		<h1>Job Summary</h1>		Ticket Number TN# BCO-1902-0090		Ticket Date 2/23/2019	
COUNTY		COMPANY		API Number			
Weld		PDC ENERGY		05-123-47814			
WELL NAME		RIG		JOB TYPE			
Popham 12N		Ensign 161		Production Casing			
SURFACE WELL LOCATION		CJES Field Supervisor		CUSTOMER REP			
40.33699 -104.53751		Derek Scott		Brady Sharpt			
EMPLOYEES							
WELL PROFILE							
Max Treating Pressure (psi):				Bottom Hole Static Temperature (°F):			
Bottom Hole Circulating Temperature (°F):				Well Type:			

Open Hole

	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
1	8.5	1632	12121		
2					


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	J55	0	1632		
Production	5.5	20	HCP-110	0	12121		

CEMENT DATA							
Stage 1:		From Depth (ft):		0	To Depth (ft):		2240
Type: Spacer		Volume (sacks):			Volume (bbls):		150
Cement & Additives:				Density (ppg)	Yield (ft³/sk)	Water Req.	
				12.5			
Stage 2:		From Depth (ft):		2240	To Depth (ft):		6905
Type: Lead		Volume (sacks):		780	Volume (bbls):		190.3
Cement & Additives:				Density (ppg)	Yield (ft³/sk)	Water Req.	
				14	1.37	6.00	
Stage 3:		From Depth (ft):		6905	To Depth (ft):		12121
Type: Tail		Volume (sacks):		975	Volume (bbls):		211.8
Cement & Additives:				Density (ppg)	Yield (ft³/sk)	Water Req.	
				14.5	1.22	5.41	
Stage 4:		From Depth (ft):			To Depth (ft):		
Type:		Volume (sacks):			Volume (bbls):		
Cement & Additives:				Density (ppg)	Yield (ft³/sk)	Water Req.	

SUMMARY							
Preflushes:		150 bbls of	Weighted Spacer	Calculated Displacement (bbl):	268.2	Stage 1	
		17 bbls of	Fresh Water	Actual Displacement (bbl):	268.2	Stage 2	
Total Preflush/Spacer Volume (bbl):		167		Plug Bump (Y/N):	Y	Bump Pressure (psi):	2650
Total Slurry Volume (bbl):		402.1		Lost Returns (Y/N):	N	(if Y, when)	
Total Fluid Pumped		837.3					
Returns to Surface:							
Job Notes (fluids pumped / procedures / tools / etc.): <div>Job notes go here!</div>							
Customer Representative Signature:				Thank You For Using CJES O-TEX Cementing			

Cement Job Log

													
Customer: PDC ENERGY				Date: 2/23/2019				Serv. Supervisor: Derek Scott					
Cust. Rep.: Brady Sharp				Ticket #: BCO-1902-0090				Serv. Center Brighton - 3021					
Lease: Popham 12N				API Well #: 05-123-47814				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													
0													
150 bbls ppg Weighted Spacer - 150 bbls of 12		+10.0 PPB CJ890+222.16 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+8.1 PPB CJ801					12.5				150.00		
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				975	14.5		1.22	5.41	211.11	126	
Displacement											268.21		
50 % CJ914+50 % CJ010-74+2.0 % CJ020+0.4													
Displacement Chemicals:													
OPEN HOLE DATA		TUBULAR DATA											
8.5in OH (1632' to 12127')		5.5in 20# (0' to 12121')		SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)			
				5.5	BTC	12121	HTC-110	4.778	12440	14770			
PREVIOUS CASING DATA		PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS							
9.625 in. 36# (0 to 1,632 ft)		TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP				
						12127	12082	1					
WELL FLUID		DISPLACEMENT FLUID			DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbl)					
TYPE	DENSITY	VOLUME	TYPE	DENSITY									
Mud	10.5 ppg		Water	8.3 ppg	2500		3500	1000					
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details						
8:20 AM							0 Arrive on location						
8:25 AM							0 Taigate meeting						
8:45 AM							0 Spot trucks/Rig in						
9:30 AM							0 Mix up latex						
10:56 AM							0 Wait for rig to circulation						
1:10 PM							0 Safety meeting						
1:23 PM	2	100			3		3 Fill lines						
1:24 PM		5000					3 Pressure test						
1:31 PM	2.9	220			14		17 Establish circulation						
1:37 PM	6	250			150		167 Pump Weighted Spacer @ 12.5ppg						
1:59 PM							167 Stop/Drop bottom plug						
2:00 PM							167 Batch up Lead cement						
2:07 PM	8	850			190.3	357.3	Pump 780sx Lead @ 14.0ppg 1.37yield						
2:35 PM	8	750			211.8	569.1	Pump 975sx Tail @ 14.5ppg 1.22yield						
3:03 PM						569.1	Stop/Drop top plug/Clean lines						
3:20 PM	8	2500			250	819.1	Displace with fresh water						
3:55 PM	4.4	2200			16.2	835.3	Slow down						
3:58 PM		2650				835.3	Bump plug/Hold for casing test						
4:01 PM	1.5	3715			1.5	836.8	Open up shoe						
4:02 PM	4	2300			5	841.8	Pump wet shoe						
4:05 PM							Stop/Check floats						
4:10 PM							Rig down						
4:50 PM							Pre-departure meeting						
5:00 PM							Leave location						
Left Yard	2/23/19 7:30 AM		Left Loc.		2/23/19 5:00 PM		Start Pump		2/23/19 1:23 PM				
Arrived Loc.	2/23/19 8:20 AM		Returned Yd.		2/23/19 5:45 PM		End Pump		2/23/19 4:05 PM				
Bumped Plug (psi)	Final Differential (psi)	Floats Held (Y/N)	PSI Left on Casing	Cement to Surface (bbl)	Top of Cement (ft)	Full Circ. During Job (Y/N)	Max Pump Pressure (psi)	Casing Rotation	Standby Charged(hrs)	Casing Reciprocation			
							Derek Scott		2/23/2019				
							Service Supervisor		Date				