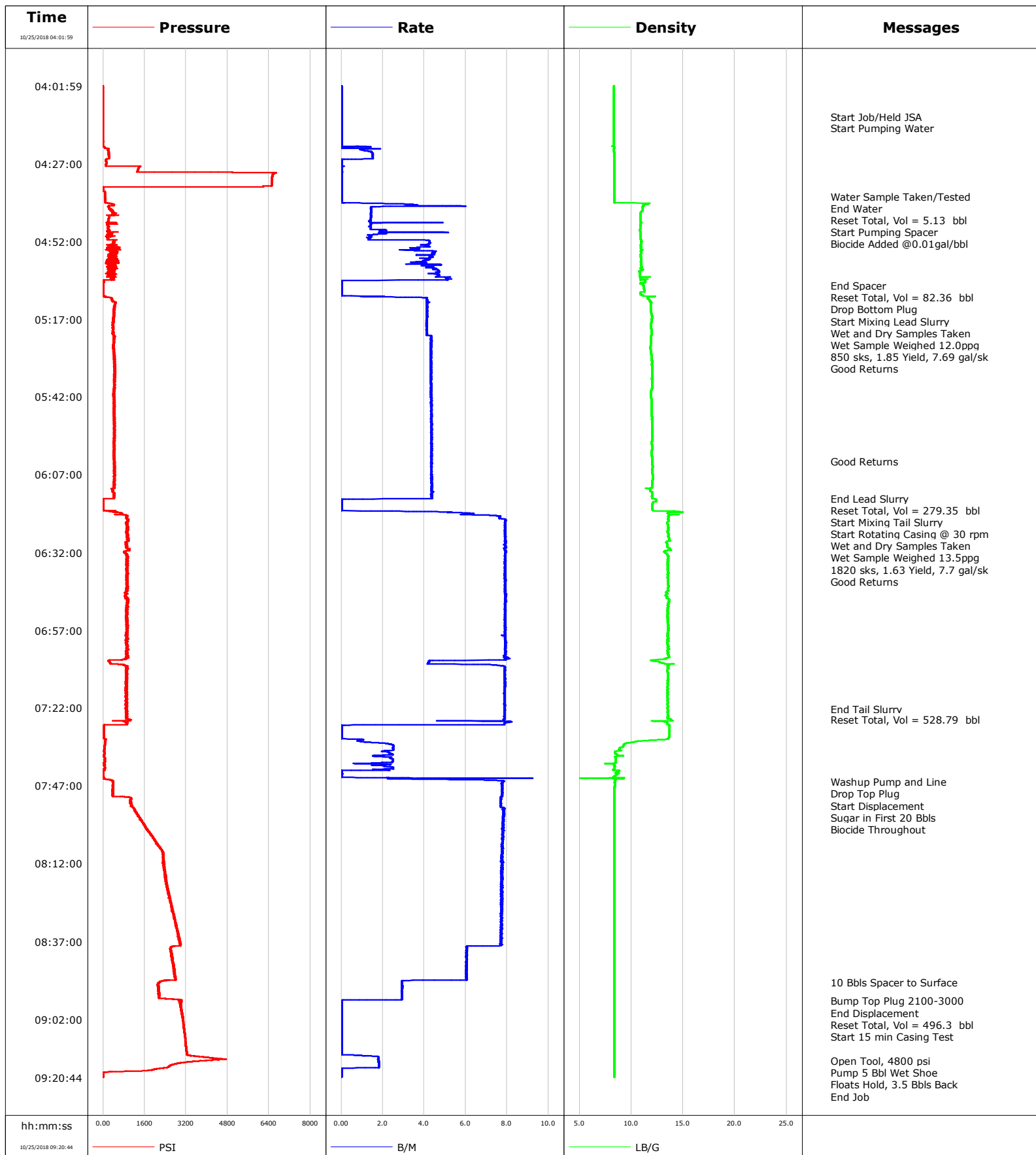


Well Cowboy 21-8HZ
Field Wattenberg
Engineer Ryan Drilling/Guy Olson
Country United States

Client Anadarko
SIR No. DN38-00253
Job Type 5.5" Production
Job Date 10-25-2018



Cementing Service Report

				Customer Anadarko			Job Number DN38-00253		
Well Cowboy 21-8HZ			Location (legal) CWY		Schlumberger Location CWY			Job Start Oct/25/2018	
Field Wattenberg		Formation Name/Type		Deviation 90 deg		Bit Size 8.5 in		Well MD 21363.0 ft	
County Weld		State/Province Colorado		BHP psi		BHST 235 degF		BHCT 230 degF	
Well Master 0631774793		API/UWI						Pore Press. Gradient lb/gal	
Rig Name Precision 564		Drilled For Oil & Gas		Service Via Land		Casing/ Liner			
						Depth, ft		Size, in	
						Weight, lb/ft		Grade	
Offshore Zone		Well Class New		Well Type Development		1879.0		9.6	
						21361.0		5.5	
Drilling Fluid Type OBM		Max. Density 9.20 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" Production							
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection WTF Head		Perforations/Open Hole			
						Top, ft		Bottom, ft	
						shot/ft		No. of Shots	
								Total Interval ft	
						ft		ft	
						ft		ft	
						ft		ft	
						Treat Down Casing		Displacement 496.3 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 2100 psi						Shoe Type Float		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 21361.0 ft		Tool Type	
No. Centralizers		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 Oct/24/2018 20:00		Arrived on Location Oct/24/2018 20:00		Leave Location Oct/25/2018 10:00		Collar Type Float		Tail Pipe Depth ft	
						Collar Depth 21360.0 ft		Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
10/25/2018	04:01:59	-1	0.0	8.34	0.0	Started Acquisition			
10/25/2018	04:02:59	-1	0.0	8.34	0.0				
10/25/2018	04:03:59	-1	0.0	8.34	0.0				
10/25/2018	04:04:59	-1	0.0	8.34	0.0				
10/25/2018	04:05:59	-1	0.0	8.34	0.0				
10/25/2018	04:06:59	-1	0.0	8.34	0.0				
10/25/2018	04:07:59	-0	0.0	8.34	0.0				
10/25/2018	04:08:59	-1	0.0	8.34	0.0				
10/25/2018	04:09:59	-1	0.0	8.34	0.0				
10/25/2018	04:10:59	-1	0.0	8.34	0.0				
10/25/2018	04:11:59	-1	0.0	8.34	0.0				
10/25/2018	04:12:00	-1	0.0	8.34	0.0	Start Job/Held JSA			
10/25/2018	04:12:59	-1	0.0	8.34	0.0				
10/25/2018	04:13:59	-1	0.0	8.34	0.0				
10/25/2018	04:14:59	-1	0.0	8.34	0.0				
10/25/2018	04:15:27	-1	0.0	8.34	0.0	Start Pumping Water			
10/25/2018	04:15:59	-1	0.0	8.34	0.0				
10/25/2018	04:16:59	-1	0.0	8.34	0.0				
10/25/2018	04:17:59	-1	0.0	8.34	0.0				
10/25/2018	04:19:59	-1	0.0	8.34	0.0				
10/25/2018	04:20:59	-1	0.0	8.34	0.0				

Well			Field	Job Start		Customer	Job Number	
Cowboy 21-8HZ			Wattenberg		Oct/25/2018		Anadarko	DN38-00253
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
10/25/2018	04:22:59	195	1.3	8.34	1.3			
10/25/2018	04:23:59	210	1.5	8.35	2.8			
10/25/2018	04:24:59	218	1.5	8.35	4.3			
10/25/2018	04:25:59	108	0.0	8.35	5.1			
10/25/2018	04:26:59	117	0.0	8.35	5.1			
10/25/2018	04:27:59	1408	0.0	8.35	5.1			
10/25/2018	04:28:59	1341	0.0	8.35	5.1			
10/25/2018	04:29:59	6669	0.0	8.35	5.1			
10/25/2018	04:30:59	6529	0.0	8.35	5.1			
10/25/2018	04:31:59	6514	0.0	8.35	5.1			
10/25/2018	04:32:59	6504	0.0	8.35	5.1			
10/25/2018	04:33:59	6496	0.0	8.35	5.1			
10/25/2018	04:34:59	1	0.0	8.35	5.1			
10/25/2018	04:35:59	64	0.0	8.36	5.1			
10/25/2018	04:36:59	67	0.0	8.36	5.1			
10/25/2018	04:37:29	72	0.0	8.36	5.1	Water Sample Taken/Tested		
10/25/2018	04:37:31	71	0.0	8.36	5.1	End Water		
10/25/2018	04:37:35	72	0.0	8.36	5.1	Start Pumping Spacer		
10/25/2018	04:37:37	73	0.0	8.35	5.1	Biocide Added @0.01gal/bbl		
10/25/2018	04:37:59	75	0.0	8.36	5.1			
10/25/2018	04:38:59	84	0.0	8.36	5.1			
10/25/2018	04:39:59	346	3.0	11.66	0.7			
10/25/2018	04:40:59	223	1.4	11.06	4.0			
10/25/2018	04:41:59	326	1.4	11.10	5.5			
10/25/2018	04:42:59	460	1.4	10.91	6.9			
10/25/2018	04:43:59	213	1.4	10.87	8.3			
10/25/2018	04:44:59	205	1.4	10.88	9.8			
10/25/2018	04:45:59	391	4.4	10.97	11.3			
10/25/2018	04:46:59	208	1.4	10.86	12.8			
10/25/2018	04:47:59	187	1.4	10.87	14.2			
10/25/2018	04:48:59	267	2.0	10.85	16.1			
10/25/2018	04:49:59	168	1.3	10.89	18.2			
10/25/2018	04:50:59	195	1.4	10.92	19.6			
10/25/2018	04:51:59	425	4.2	10.98	22.3			
10/25/2018	04:52:59	369	4.2	10.96	26.6			
10/25/2018	04:53:59	459	3.7	10.93	30.6			
10/25/2018	04:54:59	279	3.6	10.93	34.2			
10/25/2018	04:55:59	560	4.5	10.94	38.6			
10/25/2018	04:56:59	419	4.3	10.92	42.9			
10/25/2018	04:57:59	495	4.1	10.97	47.1			
10/25/2018	04:58:59	206	4.0	10.95	51.1			
10/25/2018	05:00:59	324	4.4	11.10	59.7			
10/25/2018	05:01:59	361	4.7	10.81	64.4			
10/25/2018	05:02:59	380	4.7	10.81	69.0			
10/25/2018	05:03:59	322	5.1	10.86	73.9			
10/25/2018	05:04:59	21	0.0	11.35	0.0			
10/25/2018	05:05:59	18	0.0	11.16	0.0			
10/25/2018	05:06:12	17	0.0	11.16	0.0	End Spacer		
10/25/2018	05:06:13	17	0.0	11.17	0.0	Reset Total, Vol = 82.36 bbl		
10/25/2018	05:06:59	16	0.0	11.21	0.0			
10/25/2018	05:07:59	16	0.0	11.24	0.0			
10/25/2018	05:08:59	15	0.0	10.84	0.0			
10/25/2018	05:09:59	180	3.2	11.63	0.8			
10/25/2018	05:10:15	317	4.1	11.60	1.8	Drop Bottom Plug		

Well			Field	Job Start		Customer	Job Number	
Cowboy 21-8HZ			Wattenberg		Oct/25/2018		Anadarko	DN38-00253
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
10/25/2018	05:11:17	379	4.1	11.79	6.1	Start Mixing Lead Slurry		
10/25/2018	05:11:59	476	4.1	11.87	9.0			
10/25/2018	05:12:59	432	4.1	11.87	13.2			
10/25/2018	05:13:18	441	4.1	11.87	14.5	Wet and Dry Samples Taken		
10/25/2018	05:13:19	451	4.1	11.88	14.5	Good Returns		
10/25/2018	05:13:59	422	4.1	11.86	17.3			
10/25/2018	05:14:59	430	4.1	11.92	21.4			
10/25/2018	05:15:59	417	4.1	11.99	25.6			
10/25/2018	05:16:59	415	4.1	11.98	29.7			
10/25/2018	05:17:59	381	4.1	11.94	33.8			
10/25/2018	05:18:59	370	4.1	11.91	37.9			
10/25/2018	05:19:59	399	4.1	11.93	42.0			
10/25/2018	05:20:59	400	4.1	11.95	46.2			
10/25/2018	05:21:59	397	4.1	11.95	50.3			
10/25/2018	05:22:59	444	4.3	11.94	54.6			
10/25/2018	05:23:59	409	4.4	11.92	58.9			
10/25/2018	05:24:59	421	4.3	11.88	63.2			
10/25/2018	05:25:59	405	4.3	11.83	67.5			
10/25/2018	05:26:59	406	4.3	11.88	71.9			
10/25/2018	05:27:59	434	4.3	11.91	76.2			
10/25/2018	05:28:59	438	4.3	11.96	80.5			
10/25/2018	05:29:59	448	4.3	11.98	84.8			
10/25/2018	05:30:59	454	4.3	11.99	89.2			
10/25/2018	05:31:59	442	4.3	11.99	93.5			
10/25/2018	05:32:59	457	4.3	12.01	97.8			
10/25/2018	05:33:59	459	4.3	12.02	102.1			
10/25/2018	05:34:59	454	4.3	12.00	106.5			
10/25/2018	05:35:59	453	4.3	11.99	110.8			
10/25/2018	05:36:59	427	4.3	12.00	115.1			
10/25/2018	05:37:59	432	4.3	12.02	119.4			
10/25/2018	05:38:59	432	4.3	12.01	123.8			
10/25/2018	05:39:59	415	4.3	11.93	128.1			
10/25/2018	05:40:59	426	4.3	11.88	132.4			
10/25/2018	05:41:59	428	4.3	11.92	136.7			
10/25/2018	05:42:59	426	4.3	11.95	141.1			
10/25/2018	05:43:59	433	4.3	11.96	145.4			
10/25/2018	05:44:59	435	4.3	11.97	149.8			
10/25/2018	05:45:59	433	4.4	11.95	154.1			
10/25/2018	05:46:59	436	4.3	11.95	158.4			
10/25/2018	05:47:59	416	4.4	11.97	162.8			
10/25/2018	05:48:59	428	4.3	11.99	167.1			
10/25/2018	05:49:59	438	4.3	12.00	171.5			
10/25/2018	05:50:59	426	4.3	12.00	175.8			
10/25/2018	05:51:59	439	4.4	11.99	180.2			
10/25/2018	05:52:59	439	4.3	12.00	184.5			
10/25/2018	05:53:59	414	4.4	12.01	188.9			
10/25/2018	05:54:59	445	4.4	12.02	193.2			
10/25/2018	05:55:59	417	4.4	12.02	197.6			
10/25/2018	05:56:59	409	4.4	11.96	201.9			
10/25/2018	05:57:59	436	4.4	12.00	206.3			
10/25/2018	05:58:59	410	4.4	11.99	210.6			
10/25/2018	05:59:59	404	4.3	11.97	215.0			
10/25/2018	06:00:59	425	4.3	11.98	219.3			
10/25/2018	06:01:59	414	4.3	12.00	223.7			

Well			Field	Job Start		Customer	Job Number	
Cowboy 21-8HZ			Wattenberg		Oct/25/2018		Anadarko	DN38-00253
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
10/25/2018	06:02:59	434	4.3	12.02	228.0			
10/25/2018	06:03:59	449	4.3	12.03	232.3			
10/25/2018	06:04:59	419	4.3	12.03	236.7			
10/25/2018	06:05:59	448	4.4	12.03	241.1			
10/25/2018	06:06:59	438	4.4	12.04	245.4			
10/25/2018	06:07:59	440	4.4	12.04	249.8			
10/25/2018	06:08:59	439	4.4	12.03	254.1			
10/25/2018	06:09:59	424	4.4	12.02	258.5			
10/25/2018	06:10:59	417	4.4	12.00	262.8			
10/25/2018	06:11:59	382	4.4	11.83	267.2			
10/25/2018	06:12:59	408	4.4	12.02	271.6			
10/25/2018	06:13:59	416	4.4	11.99	275.9			
10/25/2018	06:14:30	411	4.4	11.99	278.2	End Lead Slurry		
10/25/2018	06:14:44	186	4.2	12.00	279.2	Reset Total, Vol = 279.35 bbl		
10/25/2018	06:14:59	17	0.0	12.37	0.0			
10/25/2018	06:15:59	18	0.0	12.05	0.0			
10/25/2018	06:16:59	18	0.0	12.02	0.0			
10/25/2018	06:17:59	18	0.0	12.01	0.0			
10/25/2018	06:18:59	579	5.2	14.96	1.2			
10/25/2018	06:19:59	903	7.0	13.70	7.2			
10/25/2018	06:20:53	945	7.6	13.58	14.0	Start Mixing Tail Slurry		
10/25/2018	06:20:59	884	7.6	13.56	14.8			
10/25/2018	06:21:54	956	7.9	13.60	22.0	Start Rotating Casing @ 30 rpm		
10/25/2018	06:21:59	962	7.9	13.60	22.6			
10/25/2018	06:22:59	932	7.9	13.51	30.5			
10/25/2018	06:23:59	949	7.9	13.59	38.4			
10/25/2018	06:24:55	936	7.9	13.56	45.8	Wet and Dry Samples Taken		
10/25/2018	06:24:59	950	7.9	13.54	46.3			
10/25/2018	06:25:59	949	7.9	13.57	54.2			
10/25/2018	06:26:59	950	7.9	13.57	62.1			
10/25/2018	06:27:59	951	7.9	13.65	70.0			
10/25/2018	06:28:59	905	7.9	13.41	78.0			
10/25/2018	06:29:59	930	7.9	13.44	85.9			
10/25/2018	06:30:59	1015	7.9	13.72	93.8			
10/25/2018	06:31:59	857	8.0	13.23	101.7			
10/25/2018	06:32:59	925	7.9	13.49	109.6			
10/25/2018	06:33:59	941	7.9	13.57	117.5			
10/25/2018	06:34:59	906	7.9	13.50	125.4			
10/25/2018	06:35:59	886	7.9	13.51	133.3			
10/25/2018	06:36:59	954	7.9	13.51	141.2			
10/25/2018	06:37:59	942	7.9	13.56	149.1			
10/25/2018	06:38:59	937	7.9	13.52	156.9			
10/25/2018	06:39:59	922	7.9	13.51	164.9			
10/25/2018	06:40:59	945	7.9	13.54	172.8			
10/25/2018	06:41:59	918	7.9	13.54	180.7			
10/25/2018	06:42:59	918	7.9	13.58	188.6			
10/25/2018	06:43:59	892	7.9	13.53	196.5			
10/25/2018	06:44:59	887	7.9	13.38	204.4			
10/25/2018	06:45:59	878	7.9	13.34	212.3			
10/25/2018	06:46:59	902	7.9	13.63	220.2			
10/25/2018	06:47:59	944	7.9	13.63	228.1			
10/25/2018	06:48:59	918	7.9	13.51	236.0			
10/25/2018	06:49:59	895	7.9	13.51	243.9			
10/25/2018	06:50:59	949	7.9	13.52	251.8			

Well			Field	Job Start		Customer		Job Number	
Cowboy 21-8HZ			Wattenberg		Oct/25/2018		Anadarko		DN38-00253
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
10/25/2018	06:52:59	917	7.9	13.51	267.6				
10/25/2018	06:53:59	898	7.9	13.54	275.5				
10/25/2018	06:54:59	923	7.9	13.53	283.4				
10/25/2018	06:55:59	917	7.9	13.56	291.3				
10/25/2018	06:56:59	958	7.9	13.60	299.2				
10/25/2018	06:57:59	940	7.9	13.52	307.1				
10/25/2018	06:58:59	896	7.9	13.49	315.0				
10/25/2018	06:59:59	902	7.9	13.45	322.9				
10/25/2018	07:00:59	904	7.9	13.44	330.8				
10/25/2018	07:01:59	896	7.9	13.51	338.7				
10/25/2018	07:02:59	906	7.9	13.65	346.7				
10/25/2018	07:03:59	907	7.9	13.54	354.6				
10/25/2018	07:04:59	911	7.9	13.55	362.5				
10/25/2018	07:05:59	889	8.0	13.41	370.4				
10/25/2018	07:06:59	208	4.2	12.40	377.1				
10/25/2018	07:07:59	681	6.4	13.61	381.5				
10/25/2018	07:08:59	902	7.9	13.50	389.1				
10/25/2018	07:09:59	871	7.9	13.50	397.0				
10/25/2018	07:10:59	882	7.9	13.52	404.9				
10/25/2018	07:11:59	913	7.9	13.53	412.8				
10/25/2018	07:12:59	946	7.9	13.55	420.7				
10/25/2018	07:13:59	916	7.9	13.49	428.4				
10/25/2018	07:14:59	872	7.9	13.49	436.4				
10/25/2018	07:15:59	925	7.9	13.51	444.3				
10/25/2018	07:16:59	907	7.9	13.50	452.2				
10/25/2018	07:17:59	871	7.9	13.46	460.1				
10/25/2018	07:18:59	900	7.9	13.53	467.9				
10/25/2018	07:19:59	891	7.9	13.52	475.8				
10/25/2018	07:20:59	909	7.9	13.50	483.7				
10/25/2018	07:21:59	932	7.9	13.48	491.6				
10/25/2018	07:22:22	886	7.9	13.51	494.6	End Tail Slurry			
10/25/2018	07:22:59	886	7.9	13.54	499.4				
10/25/2018	07:23:59	917	7.9	13.54	507.3				
10/25/2018	07:24:59	933	7.9	13.49	515.2				
10/25/2018	07:25:38	1021	7.8	13.82	520.3	Reset Total, Vol = 528.79 bbl			
10/25/2018	07:25:59	1035	7.8	13.85	523.0				
10/25/2018	07:26:59	913	7.9	13.51	530.8				
10/25/2018	07:27:59	31	0.0	13.67	0.0				
10/25/2018	07:28:59	28	0.0	13.68	0.0				
10/25/2018	07:29:59	27	0.0	13.68	0.0				
10/25/2018	07:30:59	26	0.0	13.68	0.0				
10/25/2018	07:31:59	90	0.6	13.52	0.0				
10/25/2018	07:32:59	78	1.3	10.16	0.9				
10/25/2018	07:33:59	58	2.5	9.26	3.1				
10/25/2018	07:34:59	50	2.5	8.84	5.6				
10/25/2018	07:35:59	37	2.0	8.47	7.9				
10/25/2018	07:36:59	45	2.5	8.63	10.3				
10/25/2018	07:37:59	58	2.3	8.48	12.3				
10/25/2018	07:38:59	58	2.5	8.49	14.8				
10/25/2018	07:39:59	32	1.5	8.31	16.7				
10/25/2018	07:40:59	67	2.4	8.38	18.9				
10/25/2018	07:41:59	62	2.3	8.30	21.1				
10/25/2018	07:42:59	6	0.0	8.67	21.3				
10/25/2018	07:43:59	7	0.0	8.40	0.0				

Well			Field	Job Start		Customer	Job Number	
Cowboy 21-8HZ			Wattenberg		Oct/25/2018		Anadarko	DN38-00253
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
10/25/2018	07:45:41	401	7.8	8.40	7.4	Washup Pump and Line		
10/25/2018	07:45:43	371	7.8	8.40	7.7	Drop Top Plug		
10/25/2018	07:45:44	405	7.8	8.40	7.8	Start Displacement		
10/25/2018	07:45:59	389	7.7	8.39	9.8			
10/25/2018	07:46:59	403	7.7	8.40	17.5			
10/25/2018	07:47:08	368	7.7	8.40	18.7	Sugar in First 20 Bbls		
10/25/2018	07:47:59	397	7.8	8.36	25.3			
10/25/2018	07:48:59	370	7.8	8.37	32.9			
10/25/2018	07:49:59	388	7.8	8.37	40.8			
10/25/2018	07:50:59	1062	7.7	8.36	48.5			
10/25/2018	07:51:59	1046	7.7	8.36	56.2			
10/25/2018	07:52:59	1096	7.7	8.36	63.9			
10/25/2018	07:53:59	1162	7.8	8.36	71.5			
10/25/2018	07:54:59	1230	7.8	8.36	79.4			
10/25/2018	07:55:59	1313	7.8	8.36	87.2			
10/25/2018	07:56:59	1370	7.8	8.36	95.0			
10/25/2018	07:57:59	1457	7.8	8.36	102.9			
10/25/2018	07:58:59	1533	7.8	8.36	110.7			
10/25/2018	07:59:59	1596	7.8	8.36	118.5			
10/25/2018	08:00:59	1691	7.8	8.36	126.3			
10/25/2018	08:01:59	1817	7.8	8.36	134.0			
10/25/2018	08:02:59	1862	7.8	8.36	141.8			
10/25/2018	08:03:59	1955	7.8	8.36	149.6			
10/25/2018	08:04:59	2027	7.8	8.36	157.4			
10/25/2018	08:05:59	2096	7.7	8.36	165.2			
10/25/2018	08:06:59	2196	7.8	8.36	172.9			
10/25/2018	08:07:59	2286	7.8	8.36	180.7			
10/25/2018	08:08:59	2332	7.8	8.36	188.4			
10/25/2018	08:09:59	2301	7.8	8.36	196.2			
10/25/2018	08:10:59	2316	7.7	8.36	203.9			
10/25/2018	08:11:59	2293	7.8	8.36	211.7			
10/25/2018	08:12:59	2354	7.7	8.36	219.4			
10/25/2018	08:13:59	2379	7.8	8.36	227.2			
10/25/2018	08:14:59	2397	7.8	8.36	234.9			
10/25/2018	08:15:59	2417	7.7	8.36	242.7			
10/25/2018	08:16:59	2416	7.7	8.36	250.4			
10/25/2018	08:17:59	2426	7.7	8.36	258.2			
10/25/2018	08:18:59	2475	7.7	8.36	265.9			
10/25/2018	08:19:59	2493	7.7	8.36	273.6			
10/25/2018	08:20:59	2523	7.7	8.36	281.3			
10/25/2018	08:21:59	2527	7.8	8.36	289.1			
10/25/2018	08:22:59	2554	7.7	8.36	296.8			
10/25/2018	08:23:59	2603	7.7	8.36	304.4			
10/25/2018	08:24:59	2643	7.7	8.36	312.3			
10/25/2018	08:25:59	2660	7.7	8.36	320.0			
10/25/2018	08:26:59	2659	7.7	8.36	327.7			
10/25/2018	08:27:59	2682	7.7	8.36	335.5			
10/25/2018	08:28:59	2723	7.7	8.36	343.2			
10/25/2018	08:29:59	2768	7.7	8.36	350.9			
10/25/2018	08:30:59	2792	7.7	8.36	358.6			
10/25/2018	08:31:59	2801	7.7	8.36	366.4			
10/25/2018	08:32:59	2860	7.7	8.36	374.1			
10/25/2018	08:33:59	2863	7.7	8.36	381.8			
10/25/2018	08:34:59	2907	7.7	8.36	389.5			

Well			Field	Job Start		Customer	Job Number
Cowboy 21-8HZ			Wattenberg	Oct/25/2018		Anadarko	DN38-00253
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/25/2018	08:36:59	2934	7.7	8.36	404.9		
10/25/2018	08:37:59	2958	7.7	8.36	412.6		
10/25/2018	08:38:59	2627	6.1	8.36	419.5		
10/25/2018	08:39:59	2631	6.0	8.36	425.5		
10/25/2018	08:40:59	2669	6.1	8.36	431.5		
10/25/2018	08:41:59	2651	6.0	8.36	437.6		
10/25/2018	08:42:59	2686	6.1	8.36	443.6		
10/25/2018	08:43:59	2683	6.0	8.36	449.7		
10/25/2018	08:44:59	2721	6.1	8.36	455.7		
10/25/2018	08:45:59	2764	6.0	8.36	461.7		
10/25/2018	08:46:59	2750	6.0	8.36	467.8		
10/25/2018	08:47:59	2765	6.0	8.36	473.8		
10/25/2018	08:48:59	2788	6.0	8.36	479.8		
10/25/2018	08:49:59	2181	2.9	8.36	484.5		
10/25/2018	08:50:10	2193	2.9	8.36	485.0	10 Bbls Spacer to Surface	
10/25/2018	08:50:59	2129	2.9	8.36	487.4		
10/25/2018	08:51:59	2147	2.9	8.36	490.3		
10/25/2018	08:52:59	2145	2.9	8.36	493.3		
10/25/2018	08:53:59	2175	2.9	8.36	496.2		
10/25/2018	08:54:59	2144	2.9	8.36	499.1		
10/25/2018	08:55:59	2935	0.0	8.36	501.6		
10/25/2018	08:56:05	2954	0.0	8.36	501.6	Bump Top Plug 2100-3000	
10/25/2018	08:56:06	2922	0.0	8.36	501.6	End Displacement	
10/25/2018	08:56:09	2962	0.0	8.36	501.6	Reset Total, Vol = 496.3 bbl	
10/25/2018	08:56:10	2980	0.0	8.36	501.6	Start 15 min Casing Test	
10/25/2018	08:56:59	2976	0.0	8.36	501.6		
10/25/2018	08:57:59	3014	0.0	8.36	501.6		
10/25/2018	08:58:59	3003	0.0	8.36	501.6		
10/25/2018	08:59:59	3029	0.0	8.36	501.6		
10/25/2018	09:00:59	3060	0.0	8.37	501.6		
10/25/2018	09:01:59	3074	0.0	8.37	501.6		
10/25/2018	09:02:59	3086	0.0	8.37	501.6		
10/25/2018	09:03:59	3104	0.0	8.37	501.6		
10/25/2018	09:04:59	3120	0.0	8.37	501.6		
10/25/2018	09:05:59	3132	0.0	8.37	501.6		
10/25/2018	09:06:59	3145	0.0	8.37	501.6		
10/25/2018	09:07:59	3160	0.0	8.37	501.6		
10/25/2018	09:08:59	3173	0.0	8.37	501.6		
10/25/2018	09:09:59	3186	0.0	8.37	501.6		
10/25/2018	09:10:59	3198	0.0	8.37	501.6		
10/25/2018	09:11:59	3210	0.0	8.37	0.0		
10/25/2018	09:12:59	3224	0.0	8.37	0.0		
10/25/2018	09:13:59	3625	1.7	8.36	0.5		
10/25/2018	09:14:59	4229	1.8	8.36	2.3		
10/25/2018	09:15:23	3911	1.8	8.35	0.5	Open Tool, 4800 psi	
10/25/2018	09:15:24	3929	1.8	8.35	0.6	Pump 5 Bbl Wet Shoe	
10/25/2018	09:15:59	3089	1.8	8.36	1.6		
10/25/2018	09:16:59	2575	1.8	8.36	3.4		
10/25/2018	09:17:59	2075	0.0	8.36	4.7		
10/25/2018	09:18:59	226	0.0	8.36	4.7		
10/25/2018	09:19:49	1	0.0	8.36	4.7	Floats Hold, 3.5 Bbls Back	
10/25/2018	09:19:59	1	0.0	8.36	4.7		

Well Cowboy 21-8HZ	Field Wattenberg	Job Start Oct/25/2018	Customer Anadarko	Job Number DN38-00253
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 5.7	N2	Mud	Maximum Rate 9.3	Total Slurry 804.2	Mud 0.0	Spacer 80.0	N2					
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 6685	Final 2	Average 1192	Bump Plug to 3000	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 801.2 bbl	Displacement 496.3 bbl	Mix Water Temp 69 degF	Cement Circulated to Surface? <input type="checkbox"/>		Volume bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative			Schlumberger Supervisor Ryan Drilling/Guy Olson			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					