

<div><div>C&J ENERGY SERVICES</div><div>_1-BCO_190711102408-JLPjob 1.xlsm]-1</div></div>	PDC ENERGY		YARD CALL	7/13/2019		DISTRICT	
	Red Cloud - 6N		RTS DATE	7/14/2019		Brighton	
			YARD RTN				
Personnel/Equipment							
Driver		Assignment		Tractor	Trailer	Comments	
BLEND INFO							
Amount	Units	System/Additives			Density (ppg)	Yield (cuft/sk)	Water Req. (gal/sk)
0	SX	80 bbls water + 1600 lbs SAPP					
80.00	bbl	+20.0 PPB CJ890					
0.00	SX	100 bbl 12.5ppg Weighted Spacer - 100 bbls of 12.5 ppg Weighted Spacer: 85.3 bbl Fresh Water + 21321 lbs Barite + 100 lbs Citric Acid + 1246 lbs MS Spacer + 50 lbs X-Air					
100.00	bbl	+213.21 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+12.46 PPB CJ801					
25	SX	C&J Non Latex Lead					
6.08	bbl	50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJX157011			14	1.37	5.98
1125	SX	C&J Latex Lead					
273.56	bbl	50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJX157011+0.2 GPS CJ891			14	1.37	4.71
1835	SX	C&J Tail					
396.40	bbl	65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511			14.5	1.22	5.41
0	SX	Displacement					
369.27	bbl						
0	SX						
0	SX						
0	SX						
0.00							

Job Summary

Ticket Number	Ticket Date
TN# BCO-1907-0062	7/16/2019

COUNTY	COMPANY	API Number
Weld	PDC ENERGY	05-123-49447
WELL NAME	RIG	JOB TYPE
Red Cloud - 6N	Ensign 152	CM-PROD. CASING
SURFACE WELL LOCATION	CJES Field Supervisor	CUSTOMER REP
40.34448 -104.49212	James Payne	Brandon Young

EMPLOYEES

WELL PROFILE			
Max Treating Pressure (psi):		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	1,673	16,665	1,673	6,631
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	J-55	0	1,673		
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
PRODUCTION	5 1/2	20	HPC110	0	16,665	0	6,631
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):	939
Type: SPACER	Volume (sacks):		Volume (bbls):	45

SEE JOB LOG. C39:P53

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
BARITE	12	3.43	21.30

Stage 2:	From Depth (ft):	939	To Depth (ft):	6912
Type: LEAD LATEX	Volume (sacks):	1150	Volume (bbls):	280

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
LATEX CEMENT	14	0.07	4.71

Stage 3:	From Depth (ft):	6,912	To Depth (ft):	16665
Type: TAIL	Volume (sacks):	1835	Volume (bbls):	398

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
TAIL CEMENT	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

	Stage 1	Stage 2
Preflushes:		
80 bbls of SAPP	369.4	
100 bbls of Weighted Spacer	369.4	
Total Preflush/Spacer Volume (bbl):	180	
Total Slurry Volume (bbl):	678	
Total Fluid Pumped	1,235	
Returns to Surface:	SPACER/SAPP	155 bbls

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

SEE JOB LOG.

Customer Representative Signature:

 Thank You For Using
 CJES O-TEX Cementing

Cement Job Log



Customer:	PDC ENERGY				Date:	7/15/2019		Serv. Supervisor:	James Payne			
Cust. Rep.:	Brandon Young				Ticket #:	BCO-1907-0062		Serv. Center	Brighton - 3021			
Lease:	Red Cloud - 6N				API Well #:	05-123-49447		County:	Weld		State:	CO
Well Type:	Oil				Rig:	Ensign 152		Type of Job:	CM-PROD. 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)
80 bbls water + 1600 lbs SAPP		+20.0 PPB CJ890									80.00	
100 bbl 12.5ppg Weighted Spacer - 100 bbl		+213.21 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+12.46 PPB CJ801									100.00	
C&J Non Latex Lead		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		50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJX157011+0.2 GPS CJ891				1125	14		1.37	4.71	273.66	126
C&J Tail		65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511				1835	14.5		1.22	5.41	397.31	236
Displacement											369.27	
65 % CJ914+35 % CJ010-74+0.3 % CJ704												
Displacement Chemicals:												
OPEN HOLE DATA		TUBULAR DATA										
8.5 in. O.H. (1,673 to 16,693 ft)		5.5 in. 20#, (0 to 16,693 ft)				SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)
Mix Cemt. Temperature °F	Lead Temp.	Middle Temp.	Tail Temp.									
45.0 °F	34.0 °F	34.0 °F	75.0 °F									
PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS				
9.625 in. 36# (0 to 1,673 ft)				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								
MUD	10.5 ppg	369.4 bbl	WATER	8.9 ppg			5000					

C&J ENERGY SERVICES

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7/25/2019