 <small>2N_1-8CO_190612112643-JLPjob 1.xlsm</small>	PDC ENERGY	YARD CALL	6/14/2019		DISTRICT
	Red Cloud 2N	RTS DATE	6/19/2019		Brighton
		YARD RTN			
Personnel/Equipment					
Driver	Assignment	Tractor	Trailer	Comments	
Justin Collin	Supervisor	131154	449088		
AJ Staples	Operator		445052		
Justin LaCome	Operator		445033		
Eduardo Melgarejo	Bulk				
BLEND INFO <small>2N_1-8CO_190612112643-JLPjob 1.xlsm Main</small>					
Amount	Units	System/Additives	Density (ppg)	Yield (cuft/sk)	Water Req. (gal/sk)
0	SX	0			
0.00					
0.00	SX	80 bbls water + 1600 lbs SAPP			
80.00	bbl	+20.0 PPB CJ890			
0	SX	80 bbls ppg Weighted Spacer - 80 bbls of 12.5 ppg Weighted Spacer: 66.3 bbl Fresh Water + 17570 lbs Barite + 80 lbs Citric Acid + 997 lbs MS Spacer + 40 lbs X-Air			
80.00	bbl	+219.63 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+12.46 PPB CJ801	12.5		
25	SX	C&J Non Latex Lead 1-1			
0.00		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
755	SX	C&J Latex Lead 1-1			
183.60	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
1855	SX	C&J Tail 1-1			
401.02	bbl	65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511	14.5	1.22	5.41
0	SX	Displacement			
0	SX				
0	SX				
371.77	bbl				


## Cement Job Log



Customer:	PDC ENERGY		Date:	6/14/2019		Serv. Supervisor:	Justin Collin				
Cust. Rep.:	Antonio Barrientos		Ticket #:	BCO-1906-0078		Serv. Center	Brighton - 3021				
Lease:	Red Cloud 2N		API Well #:	05-123-49450		County:	Weld	State:	CO		
Well Type:	Oil		Rig:	Ensign 152		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											
80 bbls water + 1600 lbs SAPP		+20.0 PPB CJ890								80.00	
80 bbls ppg Weighted Spacer - 80 bbls of		+219.63 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+12.46 PPB CJ801				12.5				80.00	
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+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			1855	14.5		1.22	5.41	401.64	239
Displacement										371.77	
50 % CJ914+50 % CJ010-74+2.0 % CJ020											
Displacement Chemicals:											

## Cement Job Log



Customer:	PDC ENERGY				Date: 6/14/2019				Serv. Supervisor: Justin Collin			
Cust. Rep.:	Antonio Barrientos				Ticket #: BCO-1906-0078				Serv. Center Brighton - 3021			
Lease:	Red Cloud 2N				API Well #: 05-123-49450				County: Weld		State: CO	
Well Type:	Oil				Rig: Ensign 152				Type of Job: Production Casing			
OPEN HOLE DATA				TUBULAR DATA								
8.5 in. O.H. (1,675 to 16,806 ft)				5.5 in. 20#, ( 0 to 16,806 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 1,675 ft)				TOP		BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP
WELL FLUID		DISPLACEMENT FLUID			DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)				WATER ON LOC (bbl)	
TYPE	DENSITY	VOLUME	TYPE	DENSITY								
		371.2 bbl	Fresh	8.3 ppg	1946		2500				1000	
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details					
10:30 PM						0	ARRIVE ON LOCATION					
10:40 PM						0	TAILGATE MEETING					
11:00 PM						0	RIG IN IRON AND HOSES					
2:00 AM						0	SAFETY MEETING					
2:26 AM	2	218			3	3	LOAD LINES TO TEST					
2:55 AM		5218				3	PRESSURE TEST PUMPS AND LINES TO 5000PSI					
3:01 AM	4.5	500			80	83	PUMP FRESH WATER + SAPP SPACER					
3:19 AM	3	620			80	163	PUMP WEIGHTED SPACER					
3:36 AM						163	SHUT DOWN					
3:38 AM						163	DROP BOTTOM PLUG					
3:39 AM	3	185			6	169	BATCH AND PUMP 25SX @ 14PPG (1.37 YIELD) W/O LATEX					
3:42 AM	7	320			184.2	353.2	PUMP 755SX @ 14PPG (1.37 YIELD) WITH LATEX					
4:20 AM	6.6	532			403.1	756.3	PUMP 1855SX @ 14.5PPG (1.22 YIELD)					
5:26 AM						756.3	SHUT DOWN					
5:33 AM						756.3	DROP TOP PLUG/ WASH UP PUMPS AND LINES					
5:56 AM	4	44			371.2	1127.5	DISPLACE FRESH WATER TO BUMP					
6:08 AM	6.4	812				1127.5	CAUGHT CEMENT (28bbls away)					
6:51 AM	5	2068				1127.5	SLOW RATE TO BUMP PLUG					
6:55 AM	5	2538				1127.5	BUMP PLUG					
7:01 AM	2	3621			2	1129.5	SHIFT WET SHOE SUB					
7:03 AM	4	1928			5	1134.5	PUMP WET SHOE					
7:04 AM							CHECK FLOATS (2bbls back)					
7:20 AM							RIG OUT					
8:30 AM							JOB COMPLETE					
Left Yard	6/18/19 9:00 PM			Left Loc.	6/19/19 8:45 AM			Start Pump	6/19/19 2:26 AM			
Arrived Loc.	6/18/19 10:30 PM			Returned Yd.				End Pump	6/19/19 7:04 AM			
Bumped Plug (psi)	Final Differential (psi)	Floater 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		
				0	2224	Yes	2500		0			
							 Service Supervisor _____ Date _____					