
	PDC ENERGY	YARD CALL	1/28/2019		DISTRICT		
	Harold 6X-334	RTS DATE	1/28/2019		Brighton		
		YARD RTN	1/28/2019				
CUSTOMER INFORMATION		1.08c					
Customer Name	PDC ENERGY	WELL INFORMATION		WELL DATA		TUBULAR DATA	
Customer #:	1000700	API #:	05-123-45750	Casing Size	9.625	Size	
AFE #:		Field Name:	Wattenberg	Depth		Grade	
Cust Rep on Loc:	John Falton	Well Name:	Harold 6X-334	TVD	6,700 ft	Weight	
Cust Phone #:	970-508-5364			MD	11,850 ft	Depth	
Order Placed By:	PDC ENERGY	Well Type:	Oil	OH		Casing	
Phone #:		Formation:	Niobrara	OH Depth		5.5 in 20# (0 to 11841)	
Proposed Job Amt:	\$116,908.24	Rig Contractor:	Ensign	BHST	200°F	CEMENTING PLUG	
JOB INFORMATION		Rig Name/Num.:	Ensign 161	BHCT	180°F	Qty	Size
Ticket #:	Bco-1901-0153	Rig Phone:	Ensign	Est. BHST/BHCT 200°F / 180°F (0) (2.99°F/100ft)		Type	Material
PO #:		County:	Weld	MD / TVD	11,850 ft / 6,700 ft	TOP CONNECTION	
Order Taken By:	Laeger	State:	CO	Mud Weight & Type	10#, Water Based	Size	Type
Order Date:	1/26/2019	Latitude:	40.33549	Open Hole	8.5 in O.H. (2558 to 11841)	Thread	
CJES Acct. Manager:	Cody Michel	Longitude:	-105			JOB TYPE	
CJES Engineer	Cody Michel	Township:	SESE 6 4N64W	Previous Casing	9.625 in 36# (0 to 2558)	Production Casing	
Quote Number:	1-BCO_190125084545						
COMMENTS							
SPECIAL JOB INSTRUCTIONS							
5 1/2 head bowl and swage plug, Latex , 100# sugar							
DIRECTIONS TO WELL							
CR 49 and CR 48 , E 1 mile, N into							
Emergency Contacts							
Nearest Hospital	Greeley, Co.				Phone Number:		
Police Department					Phone Number:		
Fire Department					Phone Number:		
Designated Emergency Vehicle	131152			Vehicle Location:			
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)							
If not, nearest working phone							
Iron Tracking							
	Taken Out			Returned			
Iron Type	Taken By	Date Out	Time Out	Returned By	Date In	Time In	

		<h1>Job Summary</h1>		Ticket Number TN# Bco-1901-0153		Ticket Date 1/28/2019	
COUNTY		COMPANY		API Number			
Weld		PDC ENERGY		05-123-45750			
WELL NAME		RIG		JOB TYPE			
Harold 6X-334		Ensign 161		Production Casing			
SURFACE WELL LOCATION		CJES Field Supervisor		CUSTOMER REP			
40.33549 -104.58549		Jeff Kopp		John Falton			
EMPLOYEES							
WELL PROFILE							
Max Treating Pressure (psi):		4500		Bottom Hole Static Temperature (°F):			
Bottom Hole Circulating Temperature (°F):				Well Type:			

Open Hole

	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
1	8.5	11841	2558		
2					

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		2558	0		
Production	5.5	20		11841	0		

CEMENT DATA							
Stage 1:		From Depth (ft):		0	To Depth (ft):		5082
Type: Lead		Volume (sacks):		1315	Volume (bbls):		320.7
Cement & Additives:				Density (ppg)	Yield (ft³/sk)	Water Req.	
				14	1.37	6.00	
Stage 2:		From Depth (ft):		5082	To Depth (ft):		11841
Type: Tail		Volume (sacks):		920	Volume (bbls):		199.8
Cement & Additives:				Density (ppg)	Yield (ft³/sk)	Water Req.	
				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							
Preflushes:		150 bbls of	Weighted Spacer	Calculated Displacement (bbl):		Stage 1	Stage 2
				Actual Displacement (bbl):		261.9	
						261	
Total Preflush/Spacer Volume (bbl):		150		Plug Bump (Y/N):		Y	Bump Pressure (psi):
Total Slurry Volume (bbl):		520.5		Lost Returns (Y/N):		N	(if Y, when)
Total Fluid Pumped		670.5					
Returns to Surface:		Cement	20 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					

C&J ENERGY SERVICES	PDC ENERGY	YARD CALL	1/28/2019		DISTRICT	
	Harold 6X-334	RTS DATE	1/28/2019		Brighton	
		YARD RTN	1/28/2019			
Personnel/Equipment						
Driver	Assignment	Tractor	Trailer	Comments		
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
1290	SX	C&J Latex Lead 1-1				
312.86	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
920	SX	C&J Tail 1-1				
198.81	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					
261.87	bbl					

Cement Job Log

C&J ENERGY SERVICES													
Customer: PDC ENERGY				Date: 1/26/2019				Serv. Supervisor: Jeff Kopp					
Cust. Rep.: John Falton				Ticket #: Bco-1901-0153				Serv. Center Brighton - 3021					
Lease: Harold 6X-334				API Well #: 05-123-45750				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				1290	14		1.37	4.71	313.80	145	
C&J Tail 1-1		65 % CJ914+35 % CJ010-74 +0.3 % CJ704+0.15 % CJ210K+0.5 % CJ511				920	14.5		1.22	5.41	199.20	118	
Displacement											261.87		
50 % CJ914+50 % CJ010-74+2.0 % CJ020+0.4													
Displacement Chemicals:													
OPEN HOLE DATA		TUBULAR DATA											
8.5 in O.H. (2558 to 11841)		5.5 in 20# (0 to 11841)		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 2558)		TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP				
						11800							
WELL FLUID		DISPLACEMENT FLUID		DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	WATER ON LOC (bbl)						
TYPE	DENSITY	VOLUME	TYPE	DENSITY		4500	1000						
Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details						
2:38 AM							0 ARRIVE ON LOCATION						
2:39 AM							0 PRE JOB SAFETY MEETING						
2:45 AM							0 SPOT EQUIPMENT						
2:50 AM							0 RIG UP IRON AND HOSES/MIX LATEX WATER						
6:00 AM							0 SAFETY MEETING						
6:45 AM	3	420			3		3 FILL LINES						
6:58 AM		5382					3 PRESSURE TEST						
7:04 AM	7	500			150		153 WEIGHTED SPACER @ 12.5PPG						
7:35 AM							153 SHUT DOWN AND DROP PLUG						
7:37 AM	5.7	398			6		159 MIX AND PUMP 25SXS @ 14PPG 1.37Y 4.97WR						
7:39 AM	5.7	419			314.7		473.7 PUMP 1290SXS @ 14PPG 1.37Y 6.0WR						
8:35 AM	8	702			199.8		673.5 PUMP 920SXS @ 14.5PPG 1.22Y 5.41WR						
9:07 AM							673.5 SHUT DOWN						
9:10 AM							673.5 WASH UP PUMPS AND LINES						
9:18 AM							673.5 DROP PLUG						
9:19 AM	8	2915			261		934.5 DISPLACE						
9:51 AM		3086					934.5 BUMP PLUG						
9:56 AM	2	4120			1		935.5 BURST DISK						
9:57 AM	4	2427			5		940.5 FRESH						
9:58 AM							CHECK FLOATS						
10:00 AM							RIG OUT						
11:00 AM							LEAVE LOCATION						
Left Yard													
Arrived Loc.		Left Loc.		Returned Yd.		Start Pump		End Pump					
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	20	0	Yes	4500		2				
							Jeff Kopp						
							Service Supervisor Date						