

	PDC ENERGY	YARD CALL			DISTRICT	
	Wilmoth 5A-314	RTS DATE			Brighton	
		YARD RTN				
CUSTOMER INFORMATION					1.07b	
Customer Name	PDC ENERGY	WELL INFORMATION		WELL DATA		
Customer #:	1000700	API #:	05-123-45482	Casing Size	9.625	
AFE #:	DR002885	Field Name:	Wattenberg	Depth		
Cust Rep on Loc:	Brady Sharp	Well Name:	Wilmoth 5A-314	TVD	6,700 ft	
Cust Phone #:	9703969376			MD	13,255 ft	
Order Placed By:		Well Type:	Oil	OH		
Phone #:		Formation:	NBRR	OH Depth		
Proposed Job Amt:	\$87,213.75	Rig Contractor:	Ensign	BHST	200°F	
JOB INFORMATION		Rig Name/Num.:	Ensign 161	BHCT	180°F	
Ticket #:	BCO-1810-0056	Rig Phone:		Est. BHST/BHCT 200°F / 180°F (0) (2.99°F/100ft)		
PO #:		County:	Weld	MD / TVD	13,255 ft / 6,700 ft	
Order Taken By:	Milo	State:	CO	Mud Weight & Type	10#, Water Based	
Order Date:		Latitude:	40.34547	Open Hole	8.5 in. O.H. (1,674 to 13,255 ft)	
CJES Acct. Manager:	Adam DeSaules	Longitude:	-105	Previous Casing	9.625 in. 36# (0 to 1,674 ft)	
CJES Engineer:	Paul Novotny	Township:	NWNW 5 4N64W 6 PM	TOP CONNECTION		
		Quote Number:	1-BCO_181007160629	Size	Type Thread	
COMMENTS						
Call Titan once on cement to set up time for vac truck						
SPECIAL JOB INSTRUCTIONS						
Flat bed trailer with chems, 1600# SAPP, 100# sugar, Radios for OSR						
5.5" cement head, swage, bowl						
DIRECTIONS TO WELL						
CR 50 & CR 51, S.2, SE .1 into						
Emergency Contacts						
Nearest Hospital		Phone Number:				
Police Department		Phone Number:				
Fire Department		Phone Number:				
Designated Emergency Vehicle		Vehicle Location:				
MSDS on Dash of Emergency Vehicle? (y/n)						
Muster Area #1						
Muster Area #2						
Cell Phone Service on location? (y/n)						
If not, nearest working phone						
Iron Tracking						
	Taken Out			Returned		
Iron Type	Taken By	Date Out	Time Out	Returned By	Date In	Time In

Cement Job Log

														
Customer: PDC ENERGY				Date: 10/11/2018				Serv. Supervisor: Barlen Joyner						
Cust. Rep.: John Falton				Ticket #: BCO-1810-0056				Serv. Center Brighton - 3021						
Lease: Wilmoth 5A-314				API Well #: 05-123-45482				County: Weld		State: CO				
Well Type: Oil				Rig: Ensign 161				Type of Job: Latex Production						
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)							
80 bbbls water + 1600 lbs SAPP	+20.0 PPB CJ890										80.00			
20 bbbls water											-			
80 bbbls ppg Weighted Spacer - 80 bbbls of 12.5	+219.63 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJ776+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 % CJ157011					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 % CJ157011+1.0 GFS CJ550L+0.2 GFS 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					1185	14.5		1.22	5.41	256.57	153		
Displacement											293.02			
Displacement Chemicals:														
OPEN HOLE DATA				TUBULAR DATA										
8 1/2 from 1632' to 13262				N/A				SIZE WEIGHT	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)
								5 1/2 20#	BTC	13256	P-110	4.778	12640	11080
PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS						
9 5/8 36# from 0' to 1632'				TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP			
				N/A					13256	13217	N/A	N/A		
WELL FLUID		DISPLACEMENT FLUID			DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbbl)						
TYPE	DENSITY	VOLUME	TYPE	DENSITY										
Mud	10.5 ppg	293.1 bbl	Water	8.3 ppg	1741	52851	3500	800						
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details							
4:45 AM						0	Arrive on location / sign in							
5:20 AM						0	Pre-mix mix water							
6:00 AM						0	Spot trucks							
6:50 AM						0	Rig in							
9:00 AM						0	Wait for rig to finish circulating 4 bottoms up							
10:50 AM						0	Safety meeting							
11:16 AM	2.5		495			5	5 Drop bottom plug & fill lines							
11:19 AM			5295			0	Pressure test							
11:24 AM	4		729			80	80 SAPP + fresh water spacer							
11:46 AM	4		885			20	20 Fresh water spacer							
11:51 AM	5.8		1094			80	160 Barrite + fresh water spacer @ 12.5ppg							
12:05 PM	5.6		755			98	258 Mix, weigh & pump 780sx of Latex Lead @ 14ppg - Lead from 2303' to 6967'							
12:22 PM	4		260			15	35 Drop rate to see bottom plug hit							
12:25 PM	7.4		476			77.3	237.3 Increase rate for 190.3 bbbls total of Latex Lead							
12:43 PM	6		573			262	520 Mix, weigh & pump 1185sx of Tail @ 14.5ppg - Tail from 6967' to 13256'							
1:31 PM						520	Stop / Drop plug / Wash up pumps & lines							
1:41 PM	4.2		26			43	563 Start displacement							
1:52 PM	8		634			237	800 Catch cement / increase rate							
2:22 PM	5		2604			13	813 Drop rate							
2:24 PM	5		3030			293	1106 Bump plug							
2:24 PM			3308				1106 Plug down @ 293 bbbls away							
2:24 PM			3021				1106 Hold pressure on casing							
2:32 PM	2		4089			1	1107 Rupture shoe disc							
2:32 PM	4		2457			5	1112 Fresh water spacer							
2:33 PM							Shut-down / check floats - 2 bbbls back							
2:35 PM							Job complete							
2:37 PM							Rig out							
3:40 PM							Leave location							
Left Yard	10/11/18 4:00 AM			Left Loc.	10/11/18 3:40 PM			Start Pump		10/11/18 11:24 AM				
Arrived Loc.	10/11/18 4:45 AM			Returned Yd.	10/11/18 4:20 PM			End Pump		10/11/18 2:33 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	3030	Yes	0	0	2303	Yes	1094	No	4	No				
									10/11/2018					
							Service Supervisor		Date					