



# Job Summary

Ticket Number	Ticket Date
TN# BCO-1810-0002	10/5/2018

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-45735
WELL NAME	RIG	JOB TYPE
Judy 6D-212	Ensign 158	Production Casing
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.34052 -104.58711	Jeff Kopp	Shane Paris

EMPLOYEES		
Francisco	Brett	
James M	Serge	
Larry L		

WELL PROFILE			
Max Treating Pressure (psi):	4500	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	17521	1672		
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 5/8	36		1672	0		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	5.5	20		17521	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):	6908	To Depth (ft):	2252
Type: Lead	Volume (sacks):	780	Volume (bbls):	190
Cement & Additives:				
	Density (ppg)	14	Yield (ft³/sk)	1.37
	Water Req.	6.00		

Stage 2:	From Depth (ft):	17521	To Depth (ft):	6908
Type: Tail	Volume (sacks):	1995	Volume (bbls):	433
Cement & Additives:				
	Density (ppg)	14.5	Yield (ft³/sk)	1.22
	Water Req.	5.41		

Stage 3:	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:				
	Density (ppg)		Yield (ft³/sk)	
	Water Req.			

Stage 4:	From Depth (ft):		To Depth (ft):	
Type:	Volume (sacks):		Volume (bbls):	
Cement & Additives:				
	Density (ppg)		Yield (ft³/sk)	
	Water Req.			


## SUMMARY

Preflushes:	100 bbls of Weighted Spacer	Calculated Displacement (bbl):	Stage 1: 388	Stage 2: 388
		Actual Displacement (bbl):	388	
Total Preflush/Spacer Volume (bbl):	100	Plug Bump (Y/N):	Y	Bump Pressure (psi):
Total Slurry Volume (bbl):	623	Lost Returns (Y/N):	N	(if Y, when)
Total Fluid Pumped:	723			
Returns to Surface:	Cement	0 bbls		

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

Customer Representative Signature: Thank You For Using  
CJES O-TEX Cementing

**Cement Job Log**

<b>C&amp;J ENERGY SERVICES</b>														
Customer: PDC ENERGY				Date: 10/3/2018				Serv. Supervisor: Jeff Kopp						
Cust. Rep.: Shane Paris				Ticket #: BCO-1810-0002				Serv. Center Brighton - 3021						
Lease: Judy 6D-212				API Well #: 05-123-45735				County: Weld		State: CO				
Well Type: Oil				Rig: Ensign 158				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 (bbbls)	Mix Water (bbbls)		
0														
20 bbbls diesel											20.00			
100 bbbls Weighted Spacer - 100 bbbls of 12.5 ppg		+221.47 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJ776+11.57 PPB CJ801+0.5 GPB CJFCPC25+2.0 GPB CJ885					12.5				100.00			
Non Latex Lead		50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJ157011				25	14		1.37	5.98	6.08	4		
Latex Lead		50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJ157011				755	14		1.37	4.71	183.66	85		
Tail		65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511				1995	14.5		1.22	5.41	431.95	257		
Displacement											388.43			
50 % CJ914+50 % CJ010-74+2.0 % CJ020+0.4 %														
Displacement Chemicals:														
OPEN HOLE DATA				TUBULAR DATA										
8.5 in O.H. (1672 to 17521ft)				5.5 in 20# (0 to 17521ft)				SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)
PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS						
9 5/8 in 36# (0 to 1672ft)				TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP			
								17480						
WELL FLUID		DISPLACEMENT FLUID			DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)				WATER ON LOC (bbbl)			
TYPE	DENSITY	VOLUME	TYPE	DENSITY										
		388 bbl	Water	8.3 ppg			4500				1000			
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details							
5:30 AM						0	ARRIVE ON LOCATION							
5:35 AM						0	PRE JOB SAFETY MEETING							
5:45 AM						0	RIG UP IRON AND HOSES							
7:00 AM						0	MIX LATEX WATER							
10:00 AM						0	SAFETY MEETING							
11:29 AM	3.5	400				6	6 FILL LINES/DROP PLUG							
11:30 AM		5477				6	6 PRESSURE TEST							
11:44 AM	7.4	747			100	106	BARITE WEIGHTED SPACER @12.5PPG							
11:57 AM	7	820			6	112	MIX AND PUMP 25SXS @14PPG 1.37Y 5.98WR/ NON LATEX							
12:00 PM	8	712			184	296	MIX AND PUMP 75SXS @14PPG 1.37Y 6.0WR/ LATEX WATER							
12:23 PM	7	495			433	729	MIX AND PUMP 1995SXS @14.5PPG 1.22Y 5.41WR							
1:30 PM						729	SHUT DOWN							
1:32 PM						729	WASH UP PUMPS AND LINES							
1:44 PM						729	DROP PLUG							
1:45 PM	9	2100			388	1117	DISPLACE							
2:33 PM		3000				1117	BUMP PLUG							
2:35 PM	2				3	1120	BURST DISK							
2:37 PM	4	2700			5	1125	FRESH							
2:45 PM							CHECK FLOATS							
2:47 PM							SHUT DOWN							
3:00 PM							RIG OUT							
3:30 PM							LEAVE LOCATION							
Left Yard	10/5/18 4:30 AM			Left Loc.	10/5/18 3:30 PM			Start Pump	10/5/18 7:00 AM					
Arrived Loc.	10/5/18 5:30 AM			Returned Yd.				End Pump	10/5/18 3:30 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	0	0	2252	Yes	4500		1					
										Service Supervisor		Date		