





# Job Summary

Ticket Number	Ticket Date
TN# <b>BCO-2006-0015</b>	<b>6/19/2020</b>

COUNTY	COMPANY	API Number
<b>WELD</b>	<b>PDC ENERGY</b>	<b>0512305178</b>
WELL NAME	RIG	JOB TYPE
<b>HAYES 1</b>	<b>Ensign 122</b>	<b>CM-P2A-PERM.</b>
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
<b>40.38688 -104.7965</b>	<b>Jeff Kopp</b>	<b>Bud Holman</b>

EMPLOYEES		
Tony Y		
Doug G		

WELL PROFILE			
Max Treating Pressure (psi):	1000	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)
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)
Production	4 1/2	11.6		0	4446		
Tubing	2 3/8	4.7		0	4446		

### CEMENT DATA

<b>Stage 1:</b>	From Depth (ft):	<b>3917</b>	To Depth (ft):	<b>4446</b>
Type: <b>Balance Plug</b>	Volume (sacks):	<b>40</b>	Volume (bbls):	<b>8.2</b>
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	
	15.8	1.15	5.00	

<b>Stage 2:</b>	From Depth (ft):	<b>315</b>	To Depth (ft):	<b>2007</b>
Type: <b>Surface Plug</b>	Volume (sacks):	<b>439</b>	Volume (bbls):	<b>91</b>
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	
	15.8	1.15	5.00	

<b>Stage 3:</b>	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	

<b>Stage 4:</b>	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	

### SUMMARY

Preflushes:	<b>5</b> bbls of <b>Fresh Water</b>	Calculated Displacement (bbl):	<b>15.1</b>	Stage 1	Stage 2
	<b>5</b> bbls of <b>Fresh Water</b>	Actual Displacement (bbl):	<b>15.1</b>		
Total Preflush/Spacer Volume (bbl):	<b>10</b>	Plug Bump (Y/N):	<b>N/A</b>	Bump Pressure (psi):	<b>N/A</b>
Total Slurry Volume (bbl):	<b>99.2</b>	Lost Returns (Y/N):	<b>N</b> (if Y, when)		
Total Fluid Pumped	<b>109.2</b>				
Returns to Surface:	<b>Cement</b>	<b>0</b> bbls			

Job Notes (fluids pumped / procedures / tools / etc.): **Never got cement back to surface while pumping surface plug due to possible holes in the casing. Returns back to surface was very light gray water but was never good cement. Customer wanted to wait on cement and tag it then pump cement again attempting to bring it to surface. After pumping again still no cement to surface. Last known cement depth was @315ft.**

Customer Representative Signature: \_\_\_\_\_ **Thank You For Using NexTier Completion Solutions**







# Job Summary

Ticket Number	Ticket Date
TN# <b>BCO-2006-0017</b>	<b>6/20/2020</b>

COUNTY	COMPANY	API Number
<b>WELD</b>	<b>PDC ENERGY</b>	<b>0512305178</b>
WELL NAME	RIG	JOB TYPE
<b>HAYES 1</b>	<b>Ensign 122</b>	<b>CM-P2A-PERM.</b>
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
<b>40.38688 -104.7965</b>	<b>Jeff Kopp</b>	<b>Bud Holman</b>

EMPLOYEES		
Tony Y		
Doug G		

WELL PROFILE			
Max Treating Pressure (psi):	1000	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)
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)
Production	4 1/2	11.6		0	94		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2 3/8	4.7		0	94		
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):	94
Type:	Surface Plug			
Volume (sacks):	48	Volume (bbls):	9.5	
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	
	15.8	1.15	5.00	

Stage 2:	From Depth (ft):		To Depth (ft):	
Type:				
Volume (sacks):		Volume (bbls):		
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	

Stage 3:	From Depth (ft):		To Depth (ft):	
Type:				
Volume (sacks):		Volume (bbls):		
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	

Stage 4:	From Depth (ft):		To Depth (ft):	
Type:				
Volume (sacks):		Volume (bbls):		
Cement & Additives:				
	Density (ppg)	Yield (ft <sup>3</sup> /sk)	Water Req.	

## SUMMARY

Preflushes:	5 bbls of Fresh Water	Calculated Displacement (bbl):	Stage 1	Stage 2
		Actual Displacement (bbl):		
Total Preflush/Spacer Volume (bbl):	5	Plug Bump (Y/N):	N/A	Bump Pressure (psi): N/A
Total Slurry Volume (bbl):		Lost Returns (Y/N):	N	(if Y, when)
Total Fluid Pumped				
Returns to Surface:	Cement	1 bbls		

Job Notes (fluids pumped / procedures / tools / etc.): Job pumped per customers request. Job went well

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

**Thank You For Using**  
**NexTier Completion Solutions**

Cement Job Log



Customer:	PDC ENERGY	Date:	20-Jun-20	Serv. Supervisor:	Jeff Kopp
Cust. Rep.:	Bud Holman	Ticket #:	BCO-2006-0017	Serv. Center:	Brighton - 3021
Well Name:	HAYES 1	API Well #:	0512305178	County:	WELD
Well Type:	Oil	Rig:	Ensign 122	State:	COLORADO
				Type of Job:	CM-P2A-PERM.

Materials Furnished by NextTier

Plugs	Casing Hardware	Physical Slurry Properties						
		Sacks of Cement	Fluid Density (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbls)	Mix Water (bbls)
Spacer - 10 bbl CaCl2	+30.0 PPB NAC-110				(0.24)	(3.60)	10.00	
Spacer - Fresh Water					-	-	3.00	
Spacer - 10 bbl SMS	+30.0 PPB NAC-102				(0.30)	(3.60)	10.00	
Cement	100 % NCM-914 +2.0 % NAC-110	150	15.8		1.16	5.00	31.10	18
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

Displacement Chemicals:

OPEN HOLE DATA				TUBULAR DATA						
Mix Cemt. Temperature °F	Lead Temp.	Middle Temp.	Tail Temp.	SIZE WEIGHT	THRD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)
				2 3/8 4.7#		94				

PREVIOUS CASING DATA		PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS			
4 1/2in 11.6# (0 to 94ft)		TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP

WELL FLUID		DISPLACEMENT FLUID				DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	Total Number of Runs	WATER ON LOC (bbl)
TYPE	DENSITY	VOLUME	TYPE	DENSITY						
								1000		100

Bumped Plug	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	Additional Hrs Charged (hrs)	Casing Reciprocation	Rathole Length (ft)
				1.00		Yes	1,000.00				

Comments/Special Customer Instructions:

Jeff Kopp  
Service Supervisor

20-Jun-20  
Date

