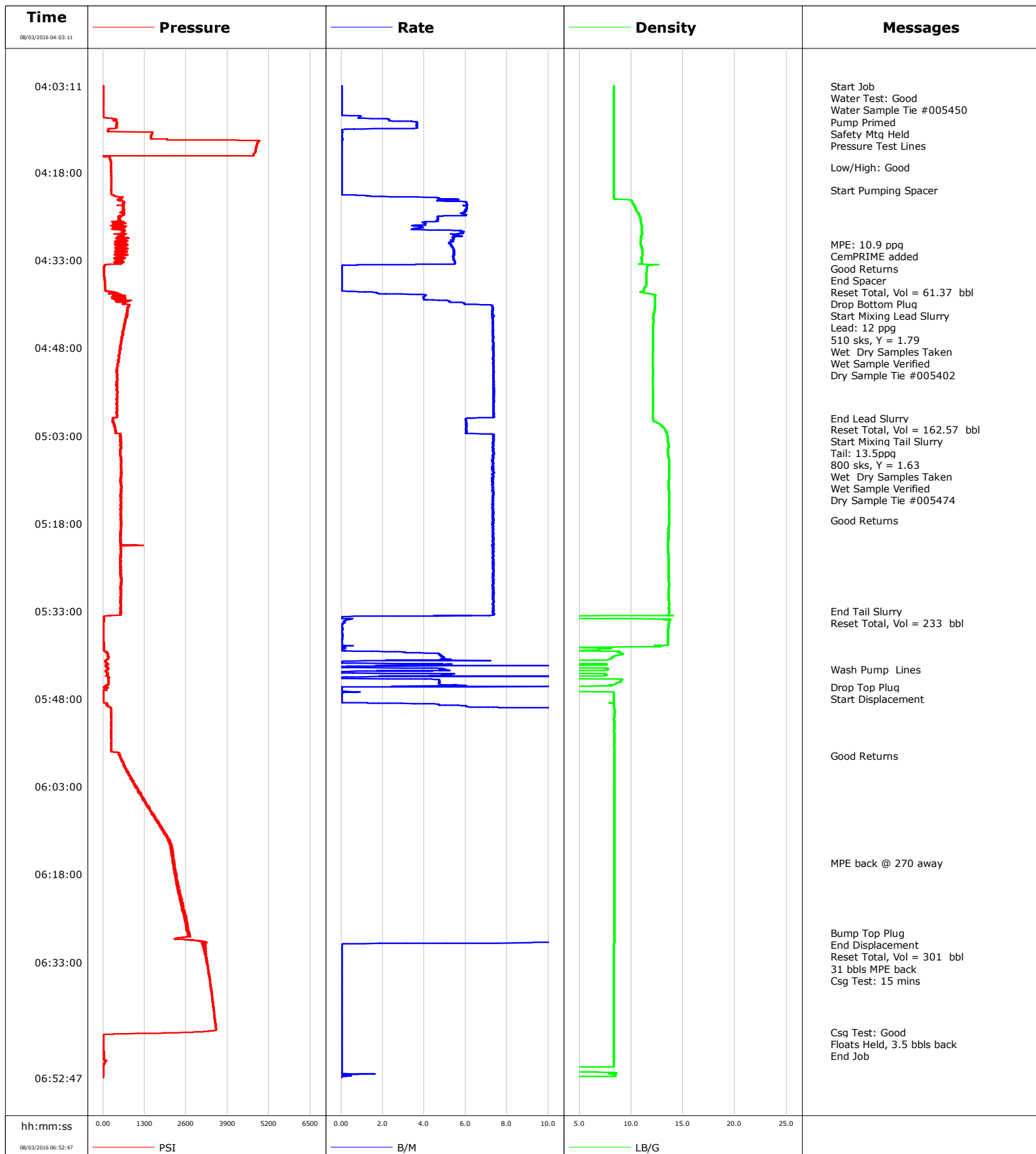


Well Land 15C-32HZ
Field Wattenberg
Engineer Matlock/Baird
Country United States

Client Anadarko
SIR No. DDGG-00122
Job Type Production
Job Date 08-03-2016



Cementing Service Report

				Customer Anadarko				Job Number DDGG-00122							
Well Land 15C-32HZ			Location (legal)			Schlumberger Location Cheyenne			Job Start Aug/02/2016						
Field Wattenberg		Formation Name/Type			Deviation deg		Bit Size 7.9 in		Well MD 13074.0 ft		Well TVD 7497.0 ft				
County Weld		State/Province CO			BHP psi		BHST 232 degF		BHCT 226 degF		Pore Press. Gradient lb/gal				
Well Master 0631662990		API/UWI 05123423040000													
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		13074.0		5.5		17.0		P-110			
						0.0		0.0		0.0					
Drilling Fluid Type		Max. Density 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 Double Cement head		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 301.0 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 psi						Shoe Type Float				Squeeze Type					
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 13074.0 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 Aug/02/2016 23:00		Arrived on Location Aug/02/2016 23:00		Leave Location Aug/03/2016 08:00		Collar Type Float				Tail Pipe Depth ft					
						Collar Depth 12982.0 ft				Sqz. Total Vol. bbl					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
08/03/2016	04:03:11	2	0.0	8.34	20.8										
08/03/2016	04:03:12	2	0.0	8.34	20.8	Start Job									
08/03/2016	04:03:13	3	0.0	8.34	20.8	Water Test: Good									
08/03/2016	04:03:14	3	0.0	8.34	20.8	Water Sample Tie #005450									
08/03/2016	04:03:15	2	0.0	8.34	20.8	Pump Primed									
08/03/2016	04:03:16	2	0.0	8.34	20.8	Safety Mtg Held									
08/03/2016	04:04:01	3	0.0	8.34	20.8										
08/03/2016	04:04:51	2	0.0	8.34	20.8										
08/03/2016	04:05:41	2	0.0	8.34	20.8										
08/03/2016	04:06:31	4	0.0	8.34	20.8										
08/03/2016	04:07:21	0	0.0	8.34	20.8										
08/03/2016	04:08:11	0	0.0	8.33	0.0										
08/03/2016	04:09:01	421	2.3	8.33	0.9										
08/03/2016	04:09:51	415	3.6	8.33	3.7										
08/03/2016	04:10:41	157	0.0	8.34	6.2										
08/03/2016	04:11:00	154	0.0	8.34	6.2	Pressure Test Lines									
08/03/2016	04:11:31	1517	0.0	8.33	6.2										
08/03/2016	04:12:21	2004	0.1	8.33	6.3										
08/03/2016	04:13:11	4820	0.0	8.33	6.3										
08/03/2016	04:14:01	4787	0.0	8.33	6.3										
08/03/2016	04:14:51	4716	0.0	8.32	6.3										

Well			Field	Job Start		Customer	Job Number	
Land 15C-32HZ			Wattenberg		Aug/02/2016		Anadarko	DDGG-00122
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
08/03/2016	04:16:31	238	0.0	8.32	6.3			
08/03/2016	04:17:08	244	0.0	8.32	6.3	Low/High: Good		
08/03/2016	04:17:21	244	0.0	8.32	6.3			
08/03/2016	04:18:11	249	0.0	8.32	6.3			
08/03/2016	04:19:01	252	0.0	8.32	6.3			
08/03/2016	04:19:51	254	0.0	8.32	6.3			
08/03/2016	04:20:41	250	0.0	8.32	6.3			
08/03/2016	04:21:00	249	0.0	8.32	6.3	Start Pumping Spacer		
08/03/2016	04:21:31	252	0.0	8.32	6.3			
08/03/2016	04:22:21	549	4.7	8.34	7.4			
08/03/2016	04:23:11	653	6.1	10.10	11.8			
08/03/2016	04:24:01	622	6.1	10.37	16.8			
08/03/2016	04:24:51	530	5.9	10.64	21.8			
08/03/2016	04:25:41	517	4.7	10.87	26.4			
08/03/2016	04:26:31	363	4.0	10.93	30.2			
08/03/2016	04:27:21	519	3.8	11.00	33.5			
08/03/2016	04:28:11	643	5.8	11.02	37.2			
08/03/2016	04:29:01	664	5.5	10.93	41.9			
08/03/2016	04:29:51	383	5.4	10.91	46.4			
08/03/2016	04:30:17	519	5.3	10.91	48.7	MPE: 10.9 ppg		
08/03/2016	04:30:18	766	5.3	10.91	48.8	CemPRIME added		
08/03/2016	04:30:19	364	5.3	10.91	48.9	Good Returns		
08/03/2016	04:30:41	591	5.3	10.98	50.8			
08/03/2016	04:31:31	527	5.4	11.04	55.3			
08/03/2016	04:32:21	463	5.4	11.04	59.9			
08/03/2016	04:33:11	611	5.5	11.02	64.4			
08/03/2016	04:33:43	161	4.8	10.76	67.3	End Spacer		
08/03/2016	04:33:51	54	0.4	11.91	67.6	Reset Total, Vol = 61.37 bbl		
08/03/2016	04:34:00	39	0.0	11.56	67.7	Drop Bottom Plug		
08/03/2016	04:34:01	37	0.0	11.56	67.7			
08/03/2016	04:34:51	22	0.0	11.47	67.7			
08/03/2016	04:35:41	23	0.0	11.45	67.7			
08/03/2016	04:36:31	47	0.0	11.44	67.7			
08/03/2016	04:37:21	59	0.0	11.42	67.7			
08/03/2016	04:38:11	72	0.0	11.19	67.7			
08/03/2016	04:39:00	709	4.0	12.33	69.1	Start Mixing Lead Slurry		
08/03/2016	04:39:01	309	4.1	12.33	69.2			
08/03/2016	04:39:51	544	4.9	12.30	72.5			
08/03/2016	04:40:41	818	7.2	12.31	77.3			
08/03/2016	04:41:31	763	7.3	12.24	83.3			
08/03/2016	04:42:07	753	7.3	12.17	87.7	Lead: 12 ppg		
08/03/2016	04:42:21	762	7.3	12.15	89.4			
08/03/2016	04:42:23	763	7.3	12.14	89.6	510 sks, Y = 1.79		
08/03/2016	04:43:11	694	7.3	12.14	95.5			
08/03/2016	04:43:50	683	7.3	12.13	100.2	Wet Dry Samples Taken		
08/03/2016	04:43:51	693	7.3	12.13	100.4	Wet Sample Verified		
08/03/2016	04:44:01	671	7.3	12.12	101.6			
08/03/2016	04:44:12	658	7.3	12.11	102.9	Dry Sample Tie #005402		
08/03/2016	04:44:51	647	7.3	12.10	107.7			
08/03/2016	04:45:41	603	7.3	12.10	113.8			
08/03/2016	04:46:31	590	7.3	12.10	119.8			
08/03/2016	04:47:21	559	7.3	12.09	125.9			
08/03/2016	04:48:11	536	7.3	12.09	132.1			
08/03/2016	04:49:01	514	7.3	12.08	138.2			

Well			Field	Job Start		Customer		Job Number	
Land 15C-32HZ			Wattenberg		Aug/02/2016		Anadarko		DDGG-00122
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
08/03/2016	04:50:41	449	7.3	12.06	150.4				
08/03/2016	04:51:31	433	7.3	12.09	156.5				
08/03/2016	04:52:21	441	7.3	12.10	162.6				
08/03/2016	04:53:11	445	7.4	12.08	168.7				
08/03/2016	04:54:01	432	7.3	12.08	174.8				
08/03/2016	04:54:51	435	7.4	12.07	181.0				
08/03/2016	04:55:41	440	7.3	12.10	187.1				
08/03/2016	04:56:31	441	7.3	12.10	193.2				
08/03/2016	04:57:21	441	7.3	12.10	199.3				
08/03/2016	04:58:11	434	7.3	12.11	205.4				
08/03/2016	04:59:01	420	7.3	12.07	211.6				
08/03/2016	04:59:51	433	7.4	12.08	217.7				
08/03/2016	05:00:00	310	6.2	12.08	218.8	End Lead Slurry			
08/03/2016	05:00:41	299	6.0	12.40	222.9				
08/03/2016	05:01:31	361	6.0	13.07	227.9				
08/03/2016	05:01:54	369	6.0	13.23	230.2	Reset Total, Vol = 162.57 bbl			
08/03/2016	05:02:01	396	6.0	13.28	230.9	Start Mixing Tail Slurry			
08/03/2016	05:02:04	388	6.0	13.29	231.2	Tail: 13.5ppg			
08/03/2016	05:02:06	381	6.0	13.30	231.4	800 sks, Y = 1.63			
08/03/2016	05:02:07	373	6.0	13.31	231.5	Wet Dry Samples Taken			
08/03/2016	05:02:21	381	6.0	13.35	232.9				
08/03/2016	05:03:00	524	7.4	13.48	237.2	Wet Sample Verified			
08/03/2016	05:03:11	554	7.3	13.50	238.6				
08/03/2016	05:04:00	530	7.3	13.53	244.6	Dry Sample Tie #005474			
08/03/2016	05:04:01	533	7.3	13.53	244.7				
08/03/2016	05:04:51	568	7.3	13.60	250.8				
08/03/2016	05:05:41	537	7.4	13.52	256.9				
08/03/2016	05:06:31	556	7.3	13.56	263.0				
08/03/2016	05:07:21	565	7.3	13.65	269.1				
08/03/2016	05:08:11	551	7.3	13.65	275.2				
08/03/2016	05:09:01	568	7.4	13.64	281.3				
08/03/2016	05:09:51	554	7.3	13.62	287.4				
08/03/2016	05:10:41	563	7.3	13.61	293.5				
08/03/2016	05:11:31	554	7.3	13.60	299.5				
08/03/2016	05:12:21	554	7.3	13.61	305.6				
08/03/2016	05:13:11	557	7.3	13.63	311.7				
08/03/2016	05:14:01	544	7.3	13.63	317.8				
08/03/2016	05:14:51	563	7.3	13.61	323.9				
08/03/2016	05:15:41	544	7.3	13.64	330.0				
08/03/2016	05:16:31	549	7.3	13.65	336.1				
08/03/2016	05:17:21	566	7.3	13.63	342.2				
08/03/2016	05:17:28	552	7.3	13.63	343.0	Good Returns			
08/03/2016	05:18:11	556	7.3	13.62	348.3				
08/03/2016	05:19:01	559	7.3	13.59	354.4				
08/03/2016	05:19:51	552	7.3	13.57	360.5				
08/03/2016	05:20:41	538	7.3	13.57	366.6				
08/03/2016	05:21:31	555	7.3	13.56	372.7				
08/03/2016	05:22:21	557	7.3	13.56	378.8				
08/03/2016	05:23:11	551	7.3	13.57	384.9				
08/03/2016	05:24:01	533	7.3	13.58	391.0				
08/03/2016	05:24:51	540	7.3	13.60	397.1				
08/03/2016	05:25:41	540	7.3	13.60	403.2				
08/03/2016	05:26:31	537	7.3	13.57	409.3				
08/03/2016	05:27:21	584	7.3	13.59	415.4				

Well			Field	Job Start		Customer		Job Number	
Land 15C-32HZ			Wattenberg		Aug/02/2016		Anadarko		DDGG-00122
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
08/03/2016	05:29:01	540	7.3	13.61	427.6				
08/03/2016	05:29:51	558	7.3	13.59	433.7				
08/03/2016	05:30:41	544	7.3	13.60	439.8				
08/03/2016	05:31:31	546	7.3	13.62	445.9				
08/03/2016	05:32:21	561	7.3	13.62	452.0				
08/03/2016	05:33:00	540	7.3	13.65	456.8	End Tail Slurry			
08/03/2016	05:33:11	541	7.3	13.66	458.1				
08/03/2016	05:34:00	27	0.0	-0.04	463.1	Reset Total, Vol = 233 bbl			
08/03/2016	05:34:01	27	0.0	-0.04	463.1				
08/03/2016	05:34:51	17	0.1	13.67	463.2				
08/03/2016	05:35:41	9	0.0	13.58	463.3				
08/03/2016	05:36:31	8	0.0	13.56	463.3				
08/03/2016	05:37:21	8	0.1	13.54	463.3				
08/03/2016	05:38:11	7	0.0	13.54	463.4				
08/03/2016	05:39:01	19	0.1	12.70	463.4				
08/03/2016	05:39:51	50	1.2	8.39	463.5				
08/03/2016	05:40:41	140	4.8	8.42	466.7				
08/03/2016	05:41:31	78	1.2	1.29	470.7				
08/03/2016	05:42:21	89	5.5	0.11	472.8				
08/03/2016	05:43:00	169	5.0	7.76	474.4	Wash Pump Lines			
08/03/2016	05:43:11	99	4.0	5.21	475.3				
08/03/2016	05:44:01	114	4.3	7.51	477.5				
08/03/2016	05:44:51	162	4.7	9.02	479.7				
08/03/2016	05:45:41	148	6.0	8.08	483.7				
08/03/2016	05:46:00	29	0.0	1.21	485.7	Drop Top Plug			
08/03/2016	05:46:31	92	0.0	-0.04	485.7				
08/03/2016	05:47:00	5	0.0	8.31	485.8	Start Displacement			
08/03/2016	05:47:21	12	0.0	8.33	485.8				
08/03/2016	05:48:11	11	0.0	8.33	485.8				
08/03/2016	05:49:01	101	4.7	8.33	487.1				
08/03/2016	05:49:51	253	19.7	8.36	492.9				
08/03/2016	05:50:41	247	20.0	8.36	499.5				
08/03/2016	05:51:31	256	19.7	8.35	506.1				
08/03/2016	05:52:21	256	19.6	8.37	512.8				
08/03/2016	05:53:11	254	19.8	8.36	519.4				
08/03/2016	05:54:01	262	19.9	8.36	526.0				
08/03/2016	05:54:51	259	19.8	8.35	532.6				
08/03/2016	05:55:41	254	19.6	8.35	539.2				
08/03/2016	05:56:31	251	19.9	8.36	545.9				
08/03/2016	05:57:21	504	19.9	8.36	552.5				
08/03/2016	05:57:46	518	19.8	8.36	555.8	Good Returns			
08/03/2016	05:58:11	567	19.7	8.36	559.1				
08/03/2016	05:59:01	630	20.0	8.36	565.7				
08/03/2016	05:59:51	687	19.9	8.36	572.3				
08/03/2016	06:00:41	805	19.7	8.36	579.0				
08/03/2016	06:01:31	877	20.0	8.35	585.6				
08/03/2016	06:02:21	961	19.9	8.36	592.2				
08/03/2016	06:03:11	1040	19.8	8.36	598.8				
08/03/2016	06:04:01	1170	19.7	8.35	605.4				
08/03/2016	06:04:51	1243	20.0	8.36	612.1				
08/03/2016	06:05:41	1325	19.9	8.36	618.7				
08/03/2016	06:06:31	1395	19.7	8.36	625.3				
08/03/2016	06:07:21	1519	20.0	8.36	631.9				
08/03/2016	06:08:11	1591	19.9	8.37	638.5				

Well			Field	Job Start		Customer		Job Number	
Land 15C-32HZ			Wattenberg		Aug/02/2016		Anadarko		DDGG-00122
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
08/03/2016	06:09:51	1823	20.0	8.35	651.8				
08/03/2016	06:10:41	1900	19.9	8.36	658.4				
08/03/2016	06:11:31	1972	19.8	8.36	665.0				
08/03/2016	06:12:21	2089	19.6	8.36	671.6				
08/03/2016	06:13:11	2158	20.0	8.36	678.3				
08/03/2016	06:14:01	2173	19.9	8.36	684.9				
08/03/2016	06:14:51	2189	19.7	8.36	691.5				
08/03/2016	06:15:41	2186	20.0	8.36	698.1				
08/03/2016	06:16:00	2193	20.0	8.36	700.6	MPE back @ 270 away			
08/03/2016	06:16:31	2194	20.0	8.37	704.7				
08/03/2016	06:17:21	2285	19.8	8.36	711.3				
08/03/2016	06:18:11	2297	20.0	8.35	718.0				
08/03/2016	06:19:01	2318	19.9	8.36	724.6				
08/03/2016	06:19:51	2308	19.9	8.36	731.2				
08/03/2016	06:20:41	2340	19.7	8.37	737.8				
08/03/2016	06:21:31	2371	20.1	8.37	744.4				
08/03/2016	06:22:21	2473	20.0	8.37	751.1				
08/03/2016	06:23:11	2507	19.7	8.37	757.7				
08/03/2016	06:24:01	2511	20.1	8.36	764.3				
08/03/2016	06:24:51	2531	20.0	8.37	770.9				
08/03/2016	06:25:41	2597	19.8	8.37	777.5				
08/03/2016	06:26:31	2660	20.1	8.36	784.1				
08/03/2016	06:27:21	2612	20.0	8.37	790.7				
08/03/2016	06:28:00	2709	20.0	8.37	795.9	Bump Top Plug			
08/03/2016	06:28:03	2648	20.0	8.37	796.3	End Displacement			
08/03/2016	06:28:04	2661	20.0	8.37	796.4	Reset Total, Vol = 301 bbl			
08/03/2016	06:28:11	2699	19.9	8.37	797.4				
08/03/2016	06:29:00	2345	19.9	8.37	803.2	31 bbls MPE back			
08/03/2016	06:29:01	2236	19.9	8.37	803.2				
08/03/2016	06:29:51	3091	1.1	8.34	804.8				
08/03/2016	06:30:00	3165	0.0	8.33	804.8	Csg Test: 15 mins			
08/03/2016	06:30:41	3167	0.0	8.33	804.8				
08/03/2016	06:31:31	3221	0.0	8.33	804.8				
08/03/2016	06:32:21	3238	0.0	8.33	804.8				
08/03/2016	06:33:11	3253	0.0	8.33	804.8				
08/03/2016	06:34:01	3278	0.0	8.33	804.8				
08/03/2016	06:34:51	3306	0.0	8.33	804.8				
08/03/2016	06:35:41	3333	0.0	8.34	804.8				
08/03/2016	06:36:31	3353	0.0	8.33	804.8				
08/03/2016	06:37:21	3375	0.0	8.33	804.8				
08/03/2016	06:38:11	3396	0.0	8.34	804.8				
08/03/2016	06:39:01	3415	0.0	8.33	804.8				
08/03/2016	06:39:51	3434	0.0	8.33	804.8				
08/03/2016	06:40:41	3453	0.0	8.33	804.8				
08/03/2016	06:41:31	3472	0.0	8.33	804.8				
08/03/2016	06:42:21	3489	0.0	8.33	804.8				
08/03/2016	06:43:11	3508	0.0	8.33	804.8				
08/03/2016	06:44:01	3526	0.0	8.33	804.8				
08/03/2016	06:44:51	3284	0.0	8.33	804.8				
08/03/2016	06:45:00	2813	0.0	8.33	804.8	Csg Test: Good			
08/03/2016	06:45:41	3	0.0	8.33	804.8				
08/03/2016	06:46:31	3	0.0	8.33	804.8				
08/03/2016	06:47:00	4	0.0	8.33	804.8	Floats Held, 3.5 bbls back			
08/03/2016	06:47:21	4	0.0	8.33	804.8				

Well			Field		Job Start	Customer		Job Number	
Land 15C-32HZ			Wattenberg		Aug/02/2016	Anadarko		DDGG-00122	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
08/03/2016	06:49:00	20	0.0	8.33	804.8	End Job			
08/03/2016	06:49:01	20	0.0	8.33	804.8				
08/03/2016	06:49:51	96	0.0	8.33	804.8				
08/03/2016	06:50:41	1	0.0	8.33	804.8				
08/03/2016	06:51:31	0	0.0	0.00	804.8				

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 6.5	N2	Mud	Maximum Rate 22.8		Total Slurry 396.0	Mud 0.0	Spacer 61.0	N2				
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 4904	Final 0	Average 1006	Bump Plug to 3200	Breakdown	Type	Volume bbl		Density lb/gal				
Avg. N2 Percent %	Designed Slurry Volume 394.0 bbl	Displacement 301.0 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 Josh Johnson			Schlumberger Supervisor Matlock/Baird			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					