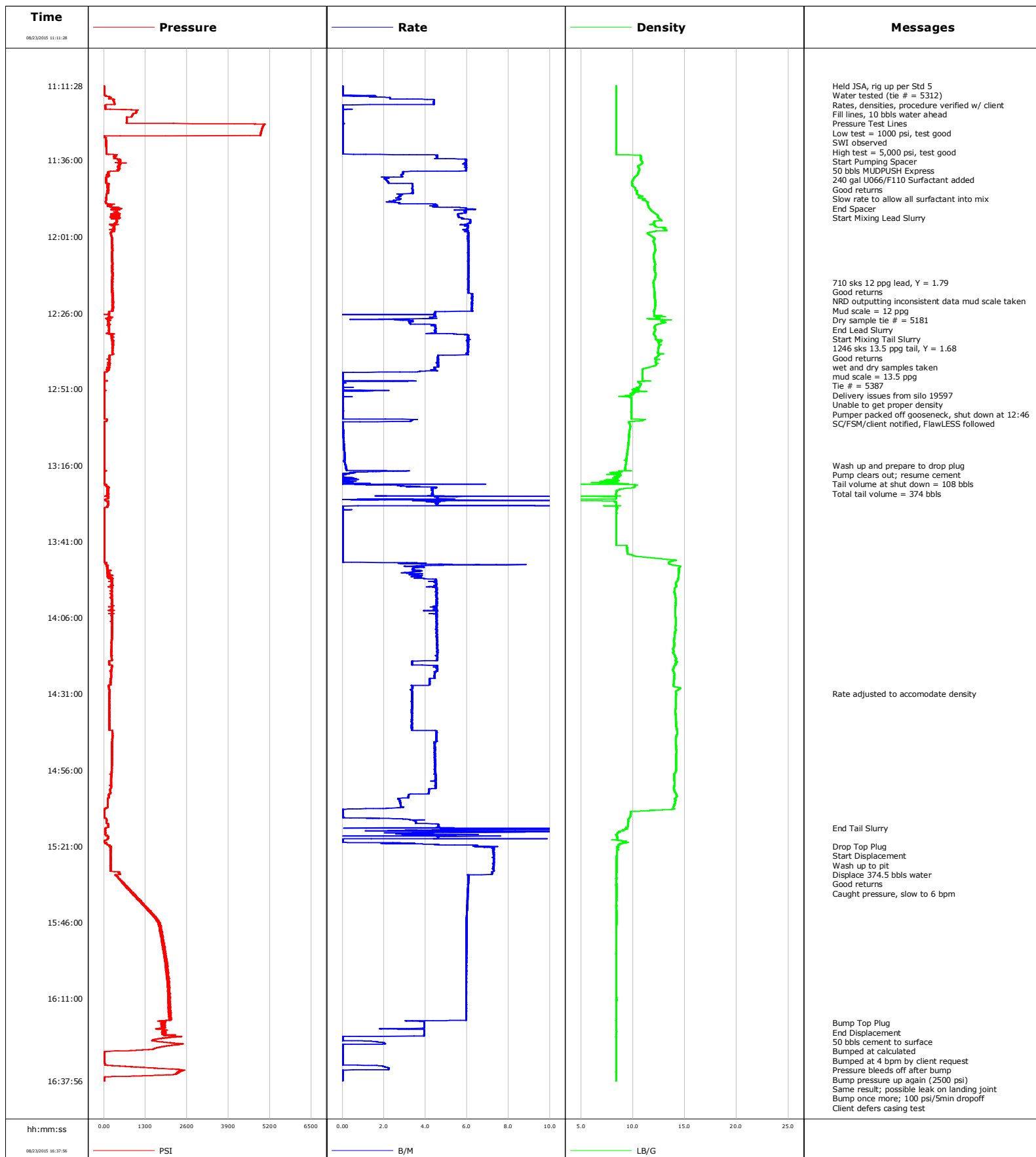


Well Winder 4
Field Wattenberg
Engineer Meaghan Langley
Country United States

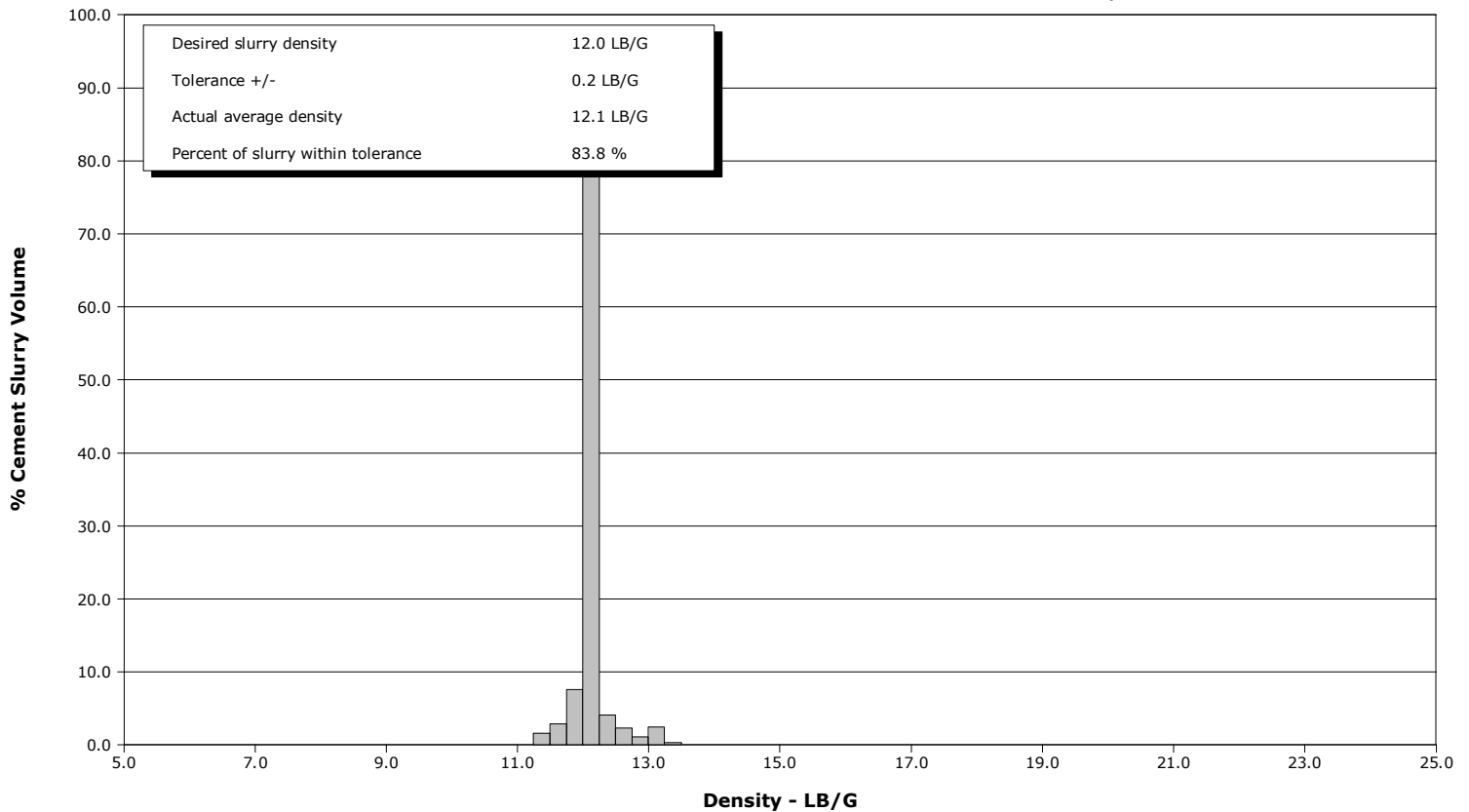
Client Extraction
SIR No. DAXH-00295
Job Type 5.5" Monobore
Job Date 08-23-2015



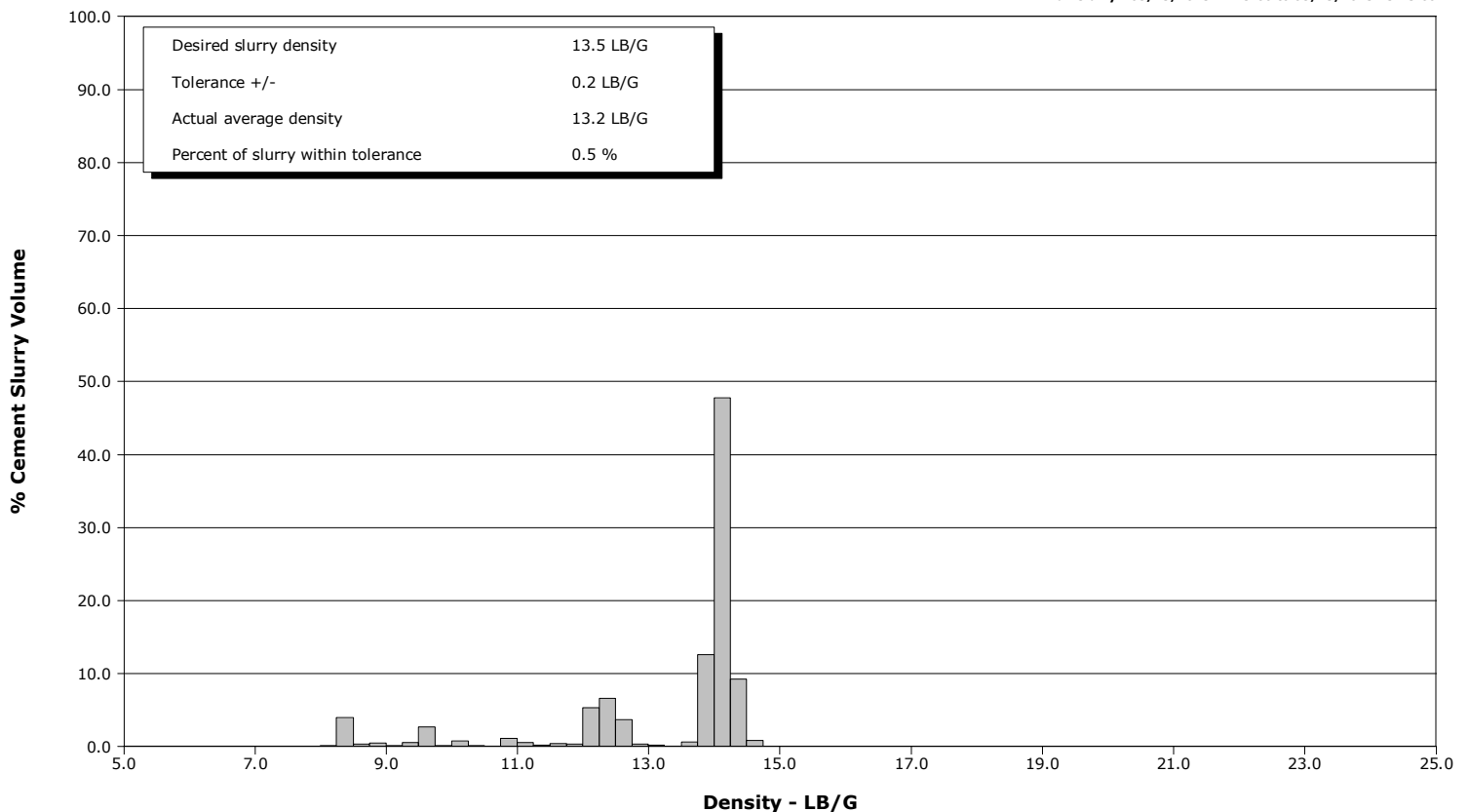
Well Winder 4
Field Wattenberg
Engineer Meaghan Langley
Country United States

Client Extraction
SIR No. DAXH-00295
Job Type 5.5" Monobore
Job Date 08-23-2015

Lead Slurry - 08/23/2015 11:52:00 to 08/23/2015 12:26:00



Tail Slurry - 08/23/2015 12:29:00 to 08/23/2015 15:15:00





Cementing Service Report

				Customer Extraction			Job Number DAXH-00295										
Well Winder 4 30C-26HZ			Location (legal) Patterson 346			Schlumberger Location Cheyenne		Job Start Aug/23/2015									
Field Wattenberg		Formation Name/Type Shale		Deviation deg		Bit Size 7.9 in		Well MD 16948.3 ft		Well TVD 7405.8 ft							
County Weld		State/Province Colorado		BHP psi		BHST 213 degF		BHCT 211 degF		Pore Press. Gradient lb/gal							
Well Master 0631562282		API/UWI 05123395770000															
Rig Name Patterson 346		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		16948.3		5.5		20.0		110					
						1500.0		9.6		36.0		110					
Drilling Fluid Type obm		Max. Density 9.00 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe											
						T/D		Depth, ft		Size, in		Weight, lb/ft		Grade		Thread	
Service Line Cementing		Job Type 5.5" Monobore															
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection Double Cement Head		Perforations/Open Hole											
						Top, ft		Bottom, ft		shot/ft		No. of Shots		Total Interval ft			
						ft		ft						Diameter in			
						ft		ft									
Service Instructions Rates, densities, procedure verified w/ client 50 bbls 11 ppg MUDPUSH Express 240 gal surfactant added 710 sks 12 ppg lead, Y = 1.79 1246 sks 13.5 ppg tail, Y = 1.68 Drop top plug (client-provided) Displace 374.5 bbls water						Treat Down Casing		Displacement 374.5 bbl		Packer Type		Packer Depth ft					
						Tubing Vol. bbl		Casing Vol. 376.0 bbl		Annular Vol. 549.0 bbl		Openhole Vol. 1066.0 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 Float				Squeeze Type							
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 16948.0 ft				Tool Type							
No. Centralizers		Top Plugs 1		Bottom Plugs 0		Stage Tool Type				Tool Depth ft							
Cement Head Type Double						Stage Tool Depth ft				Tail Pipe Size in							
Job Scheduled For Aug/23/2015		Arrived on Location Aug/23/2015		Leave Location Aug/23/2015		Collar Type Float				Tail Pipe Depth ft							
						Collar Depth 16887.0 ft				Sqz. Total Vol. bbl							
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message										
08/23/2015	11:11:28	3	0.0	8.39	14.0	0	Started Acquisition										
08/23/2015	11:11:29	3	0.0	8.39	14.0	0	Rates, densities, procedure verified w/ client										
08/23/2015	11:11:30	3	0.0	8.39	14.0	0	Fill lines, 10 bbls water ahead										
08/23/2015	11:13:28	4	0.0	8.39	14.1	0											
08/23/2015	11:15:28	167	2.3	8.38	1.4	0											
08/23/2015	11:17:28	335	4.4	8.38	9.4	0											
08/23/2015	11:18:00	37	0.0	8.38	10.2	0	Pressure Test Lines										
08/23/2015	11:19:28	1040	0.0	8.38	10.3	0											
08/23/2015	11:21:28	871	0.0	8.38	10.3	0											
08/23/2015	11:23:28	713	0.0	8.38	10.3	0											
08/23/2015	11:24:00	5064	0.0	8.38	10.3	0	Low test = 1000 psi, test good										
08/23/2015	11:25:28	4960	0.0	8.38	10.3	0											
08/23/2015	11:27:28	4913	0.0	8.38	10.3	0											
08/23/2015	11:29:28	68	0.0	8.38	10.3	0											
08/23/2015	11:31:28	76	0.0	8.38	10.3	0											
08/23/2015	11:33:28	85	0.0	8.38	10.4	0											
08/23/2015	11:34:28	327	4.5	10.75	12.5	15	Start Pumping Spacer										
08/23/2015	11:34:34	342	4.6	10.75	12.9	15	50 bbls MUDPUSH Express										
08/23/2015	11:35:28	476	5.9	10.76	17.1	20											
08/23/2015	11:37:18	493	6.0	10.73	28.0	26	Good returns										
08/23/2015	11:37:28	498	6.0	10.65	29.0	25											

Well			Field		Job Start		Customer		Job Number
Winder 4 30C-26HZ			Wattenberg		Aug/23/2015		Extraction		DAXH-00295
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
08/23/2015	11:39:28	208	4.1	10.57	40.9	23			
08/23/2015	11:41:28	67	2.1	10.17	46.7	21			
08/23/2015	11:43:28	128	3.3	9.92	51.0	22			
08/23/2015	11:45:28	116	3.4	10.23	57.7	25			
08/23/2015	11:46:00	106	3.4	10.41	59.6	25	End Spacer		
08/23/2015	11:47:28	79	2.8	10.71	64.2	27			
08/23/2015	11:49:28	47	2.4	11.33	69.5	22			
08/23/2015	11:51:28	448	5.9	11.56	77.3	19			
08/23/2015	11:52:00	462	6.4	11.68	80.6	20	Start Mixing Lead Slurry		
08/23/2015	11:53:28	457	5.6	12.22	89.2	25			
08/23/2015	11:55:28	387	6.2	12.71	100.7	32			
08/23/2015	11:57:28	341	6.0	12.15	112.8	36			
08/23/2015	11:59:28	245	6.0	11.72	124.8	29			
08/23/2015	12:01:28	253	6.1	12.07	137.0	26			
08/23/2015	12:03:28	261	6.1	12.09	149.1	25			
08/23/2015	12:05:28	276	6.1	12.15	161.3	25			
08/23/2015	12:07:28	255	6.1	12.01	173.4	24			
08/23/2015	12:09:28	256	6.1	12.12	185.5	25			
08/23/2015	12:11:28	264	6.1	12.09	197.7	25			
08/23/2015	12:13:28	286	6.1	12.19	209.8	26			
08/23/2015	12:15:28	237	6.1	12.02	222.0	24			
08/23/2015	12:16:01	255	6.1	11.99	225.3	24	710 sks 12 ppg lead, Y = 1.79		
08/23/2015	12:16:53	256	6.1	12.02	230.6	24	Mud scale = 12 ppg		
08/23/2015	12:17:17	257	6.1	12.02	233.0	24	Dry sample tie # = 5181		
08/23/2015	12:17:28	253	6.1	12.03	234.1	24			
08/23/2015	12:19:28	267	6.1	12.07	246.2	24			
08/23/2015	12:21:28	272	6.3	12.14	258.7	25			
08/23/2015	12:23:28	280	6.3	12.15	271.2	25			
08/23/2015	12:25:28	163	5.0	12.03	283.7	24			
08/23/2015	12:26:00	165	4.4	12.05	286.1	25	End Lead Slurry		
08/23/2015	12:27:28	202	4.3	12.29	292.6	29			
08/23/2015	12:29:00	137	3.3	13.06	297.7	42	Start Mixing Tail Slurry		
08/23/2015	12:29:28	137	3.3	12.68	299.2	38			
08/23/2015	12:30:00	163	4.5	12.18	301.3	34	1246 sks 13.5 ppg tail, Y = 1.68		
08/23/2015	12:31:28	164	4.5	12.16	307.9	28			
08/23/2015	12:33:28	245	6.1	12.13	317.8	25			
08/23/2015	12:35:28	256	6.0	12.68	329.9	22			
08/23/2015	12:37:00	269	6.1	12.50	339.1	17	Delivery issues from silo 19597		
08/23/2015	12:37:28	268	6.1	12.47	342.0	16			
08/23/2015	12:39:28	285	6.0	12.61	354.1	25			
08/23/2015	12:41:28	160	4.6	12.24	363.7	22			
08/23/2015	12:43:28	168	4.6	11.93	372.9	14			
08/23/2015	12:45:00	96	4.3	10.91	379.8	9	Unable to get proper density		
08/23/2015	12:45:28	17	0.2	10.93	381.3	0			
08/23/2015	12:46:00	15	0.0	10.90	381.3	0	Pumper packed off gooseneck, shut down at 12:46		
08/23/2015	12:47:28	15	0.0	10.91	381.3	0			
08/23/2015	12:48:00	15	0.0	10.92	381.3	0	SC/FSM/client notified, FlawLESS followed		
08/23/2015	12:49:28	14	0.0	10.75	382.0	0			
08/23/2015	12:51:28	21	1.3	10.00	382.3	12			
08/23/2015	12:53:28	17	0.2	9.21	382.5	0			
08/23/2015	12:55:28	17	0.0	9.85	382.6	0			
08/23/2015	12:57:28	17	0.0	9.85	382.6	0			
08/23/2015	12:59:28	17	0.0	9.85	382.6	0			
08/23/2015	13:01:28	80	3.3	10.28	384.8	37			

Well			Field		Job Start		Customer		Job Number
Winder 4 30C-26HZ			Wattenberg		Aug/23/2015		Extraction		DAXH-00295
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
08/23/2015	13:05:28	15	0.0	9.65	385.6	0			
08/23/2015	13:07:28	16	0.1	9.60	385.6	0			
08/23/2015	13:09:28	15	0.1	9.54	385.7	0			
08/23/2015	13:11:28	15	0.1	9.47	385.9	0			
08/23/2015	13:13:28	15	0.1	9.39	386.1	0			
08/23/2015	13:15:28	16	0.1	9.32	386.3	0			
08/23/2015	13:16:00	15	0.1	9.30	386.4	0	Wash up and prepare to drop plug		
08/23/2015	13:17:00	16	0.2	9.26	386.5	0	Pump clears out; resume cement		
08/23/2015	13:17:28	16	0.2	9.24	386.6	0			
08/23/2015	13:18:00	22	1.6	8.81	387.4	46	Tail volume at shut down = 108 bbls		
08/23/2015	13:19:28	17	0.0	8.63	387.9	0			
08/23/2015	13:20:00	17	0.0	8.38	387.9	0	Total tail volume = 374 bbls		
08/23/2015	13:21:28	14	0.2	8.48	388.2	0			
08/23/2015	13:23:28	135	4.3	9.43	392.7	9			
08/23/2015	13:25:28	141	4.4	8.34	401.4	9			
08/23/2015	13:27:28	38	11.0	3.64	410.5	38			
08/23/2015	13:29:28	86	0.0	8.51	420.0	0			
08/23/2015	13:31:28	16	0.0	8.39	420.0	0			
08/23/2015	13:33:28	15	0.0	8.38	420.0	0			
08/23/2015	13:35:28	15	0.0	8.38	420.1	0			
08/23/2015	13:37:28	15	0.0	8.38	420.1	0			
08/23/2015	13:39:28	15	0.0	8.38	420.1	0			
08/23/2015	13:41:28	15	0.0	8.38	420.2	0			
08/23/2015	13:43:28	15	0.0	9.44	420.2	0			
08/23/2015	13:45:28	15	0.0	9.94	420.2	0			
08/23/2015	13:47:28	15	0.0	13.67	420.2	0			
08/23/2015	13:49:28	98	3.8	14.49	426.9	29			
08/23/2015	13:51:28	157	3.7	14.41	433.8	38			
08/23/2015	13:53:28	245	4.5	14.36	441.3	39			
08/23/2015	13:55:28	259	4.5	14.19	450.3	37			
08/23/2015	13:57:28	242	4.5	13.99	459.3	35			
08/23/2015	13:59:28	247	4.5	14.11	468.4	35			
08/23/2015	14:01:28	250	4.6	14.11	477.5	35			
08/23/2015	14:03:28	251	4.6	14.10	486.5	35			
08/23/2015	14:05:28	247	4.6	14.10	495.5	35			
08/23/2015	14:07:28	262	4.6	14.14	504.6	35			
08/23/2015	14:09:28	259	4.5	14.09	513.7	35			
08/23/2015	14:11:28	255	4.6	14.03	522.8	34			
08/23/2015	14:13:28	244	4.6	13.96	531.9	34			
08/23/2015	14:15:28	240	4.6	13.96	541.0	34			
08/23/2015	14:17:28	231	4.6	13.88	550.2	33			
08/23/2015	14:19:28	236	4.6	14.18	559.3	35			
08/23/2015	14:21:28	168	3.4	14.12	566.8	35			
08/23/2015	14:23:28	231	4.6	13.90	575.8	33			
08/23/2015	14:25:28	227	4.4	13.98	584.7	34			
08/23/2015	14:27:28	203	4.2	13.94	593.2	34			
08/23/2015	14:29:28	158	3.3	14.45	600.5	44			
08/23/2015	14:31:00	166	3.4	14.16	605.7	34	Rate adjusted to accomodate density		
08/23/2015	14:31:28	171	3.4	14.15	607.2	34			
08/23/2015	14:33:28	168	3.3	14.13	613.9	35			
08/23/2015	14:35:28	161	3.3	14.12	620.7	35			
08/23/2015	14:37:28	161	3.4	14.11	627.4	35			
08/23/2015	14:39:28	172	3.3	14.14	634.0	35			
08/23/2015	14:41:28	177	3.3	14.17	640.7	35			

Well			Field		Job Start		Customer		Job Number
Winder 4 30C-26HZ			Wattenberg		Aug/23/2015		Extraction		DAXH-00295
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message		
08/23/2015	14:45:28	268	4.5	14.15	657.1	36			
08/23/2015	14:47:28	244	4.4	14.13	666.1	35			
08/23/2015	14:49:28	243	4.4	14.19	675.0	35			
08/23/2015	14:51:28	252	4.5	14.17	683.9	35			
08/23/2015	14:53:28	249	4.5	14.16	692.9	35			
08/23/2015	14:55:28	251	4.4	14.16	701.8	35			
08/23/2015	14:57:28	237	4.5	13.97	710.7	34			
08/23/2015	14:59:28	219	4.5	14.00	719.7	34			
08/23/2015	15:01:28	220	4.5	14.00	728.7	33			
08/23/2015	15:03:28	208	4.2	14.13	737.2	33			
08/23/2015	15:05:28	119	2.7	14.03	743.8	33			
08/23/2015	15:07:28	119	2.8	13.99	749.3	57			
08/23/2015	15:09:28	18	0.0	10.22	752.5	0			
08/23/2015	15:11:28	18	0.0	9.70	752.5	0			
08/23/2015	15:13:28	88	3.5	9.53	758.3	68			
08/23/2015	15:15:00	41	25.0	9.34	765.2	43	End Tail Slurry		
08/23/2015	15:15:28	33	19.9	9.16	773.3	55			
08/23/2015	15:17:28	97	4.7	8.42	783.5	48			
08/23/2015	15:19:28	22	0.0	9.12	788.4	0			
08/23/2015	15:21:00	226	7.4	8.55	794.3	0	Drop Top Plug		
08/23/2015	15:21:28	201	7.3	8.54	797.6	0			
08/23/2015	15:23:28	208	7.3	8.45	812.1	0			
08/23/2015	15:25:28	213	7.3	8.44	826.7	0			
08/23/2015	15:27:22	215	7.3	8.42	840.6	0	Displace 374.5 bbls water		
08/23/2015	15:27:28	212	7.3	8.42	841.3	0			
08/23/2015	15:29:28	471	7.2	8.41	855.9	0			
08/23/2015	15:31:28	467	6.1	8.40	869.0	0			
08/23/2015	15:32:27	531	6.1	8.40	874.9	0	Caught pressure, slow to 6 bpm		
08/23/2015	15:33:28	623	6.1	8.41	881.1	0			
08/23/2015	15:35:28	848	6.0	8.41	893.2	0			
08/23/2015	15:37:28	1026	6.0	8.41	905.3	0			
08/23/2015	15:39:28	1211	6.0	8.40	917.3	0			
08/23/2015	15:41:28	1338	6.0	8.40	929.4	0			
08/23/2015	15:43:28	1544	6.0	8.41	941.4	0			
08/23/2015	15:45:28	1677	6.0	8.42	953.4	0			
08/23/2015	15:47:28	1739	6.0	8.40	965.4	0			
08/23/2015	15:49:28	1812	6.0	8.40	977.3	0			
08/23/2015	15:51:28	1806	6.0	8.40	989.3	0			
08/23/2015	15:53:28	1874	6.0	8.39	1001.3	0			
08/23/2015	15:55:28	1872	6.0	8.39	1013.2	0			
08/23/2015	15:57:28	1951	6.0	8.39	1025.2	0			
08/23/2015	15:59:28	1923	6.0	8.39	1037.1	0			
08/23/2015	16:01:28	1954	6.0	8.40	1049.1	0			
08/23/2015	16:03:28	2035	6.0	8.39	1061.0	0			
08/23/2015	16:05:28	1994	6.0	8.39	1073.0	0			
08/23/2015	16:07:28	2010	6.0	8.40	1084.9	0			
08/23/2015	16:09:28	2026	6.0	8.38	1096.9	0			
08/23/2015	16:11:28	2034	6.0	8.41	1108.8	0			
08/23/2015	16:13:28	2084	6.0	8.40	1120.7	0			
08/23/2015	16:15:28	2055	6.0	8.39	1132.7	0			
08/23/2015	16:17:28	2068	6.0	8.39	1144.6	0			
08/23/2015	16:19:00	1917	3.9	8.39	1151.8	0	Bump Top Plug		
08/23/2015	16:19:28	1852	3.9	8.39	1153.7	0			
08/23/2015	16:20:00	1893	3.9	8.39	1155.8	0	50 bbls cement to surface		

Well			Field		Job Start	Customer		Job Number
Winder 4 30C-26HZ			Wattenberg		Aug/23/2015	Extraction		DAXH-00295
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
08/23/2015	16:21:28	1861	3.9	8.40	1161.0	0		
08/23/2015	16:23:28	2422	0.0	8.35	1168.2	0		
08/23/2015	16:25:28	2136	2.0	8.40	1169.3	0		
08/23/2015	16:27:28	1558	0.0	8.40	1170.2	0		
08/23/2015	16:29:00	22	0.0	8.40	1170.2	0	Pressure bleeds off after bump	
08/23/2015	16:29:28	23	0.0	8.39	1170.2	0		
08/23/2015	16:31:00	24	0.0	8.39	1170.2	0	Bump pressure up again (2500 psi)	
08/23/2015	16:31:28	23	0.0	8.39	1170.2	0		
08/23/2015	16:32:00	23	0.0	8.39	1170.2	0	Same result; possible leak on landing joint	
08/23/2015	16:33:28	1148	2.1	8.40	1171.5	0		
08/23/2015	16:34:00	2132	2.2	8.40	1172.7	0	Bump once more; 100 psi/5min dropoff	
08/23/2015	16:35:28	2275	0.0	8.40	1173.4	0		
08/23/2015	16:36:00	1943	0.0	8.40	1173.4	0	Client defers casing test	
08/23/2015	16:36:34	139	0.0	8.40	1173.4	0	End job, rig down	

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 3.9	N2	Mud	Maximum Rate 25.0		Total Slurry 1173.1	Mud 0.0	Spacer 204.7	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 1440332800	Final 19	Average 74161	Bump Plug to 2500	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 0.0 bbl		Displacement 337.7 bbl	Mix Water Temp 75 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 50.0 bbl	
						Washed Thru Perfs <input type="checkbox"/>	To ft	
Customer or Authorized Representative			Schlumberger Supervisor Meaghan Langley			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	



Service Order #:	
Date:	Aug/23/2015
Operating Time (hh:mm):	00:00
Client Rep:	
Schlumberger Engineer:	Meaghan Langley
Schlumberger FSM:	Dan Joelson

Main Objective: Cement 5.5" Monobore

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

4	Evaluation				
4a	Main job objective achieved with no consequential non-productive time	10	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	10
Sub-total					100%

Total	100%
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Comments: (Please include a brief explanation for a "NO" response and summarize any innovations attempted on this well.)

Client:	Schlumberger:
Client Signature:	Schlumberger Signature: