

Cementing Service Report

				Customer NOBLE ENERGY			Job Number 2637775	
Well ZEEHNDER-B05-23 0631251798			Location (legal) WELD		Schlumberger Location CHEYENNE		Job Start Dec/13/2017	
Field DJ		Formation Name/Type		Deviation deg	Bit Size in	Well MD 817.0 ft		Well TVD 817.0 ft
County WELD		State/Province Colorado		BHP psi	BHST degF	BHCT degF	Pore Press. Gradient lb/gal	
Well Master		API/UWI						
Rig Name BOHLER# 6	Drilled For Oil and Gas	Service Via Land	Casing/ Liner					
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone N/A	Well Class Old	Well Type Workover	567.0	4.5	11.6	N80	N/A	
			0.0	0.0	0.0			
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	Grade
Service Line Cementing	Job Type SURFACE PLUG			T	817.0	2.4	4.7	J55
					0.0	0.0	0.0	
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection 2 3/8" 4.7# T/S	Perforations/Open Hole					
			Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval	
			ft	ft			ft	
			ft	ft			Diameter	
			ft	ft			in	
			Treat Down Tubing	Displacement 1.5 bbl	Packer Type	Packer Depth ft		
			Tubing Vol. 78.0 bbl	Casing Vol. bbl	Annular Vol. bbl	Openhole Vol. bbl		
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools			Squeeze Job	
Lift Pressure psi				Shoe Type			Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth ft			Tool Type	
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type			Tool Depth ft	
Cement Head Type				Stage Tool Depth ft			Tail Pipe Size in	
Job Scheduled For Dec/13/2017 11:00		Arrived on Location Dec/13/2017 11:00		Leave Location Dec/13/2017 16:00		Collar Type		Tail Pipe Depth ft
						Collar Depth ft		Sqz. Total Vol. bbl
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
12/13/2017	11:14:04	136	0.0	8.31	0.0	End Job		
12/13/2017	11:14:07	136	0.0	8.31	0.0	Start Job		
12/13/2017	11:14:09	136	0.0	8.31	0.0	Start Pumping Water		
12/13/2017	11:18:30	136	0.0	8.32	3.3	End Water		
12/13/2017	11:18:33	136	0.0	8.32	3.3	Reset Total, Vol = 5 bbl		
12/13/2017	11:18:35	136	0.0	8.32	0.0	Pressure Test Lines		
12/13/2017	11:19:05	2114	0.0	8.32	0.0			
12/13/2017	11:20:11	173	0.0	8.32	0.0	Start Pumping Wash		
12/13/2017	11:24:06	333	1.0	8.31	8.8			
12/13/2017	11:29:07	141	0.0	9.44	10.7			
12/13/2017	11:34:08	136	0.0	9.67	10.7			
12/13/2017	11:39:09	132	0.0	9.67	10.7			
12/13/2017	11:44:10	132	0.0	10.44	10.7			
12/13/2017	11:47:03	132	0.0	10.40	10.7	End Wash		
12/13/2017	11:47:04	132	0.0	10.40	10.7	Reset Total, Vol = 10 bbl		
12/13/2017	11:49:11	132	0.0	13.37	10.7			
12/13/2017	11:49:45	132	0.0	14.75	10.7	Start Cement Slurry		
12/13/2017	11:54:12	333	0.9	15.63	23.8			
12/13/2017	11:59:13	141	0.2	15.13	30.1			
12/13/2017	12:04:14	228	0.6	15.10	43.7			
12/13/2017	12:09:15	420	0.8	15.93	54.3			

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Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G	Volume BBL	Message			
12/13/2017	12:16:11	388		0.6	13.37	69.5	End Cement Slurry			
12/13/2017	12:16:12	379		0.7	13.29	69.5	Reset Total, Vol = 65 bbl			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry 4.9	N2	Mud	Maximum Rate 10.4		Total Slurry 78.0	Mud 0.0	Spacer 10.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 2489	Final 159	Average 204	Bump Plug to	Breakdown	Type		Volume bbl		Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 78.0 bbl		Displacement 1.5 bbl		Mix Water Temp 50 degF		Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl
								Washed Thru Perfs <input type="checkbox"/>		To ft
Customer or Authorized Representative CHRIS MATHIAS				Schlumberger Supervisor LUIS JIMENEZ				Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>
								-		-