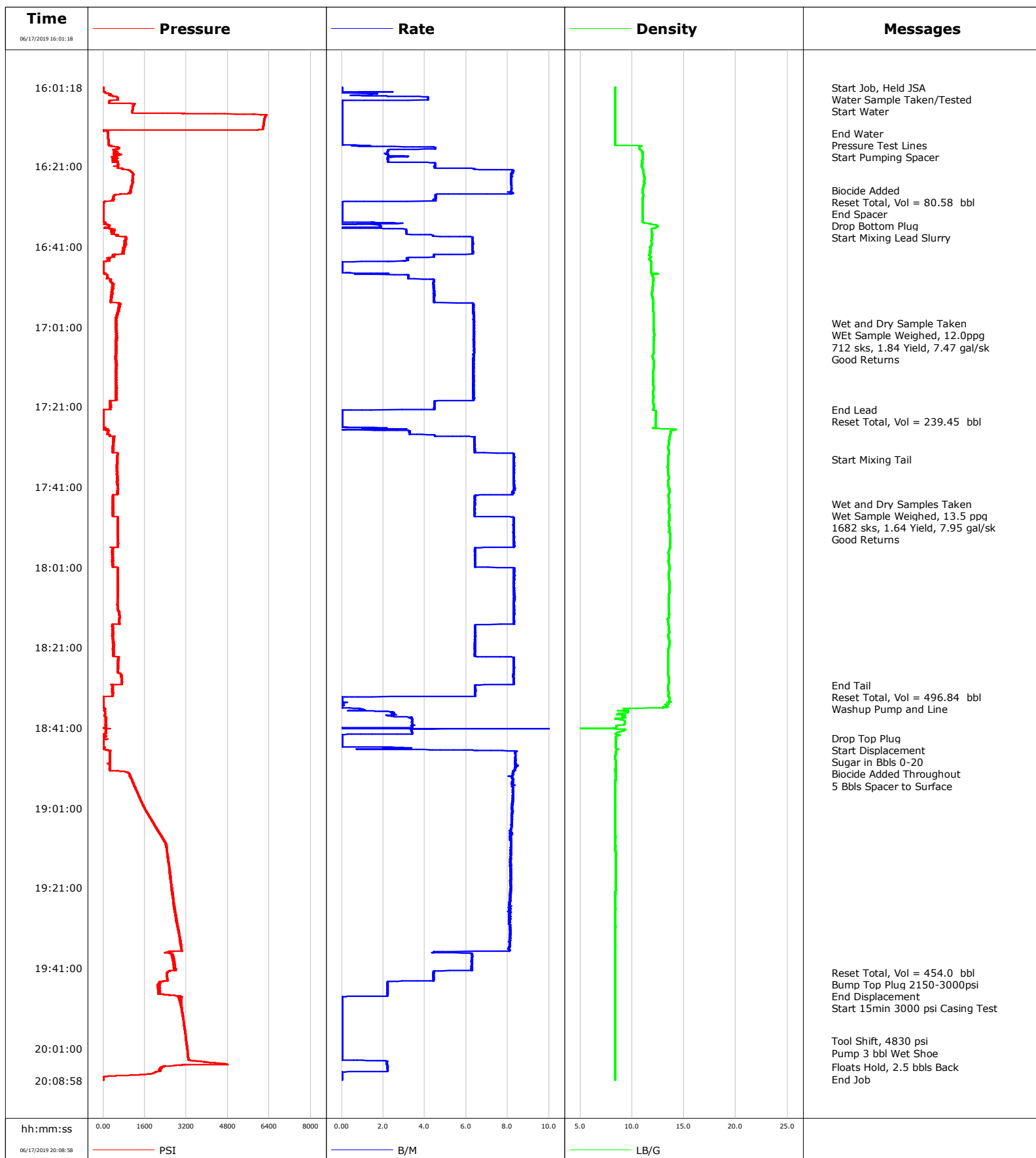


Well MC 3-4HZ
Field Wattenberg
Engineer Ryan Drilling, Andrew Black
Country United States

Client Anadarko
SIR No. EAJ7-00540
Job Type 5.5" Production
Job Date 06-17-2019



Cementing Service Report

				Customer Anadarko		Job Number EAJ7-00540	
Well MC 3-4HZ			Location (legal) CWY		Schlumberger Location CWY		Job Start Jun/17/2019
Field Wattenberg		Formation Name/Type		Deviation 90 deg	Bit Size 8.5 in	Well MD 19596.0 ft	Well TVD 7816.0 ft
County Weld		State/Province Colorado		BHP psi	BHST 230 degF	BHCT 230 degF	Pore Press. Gradient lb/gal
Well Master 0065884957		API/UWI					
Rig Name Precision 564	Drilled For Oil and Gas	Service Via Land		Casing/ Liner			
				Depth, ft	Size, in	Weight, lb/ft	Grade
				19596.0	5.0	17.0	p110
				0.0	0.0	0.0	
Offshore Zone		Well Class New	Well Type Development				
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe			
				T/D	Depth, ft	Size, in	Weight, lb/ft
Service Line Cementing		Job Type 5.5" Production					
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
				ft	ft		
				ft	ft		
				ft	ft		
				Treat Down Casing	Displacement 454.0 bbl	Packer Type	Packer Depth ft
				Tubing Vol. 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 2150 psi				Shoe Type Float		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 19596.0 ft		Tool Type	
No. Centralizers		Top Plugs 1	Bottom Plugs 1	Stage Tool Type		Tool Depth ft	
Cement Head Type				Stage Tool Depth ft		Tail Pipe Size in	
Job Scheduled For Jun/17/2019 10:03		Arrived on Location Jun/17/2019 10:30		Leave Location Jun/17/2019 21:30		Collar Type Float	
						Tail Pipe Depth ft	
						Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
06/17/2019	16:01:18	13	0.0	8.39	0.0	Started Acquisition	
06/17/2019	16:01:19	12	0.0	8.39	0.0	Start Job, Held JSA	
06/17/2019	16:01:20	13	0.0	8.39	0.0	Water Sample Taken/Tested	
06/17/2019	16:02:18	15	0.0	8.39	0.0		
06/17/2019	16:03:18	235	0.7	8.39	1.0		
06/17/2019	16:04:18	565	4.2	8.39	4.2		
06/17/2019	16:05:18	214	0.0	8.39	5.3		
06/17/2019	16:06:18	1141	0.0	8.39	5.3		
06/17/2019	16:07:18	1123	0.0	8.39	5.3		
06/17/2019	16:08:18	6273	0.0	8.39	5.3		
06/17/2019	16:09:18	6210	0.0	8.39	5.3		
06/17/2019	16:11:18	6156	0.0	8.39	5.3		
06/17/2019	16:12:18	177	0.0	8.39	5.3		
06/17/2019	16:12:46	172	0.0	8.39	5.3	End Water	
06/17/2019	16:12:48	173	0.0	8.39	5.3	Pressure Test Lines	
06/17/2019	16:12:52	174	0.0	8.39	5.3	Start Pumping Spacer	
06/17/2019	16:13:18	179	0.0	8.39	5.3		
06/17/2019	16:14:18	193	0.0	8.39	5.3		
06/17/2019	16:15:18	198	0.0	8.39	0.0		
06/17/2019	16:16:18	581	4.5	10.71	1.1		
06/17/2019	16:17:18	506	2.2	10.98	4.5		

Well			Field	Job Start		Customer		Job Number	
MC 3-4HZ			Wattenberg		Jun/17/2019		Anadarko		EAJ7-00540
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
06/17/2019	16:19:18	521	2.2	11.03	9.2				
06/17/2019	16:20:18	565	4.5	10.98	12.0				
06/17/2019	16:21:18	561	4.5	10.96	16.5				
06/17/2019	16:22:18	1071	8.2	11.06	23.3				
06/17/2019	16:23:18	1142	8.2	11.15	31.5				
06/17/2019	16:24:18	1127	8.2	11.19	39.6				
06/17/2019	16:25:18	1116	8.2	11.18	47.8				
06/17/2019	16:26:18	1096	8.2	11.07	55.9				
06/17/2019	16:26:57	1034	8.2	11.02	61.3	Biocide Added			
06/17/2019	16:27:18	1048	8.2	10.99	64.1				
06/17/2019	16:28:18	430	4.5	11.05	71.0				
06/17/2019	16:29:18	403	4.5	10.99	75.5				
06/17/2019	16:29:52	41	0.0	10.98	77.6	Reset Total, Vol = 80.58 bbl			
06/17/2019	16:29:55	31	0.0	10.98	0.0	End Spacer			
06/17/2019	16:29:57	29	0.0	10.99	0.0	Drop Bottom Plug			
06/17/2019	16:30:03	25	0.0	10.99	0.0	Start Mixing Lead Slurry			
06/17/2019	16:30:18	16	0.0	10.99	0.0				
06/17/2019	16:31:18	13	0.0	10.99	0.0				
06/17/2019	16:32:18	12	0.0	10.99	0.0				
06/17/2019	16:33:18	11	0.0	10.99	0.0				
06/17/2019	16:34:18	11	0.0	10.99	0.0				
06/17/2019	16:35:18	86	2.7	11.60	0.7				
06/17/2019	16:36:18	64	0.0	12.26	2.2				
06/17/2019	16:37:18	324	3.1	11.88	4.6				
06/17/2019	16:38:18	569	4.4	11.93	8.1				
06/17/2019	16:39:18	896	6.3	11.89	13.9				
06/17/2019	16:40:18	810	6.3	11.86	20.2				
06/17/2019	16:41:18	791	6.3	11.73	26.5				
06/17/2019	16:42:18	791	6.3	11.76	32.8				
06/17/2019	16:43:18	362	4.4	11.66	38.6				
06/17/2019	16:44:18	243	3.2	11.69	42.3				
06/17/2019	16:46:18	12	0.0	11.80	43.8				
06/17/2019	16:47:18	12	0.0	11.80	43.8				
06/17/2019	16:48:18	152	3.2	11.96	45.2				
06/17/2019	16:49:18	302	4.4	12.03	48.6				
06/17/2019	16:50:18	368	4.4	12.02	53.0				
06/17/2019	16:51:18	350	4.4	11.96	57.4				
06/17/2019	16:52:18	360	4.4	11.94	61.9				
06/17/2019	16:53:18	310	4.5	11.93	66.3				
06/17/2019	16:54:18	281	4.4	12.00	70.8				
06/17/2019	16:55:18	597	6.3	12.03	75.6				
06/17/2019	16:56:18	591	6.4	12.02	81.9				
06/17/2019	16:57:18	551	6.3	12.04	88.3				
06/17/2019	16:58:18	512	6.4	12.05	94.6				
06/17/2019	16:59:18	477	6.4	12.07	101.0				
06/17/2019	17:00:12	515	6.4	12.08	106.7	Wet and Dry Sample Taken			
06/17/2019	17:00:13	493	6.4	12.08	106.8	WEt Sample Weighed, 12.0ppg			
06/17/2019	17:00:18	501	6.3	12.08	107.4				
06/17/2019	17:00:48	489	6.4	12.08	110.5	712 sks, 1.84 Yield, 7.47 gal/sk			
06/17/2019	17:01:18	478	6.4	12.07	113.7				
06/17/2019	17:02:18	511	6.4	12.12	120.1				
06/17/2019	17:03:18	524	6.4	12.13	126.4				
06/17/2019	17:04:18	491	6.4	12.09	132.8				
06/17/2019	17:05:18	497	6.4	12.04	139.2				

Well			Field	Job Start		Customer		Job Number	
MC 3-4HZ			Wattenberg		Jun/17/2019		Anadarko		EAJ7-00540
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
06/17/2019	17:07:18	499	6.4	12.06	151.9				
06/17/2019	17:08:18	505	6.3	11.97	158.3				
06/17/2019	17:09:18	470	6.3	12.05	164.6				
06/17/2019	17:10:18	496	6.4	12.10	171.0				
06/17/2019	17:11:18	507	6.3	12.07	177.3				
06/17/2019	17:12:18	475	6.3	12.03	183.7				
06/17/2019	17:13:18	492	6.3	12.02	190.0				
06/17/2019	17:14:18	517	6.4	12.03	196.3				
06/17/2019	17:15:18	497	6.3	12.03	202.7				
06/17/2019	17:16:18	514	6.3	12.04	209.0				
06/17/2019	17:17:18	514	6.3	12.03	215.4				
06/17/2019	17:18:18	495	6.3	12.03	221.7				
06/17/2019	17:19:18	512	6.4	12.03	228.1				
06/17/2019	17:21:18	289	4.5	12.08	237.4				
06/17/2019	17:21:45	13	2.9	12.01	239.4	End Lead			
06/17/2019	17:21:46	8	1.4	12.01	239.4	Reset Total, Vol = 239.45 bbl			
06/17/2019	17:22:18	8	0.0	12.31	0.0				
06/17/2019	17:23:18	10	0.0	12.28	0.0				
06/17/2019	17:24:18	9	0.0	12.27	0.0				
06/17/2019	17:25:18	10	0.0	12.26	0.0				
06/17/2019	17:26:18	88	2.2	12.01	0.3				
06/17/2019	17:27:18	185	3.3	13.71	2.4				
06/17/2019	17:28:18	261	4.5	13.62	6.1				
06/17/2019	17:29:18	415	6.4	13.57	12.3				
06/17/2019	17:30:18	397	6.4	13.54	18.7				
06/17/2019	17:31:18	388	6.4	13.48	25.1				
06/17/2019	17:32:18	376	6.4	13.55	31.5				
06/17/2019	17:33:18	545	8.3	13.48	39.4				
06/17/2019	17:34:13	560	8.3	13.48	47.0	Start Mixing Tail			
06/17/2019	17:34:18	534	8.3	13.48	47.7				
06/17/2019	17:35:18	540	8.3	13.47	55.9				
06/17/2019	17:36:18	530	8.3	13.43	64.2				
06/17/2019	17:37:18	537	8.3	13.47	72.5				
06/17/2019	17:38:18	555	8.3	13.52	80.8				
06/17/2019	17:39:18	549	8.3	13.51	89.1				
06/17/2019	17:40:18	553	8.3	13.48	97.4				
06/17/2019	17:41:18	566	8.3	13.55	105.7				
06/17/2019	17:42:18	544	8.2	13.57	114.0				
06/17/2019	17:43:18	392	6.4	13.51	121.7				
06/17/2019	17:44:18	389	6.4	13.54	128.1				
06/17/2019	17:45:14	399	6.4	13.56	134.1	Wet and Dry Samples Taken			
06/17/2019	17:45:18	393	6.4	13.56	134.5				
06/17/2019	17:45:26	375	6.4	13.57	135.4	1682 sks, 1.64 Yield, 7.95 gal/sk			
06/17/2019	17:46:18	383	6.4	13.57	140.9				
06/17/2019	17:47:18	387	6.4	13.56	147.3				
06/17/2019	17:48:18	389	6.4	13.58	153.7				
06/17/2019	17:49:18	561	8.3	13.57	161.8				
06/17/2019	17:50:18	538	8.3	13.56	170.1				
06/17/2019	17:51:18	552	8.3	13.57	178.4				
06/17/2019	17:52:18	544	8.2	13.56	186.7				
06/17/2019	17:53:18	558	8.3	13.68	194.9				
06/17/2019	17:54:18	574	8.3	13.67	203.2				
06/17/2019	17:56:18	367	6.4	13.62	219.5				
06/17/2019	17:57:18	368	6.4	13.51	225.9				

Well			Field	Job Start		Customer	Job Number
MC 3-4HZ			Wattenberg	Jun/17/2019		Anadarko	EAJ7-00540
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
06/17/2019	17:59:18	361	6.4	13.52	238.7		
06/17/2019	18:00:18	369	6.4	13.56	245.1		
06/17/2019	18:01:18	554	8.3	13.59	252.0		
06/17/2019	18:02:18	566	8.3	13.55	260.3		
06/17/2019	18:03:18	562	8.3	13.54	268.6		
06/17/2019	18:04:18	558	8.3	13.57	276.9		
06/17/2019	18:05:18	560	8.3	13.60	285.2		
06/17/2019	18:06:18	543	8.3	13.59	293.5		
06/17/2019	18:07:18	569	8.3	13.57	301.8		
06/17/2019	18:08:18	559	8.3	13.56	310.1		
06/17/2019	18:09:18	538	8.3	13.54	318.4		
06/17/2019	18:10:18	546	8.3	13.54	326.7		
06/17/2019	18:11:18	541	8.3	13.55	335.0		
06/17/2019	18:12:18	613	8.3	13.56	343.3		
06/17/2019	18:13:18	635	8.3	13.56	351.6		
06/17/2019	18:14:18	604	8.3	13.44	359.9		
06/17/2019	18:15:18	352	6.8	13.51	368.1		
06/17/2019	18:16:18	391	6.4	13.55	374.6		
06/17/2019	18:17:18	380	6.4	13.57	381.0		
06/17/2019	18:18:18	382	6.4	13.52	387.5		
06/17/2019	18:19:18	383	6.4	13.58	393.9		
06/17/2019	18:20:18	403	6.4	13.59	400.3		
06/17/2019	18:21:18	410	6.4	13.52	406.7		
06/17/2019	18:22:18	402	6.4	13.51	413.1		
06/17/2019	18:23:18	410	6.4	13.51	419.5		
06/17/2019	18:24:18	591	8.3	13.50	427.7		
06/17/2019	18:25:18	569	8.3	13.49	436.0		
06/17/2019	18:26:18	566	8.3	13.48	444.3		
06/17/2019	18:27:18	569	8.3	13.49	452.6		
06/17/2019	18:28:18	676	8.2	13.51	460.9		
06/17/2019	18:29:18	703	8.3	13.53	469.1		
06/17/2019	18:30:18	503	8.1	13.51	477.3		
06/17/2019	18:30:26	348	6.4	13.50	478.3	End Tail	
06/17/2019	18:31:18	332	6.4	13.45	483.9		
06/17/2019	18:32:18	401	6.4	13.54	490.4		
06/17/2019	18:33:18	14	2.3	13.52	496.7		
06/17/2019	18:33:20	14	0.8	13.52	496.8	Reset Total, Vol = 496.84 bbl	
06/17/2019	18:33:22	14	0.3	13.56	0.0	Washup Pump and Line	
06/17/2019	18:34:18	16	0.0	13.60	0.0		
06/17/2019	18:35:18	15	0.0	13.25	0.1		
06/17/2019	18:36:18	63	0.9	9.22	0.2		
06/17/2019	18:37:18	66	2.5	9.57	1.7		
06/17/2019	18:38:18	63	2.6	9.10	4.1		
06/17/2019	18:39:18	119	3.4	9.25	7.4		
06/17/2019	18:40:18	88	3.4	9.23	10.8		
06/17/2019	18:41:18	101	8.3	6.70	14.2		
06/17/2019	18:42:18	121	3.4	8.52	17.8		
06/17/2019	18:43:18	87	0.0	8.43	19.1		
06/17/2019	18:43:35	-0	0.0	8.44	19.1	Drop Top Plug	
06/17/2019	18:43:37	1	0.0	8.45	0.0	Start Displacement	
06/17/2019	18:44:18	1	0.0	8.42	0.0		
06/17/2019	18:45:18	8	0.0	8.42	0.0		
06/17/2019	18:46:18	17	2.2	8.54	1.1		
06/17/2019	18:47:18	262	8.3	8.42	7.3		

Well			Field	Job Start		Customer		Job Number	
MC 3-4HZ			Wattenberg		Jun/17/2019		Anadarko		EAJ7-00540
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
06/17/2019	18:49:18	255	8.4	8.40	24.0				
06/17/2019	18:50:18	258	8.3	8.41	32.3				
06/17/2019	18:50:22	257	8.4	8.41	32.9	5 Bbls Spacer to Surface			
06/17/2019	18:51:18	261	8.3	8.40	40.7				
06/17/2019	18:52:18	979	8.2	8.40	49.0				
06/17/2019	18:53:18	1061	8.2	8.40	57.3				
06/17/2019	18:54:18	1121	8.3	8.40	65.5				
06/17/2019	18:55:18	1198	8.2	8.40	73.7				
06/17/2019	18:56:18	1263	8.2	8.40	82.0				
06/17/2019	18:57:18	1326	8.2	8.39	90.2				
06/17/2019	18:58:18	1392	8.2	8.40	98.4				
06/17/2019	18:59:18	1451	8.2	8.39	106.7				
06/17/2019	19:00:18	1537	8.2	8.39	114.9				
06/17/2019	19:01:18	1601	8.2	8.40	123.1				
06/17/2019	19:02:18	1687	8.2	8.39	131.3				
06/17/2019	19:03:18	1788	8.2	8.40	139.5				
06/17/2019	19:04:18	1885	8.2	8.39	147.7				
06/17/2019	19:06:18	2075	8.2	8.40	164.1				
06/17/2019	19:07:18	2152	8.2	8.40	172.2				
06/17/2019	19:08:18	2249	8.1	8.40	180.4				
06/17/2019	19:09:18	2367	8.2	8.40	188.5				
06/17/2019	19:10:18	2428	8.1	8.40	196.7				
06/17/2019	19:11:18	2442	8.2	8.40	204.8				
06/17/2019	19:12:18	2459	8.1	8.40	212.9				
06/17/2019	19:13:18	2484	8.1	8.40	221.1				
06/17/2019	19:14:18	2514	8.1	8.40	229.2				
06/17/2019	19:15:18	2527	8.1	8.40	237.3				
06/17/2019	19:16:18	2549	8.1	8.40	245.5				
06/17/2019	19:17:18	2560	8.1	8.40	253.6				
06/17/2019	19:18:18	2575	8.2	8.40	261.8				
06/17/2019	19:19:18	2605	8.1	8.40	269.9				
06/17/2019	19:20:18	2624	8.1	8.40	278.0				
06/17/2019	19:21:18	2654	8.1	8.40	286.2				
06/17/2019	19:22:18	2669	8.1	8.40	294.3				
06/17/2019	19:23:18	2686	8.1	8.40	302.4				
06/17/2019	19:24:18	2717	8.1	8.40	310.5				
06/17/2019	19:25:18	2735	8.0	8.40	318.6				
06/17/2019	19:26:18	2757	8.0	8.40	326.7				
06/17/2019	19:27:18	2758	8.1	8.40	334.8				
06/17/2019	19:28:18	2784	8.1	8.40	342.9				
06/17/2019	19:29:18	2830	8.1	8.40	351.0				
06/17/2019	19:30:18	2858	8.1	8.40	359.1				
06/17/2019	19:31:18	2881	8.1	8.40	367.2				
06/17/2019	19:32:18	2913	8.1	8.40	375.3				
06/17/2019	19:33:18	2956	8.1	8.40	383.4				
06/17/2019	19:34:18	2976	8.1	8.40	391.5				
06/17/2019	19:35:18	2997	8.1	8.39	399.6				
06/17/2019	19:36:18	3023	8.0	8.40	407.7				
06/17/2019	19:37:18	2556	6.2	8.39	414.3				
06/17/2019	19:38:18	2678	6.3	8.40	420.6				
06/17/2019	19:39:18	2742	6.3	8.39	426.8				
06/17/2019	19:40:18	2753	6.3	8.39	433.1				
06/17/2019	19:41:18	2754	6.3	8.40	439.4				
06/17/2019	19:42:02	2456	4.4	8.40	443.3	Reset Total, Vol = 454.0 bbl			

Well			Field		Job Start		Customer		Job Number	
MC 3-4HZ			Wattenberg		Jun/17/2019		Anadarko		EAJ7-00540	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/17/2019	19:42:21	2459	4.4	8.39	444.7	Bump Top Plug 2150-3000psi				
06/17/2019	19:42:22	2448	4.4	8.40	444.8	End Displacement				
06/17/2019	19:42:30	2439	4.4	8.39	445.4	Start 15min 3000 psi Casing Test				
06/17/2019	19:43:18	2454	4.4	8.39	448.9					
06/17/2019	19:44:18	2322	2.3	8.39	453.2					
06/17/2019	19:45:18	2179	2.2	8.39	455.4					
06/17/2019	19:47:18	2190	2.2	8.39	459.8					
06/17/2019	19:48:18	2886	0.0	8.40	0.0					
06/17/2019	19:49:18	2988	0.0	8.40	0.0					
06/17/2019	19:50:18	3029	0.0	8.39	0.0					
06/17/2019	19:51:18	3015	0.0	8.40	0.0					
06/17/2019	19:52:18	3053	0.0	8.40	0.0					
06/17/2019	19:53:18	3076	0.0	8.39	0.0					
06/17/2019	19:54:18	3091	0.0	8.40	0.0					
06/17/2019	19:55:18	3117	0.0	8.40	0.0					
06/17/2019	19:56:18	3138	0.0	8.40	0.0					
06/17/2019	19:57:18	3157	0.0	8.40	0.0					
06/17/2019	19:58:18	3179	0.0	8.40	0.0					
06/17/2019	19:59:06	3194	0.0	8.40	0.0	Tool Shift, 4830 psi				
06/17/2019	19:59:18	3197	0.0	8.40	0.0					
06/17/2019	20:00:18	3217	0.0	8.40	0.0					
06/17/2019	20:00:36	3222	0.0	8.40	0.0	Pump 3 bbl Wet Shoe				
06/17/2019	20:01:18	3236	0.0	8.39	0.0					
06/17/2019	20:02:18	3254	0.0	8.40	0.0					
06/17/2019	20:03:18	3272	0.0	8.40	0.0					
06/17/2019	20:04:18	3784	2.2	8.39	0.6					
06/17/2019	20:05:18	2801	2.2	8.39	2.8					
06/17/2019	20:05:37	2267	2.2	8.39	3.4	Floats Hold, 2.5 bbls Back				
06/17/2019	20:06:18	2168	2.2	8.39	5.0					
06/17/2019	20:07:18	1902	0.0	8.39	6.1					
06/17/2019	20:08:18	7	0.0	8.39	6.1					

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry	N2	Mud	Maximum Rate		Total Slurry 734.0	Mud	Spacer 80.0	N2			
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum	Final 0	Average	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal				
Avg. N2 Percent %	Designed Slurry Volume 724.0 bbl		Displacement 454.0 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 John Truett			Schlumberger Supervisor Ryan Drilling, Andrew Black			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>				
						-	-				