

# Job Summary

Ticket Number	Ticket Date
TN# <b>BCO-1901-0012</b>	<b>1/9/2019</b>

COUNTY	COMPANY	API Number
<b>Weld</b>	<b>PDC ENERGY</b>	<b>05-123-45757</b>
WELL NAME	RIG	JOB TYPE
<b>Harold 6Y-202</b>	<b>Ensign 161</b>	<b>Production Casing</b>
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
<b>40.33566 -104.58549</b>	<b>Francisco Flores</b>	<b>John Falton</b>

EMPLOYEES
<i>Tony Yates</i>
<i>Serge Dzmitryiev</i>
<i>Anthony Staples</i>

<b>WELL PROFILE</b>			
Max Treating Pressure (psi):	3500	Bottom Hole Static Temperature (°F):	
Bottom Hole Circulating Temperature (°F):		Well Type:	Oil

## Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	8.5	17607	1656		
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		1656	0		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	5.5	20		17602	0		
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):	7930	To Depth (ft):	3430	
	Type: Lead Cement				
	Volume (sacks):	780	Volume (bbls):	184	
Cement & Additives:			Density (ppg)	Yield (ft³/sk)	Water Req.
			14	1.37	4.71

<b>Stage 2:</b>	From Depth (ft):	17602	To Depth (ft):	7930	
Type: Tail Cement	Volume (sacks):	2000	Volume (bbls):	433	
Cement & Additives:			Density (ppg)	Yield (ft³/sk)	Water Req.
			14.40	1.22	5.41

Stage 3:	From Depth (ft):		To Depth (ft):		
	Type:				
	Volume (sacks):		Volume (bbls):		
	Cement & Additives:		Density (ppg)	Yield (ft^3/sk)	Water Rec

Stage 4:

From Depth (ft):

To Depth (ft):

Type:

Volume (sacks):

Volume (bbls):

Cement & Additives:

Density (ppg)

Yield (ft³/sk)

Water Req.

## SUMMARY



			Stage 1		Stage 2	
Preflushes:	150	bbls of Weighted Spacer	Calculated Displacement (bbl):	390		
		bbls of	Actual Displacement (bbl):	390		
		bbls of				
Total Preflush/Spacer Volume (bbl):	150		Plug Bump (Y/N):	Y	Bump Pressure (psi):	1880
Total Slurry Volume (bbl):	624.2		Lost Returns (Y/N):	N	(if Y, when)	
Total Fluid Pumped	1173.7					
Returns to Surface:						

Job Notes (fluids pumped / procedures / tools / etc.): Mix & pump 150bbls of weighted spacer@12ppg 1.34Y. Followed by 25sx@14ppg 1.37Y non-latex lead. Mix & pump 755sx@14ppg 1.37Y of latex lead cement. Mix & pump 2000sx@14.5ppg 1.22Y of tail. Drop top plug displace it with 390bbls of fresh treated water. Pumped job per customers request. Job went well. Thank you!

**Thank You For Using**  
**CJES O-TEX Cementing**

Customer Representative Signature: \_\_\_\_\_

**Cement Job Log**

													
Customer: PDC ENERGY				Date: 1/8/2019				Serv. Supervisor: Francisco Flores					
Cust. Rep.: John Falton				Ticket #: BCO-1901-0012				Serv. Center Brighton - 3021					
Lease: Harold 6Y-202				API Well #: 05-123-45757				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 CJ776+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				2000	14.5		1.22	5.41	433.04	258	
Displacement											389.60		
50 % CJ914+50 % CJ010-74+2.0 % CJ020+0.4													
Displacement Chemicals:													
OPEN HOLE DATA		TUBULAR DATA											
8.5 in. O.H. (1,655 to 17,610 ft)		5.5 in. 20#, ( 0 to 17,610 ft)		SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)			
PREVIOUS CASING DATA		PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS							
9.625 in. 36# ( 0 to 1,655 ft)		TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP				
						17602'	17570'						
WELL FLUID		DISPLACEMENT FLUID		DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbl)						
TYPE	DENSITY	VOLUME	TYPE	DENSITY									
Water based	10.6 ppg	390 bbl	Water			3500	2000						
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details						
4:00 AM							0 Arrive on location						
4:10 AM							0 Tailgate meeting						
7:00 AM							0 Spot equipment						
7:15 AM							0 Rig in iron						
12:00 PM							0 Safety meeting						
12:45 PM	4	100				3	3 Fill lines						
12:47 PM		5012					3 Pressure test iron						
12:54 PM	5	208			150	153	Mix & pump weighted spacer@12.5ppg						
1:18 PM	2	100			6	159	Mix & pump 25sx@14ppg 1.37Y Non-latex lead						
1:20 PM	6	260			184.2	343.2	Mix & pump 755sx@14ppg 1.37Y Latex lead						
1:50 PM	7.5	475			434.5	777.7	Mix & pump 2000sx@14.5ppg 1.22Y Tail cement						
2:53 PM						777.7	Wash up SCM/ Drop top plug						
3:07 PM	8	1389			390	1167.7	Displacement						
3:56 PM	2	1880			1	1168.7	Bump Plug						
4:03 PM	4	2200			5	1173.7	BWSS						
4:06 PM						1173.7	Check floats						
4:10 PM						1173.7	Rig out						
						1173.7							
						1173.7							
						1173.7							
						1173.7							
						1173.7							
						1173.7							
Left Yard	1/8/19 3:00 AM		Left Loc.		1/8/19 5:00 PM		Start Pump		1/8/19 12:45 PM				
Arrived Loc.	1/8/19 4:00 AM		Returned Yd.		1/8/19 7:00 PM		End Pump		1/8/19 4:10 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			
Yes	1880	Yes	0	0	2295'	Yes	3500	No	5				
									1/8/2019				
							Service Supervisor		Date				