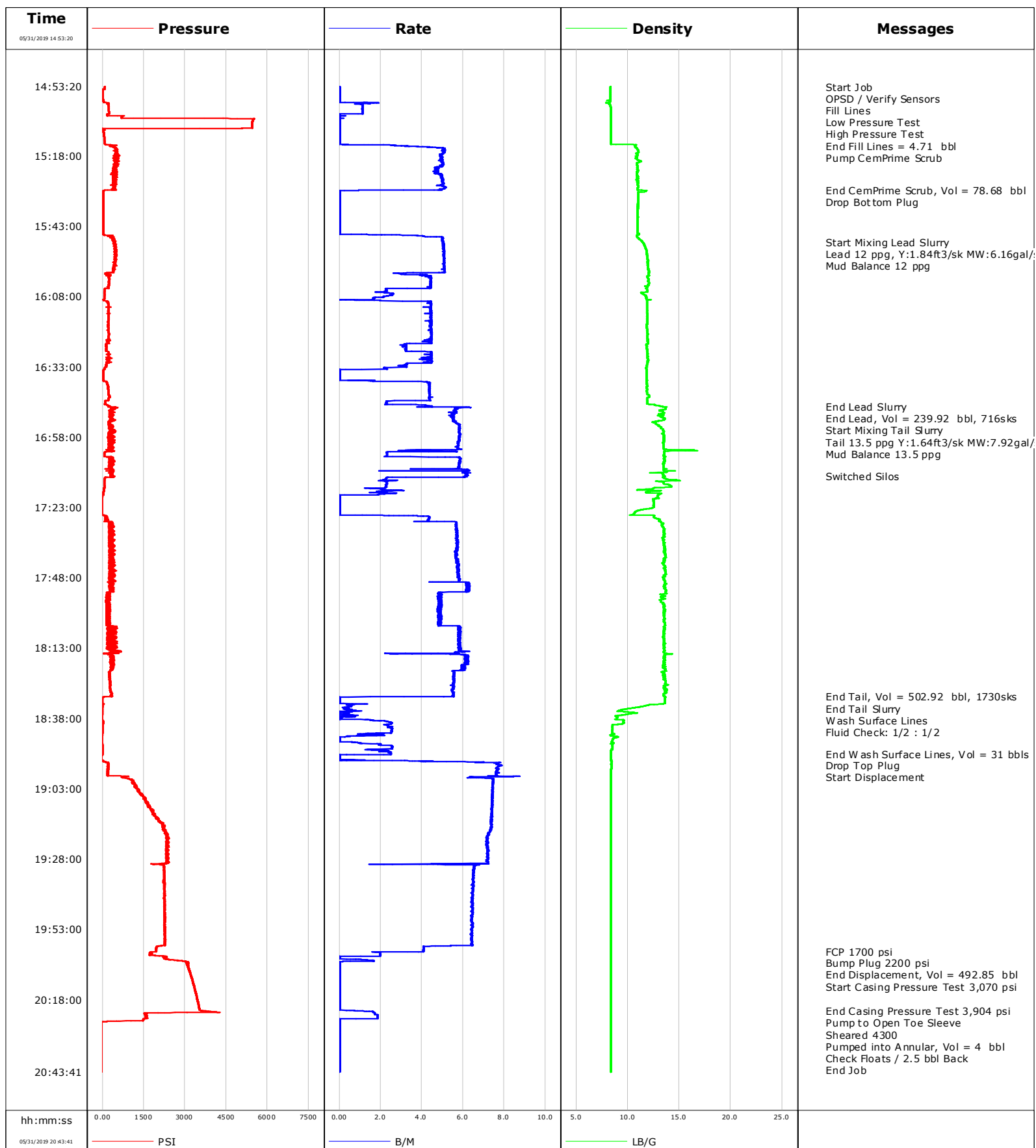


Well MC 3-1HZ
Field Wattenberg
Engineer Adam Aasen / Guy Olson
Country United States

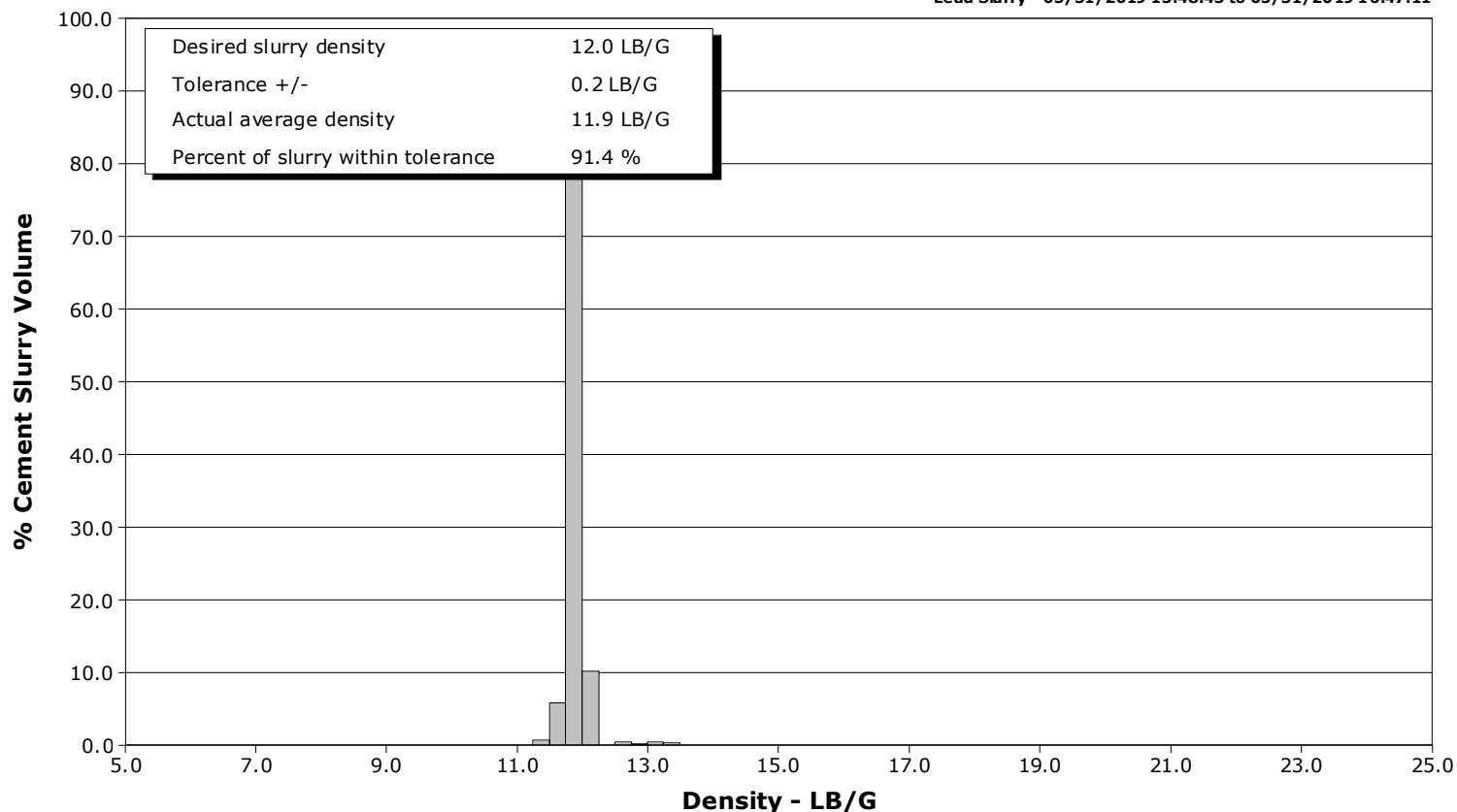
Client ANADARKO PETROLEUM COMPANY
SIR No. EAJ7-00423
Job Type Production
Job Date 05-31-2019



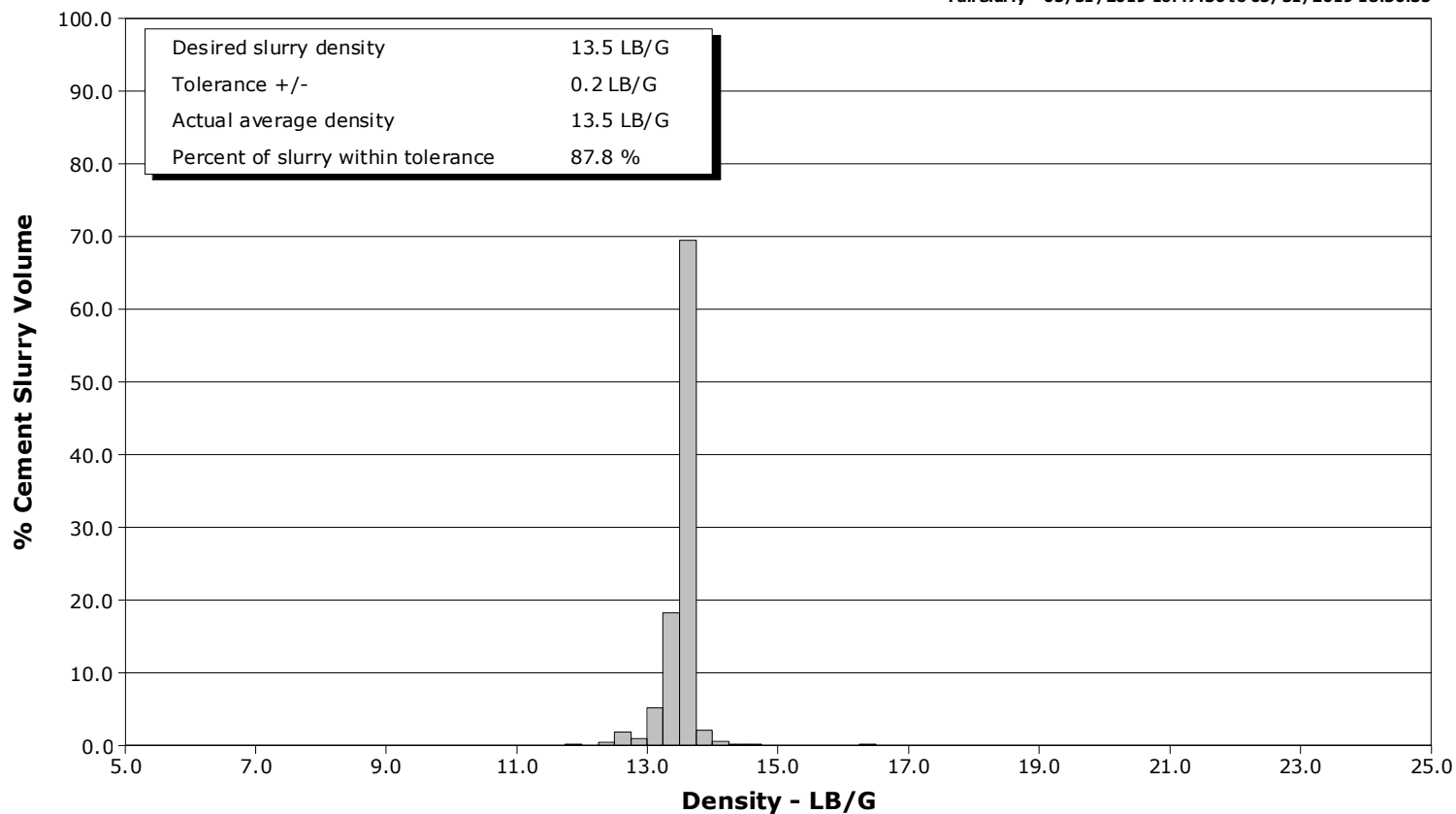
Well MC 3-1HZ
Field Wattenberg
Engineer Adam Aasen / Guy Olson
Country United States

Client ANADARKO PETROLEUM COMPANY
SIR No. EAJ7-00423
Job Type Production
Job Date 05-31-2019

Lead Slurry - 05/31/2019 15:48:45 to 05/31/2019 16:47:11



Tail Slurry - 05/31/2019 16:47:30 to 05/31/2019 18:30:35



				Customer ANADARKO PETROLEUM COMPANY		Job Number EAJ7-00423	
Well MC 3-1HZ		Location (legal)		Schlumberger Location Cheyenne		Job Start May/31/2019	
Field Wattenberg		Formation Name/Type		Deviation 90 deg	Bit Size 8.5 in	Well MD 19933.0 ft	Well TVD 7662.0 ft
County Weld		State/Province Colorado		BHP psi	BHST 230 degF	BHCT 230 degF	Pore Press. Gradient lb/gal
Well Master 0065875173		API/UWI					
Rig Name PD 564	Drilled For Oil	Service Via Land	Casing/Liner				
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Offshore Zone	Well Class New	Well Type New Well Completion	1931.0	9.6	36.0	J55	N/A
			19928.2	5.5	17.0	P110	LTC
Drilling Fluid Type Oil Mud		Max. Density 9.50 lb/gal	Plastic Viscosity 70.000 cP	Tubing/Drill Pipe			
				T/D	Depth, ft	Size, in	Weight, lb/ft
Service Line Cementing	Job Type Production						
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection 5.5 LTC	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 Casing	Displacement 463.3 bbl	Packer Type	Packer Depth ft	
			Tubing Vol. bbl	Casing Vol. 463.3 bbl	Annular Vol. 92.5 bbl	Openhole Vol. 734.3 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 19928.2 ft		Tool Type	
No. Centralizers 288		Top Plugs 1	Bottom Plugs 1	Stage Tool Type		Tool Depth ft	
Cement Head Type Double				Stage Tool Depth ft		Tail Pipe Size in	
Job Scheduled For May/31/2019 01:30		Arrived on Location May/31/2019 01:50		Leave Location May/31/2019 21:40		Collar Type Float	
						Tail Pipe Depth ft	
				Collar Depth 19926.2 ft		Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/31/2019	14:53:20	77	0.0	8.33	0.0	Started Acquisition	
05/31/2019	14:53:36	78	0.0	8.33	0.0	Start Job	
05/31/2019	14:53:38	77	0.0	8.33	0.0	OPSD / Verify Sensors	
05/31/2019	14:53:40	77	0.0	8.33	0.0	Fill Lines	
05/31/2019	14:55:20	1	0.0	8.33	0.0		
05/31/2019	14:57:20	7	0.0	8.33	0.0		
05/31/2019	14:59:20	230	1.5	8.19	0.5		
05/31/2019	15:01:20	227	1.1	8.36	2.8		
05/31/2019	15:03:20	168	0.0	8.36	4.7		
05/31/2019	15:04:40	4387	0.0	8.36	4.7	Low Pressure Test	
05/31/2019	15:05:20	5465	0.0	8.36	4.7		
05/31/2019	15:06:07	5448	0.0	8.36	4.7	High Pressure Test	
05/31/2019	15:07:20	5445	0.0	8.36	4.7		
05/31/2019	15:09:20	32	0.0	8.37	4.7		
05/31/2019	15:10:18	45	0.0	8.37	4.7	End Fill Lines = 4.71 bbl	
05/31/2019	15:10:27	46	0.0	8.37	4.7	Pump CemPrime Scrub	
05/31/2019	15:11:20	57	0.0	8.37	4.7		
05/31/2019	15:13:20	78	0.0	8.37	4.7		
05/31/2019	15:15:20	478	5.1	10.89	9.7		
05/31/2019	15:17:20	441	4.9	10.94	19.8		
05/31/2019	15:19:20	441	5.0	10.93	29.7		

Well			Field		Job Start	Customer	Job Number
MC 3-1HZ			Wattenberg		May/31/2019	ANADARKO PETROLEUM COMPANY	EAJ7-00423
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/31/2019	15:23:20	360	4.8	10.98	49.3		
05/31/2019	15:25:20	454	5.0	10.99	59.0		
05/31/2019	15:27:20	415	5.0	10.94	69.0		
05/31/2019	15:29:20	397	5.2	10.98	79.0		
05/31/2019	15:30:23	33	0.0	11.76	83.4	End CemPrime Scrub, Vol = 78.68 bbl	
05/31/2019	15:30:39	29	0.0	11.73	83.4	Drop Bot tom Plug	
05/31/2019	15:31:20	25	0.0	10.99	83.4		
05/31/2019	15:33:20	24	0.0	10.98	83.4		
05/31/2019	15:35:20	23	0.0	10.98	83.4		
05/31/2019	15:37:20	23	0.0	10.98	83.4		
05/31/2019	15:39:20	22	0.0	10.98	83.4		
05/31/2019	15:41:20	21	0.0	10.98	83.4		
05/31/2019	15:43:20	21	0.0	10.98	83.4		
05/31/2019	15:45:20	21	0.0	10.97	83.4		
05/31/2019	15:47:20	352	5.0	11.05	89.2		
05/31/2019	15:48:45	407	5.0	11.49	96.3	Start Mixing Lead Slurry	
05/31/2019	15:49:20	402	5.0	11.58	99.2		
05/31/2019	15:49:21	460	5.0	11.58	99.3	Lead 12 ppg, Y:1.84ft3/sk MW:6.16gal/sk	
05/31/2019	15:51:20	517	5.1	11.78	109.3		
05/31/2019	15:52:03	517	5.1	11.82	113.0	Mud Balance 12 ppg	
05/31/2019	15:53:20	482	5.0	11.89	119.5		
05/31/2019	15:55:20	480	5.1	11.96	129.6		
05/31/2019	15:57:20	436	5.1	11.94	139.8		
05/31/2019	15:59:20	374	5.1	12.03	150.0		
05/31/2019	16:01:20	227	4.4	11.94	157.9		
05/31/2019	16:03:20	239	4.4	12.06	166.8		
05/31/2019	16:05:20	77	2.3	11.86	175.2		
05/31/2019	16:07:20	73	2.5	11.59	179.8		
05/31/2019	16:09:20	49	1.9	11.86	183.5		
05/31/2019	16:11:20	215	4.4	11.89	191.7		
05/31/2019	16:13:20	215	4.4	11.86	200.6		
05/31/2019	16:15:20	224	4.4	11.90	209.4		
05/31/2019	16:17:20	212	4.5	11.89	218.3		
05/31/2019	16:19:20	209	4.5	11.88	227.2		
05/31/2019	16:21:20	233	4.5	11.96	236.1		
05/31/2019	16:23:20	166	4.4	11.94	245.0		
05/31/2019	16:25:20	126	3.2	11.82	253.1		
05/31/2019	16:27:20	132	3.3	11.91	259.5		
05/31/2019	16:29:20	221	4.5	11.97	268.2		
05/31/2019	16:31:20	138	4.3	11.93	276.9		
05/31/2019	16:35:20	31	0.0	11.83	284.7		
05/31/2019	16:37:20	29	0.0	11.83	284.7		
05/31/2019	16:39:20	180	4.4	11.87	290.4		
05/31/2019	16:41:20	213	4.4	11.86	299.2		
05/31/2019	16:43:20	249	4.4	12.06	307.9		
05/31/2019	16:45:20	90	2.3	11.89	316.0		
05/31/2019	16:47:11	295	4.5	13.43	321.8	End Lead Slurry	
05/31/2019	16:47:20	474	6.4	13.66	322.5	End Lead , Vol = 239.92 bbl, 716sk	
05/31/2019	16:47:30	362	5.9	13.67	323.6	Start Mixing Tail Slurry	
05/31/2019	16:48:45	350	5.6	13.33	330.6	Tail 13.5 ppg Y:1.64ft3/sk MW:7.92gal/sk	
05/31/2019	16:49:20	319	5.7	13.53	333.9		
05/31/2019	16:51:20	375	5.5	13.51	345.0		
05/31/2019	16:53:20	238	5.8	12.75	356.2		
05/31/2019	16:55:20	298	5.8	13.41	367.8		

Well			Field		Job Start	Customer	Job Number
MC 3-1HZ			Wattenberg		May/31/2019	ANADARKO PETROLEUM COMPANY	EAJ7-00423
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/31/2019	16:57:20	391	5.8	13.51	379.4		
05/31/2019	16:59:20	280	5.8	13.45	391.1		
05/31/2019	17:01:20	221	5.7	13.50	402.6		
05/31/2019	17:03:20	82	2.3	13.54	412.6		
05/31/2019	17:05:20	356	5.8	13.57	418.4		
05/31/2019	17:07:20	251	5.8	13.50	430.1		
05/31/2019	17:09:20	300	5.9	13.51	441.5		
05/31/2019	17:11:20	340	6.2	13.43	453.7		
05/31/2019	17:11:53	290	6.1	13.58	457.1	Switched Silos	
05/31/2019	17:13:20	66	2.1	14.99	461.8		
05/31/2019	17:15:20	71	2.3	14.19	466.3		
05/31/2019	17:17:20	37	1.8	11.94	470.7		
05/31/2019	17:19:20	-19	0.0	12.90	473.3		
05/31/2019	17:21:20	-24	0.0	12.54	473.3		
05/31/2019	17:23:20	-25	0.0	12.15	473.3		
05/31/2019	17:25:20	-27	0.0	10.58	473.3		
05/31/2019	17:27:20	157	4.3	13.11	479.9		
05/31/2019	17:29:20	301	5.7	13.30	490.3		
05/31/2019	17:31:20	237	5.7	13.51	501.7		
05/31/2019	17:33:20	289	5.7	13.52	513.1		
05/31/2019	17:35:20	360	5.7	13.49	524.5		
05/31/2019	17:37:20	284	5.7	13.56	535.9		
05/31/2019	17:39:20	270	5.7	13.63	547.3		
05/31/2019	17:41:20	418	5.8	13.58	558.6		
05/31/2019	17:43:20	310	5.7	13.51	570.1		
05/31/2019	17:45:20	258	5.7	13.60	581.6		
05/31/2019	17:47:20	297	5.8	13.54	593.1		
05/31/2019	17:49:20	484	5.8	13.60	604.7		
05/31/2019	17:51:20	253	6.3	13.63	617.0		
05/31/2019	17:53:20	277	4.8	13.65	629.1		
05/31/2019	17:55:20	259	4.9	13.51	638.8		
05/31/2019	17:57:20	239	5.0	13.48	648.6		
05/31/2019	17:59:20	145	4.8	13.57	658.3		
05/31/2019	18:01:20	240	5.0	13.51	668.0		
05/31/2019	18:03:20	188	4.8	13.53	677.8		
05/31/2019	18:05:20	358	5.9	13.51	687.8		
05/31/2019	18:07:20	436	5.8	13.47	699.5		
05/31/2019	18:09:20	185	5.8	13.48	711.1		
05/31/2019	18:11:20	285	5.8	13.64	722.7		
05/31/2019	18:13:20	482	5.9	13.55	734.4		
05/31/2019	18:15:20	213	6.1	13.55	745.6		
05/31/2019	18:17:20	348	6.2	13.64	757.9		
05/31/2019	18:19:20	374	6.0	13.51	770.1		
05/31/2019	18:21:20	258	5.5	13.37	782.0		
05/31/2019	18:23:20	249	5.5	13.46	793.1		
05/31/2019	18:25:20	267	5.5	13.67	804.2		
05/31/2019	18:27:20	275	5.5	13.61	815.2		
05/31/2019	18:29:20	329	5.5	13.45	826.2		
05/31/2019	18:30:23	23	0.0	13.63	831.4	End Tail, Vol = 502.92 bbl, 1730sks	
05/31/2019	18:30:35	-2	0.0	13.61	831.4	End Tail Slurry	
05/31/2019	18:30:42	-7	0.0	13.61	831.4	Wash Surface Lines	
05/31/2019	18:30:43	-7	0.0	13.61	831.4	Fluid Check: 1/2 : 1/2	
05/31/2019	18:31:20	-11	0.0	13.59	831.4		
05/31/2019	18:33:20	14	0.5	11.92	831.8		

Well			Field		Job Start		Customer		Job Number	
MC 3-1HZ			Wattenberg		May/31/2019		ANADARKO PETROLEUM COMPANY		EAJ7-00423	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
05/31/2019	18:37:20	-18	0.3	8.97	833.4					
05/31/2019	18:39:20	19	2.5	9.61	835.5					
05/31/2019	18:41:20	14	2.5	8.51	840.4					
05/31/2019	18:43:20	-21	1.6	8.57	845.3					
05/31/2019	18:45:20	-35	0.0	8.56	846.7					
05/31/2019	18:47:20	-6	1.9	8.50	848.0					
05/31/2019	18:49:20	10	2.3	8.37	852.8					
05/31/2019	18:50:44	11	2.5	8.38	856.1	End Wash Surface Lines, Vol = 31 bbls				
05/31/2019	18:51:20	-36	0.0	8.38	856.3					
05/31/2019	18:51:43	-38	0.0	8.38	856.3	Drop Top Plug				
05/31/2019	18:52:09	-39	0.0	8.37	856.3	Start Displacement				
05/31/2019	18:53:20	118	5.2	8.46	1.7					
05/31/2019	18:55:20	192	7.6	8.41	16.8					
05/31/2019	18:57:20	181	7.7	8.37	32.1					
05/31/2019	18:59:20	930	7.4	8.37	46.8					
05/31/2019	19:01:20	1199	7.5	8.37	61.7					
05/31/2019	19:03:20	1268	7.4	8.37	76.6					
05/31/2019	19:05:20	1410	7.4	8.36	91.5					
05/31/2019	19:07:20	1593	7.4	8.37	106.3					
05/31/2019	19:09:20	1731	7.4	8.36	121.1					
05/31/2019	19:11:20	1826	7.4	8.36	135.9					
05/31/2019	19:13:20	1933	7.4	8.36	150.7					
05/31/2019	19:15:20	2157	7.4	8.36	165.4					
05/31/2019	19:17:20	2272	7.4	8.36	180.1					
05/31/2019	19:19:20	2367	7.3	8.36	194.7					
05/31/2019	19:21:20	2347	7.2	8.36	209.1					
05/31/2019	19:23:20	2316	7.2	8.37	223.4					
05/31/2019	19:25:20	2359	7.2	8.36	237.8					
05/31/2019	19:27:20	2322	7.2	8.36	252.2					
05/31/2019	19:29:20	2293	7.2	8.36	266.5					
05/31/2019	19:31:20	2250	6.5	8.36	279.0					
05/31/2019	19:33:20	2249	6.5	8.36	292.0					
05/31/2019	19:35:20	2241	6.5	8.37	305.0					
05/31/2019	19:37:20	2243	6.5	8.37	318.0					
05/31/2019	19:39:20	2248	6.5	8.37	331.0					
05/31/2019	19:41:20	2254	6.5	8.37	343.9					
05/31/2019	19:43:20	2257	6.4	8.37	356.7					
05/31/2019	19:45:20	2253	6.5	8.37	369.6					
05/31/2019	19:47:20	2253	6.4	8.37	382.5					
05/31/2019	19:49:20	2264	6.4	8.37	395.4					
05/31/2019	19:51:20	2245	6.4	8.37	408.2					
05/31/2019	19:53:20	2266	6.4	8.37	421.1					
05/31/2019	19:55:20	2263	6.4	8.37	433.9					
05/31/2019	19:57:20	2260	6.4	8.37	446.8					
05/31/2019	19:59:20	1958	4.1	8.37	458.4					
05/31/2019	20:01:00	1811	1.6	8.37	465.0	FCP 1700 psi				
05/31/2019	20:01:20	1712	2.0	8.37	465.7					
05/31/2019	20:02:55	2225	0.0	8.37	468.0	Bump Plug 2200 psi				
05/31/2019	20:02:58	2257	0.0	8.37	468.0	End Displacement, Vol = 492.85 bbl				
05/31/2019	20:03:20	2246	0.0	8.37	0.0					
05/31/2019	20:04:30	3070	0.0	8.37	1.1	Start Casing Pressure Test 3,070 psi				
05/31/2019	20:05:20	3070	0.0	8.37	1.1					
05/31/2019	20:07:20	3154	0.0	8.37	1.1					
05/31/2019	20:09:20	3214	0.0	8.37	1.1					

Well			Field		Job Start		Customer		Job Number	
MC 3-1HZ			Wattenberg		May/31/2019		ANADARKO PETROLEUM COMPANY		EAJ7-00423	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
05/31/2019	20:13:20	3330	0.0	8.37	1.1					
05/31/2019	20:15:20	3383	0.0	8.37	1.1					
05/31/2019	20:17:20	3432	0.0	8.37	1.1					
05/31/2019	20:19:20	3479	0.0	8.37	1.1					
05/31/2019	20:21:20	3523	0.0	8.37	1.1					
05/31/2019	20:22:09	3904	1.6	8.37	1.6	End Casing Pressure Test 3,904 psi				
05/31/2019	20:22:10	3936	1.6	8.37	1.7	Pump to Open Toe Sleeve				
05/31/2019	20:22:36	2011	1.7	8.37	2.4	Sheared 4300				
05/31/2019	20:23:20	1611	1.9	8.37	3.6					
05/31/2019	20:24:51	1491	0.0	8.37	6.2	Pumped into Annular, Vol = 4 bbl				
05/31/2019	20:25:20	1468	0.0	8.37	6.2					
05/31/2019	20:25:55	-48	0.0	8.37	6.2	Check Floats / 2.5 bbl Back				
05/31/2019	20:27:20	-48	0.0	8.37	6.2					
05/31/2019	20:29:20	-48	0.0	8.37	6.2					
05/31/2019	20:31:20	-49	0.0	8.37	6.2					
05/31/2019	20:33:20	-50	0.0	8.37	6.2					
05/31/2019	20:35:20	-51	0.0	8.37	6.2					
05/31/2019	20:37:20	-51	0.0	8.37	6.2					
05/31/2019	20:39:20	-52	0.0	8.37	6.2					
05/31/2019	20:40:04	-52	0.0	8.37	6.2	End Job				
05/31/2019	20:41:20	-51	0.0	8.37	6.2					

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate		Total Slurry 742.8	Mud	Spacer 78.7	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final 0	Average	Bump Plug to 2200	Breakdown	Type FreshWater	Volume 999.0 bbl	Density 8.34 lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 738.8 bbl	Displacement 463.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl	
					Washed Thru Perfs <input type="checkbox"/>		To ft	
Customer or Authorized Representative James Atkins			Schlumberger Supervisor Adam Aasen / Guy Olson			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	