

# Cementing Service Report

				Customer Noble			Job Number DKFJ-00071	
Well Wells Ranch AA22-645 AA22-645			Location (legal) 217304		Schlumberger Location Cheyenne		Job Start Apr/10/2016	
Field Wattenberg		Formation Name/Type		Deviation deg	Bit Size 8.5 in	Well MD 11909.4 ft		Well TVD 6712.4 ft
County Weld		State/Province Colorado		BHP 2533 psi	BHST 230 degF	BHCT 225 degF	Pore Press. Gradient lb/gal	
Well Master 0631666542		API/UWI 051234424210000						
Rig Name H&P 343	Drilled For Oil and Gas		Service Via Land	Casing/ Liner				
	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread			
Offshore Zone	Well Class New		Well Type Other	11909.4	5.5	20.0	N/A	N/A
	0.0	0.0	0.0					
Drilling Fluid Type LT OBM		Max. Density 9.30 lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread			
Service Line Cementing	Job Type Production							
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi		WH Connection 1502	Perforations/Open Hole				
	Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft			
Service Instructions	ft	ft						
	ft	ft			Diameter in			
	ft	ft						
	Treat Down Casing		Displacement 263.0 bbl		Packer Type		Packer Depth ft	
	Tubing Vol. bbl		Casing Vol. 264.0 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 1560 psi			Shoe Type Float		Squeeze Type			
Pipe Rotated <input checked="" type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 11909.4 ft		Tool Type		
No. Centralizers		Top Plugs 1	Bottom Plugs 2	Stage Tool Type		Tool Depth ft		
Cement Head Type				Stage Tool Depth ft		Tail Pipe Size in		
Job Scheduled For Apr/10/2016		Arrived on Location Apr/10/2016		Leave Location Apr/10/2016		Collar Type Float		Tail Pipe Depth ft
						Collar Depth 11865.0 ft		Sqz. Total Vol. bbl
Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume BBL	CPF1_PRESS PSI	Message		
04/10/2016	11:33:59	0.0	0.01	0.0	9	Started Acquisition		
04/10/2016	11:34:49	0.0	0.01	0.0	9	Water test Complete		
04/10/2016	11:39:00	0.0	0.01	0.0	9			
04/10/2016	11:41:08	0.0	0.80	0.0	10	JSA Complete		
04/10/2016	11:44:01	5.7	8.35	0.0	57			
04/10/2016	11:49:02	0.0	8.39	2.7	5675			
04/10/2016	11:54:03	0.0	8.39	3.8	1450			
04/10/2016	11:54:13	0.0	8.39	3.8	2058	Pressure Test Lines (Low)		
04/10/2016	11:55:44	0.0	8.39	3.8	5200	Pressure Test Lines (High)		
04/10/2016	11:59:04	0.0	8.39	3.8	5180			
04/10/2016	12:04:05	0.0	8.39	3.8	41			
04/10/2016	12:05:59	6.0	10.89	5.8	560	Drop Bottom Plug		
04/10/2016	12:06:59	6.1	11.71	11.9	429	Start MUDPUSH		
04/10/2016	12:09:06	6.2	11.52	24.8	398			
04/10/2016	12:14:07	6.1	11.56	55.6	270			
04/10/2016	12:14:11	6.1	11.56	56.0	266	Wet Sample Weight =11.6ppg		
04/10/2016	12:19:08	6.1	11.44	86.4	275			
04/10/2016	12:24:09	0.0	12.19	87.2	47			
04/10/2016	12:24:42	0.0	12.15	87.2	66	End MUDPUSH		
04/10/2016	12:24:43	0.0	12.16	87.2	66	Drop Bottom Plug		
04/10/2016	12:24:46	1.4	12.32	87.2	44	Wet Dry Samples Taken		



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Date	Time 24-hr clock	Flow Rate B/M		Density LB/G	Volume BBL	CPF1_PRESS PSI	Message			
04/10/2016	12:25:17	6.0		12.09	89.8	431	Start Mixing Lead Slurry			
04/10/2016	12:29:10	6.0		11.97	98.8	421				
04/10/2016	12:34:11	6.0		11.97	129.0	441				
04/10/2016	12:34:17	6.0		11.95	129.6	453	Good Returns			
04/10/2016	12:39:12	6.0		12.01	159.3	463				
04/10/2016	12:39:18	6.0		12.02	159.9	468	Wet Dry Samples Taken			
04/10/2016	12:44:13	6.0		12.00	189.5	474				
04/10/2016	12:44:17	6.0		12.00	189.9	472	Wet Sample Weighed			
04/10/2016	12:49:14	6.0		12.01	219.7	478				
04/10/2016	12:54:15	6.0		11.81	249.8	458				
04/10/2016	12:59:16	6.0		12.02	280.0	473				
04/10/2016	13:04:17	6.1		11.94	310.2	454				
04/10/2016	13:08:39	0.0		12.02	318.8	56	End Lead Slurry			
04/10/2016	13:08:41	0.0		12.03	318.8	56	Reset Total, Vol = 230.45 bbl			
04/10/2016	13:09:18	2.5		12.48	319.0	229				
04/10/2016	13:14:19	6.1		12.95	345.1	490				
04/10/2016	13:14:58	6.1		12.95	349.1	527	Start Mixing Tail Slurry			
04/10/2016	13:19:20	6.1		12.99	375.6	520				
04/10/2016	13:24:21	6.1		12.98	406.1	504				
04/10/2016	13:29:22	6.1		12.95	436.6	509				
04/10/2016	13:34:23	6.1		12.93	467.1	494				
04/10/2016	13:36:39	6.1		12.94	480.9	534	Wet dry Samples taken			
04/10/2016	13:39:24	6.1		12.94	497.6	531				
04/10/2016	13:44:25	6.1		13.01	523.7	524				
04/10/2016	13:47:44	6.1		12.92	543.9	507	Good Returns			
04/10/2016	13:49:26	0.0		12.77	552.2	77				
04/10/2016	13:50:27	0.0		12.73	552.2	70	End Tail Slurry			
04/10/2016	13:50:29	0.0		12.73	552.2	70	Reset Total, Vol = 233.37 bbl			
04/10/2016	13:50:43	0.0		12.73	552.2	67	Wash Pump Lines + Blow down			
04/10/2016	13:54:27	0.0		12.62	552.2	28				
04/10/2016	13:59:28	2.8		8.73	559.8	61				
04/10/2016	14:04:29	0.0		8.40	579.1	22				
04/10/2016	14:09:30	0.0		8.40	579.1	23				
04/10/2016	14:14:31	0.0		8.40	579.1	21				
04/10/2016	14:19:32	6.0		8.45	596.1	209				
04/10/2016	14:19:56	6.0		8.44	598.5	225	Reset Total, Vol = 46.21 bbl			
04/10/2016	14:20:35	6.0		8.43	602.3	218	Drop Top Plug			
04/10/2016	14:21:59	6.0		8.41	610.7	212	Start Displacement			
04/10/2016	14:24:33	6.0		8.40	626.1	215				
04/10/2016	14:29:34	7.3		8.41	661.4	749				
04/10/2016	14:32:59	7.3		8.41	686.5	1059	Good Returns			
04/10/2016	14:34:35	7.4		8.41	698.3	1213				
04/10/2016	14:39:36	7.4		8.41	735.3	1641				
04/10/2016	14:44:37	7.3		8.41	772.2	1748				
04/10/2016	14:49:38	7.3		8.41	809.2	1840				
04/10/2016	14:54:39	1.9		8.41	841.7	1307				
04/10/2016	14:59:40	0.0		8.39	849.4	1965				
04/10/2016	15:04:41	0.0		8.39	849.4	2119				
04/10/2016	15:07:09	0.0		8.38	849.4	17	Bump Top Plug			
04/10/2016	15:07:10	0.0		8.38	849.4	17	End Displacement			
04/10/2016	15:07:12	0.0		8.39	849.4	18	Reset Total, Vol = 263.01 bbl			
04/10/2016	15:09:42	0.0		8.39	849.4	17				
04/10/2016	15:11:51	0.0		8.38	849.4	18	Check Float it held 3.5bbls back			
04/10/2016	15:11:53	0.0		8.38	849.4	17	MUDPUSH to Surface @ 226 Away			



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04/10/2016	15:19:44	0.0	8.15	849.4	13			
04/10/2016	15:24:45	0.0	1.51	849.4	13			
04/10/2016	15:29:46	0.0	0.01	849.4	13			
04/10/2016	15:34:47	0.0	0.01	849.4	13			
04/10/2016	15:39:48	0.0	0.01	849.4	13			
04/10/2016	15:43:00	0.0	0.01	849.4	13	End Job		
04/10/2016	15:44:49	0.0	0.01	849.4	12			
04/10/2016	15:49:50	0.0	0.01	849.4	13			
04/10/2016	15:54:51	0.0	0.01	849.4	12			

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.7	N2	Mud	Maximum Rate 8.0	Total Slurry 858.1	Mud 0.0	Spacer 103.8	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 5845	Final 12	Average 556	Bump Plug to 2000	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 431.0 bbl		Displacement 297.2 bbl	Mix Water Temp 61 degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl	
						Washed Thru Perfs <input type="checkbox"/>	To ft	
Customer or Authorized Representative Sanchez			Schlumberger Supervisor Wayne Silvester			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	