



Job Summary

Ticket Number	Ticket Date
TN# BCO-1904-0149	4/30/2019

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-47815
WELL NAME	RIG	JOB TYPE
Popham 7N	Ensign 161	Production Casing
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.33708 -104.53805	Derek Scott	Tony Barrientos

EMPLOYEES

WELL PROFILE			
Max Treating Pressure (psi):	3000	Bottom Hole Static Temperature (°F):	
Bottom Hole Circulating Temperature (°F):		Well Type:	

Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	8.5	1668	12189		
2	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Surface	9.625	36	J-55	0	1668		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	5.5	20	HCP-110	0	12189		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

CEMENT DATA

Stage 1:	From Depth (ft):	0	To Depth (ft):	648
Type: SAPP	Volume (sacks):		Volume (bbls):	80
Cement & Additives:				
Mudflush				
Density (ppg)				
Yield (ft³/sk)				
Water Req.				
Stage 2:	From Depth (ft):	648	To Depth (ft):	2431
Type: Barite	Volume (sacks):		Volume (bbls):	80
Cement & Additives:				
Weighted Spacer				
Density (ppg)				
Yield (ft³/sk)				
Water Req.				
Stage 3:	From Depth (ft):	2431	To Depth (ft):	6946
Type: Lead	Volume (sacks):	780	Volume (bbls):	184.2
Cement & Additives:				
Latex Lead				
Density (ppg)				
Yield (ft³/sk)				
Water Req.				
Stage 4:	From Depth (ft):	6946	To Depth (ft):	12189
Type: Tail	Volume (sacks):	985	Volume (bbls):	214
Cement & Additives:				
Tail				
Density (ppg)				
Yield (ft³/sk)				
Water Req.				

SUMMARY

Preflushes:	80 bbls of SAPP	Calculated Displacement (bbl):	269.7	Stage 1	Stage 2
	80 bbls of Weighted Spacer	Actual Displacement (bbl):	269.7		
Total Preflush/Spacer Volume (bbl):	160	Plug Bump (Y/N):	Y	Bump Pressure (psi):	2450
Total Slurry Volume (bbl):	398.2	Lost Returns (Y/N):	N	(if Y, when)	
Total Fluid Pumped	827.9				
Returns to Surface:	Preflush	50 bbls			

Job Notes (fluids pumped / procedures / tools / etc.):

Job went well.

Thank You For Using
CJES O-TEX Cementing

Customer Representative Signature:

Cement Job Log

C&J ENERGY SERVICES										
Customer:	PDC ENERGY			Date:	4/30/2019		Serv. Supervisor: Derek Scott			
Cust. Rep.:	Tony Barrientos			Ticket #:	BCO-1904-0149		Serv. Center Brighton - 3021			
Lease:	Popham 7N			API Well #:	05-123-47815		County:	Weld	State: CO	
Well Type:	Oil			Rig:	Ensign 161		Type of Job:	Production Casing		
Materials Furnished by C&J ENERGY SERVICES										
Plugs	Casing Hardware			Physical Slurry Properties						
				Sacks of Cement	Fluid Dens (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbls)	Mix Water (bbls)
0										
80 bbls water + 1600 lbs SAPP			+20.0 PPB CJ890						80.00	
80 bbls ppg Weighted Spacer - 80 bbls of			+219.63 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+12.46 PPB CJ801		12.5				80.00	
C&J Non Latex Lead 1-1			50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJX157011	25	14		1.37	5.98	6.08	4
C&J Latex Lead 1-1			50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJX157011+1.0 GPS CJ550L+0.2 GPS CJ891	755	14		1.37	4.71	183.66	85
C&J Tail 1-1			65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511	985	14.5		1.22	5.41	213.27	127
Displacement									269.41	
50 % CJ914+50 % CJ010-74+2.0 % CJ020										
Displacement Chemicals:	10 gallons Biocide									

C&J ENERGY SERVICES

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