		WPC ID 1CO073818		Well Permit Number		Field Name Hiawatha West		County Moffat		State CO					
Well Configuration Type Vertical				Orig KB Elv (ft) 6,881.00		Ground Elevation (ft) 6,867.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 4,922.0			
Original Spud Date 9/14/2005		Completion Date 1/16/2006		Asset Group Central Rockies Asset Group		Responsible Engineer Mike Stahl		N/S Dist (ft) 970.0		N/S Ref FNL		E/W Dist (ft) 882.0		E/W Ref FWL	
Lot		Quarter 1 NW	Quarter 2 NW	Quarter 3	Quarter 4	Section 26	Section Suffix	Section Type	Township 12 N		Township N/S Dir Range 101 W		Meridian		
Vertical - Original Hole, 9/14/2012 3:34:04 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		9/14/2005		12		14.0		533.7		
					Original Hole		9/15/2005		7 7/8		533.7		4,922.0		
Surface Casing, 533.7ftKB															
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des			
8 5/8		24.00		J-55		14.0		487.4		473.43		Casing Joints			
8 5/8						487.4		488.4		1.00		Float Collar			
8 5/8		24.00		J-55		488.4		532.7		44.25		Casing Joints			
8 5/8						532.7		533.7		1.00		Guide Shoe			
Production Casing, 4,902.0ftKB															
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des			
4 1/2		11.60		N-80		14.0		4,013.0		3,999.00		Casing Joints			
4 1/2		11.60		N-80		4,013.0		4,035.3		22.25		Casing Flag Joint			
4 1/2		11.60		N-80		4,035.3		4,455.8		420.56		Casing Joints			
4 1/2		11.60		N-80		4,455.8		4,478.0		22.22		Casing Flag Joint			
4 1/2		11.60		N-80		4,478.0		4,898.0		420.00		Casing Joints			
4 1/2		11.60		N-80		4,898.0		4,899.0		1.00		Casing Shoe Joint			
4 1/2						4,899.0		4,902.0		3.00		Guide Shoe & Float Collar			
Cement Stages															
Des		Pump Start Date		Drill Out Date		Top (ftKB)		Btm (ftKB)		Top Meas Meth					
Surface Casing Cement		9/15/2005				14.0		533.7							
Production Casing Cement		10/10/2005				1,100.0		4,902.0							
Cement below shoe		10/10/2005				4,902.1		4,922.0							
Perforations															
Type of Hole		Date		Top (ftKB)		Btm (ftKB)		Zone							
Perforated		10/24/2005		4,200.0		4,208.0		Ft Union, Original Hole							
Perforated		1/16/2006		4,205.0		4,207.0		Tubing, Original Hole							
Perforated		10/24/2005		4,582.0		4,588.0		Lwr Ft Union SS, Original Hole							
Perforated		10/24/2005		4,658.0		4,668.0		Base Ft Union, Original Hole							
Perforated		10/20/2005		4,751.0		4,761.0		Mdl Lewis SS, Original Hole							
Perforated		10/20/2005		4,770.0		4,778.0		Mdl Lewis SS, Original Hole							
Perforated		10/20/2005		4,783.0		4,794.0		Mdl Lewis SS, Original Hole							
Perforated		10/20/2005		4,802.0		4,809.0		Mdl Lewis SS, Original Hole							
Perforated		10/20/2005		4,823.0		4,833.0		Mdl Lewis SS, Original Hole							
Perforated		10/20/2005		4,837.0		4,841.0		Mdl Lewis SS, Original Hole							
Stim/Treat Stages															
Stage Type		Start Date		Top (ftKB)		Btm (ftKB)		Stim/Treat Fluid		Vol Clean Pump (bbl)					
Frac		10/24/2005		4,751.0		4,841.0		135,437# 20/40 white, sand							
Frac		10/24/2005		4,582.0		4,668.0		37,538# 20/40 white, sand							
Tubing - Production set at 4,740.0ftKB on 12/27/2005 14:00															
Set Depth (ftKB)		Comment		Run Date											
4,740.0				12/27/2005											
Item Des		OD (in)		ID (in)		Len (ft)		Top (ftKB)		Btm (ftKB)					
Tubing		2 3/8		1.995		4.00		10.5		14.5					
Tubing		2 3/8		1.995		4,187.30		14.5		4,201.8					
API Seating Nipple		2 3/8		1.780		1.00		4,201.8		4,202.8					
Tubing, with perfs		2 3/8		1.995		8.00		4,202.8		4,210.8					
Tubing		2 3/8		1.995		483.90		4,210.8		4,694.7					
NoGo Blanking Plug		2 3/8		1.781		1.00		4,694.7		4,695.7					
Profile Nipple R nipple 1.78"		2 3/8				1.00		4,695.7		4,696.7					
Tubing		2 3/8		1.995		32.26		4,696.7		4,729.0					
Packer - 2 cup		4		1.990		1.50		4,729.0		4,730.5					
Tubing		2 3/8		1.995		8.00		4,730.5		4,738.5					
Vortex DX1 Tool		2 3/8				1.25		4,738.5		4,739.8					
Notched Collar		2 3/8				0.25		4,739.8		4,740.0					
<des> on <dtmrun>															
Rod Description		Run Date													
Item Des		OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)							
Other String Components															
Item Des		OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)							
Other In Hole															
Des		OD (in)		Run Date		Pull Date		Top (ftKB)		Btm (ftKB)					
Bumper Spring w/SV in place		1.87		2/28/2006		6/12/2006		4,201.0		4,203.0					
Bridge Plug - Temporary		3.6		10/24/2005		11/8/2005		4,685.0		4,687.0					
Blanking plug		1.781		6/12/2006				4,695.0		4,696.0					
Fill		4		12/22/2005				4,898.0		4,902.0					



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API Number	WPC ID	Well Permit Number	Field Name	County	State
0508107209	1CO073818		Hiawatha West	Moffat	CO
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Vertical	6,881.00	6,867.00			4,922.0
Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref
9/14/2005	1/16/2006	Central Rockies Asset Group	Mike Stahl	970.0	FNL
				E/W Dist (ft)	E/W Ref
				882.0	FWL
Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section
	NW	NW			26
			Section Suffix	Section Type	Township
					12 N
				Range	Range E/W Dir
				101	W
					Meridian

Vertical - Original Hole, 9/14/2012 3:34:05 PM					Bottom Hole Cores				
MD (ftKB)	TV D (ftKB)	In cl (°)	Vertical schematic (actual)	Logs	Date	Core #	Top (ftKB)	Btm (ftKB)	Recov (ft)
10.5			2-1; Tubing; 2 3/8; 1.995; 10.5; 4.00						
14.1			1-1; Casing Joints; 8 5/8; 8.097; 14.0; 473.43						
14.4			1-2; Float Collar; 8 5/8; 487.4; 1.00						
487.5			1-3; Casing Joints; 8 5/8; 8.097; 488.4; 44.25						
488.5			1-4; Guide Shoe; 8 5/8; 532.7; 1.00						
532.8			2-1; Casing Joints; 4 1/2; 4.000; 14.0; 3,999.00						
533.8			2-2; Tubing; 2 3/8; 1.995; 14.5; 4,187.30						
1,100.1			2-2; Casing Flag Joint; 4 1/2; 4.000; 4,013.0; 22.25						
4,013.1			2-3; API Seating Nipple; 2 3/8; 1.780; 4,201.8; 1.00						
4,035.1			Perforated; 4,200.0-4,208.0; 10/24/2005						
4,200.1			Perforated; 4,205.0-4,207.0; 1/16/2006						
4,201.8			2-4; Tubing, with perfs; 2 3/8; 1.995; 4,202.8; 8.00						
4,202.8			2-3; Casing Joints; 4 1/2; 4.000; 4,035.3; 420.56						
4,205.1			2-5; Tubing; 2 3/8; 1.995; 4,210.8; 483.90						
4,207.0			2-4; Casing Flag Joint; 4 1/2; 4.000; 4,455.8; 22.22						
4,208.0			Perforated; 4,582.0-4,588.0; 10/24/2005						
4,211.0			Perforated; 4,658.0-4,668.0; 10/24/2005						
4,455.7			2-5; Casing Joints; 4 1/2; 4.000; 4,478.0; 420.00						
4,478.0			2-6; NoGo Blanking Plug; 2 3/8; 1.781; 4,694.7; 1.00						
4,582.0			2-7; Profile Nipple R nipple 1.78; 2 3/8; 4,695.7; 1.00						
4,587.9			2-8; Tubing; 2 3/8; 1.995; 4,696.7; 32.26						
4,658.1			2-9; Packer - 2 cup; 4; 1.990; 4,729.0; 1.50						
4,668.0			2-10; Tubing; 2 3/8; 1.995; 4,730.5; 8.00						
4,694.9			2-11; Vortex DX1 Tool; 2 3/8; 4,738.5; 1.25						
4,696.9			2-12; Notched Collar; 2 3/8; 4,739.8; 0.25						
4,729.0			Perforated; 4,751.0-4,761.0; 10/20/2005						
4,730.6			Perforated; 4,770.0-4,778.0; 10/20/2005						
4,738.5			Perforated; 4,783.0-4,794.0; 10/20/2005						
4,739.8			Perforated; 4,802.0-4,809.0; 10/20/2005						
4,740.2			Perforated; 4,823.0-4,833.0; 10/20/2005						
4,740.2			Perforated; 4,837.0-4,841.0; 10/20/2005						
4,751.0			2-6; Casing Shoe Joint; 4 1/2; 4.000; 4,898.0; 1.00						
4,761.2			2-7; Guide Shoe & Float Collar; 4 1/2; 4,899.0; 3.00						
4,770.0									
4,777.9									
4,783.1									
4,794.0									
4,801.8									
4,809.1									
4,823.2									
4,833.0									
4,836.9									
4,840.9									
4,898.0									
4,898.9									
4,901.9									
4,921.9									