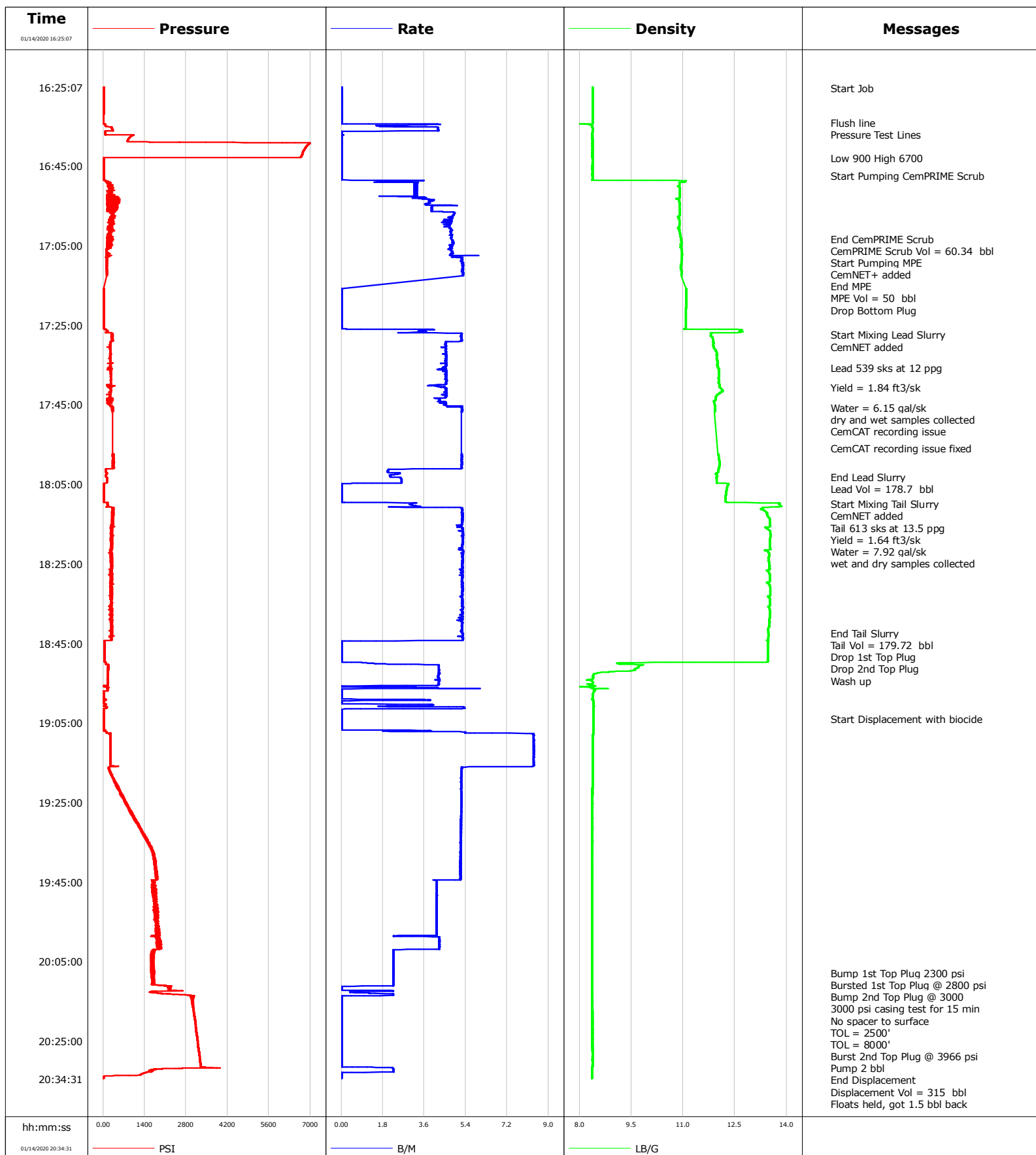


**Well** Windsock 21-9HZ  
**Field** DJ  
**Engineer** Hyunwoo Chung  
**Country** United States

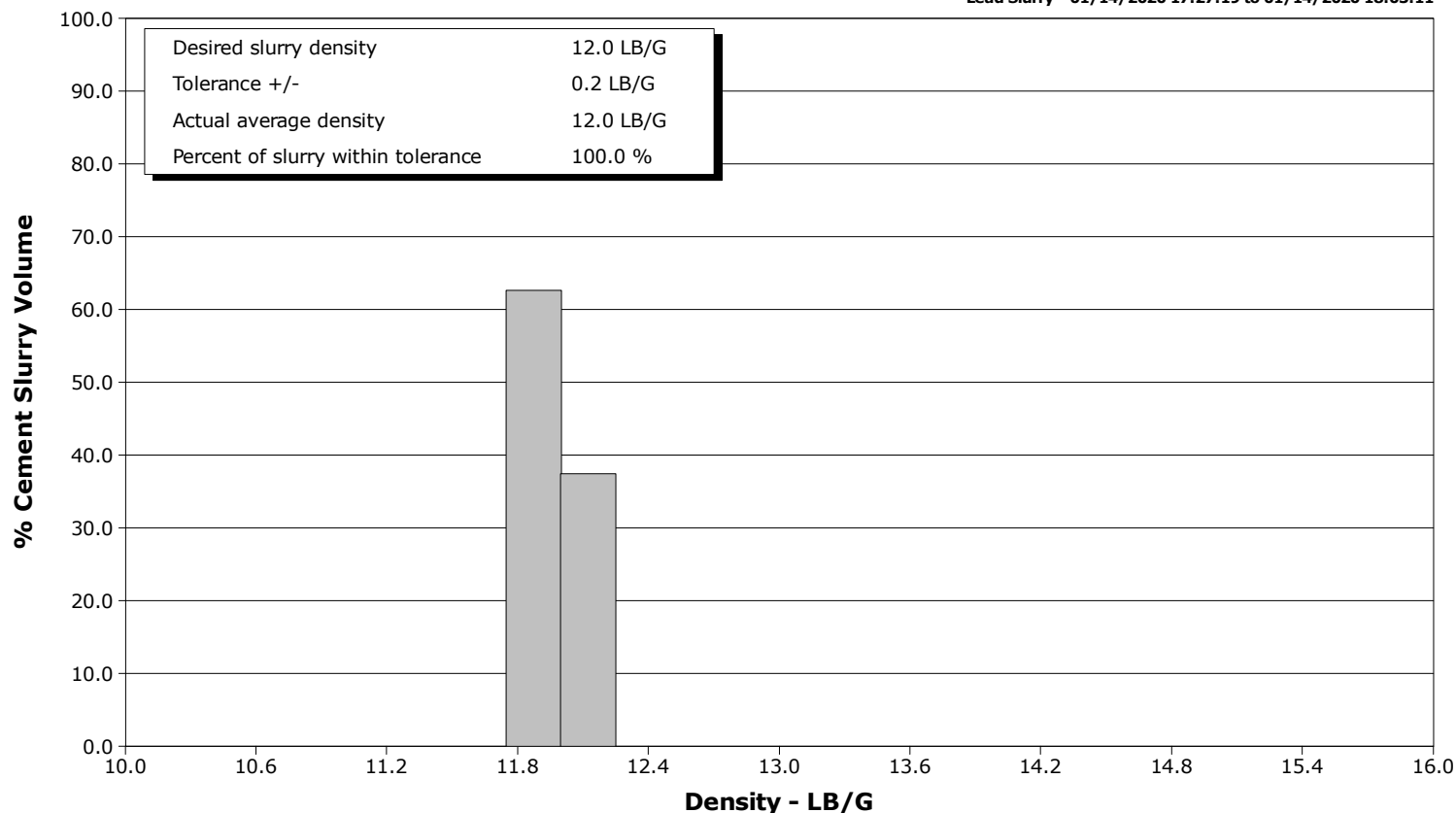
**Client** Anadarko  
**SIR No.** EAJ7-001227  
**Job Type** Production  
**Job Date** 01-14-2020



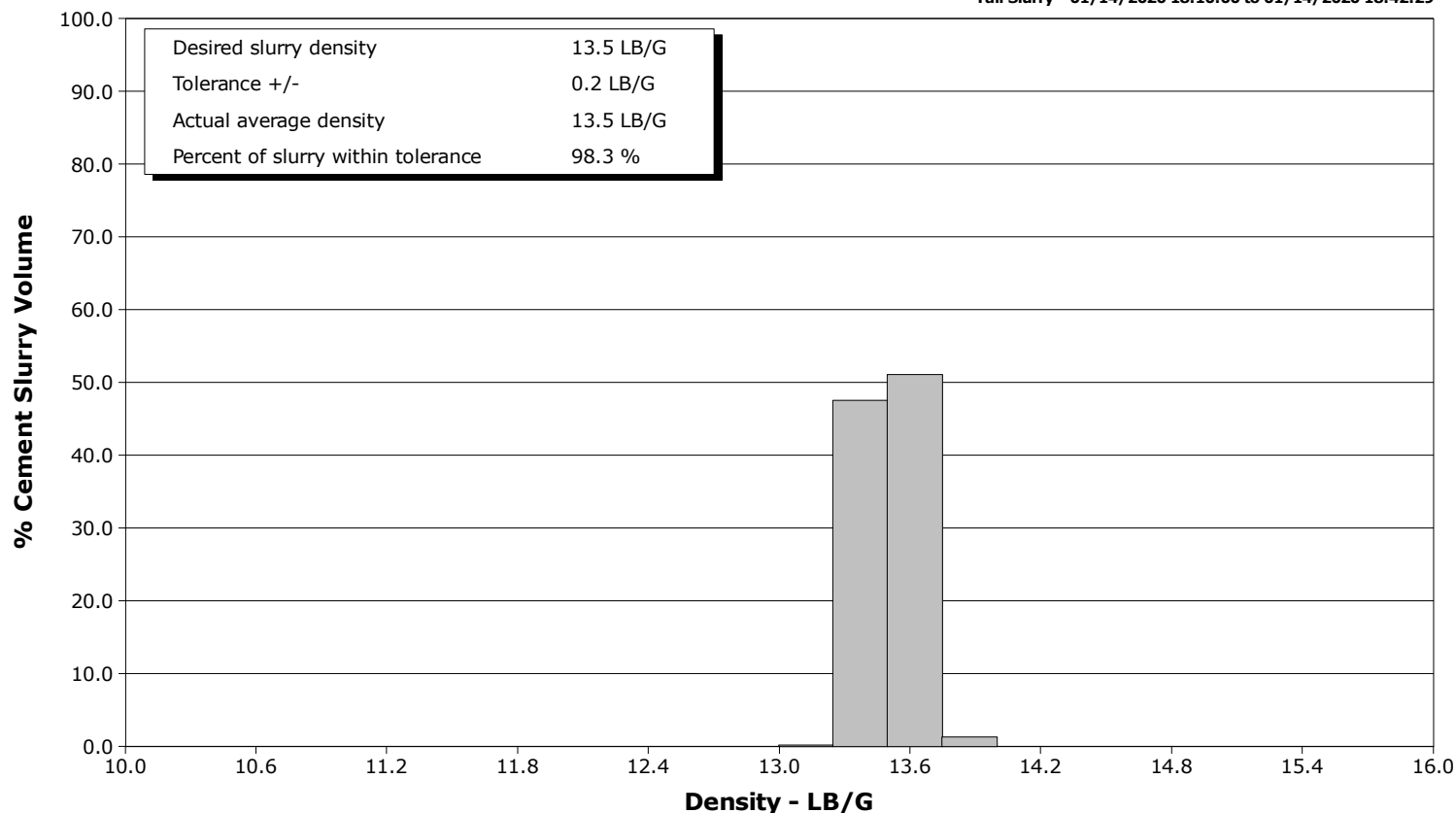
**Well** Windsock 21-9HZ  
**Field** DJ  
**Engineer** Hyunwoo Chung  
**Country** United States

**Client** Anadarko  
**SIR No.** EAJ7-001227  
**Job Type** Production  
**Job Date** 01-14-2020

**Lead Slurry - 01/14/2020 17:27:19 to 01/14/2020 18:03:11**



**Tail Slurry - 01/14/2020 18:10:00 to 01/14/2020 18:42:29**



# Cementing Service Report

				Customer Anadarko			Job Number EAJ7-001227				
Well Windsock 21-9HZ			Location (legal) Cheyenne			Schlumberger Location Pierre Lessard			Job Start Jan/14/2020		
Field DJ		Formation Name/Type Clean-Sandstone		Deviation deg		Bit Size in		Well MD 13573.0 ft		Well TVD ft	
County Weld		State/Province Colorado		BHP psi		BHST degF		BHCT degF		Pore Press. Gradient lb/gal	
Well Master 0065959421		API/UWI 05-123-50634-00-00									
Rig Name Precision 461		Drilled For Oil		Service Via Land		Casing/Liner					
						Depth, ft		Size, in		Weight, lb/ft	
										Grade	
										Thread	
Offshore Zone		Well Class New		Well Type Development		1910.0		9.6		36.0	
						13573.0		5.5		17.0	
										J-55	
										8RD	
										P-110	
										8RD	
Drilling Fluid Type		Max. Density 9.10 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 Sub-sea cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
										No. of Shots	
										Total Interval ft	
										Diameter in	
						Treat Down Annulus		Displacement 315.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 315.2 bbl		Annular Vol. bbl	
										Openhole Vol. 0.0 bbl	
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input type="checkbox"/>				Casing Tools				Squeeze Job	
Lift Pressure psi						Shoe Type Float				Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 13573.0 ft				Tool Type	
No. Centralizers		Top Plugs 2		Bottom Plugs 1		Stage Tool Type				Tool Depth ft	
Cement Head Type Double						Stage Tool Depth ft				Tail Pipe Size in	
Job Scheduled For Jan/14/2020 07:30		Arrived on Location Jan/14/2020 07:00		Leave Location Jan/14/2020 22:00		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 13565.3 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
01/14/2020	16:25:07	18	0.0	8.39	0.0	Started Acquisition					
01/14/2020	16:25:29	18	0.0	8.39	0.0	Start Job					
01/14/2020	16:37:00	69	0.0	8.37	6.7	Pressure Test Lines					
01/14/2020	16:43:00	18	0.0	8.37	6.7	Low 900 High 6700					
01/14/2020	16:47:19	20	0.0	8.37	0.0	Start Pumping CemPRIME Scrub					
01/14/2020	17:03:19	177	4.8	10.93	60.2	End CemPRIME Scrub					
01/14/2020	17:03:21	196	4.8	10.93	60.3	CemPRIME Scrub Vol = 60.34 bbl					
01/14/2020	17:03:27	338	4.8	10.93	0.5	Start Pumping MPE					
01/14/2020	17:05:00	124	4.8	10.95	8.0	CemNET+ added					
01/14/2020	17:12:34	125	5.3	10.94	46.4	End MPE					
01/14/2020	17:16:05	33	0.0	11.09	0.0	Drop Bottom Plug					
01/14/2020	17:27:19	290	5.2	11.80	5.1	Start Mixing Lead Slurry					
01/14/2020	17:30:27	241	4.6	11.88	20.5	CemNET added					
01/14/2020	17:35:42	258	4.5	12.01	23.3	Lead 539 sks at 12 ppg					
01/14/2020	17:40:42	255	4.5	12.06	45.7	Yield = 1.84 ft3/sk					
01/14/2020	17:45:44	344	5.2	11.93	68.5	Water = 6.15 gal/sk					
01/14/2020	17:46:01	317	5.2	11.93	70.0	dry and wet samples collected					
01/14/2020	18:03:11	105	2.1	11.98	98.8	End Lead Slurry					
01/14/2020	18:05:15	32	0.0	12.30	102.9	Lead Vol = 178.7 bbl					
01/14/2020	18:10:00	142	3.0	13.79	1.1	Start Mixing Tail Slurry					
01/14/2020	18:11:59	323	5.2	13.40	9.7	CemNET added					

Well			Field		Job Start	Customer	Job Number
Windsock 21-9HZ			DJ		Jan/14/2020	Anadarko	EAJ7-001227
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/14/2020	18:14:51	344	5.2	13.50	24.7	Yield = 1.64 ft3/sk	
01/14/2020	18:16:52	255	5.3	13.52	35.3	Water = 7.92 gal/sk	
01/14/2020	18:18:53	315	5.3	13.51	45.9	wet and dry samples collected	
01/14/2020	18:42:29	281	5.3	13.46	169.8	End Tail Slurry	
01/14/2020	18:44:25	41	0.9	13.47	179.7	Tail Vol = 179.72 bbl	
01/14/2020	18:44:39	38	0.0	13.45	0.0	Drop 1st Top Plug	
01/14/2020	18:46:00	36	0.0	13.45	0.0	Drop 2nd Top Plug	
01/14/2020	18:48:00	37	0.0	13.44	0.0	Wash up	
01/14/2020	19:04:00	23	0.0	8.40	31.2	Start Displacement with biocide	
01/14/2020	20:08:00	1623	2.3	8.37	338.7	Bump 1st Top Plug 2300 psi	
01/14/2020	20:09:00	1690	2.3	8.37	341.0	Burst 1st Top Plug @ 2800 psi	
01/14/2020	20:10:00	1706	2.3	8.37	343.3	Bump 2nd Top Plug @ 3000	
01/14/2020	20:12:00	2196	0.0	8.37	346.1	3000 psi casing test for 15 min	
01/14/2020	20:14:00	2965	0.0	8.37	348.3	No spacer to surface	
01/14/2020	20:16:00	3023	0.0	8.37	348.3	TOL = 2500'	
01/14/2020	20:17:00	3053	0.0	8.37	348.3	TOL = 8000'	
01/14/2020	20:25:29	3194	0.0	8.37	348.3	Burst 2nd Top Plug @ 3966 psi	
01/14/2020	20:26:05	3204	0.0	8.37	348.3	Pump 2 bbl	
01/14/2020	20:26:30	3211	0.0	8.37	348.3	End Displacement	
01/14/2020	20:27:00	3220	0.0	8.37	348.3	Displacement Vol = 315 bbl	
01/14/2020	20:28:01	3238	0.0	8.37	348.3	Floats held, got 1.5 bbl back	

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 4.7	N2	Mud	Maximum Rate 8.4	Total Slurry 358.7	Mud 0.0	Spacer 110.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3944	Final 20	Average 879	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 355.5 bbl		Displacement 315.0 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface? <input type="checkbox"/>	Volume bbl	
						Washed Thru Perfs <input type="checkbox"/>	To ft	
Customer or Authorized Representative Zach Haynes			Schlumberger Supervisor Hyunwoo Chung			Circulation Lost <input checked="" type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	