		<h1>Job Summary</h1>		Ticket Number TN# BCO-1901-0103	Ticket Date 1/18/2019
COUNTY	COMPANY		API Number		
Weld	PDC ENERGY		05-123-45755		
WELL NAME	RIG	JOB TYPE			
Harold 6X-304	Ensign 161	Production Casing			
SURFACE WELL LOCATION		CJES Field Supervisor	CUSTOMER REP		
40.33558 -104.58549		Israel Davila	Brady Sharp		
EMPLOYEES					
Jeff Kapp					
James McFarland					
Vernon Fox					
WELL PROFILE					
Max Treating Pressure (psi):		4500	Bottom Hole Static Temperature (°F):		
Bottom Hole Circulating Temperature (°F):			Well Type:		oil


Open Hole					
1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	8.5"	2558	11892	0	6700
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	9.625	36		0	2558	0	2558
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	5.5			0	11890	0	6700
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):	1250	To Depth (ft):	7000		
Type: Latex Lead		Volume (sacks):	1246	Volume (bbls):	304		
		Cement & Additives:	Density (ppg)		Yield (ft³/sk)	Water Req.	
		Latex Lead Cement	14		1.37	5.98	
Stage 2:		From Depth (ft):	7000	To Depth (ft):	11892		
Type: Tail Cement		Volume (sacks):	930	Volume (bbls):	202		
		Cement & Additives:	Density (ppg)		Yield (ft³/sk)	Water Req.	
		Tail Cement	14.5		1.22	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							
				Stage 1	Stage 2		
Preflushes:	150 bbls of	Weighted Spacer	Calculated Displacement (bbl):	263			
	10 bbls of	Fresh Water	Actual Displacement (bbl):	263			
Total Preflush/Spacer Volume (bbl):	160	Plug Bump (Y/N):	Y	Bump Pressure (psi):	2900		
Total Slurry Volume (bbl):	506	Lost Returns (Y/N):	N	(if Y, when)			
Total Fluid Pumped	935						
Returns to Surface:	Spacer	90 bbls					
Job Notes (fluids pumped / procedures / tools / etc.): <div> Pumped 150 bbls Weighted spacer@12.5. Pumped 1246 sks Latex lead@14, 1.37 yield from 1250' to 7000'. (First 25 sks non-latex) Pumped 930 sks tail @14.5, 1.22 yield from 7000' to 11892'. Displace 263 bbls to land plug. Open wet shoe sub@4115 psi. Displace 5 bbls. check floats, floats held. 2 bbla back. </div>							

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

	PDC ENERGY	YARD CALL	1/18/2019		DISTRICT Brighton	
	Harold 6X-304	RTS DATE	1/18/2019			
			YARD RTN	1/18/2019		

CUSTOMER INFORMATION		WELL INFORMATION		WELL DATA		TUBULAR DATA	
Customer Name	PDC ENERGY	API #:	05-123-45755	Casing Size	9.625	Size	Grade
Customer #:	1000700	Field Name:	Wattenberg	Depth	2558	5.5	Weight
AFE #:		Well Name:	Harold 6X-304	TVD		20#	
Cust Rep on Loc:	Brady Sharp			MD		Casing	
Cust Phone #:	970-396-9376	Well Type:	Oil	OH	8.5	5.5 in. 20#, (0 to 11,900 ft)	
Order Placed By:		Formation:	NBRR	OH Depth	11892	CEMENTING PLUG	
Phone #:		Rig Contractor:	Ensign	BHST	200°F	Qty	Size
Proposed Job Amt:	\$113,308.32	Rig Name/Num.:	Ensign 161	BHCT	180°F		Type
JOB INFORMATION		Rig Phone:		Est. BHST/BHCT		200°F / 180°F (0) (2.99°F/100ft)	
Ticket #:	BCO-1901-0103	County:	Weld	MD / TVD		TOP CONNECTION	
PO #:		State:	CO	Mud Weight & Type	10#, Water Based	Size	Type
Order Taken By:	Milo	Latitude:	40.33558	Open Hole	8.5" (2558'-11892')		Thread
Order Date:		Longitude:	-105			JOB TYPE	
CJES Acct. Manager:	Cody Michel	Township:	SESE 6 4N64W 6 PM	Previous Casing	9.625 in. 36# (0 to 2,558 ft)	Production Casing	
CJES Engineer	Cody Michel	Quote Number:	1-BCO_190115135343				

COMMENTS			
Lead cement to surface. Call Titan once on cement to set up time for vac truck. No draining pump inside containment.			

SPECIAL JOB INSTRUCTIONS			
Radios for OSR. 4 totes of latex, 1 tote of latex stabilizer, 150# sugar, 10gal Alpha defoamer			
Check iron trailer for all fittings			

DIRECTIONS TO WELL			
CR 49 & CR 48, E 1, N into			


Emergency Contacts			
Nearest Hospital	Greeley	Phone Number:	911
Police Department	Greeley	Phone Number:	911
Fire Department	Greeley	Phone Number:	911

Designated Emergency Vehicle	131155	Vehicle Location:	Next to cement pump
MSDS on Dash of Emergency Vehicle? (y/n)	y		

Muster Area #1	Lease entrance
Muster Area #2	Wind Depending

Cell Phone Service on location? (y/n)	y
If not, nearest working phone	

Iron Tracking						
	Taken Out			Returned		
Iron Type	Taken By	Date Out	Time Out	Returned By	Date In	Time In

	PDC ENERGY	YARD CALL	1/18/2019		DISTRICT
	Harold 6X-304	RTS DATE	1/18/2019		Brighton
		YARD RTN	1/18/2019		
Personnel/Equipment					
Driver	Assignment	Tractor	Trailer	Comments	
Israel Davila	Supervisor	131155	449093		
James McFarland	Operator	745024	445024		
Jeff Kapp	Ground supervisor	749100	445047		
Vernon Fox	Bulk	201400	444002		
BLEND INFO					
Amount	Units	System/Additives	Density (ppg)	Yield (cuft/sk)	Water Req. (gal/sk)
0	SX	0			
0.00					
0.00	SX	0			
0.00					
0	SX	150 bbls ppg Weighted Spacer - 150 bbls of 12.5 ppg Weighted Spacer: 121.12 bbl Fresh Water + 33,324 lbs Barite + 150 lbs Citric Acid + 1215 lbs MS Spacer + 75 lbs X-Air + 1500 lbs SAPP			
150.00	bbl	+10.0 PPB CJ890+222.16 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+8.1 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
1221	SX	C&J Latex Lead 1-1			
303.82	bbl	50 % CJ914+50 % CJ010-74 +2.0 % CJ020+0.4 % CJ548+0.3 % CJ240+10.0 % CJ041+0.3 % CJX157011+1.0 GPS CJ550L+0.2 GPS CJ891	14	1.37	4.71
930	SX	C&J Tail 1-1			
200.85	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				
262.97	bbl				

Cement Job Log

C&J ENERGY SERVICES													
Customer: PDC ENERGY				Date: 1/18/2019				Serv. Supervisor: Israel Davila					
Cust. Rep.: Brady Sharp				Ticket #: BCO-1901-0103				Serv. Center Brighton - 3021					
Lease: Harold 6X-304				API Well #: 05-123-45755				County:		Weld		State: CO	
Well Type: Oil				Rig: Ensign 161				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													
0													
150 bbls ppg Weighted Spacer - 150 bbls of 12		+10.0 PPB CJ890+222.16 PPB CJ300+1.0 PPB CJ209+0.5 PPB CJX157011+8.1 PPB CJ801					12.5				150.00		
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+1.0 GPS CJ550L+0.2 GPS CJ891				1221	14		1.37	4.71	297.01	137	
C&J Tail 1-1		65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511				930	14.5		1.22	5.41	201.36	120	
Displacement											262.97		
50 % CJ914+50 % CJ010-74+2.0 % CJ020+0.4													
Displacement Chemicals:													
OPEN HOLE DATA		TUBULAR DATA											
8.5" O.H. 2558' to 11892'		5.5" P.C. 0'-11890'		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 2,558 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									
		263 bbl	H2O	8.3 ppg			4500						
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details						
11:00 AM						0	Arrive on location						
11:15 AM						0	Tailgate meeting						
11:25 AM						0	Spot equipment						
11:40 AM						0	Rig in						
3:45 PM						0	JSA/Safety meeting						
4:30 PM	4	230			5	5	Fill Lines W/ Fresh H2O						
4:43 PM						5	Pressure test high pressure line to 5000psi						
4:50 PM	5	400			150	155	Pump Weighted spacer						
5:17 PM	5	400			5	160	Pump fresh spacer						
5:17 PM	5	450			304	464	Pump 1246 sks Latex lead, first 25 sks non latex, from 1250' to 7000'						
6:23 PM	7.5	640			202	666	Pump Tail cement from 7000' to 11892'						
6:49 PM						666	Shut down						
6:51 PM						666	Wash pump and lines/Load plug						
7:06 PM	8	2500			263	929	Displace plug						
7:43 PM		2900				929	Bump plug						
7:48 PM	2	4115			1	930	Open Wet shoe sub						
7:49 PM	4	2200			5	935	pump 5 bbls @4 bbls/Minute						
7:51 PM		2000					Shut down						
7:52 PM		0					Check floats/floats held. 2 bbls back						
8:00 PM							Rig out						
9:00 PM							Depart location						
Left Yard		1/18/19 10:00 AM		Left Loc.		1/18/19 9:00 PM		Start Pump		1/18/19 3:00 PM			
Arrived Loc.		1/18/19 11:00 AM		Returned Yd.		1/18/19 10:00 AM		End Pump		1/18/19 8:00 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			
					1250		5000						
							Israel Davila		1/18/2019				
							Service Supervisor		Date				