



Crestone Peak Resources Watkins Pipeline HAZOP Closure Form

NODE	2
NODE DESCRIPTION	Wet Gas Receiver
DEVIATION / PARAMETER	Higher Pressure
CAUSE	Hydrate formation/ line plugged/Paraffin build up
SAFEGUARDS	Operating procedures; Hydrate removal procedure; monitoring
RISK	10
RECOMMENDATION #	2.1.1.1
RECOMMENDATION	Ensure the Watkins region is familiar with the Hydrate removal SOPs
STATUS	
RESPONSIBILITY	
CLOSURE JUSTIFICATION	
CLOSED DATE	



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NODE	2
NODE DESCRIPTION	Wet Gas Receiver
DEVIATION / PARAMETER	Human Factor
CAUSE	Excess liquid in the barrel
SAFEGUARDS	Operating procedure; Drip Pan
RISK	15
RECOMMENDATION #	4.1.1.1
RECOMMENDATION	Verify returning liquid to pipeline is detailed in the operating procedure
STATUS	
RESPONSIBILITY	
CLOSURE JUSTIFICATION	
CLOSED DATE	



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NODE	4
NODE DESCRIPTION	Pipeline
DEVIATION / PARAMETER	Human Factor
CAUSE	3rd party line strike/ failure organize One Calls
SAFEGUARDS	Pressure monitoring/ remote shut-in of wellheads; Pipeline buried to a minimum of 4ft; Signage/flagging; Low pressure system, minimizing the release quantities; Pipelines are in Colorado 811
RISK	20
RECOMMENDATION #	1.1.1.1
RECOMMENDATION	Field verify pipeline markers, and replace as required
STATUS	
RESPONSIBILITY	
CLOSURE JUSTIFICATION	
CLOSED DATE	



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NODE	4
NODE DESCRIPTION	Pipeline
DEVIATION / PARAMETER	Human Factor
CAUSE	3rd party line strike/ failure organize One Calls
SAFEGUARDS	Pressure monitoring/ remote shut-in of wellheads; Pipeline buried to a minimum of 4ft; Signage/flagging ;Low pressure system, minimizing the release quantities ;Pipelines are in Colorado 811
RISK	20
RECOMMENDATION #	1.1.1.2
RECOMMENDATION	Verify all pipelines are in Colorado 811
STATUS	
RESPONSIBILITY	
CLOSURE JUSTIFICATION	
CLOSED DATE	



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NODE	4
NODE DESCRIPTION	Pipeline
DEVIATION / PARAMETER	Human Factor
CAUSE	3rd party line strike/ failure organize One Calls
SAFEGUARDS	Pressure monitoring/ remote shut-in of wellheads; Pipeline buried to a minimum of 4ft; Signage/flagging; Low pressure system, minimizing the release quantities; are in Colorado 811
RISK	20
RECOMMENDATION #	1.1.1.3
RECOMMENDATION	Consider programming remote shut-down on Well Pads O2 Slam Valves
STATUS	
RESPONSIBILITY	
CLOSURE JUSTIFICATION	
CLOSED DATE	