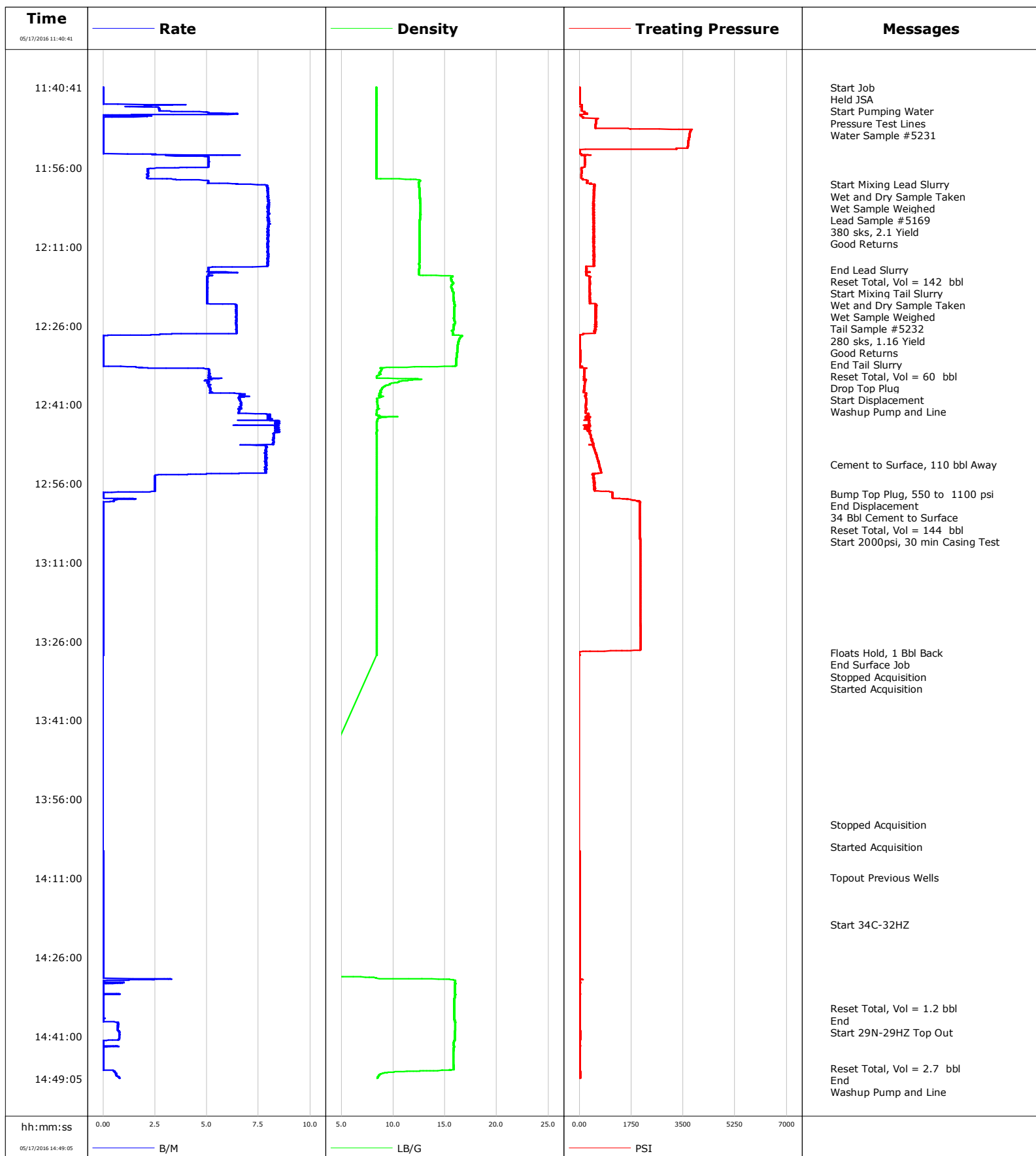


Well Land Fed 13N-32HZ
Field Wattenberg
Engineer Ryan Drilling/Ken Sovereign
Country United States

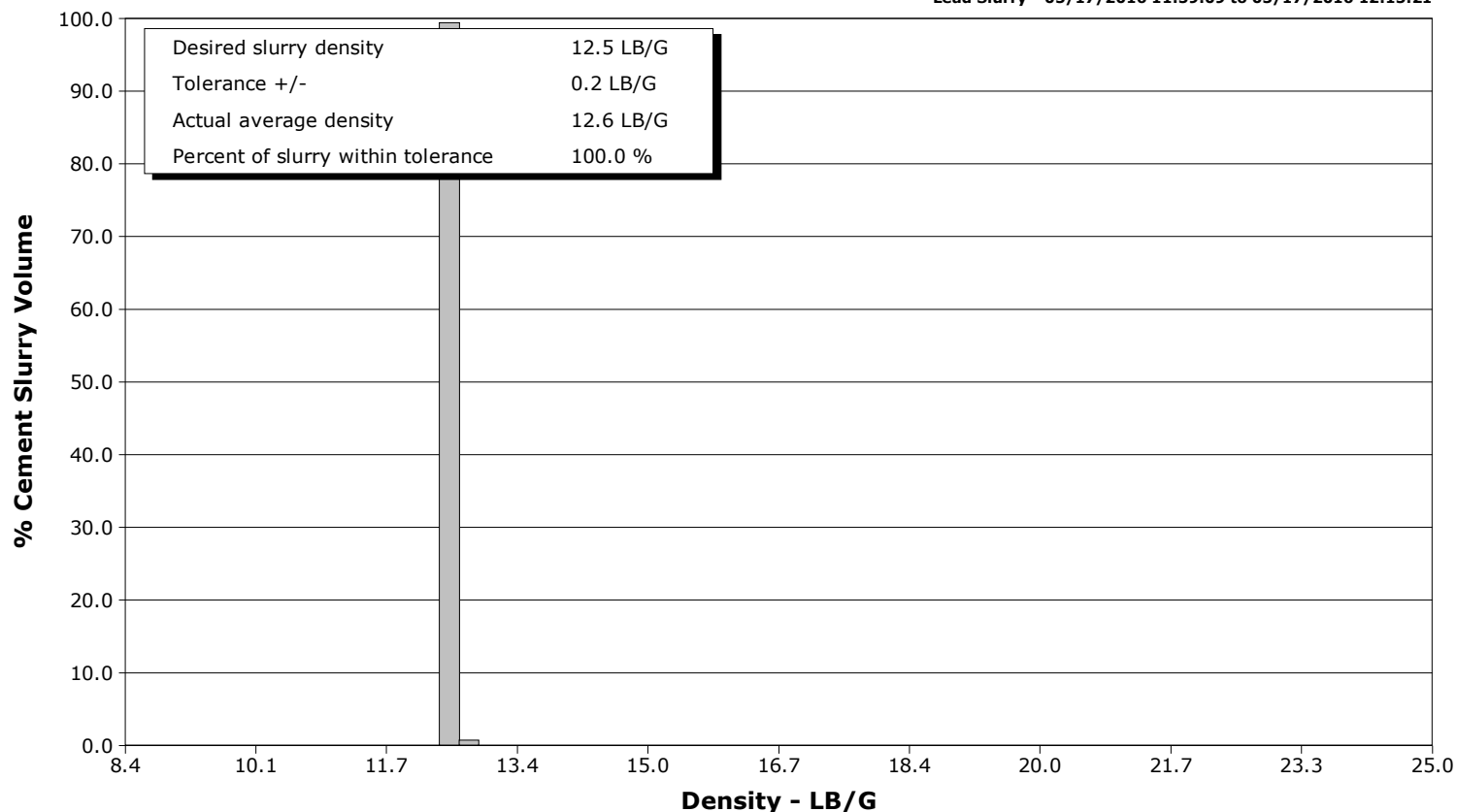
Client Anadarko
SIR No.
Job Type Surface
Job Date 05-17-2016



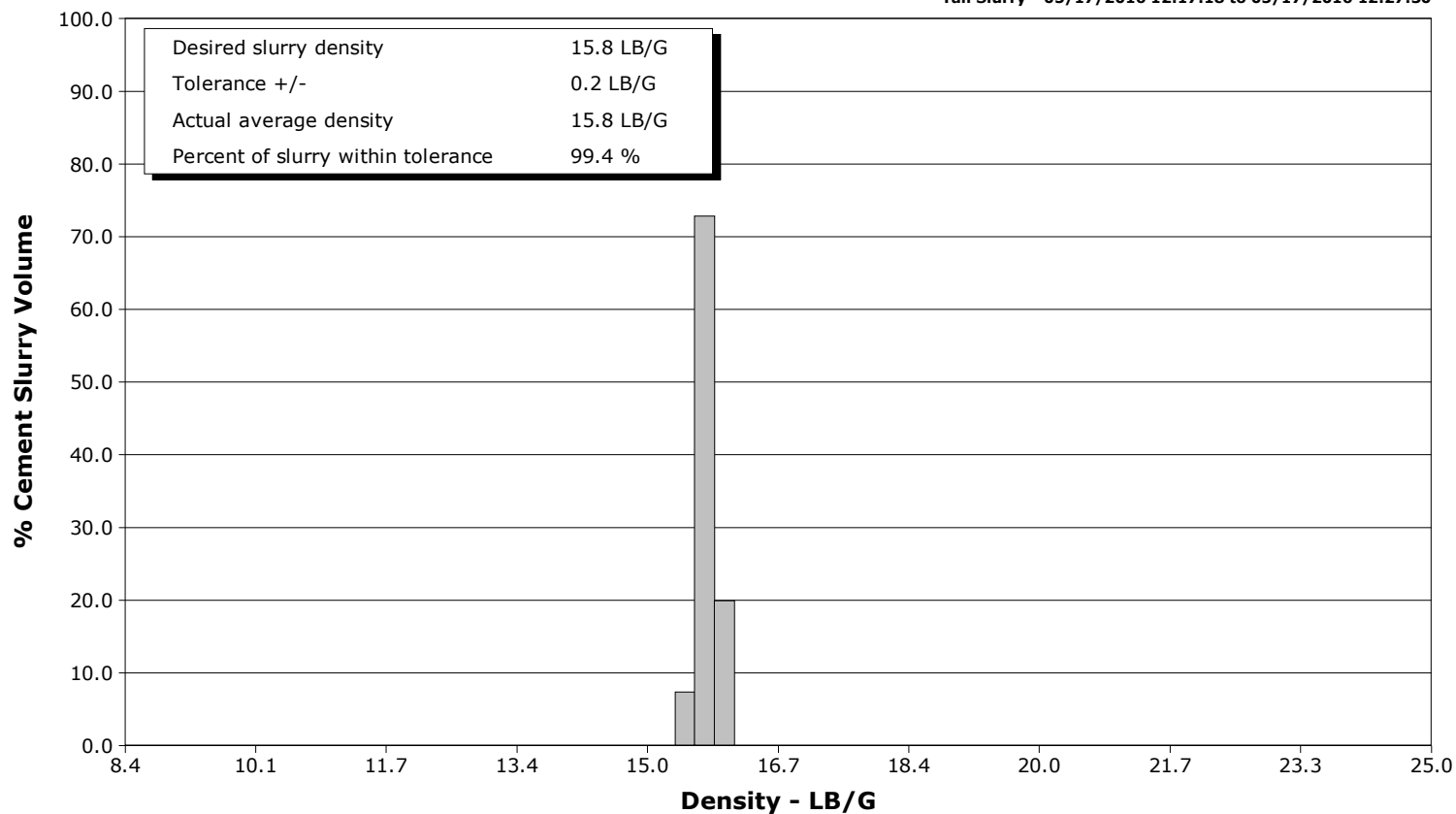
Well Land Fed 13N-32HZ
Field Wattenberg
Engineer Ryan Drilling/Ken Sovereign
Country United States

Client Anadarko
SIR No.
Job Type Surface
Job Date 05-17-2016

Lead Slurry - 05/17/2016 11:59:09 to 05/17/2016 12:15:21



Tail Slurry - 05/17/2016 12:17:18 to 05/17/2016 12:27:30



Cementing Service Report

				Customer Anadarko			Job Number				
Well Land Fed 13N-32HZ			Location (legal) CWY			Schlumberger Location Rock Springs			Job Start May/17/2016		
Field Wattenberg		Formation Name/Type Shale		Deviation 0 deg		Bit Size 13.5 in		Well MD 1911.0 ft		Well TVD 1864.3 ft	
County Weld		State/Province Colorado		BHP 945 psi		BHST 101 degF		BHCT 81 degF		Pore Press. Gradient lb/gal	
Well Master 0631662943		API/UWI									
Rig Name Precision 461		Drilled For Oil & Gas		Service Via Land		Casing/Liner					
						Depth, ft		Size, in		Weight, lb/ft	
Offshore Zone		Well Class New		Well Type Development		1911.0		9.6		24.2	
						0.0		0.0		0.0	
Drilling Fluid Type LT OBM		Max. Density 8.80 lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
Service Line Cementing		Job Type Surface									
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection Single Cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
										No. of Shots	
										Total Interval ft	
										Diameter in	
						Treat Down Casing		Displacement 144.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 148.0 bbl		Annular Vol. 166.4 bbl	
										Openhole Vol. 166.4 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 550 psi				Shoe Type Float				Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1911.0 ft				Tool Type			
No. Centralizers		Top Plugs 1		Bottom Plugs		Stage Tool Type				Tool Depth ft	
Cement Head Type Single						Stage Tool Depth ft				Tail Pipe Size in	
Job Scheduled For May/17/2016 08:30		Arrived on Location May/17/2016 08:30		Leave Location May/17/2016 15:30		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 1866.0 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
05/17/2016	11:40:41	9	0.0	8.40	0.0	Started Acquisition					
05/17/2016	11:40:42	9	0.0	8.40	0.0	Held JSA					
05/17/2016	11:41:01	8	0.0	8.40	0.0	Start Pumping Water					
05/17/2016	11:41:04	9	0.0	8.40	0.0	Pressure Test Lines					
05/17/2016	11:41:06	9	0.0	8.40	0.0	Water Sample #5231					
05/17/2016	11:41:26	5	0.0	8.40	0.0						
05/17/2016	11:42:11	5	0.0	8.40	0.0						
05/17/2016	11:42:56	5	0.0	8.40	0.0						
05/17/2016	11:43:41	5	0.0	8.40	0.0						
05/17/2016	11:44:26	74	1.4	8.39	1.1						
05/17/2016	11:45:11	74	2.7	8.39	3.1						
05/17/2016	11:45:56	21	1.4	8.40	6.8						
05/17/2016	11:46:41	602	0.0	8.39	7.4						
05/17/2016	11:47:26	555	0.0	8.39	7.4						
05/17/2016	11:48:11	550	0.0	8.39	7.4						
05/17/2016	11:48:56	3763	0.0	8.39	7.4						
05/17/2016	11:49:41	3714	0.0	8.39	7.4						
05/17/2016	11:50:26	3695	0.0	8.39	7.4						
05/17/2016	11:51:11	3672	0.0	8.39	7.4						
05/17/2016	11:51:56	3651	0.0	8.39	7.4						
05/17/2016	11:52:41	7	0.0	8.39	7.4						

Well			Field	Job Start		Customer	Job Number
Land Fed 13N-32HZ			Wattenberg	May/17/2016		Anadarko	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/17/2016	11:54:11	191	5.1	8.40	10.7		
05/17/2016	11:54:56	173	5.1	8.39	14.6		
05/17/2016	11:55:41	183	5.1	8.39	18.4		
05/17/2016	11:56:26	68	2.2	8.39	21.0		
05/17/2016	11:57:11	66	2.2	8.39	22.6		
05/17/2016	11:57:56	64	2.1	8.38	24.2		
05/17/2016	11:58:41	278	5.1	12.51	27.1		
05/17/2016	11:59:09	368	6.5	12.47	29.7	Start Mixing Lead Slurry	
05/17/2016	11:59:11	513	6.4	12.47	29.9	Wet and Dry Sample Taken	
05/17/2016	11:59:12	512	7.1	12.48	30.0	Wet Sample Weighed	
05/17/2016	11:59:13	512	7.5	12.48	30.1	380 sks, 2.1 Yield	
05/17/2016	11:59:26	504	7.9	12.49	31.8		
05/17/2016	11:59:50	509	7.9	12.52	35.0	Good Returns	
05/17/2016	12:00:11	500	7.9	12.54	37.8		
05/17/2016	12:00:56	499	8.0	12.55	43.7		
05/17/2016	12:01:41	491	8.0	12.56	49.7		
05/17/2016	12:02:26	483	8.0	12.60	55.6		
05/17/2016	12:03:11	468	8.0	12.62	61.6		
05/17/2016	12:03:56	492	8.0	12.64	67.6		
05/17/2016	12:04:41	479	8.0	12.60	73.6		
05/17/2016	12:05:26	488	7.9	12.59	79.5		
05/17/2016	12:06:11	480	7.9	12.55	85.5		
05/17/2016	12:06:56	482	8.0	12.53	91.5		
05/17/2016	12:07:41	490	8.0	12.52	97.5		
05/17/2016	12:08:26	471	8.0	12.52	103.4		
05/17/2016	12:09:11	505	8.0	12.52	109.4		
05/17/2016	12:09:56	478	7.9	12.53	115.4		
05/17/2016	12:10:41	480	8.0	12.54	121.3		
05/17/2016	12:11:26	490	8.0	12.54	127.3		
05/17/2016	12:12:11	484	7.9	12.54	133.2		
05/17/2016	12:12:56	478	8.0	12.55	139.2		
05/17/2016	12:13:41	494	7.9	12.54	145.1		
05/17/2016	12:14:26	482	7.9	12.51	151.1		
05/17/2016	12:15:11	238	5.1	12.52	156.1		
05/17/2016	12:15:21	222	5.1	12.49	156.9	End Lead Slurry	
05/17/2016	12:15:56	352	6.5	12.51	160.0		
05/17/2016	12:16:41	356	5.0	15.76	163.9		
05/17/2016	12:17:08	336	5.0	15.58	166.2	Reset Total, Vol = 142 bbl	
05/17/2016	12:17:18	345	5.0	15.64	167.0	Start Mixing Tail Slurry	
05/17/2016	12:17:26	346	5.0	15.60	167.7		
05/17/2016	12:18:11	351	5.0	15.70	171.5		
05/17/2016	12:18:14	353	5.0	15.68	171.7	Wet and Dry Sample Taken	
05/17/2016	12:18:15	346	5.0	15.67	171.8	Tail Sample #5232	
05/17/2016	12:18:56	337	5.0	15.66	175.2		
05/17/2016	12:19:41	344	5.0	15.82	179.0		
05/17/2016	12:20:26	361	5.0	15.79	182.8		
05/17/2016	12:21:11	359	5.0	15.83	186.5		
05/17/2016	12:21:56	546	6.2	15.91	190.3		
05/17/2016	12:22:41	553	6.4	15.90	195.1		
05/17/2016	12:23:26	548	6.4	15.87	200.0		
05/17/2016	12:24:11	558	6.4	15.89	204.8		
05/17/2016	12:24:56	534	6.4	15.90	209.6		
05/17/2016	12:25:41	555	6.4	15.95	214.4		
05/17/2016	12:26:26	526	6.4	15.84	219.2		

Well			Field		Job Start		Customer		Job Number	
Land Fed 13N-32HZ			Wattenberg		May/17/2016		Anadarko			
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL		Message	
05/17/2016	12:27:30	535		6.4	15.76		226.1		End Tail Slurry	
05/17/2016	12:27:45	66		2.5	15.74		227.0		Reset Total, Vol = 60 bbl	
05/17/2016	12:27:48	11		1.9	15.81		227.1		Drop Top Plug	
05/17/2016	12:27:49	7		1.3	15.94		227.1		Start Displacement	
05/17/2016	12:27:53	14		0.2	16.46		0.0		Washup Pump and Line	
05/17/2016	12:27:56	15		0.0	16.64		0.0			
05/17/2016	12:28:41	12		0.0	16.36		0.0			
05/17/2016	12:29:26	12		0.0	16.26		0.0			
05/17/2016	12:30:11	12		0.0	16.21		0.0			
05/17/2016	12:30:56	21		0.0	16.16		0.0			
05/17/2016	12:31:41	25		0.0	16.12		0.0			
05/17/2016	12:32:26	28		0.0	16.09		0.0			
05/17/2016	12:33:11	13		0.0	16.07		0.0			
05/17/2016	12:33:56	80		1.7	10.06		0.2			
05/17/2016	12:34:41	170		5.1	8.80		3.5			
05/17/2016	12:35:26	163		5.1	8.61		7.3			
05/17/2016	12:36:11	193		5.2	12.69		11.2			
05/17/2016	12:36:56	181		5.0	10.06		15.0			
05/17/2016	12:37:41	164		5.1	9.07		18.8			
05/17/2016	12:38:26	152		5.2	8.75		22.7			
05/17/2016	12:39:11	220		6.6	8.68		27.1			
05/17/2016	12:39:56	226		6.5	8.43		32.1			
05/17/2016	12:40:41	233		6.7	8.46		37.0			
05/17/2016	12:41:26	216		6.6	8.52		42.0			
05/17/2016	12:42:11	209		6.6	8.41		47.0			
05/17/2016	12:42:56	294		8.0	8.39		52.1			
05/17/2016	12:43:41	326		8.0	8.55		58.2			
05/17/2016	12:44:26	321		8.4	8.43		64.3			
05/17/2016	12:45:11	369		8.3	8.42		70.5			
05/17/2016	12:45:56	273		8.3	8.45		76.7			
05/17/2016	12:46:41	370		8.2	8.40		83.0			
05/17/2016	12:47:26	413		8.2	8.40		89.2			
05/17/2016	12:48:11	445		8.2	8.40		95.3			
05/17/2016	12:48:56	473		7.9	8.40		101.3			
05/17/2016	12:49:41	519		7.8	8.40		107.2			
05/17/2016	12:50:26	557		7.8	8.40		113.1			
05/17/2016	12:51:11	609		7.8	8.40		119.0			
05/17/2016	12:51:56	639		7.9	8.40		124.8			
05/17/2016	12:52:25	663		7.8	8.40		128.6		Cement to Surface, 110 bbl Away	
05/17/2016	12:52:41	685		7.9	8.40		130.7			
05/17/2016	12:53:26	711		7.8	8.40		136.6			
05/17/2016	12:54:11	563		5.2	8.40		142.3			
05/17/2016	12:54:56	490		2.5	8.40		144.5			
05/17/2016	12:55:41	476		2.5	8.40		146.4			
05/17/2016	12:56:26	488		2.5	8.41		148.2			
05/17/2016	12:57:11	500		2.5	8.41		150.1			
05/17/2016	12:57:56	1108		0.0	8.41		151.3			
05/17/2016	12:58:00	1107		0.0	8.41		151.3		Bump Top Plug, 550 to 1100 psi	
05/17/2016	12:58:04	1110		0.0	8.41		151.3		End Displacement	
05/17/2016	12:58:06	1109		0.0	8.41		151.3		34 Bbl Cement to Surface	
05/17/2016	12:58:33	1108		0.0	8.41		151.3		Reset Total, Vol = 144 bbl	
05/17/2016	12:58:34	1107		0.0	8.41		151.3		Start 2000psi, 30 min Casing Test	
05/17/2016	12:58:41	1108		0.0	8.41		151.3			
05/17/2016	12:59:26	2046		0.5	8.41		151.8			

Well			Field	Job Start		Customer	Job Number
Land Fed 13N-32HZ			Wattenberg	May/17/2016		Anadarko	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
05/17/2016	13:00:56	2040	0.0	8.41	151.8		
05/17/2016	13:01:41	2040	0.0	8.41	151.8		
05/17/2016	13:02:26	2039	0.0	8.41	151.8		
05/17/2016	13:03:11	2040	0.0	8.41	151.8		
05/17/2016	13:03:56	2041	0.0	8.41	151.8		
05/17/2016	13:04:41	2041	0.0	8.41	151.8		
05/17/2016	13:05:26	2042	0.0	8.41	151.8		
05/17/2016	13:06:11	2043	0.0	8.41	151.8		
05/17/2016	13:06:56	2044	0.0	8.41	151.8		
05/17/2016	13:07:41	2045	0.0	8.41	151.8		
05/17/2016	13:08:26	2045	0.0	8.41	151.8		
05/17/2016	13:09:11	2046	0.0	8.41	151.8		
05/17/2016	13:09:56	2047	0.0	8.41	151.8		
05/17/2016	13:10:41	2048	0.0	8.41	151.8		
05/17/2016	13:11:26	2048	0.0	8.41	151.8		
05/17/2016	13:12:11	2049	0.0	8.41	151.8		
05/17/2016	13:12:56	2050	0.0	8.41	151.8		
05/17/2016	13:13:41	2051	0.0	8.41	151.8		
05/17/2016	13:14:26	2051	0.0	8.41	151.8		
05/17/2016	13:15:11	2052	0.0	8.41	151.8		
05/17/2016	13:15:56	2053	0.0	8.41	151.8		
05/17/2016	13:16:41	2053	0.0	8.41	151.8		
05/17/2016	13:17:26	2054	0.0	8.41	151.8		
05/17/2016	13:18:11	2055	0.0	8.41	151.8		
05/17/2016	13:18:56	2055	0.0	8.41	151.8		
05/17/2016	13:19:41	2056	0.0	8.41	151.8		
05/17/2016	13:20:26	2057	0.0	8.41	151.8		
05/17/2016	13:21:11	2057	0.0	8.41	151.8		
05/17/2016	13:21:56	2059	0.0	8.41	151.8		
05/17/2016	13:22:41	2060	0.0	8.41	151.8		
05/17/2016	13:23:26	2061	0.0	8.41	151.8		
05/17/2016	13:24:11	2061	0.0	8.41	151.8		
05/17/2016	13:24:56	2062	0.0	8.41	151.8		
05/17/2016	13:25:41	2063	0.0	8.41	151.8		
05/17/2016	13:26:26	2063	0.0	8.41	151.8		
05/17/2016	13:27:11	2064	0.0	8.41	151.8		
05/17/2016	13:27:56	227	0.0	8.41	151.8		
05/17/2016	13:28:12	-2	0.0	8.41	151.8	Floats Hold, 1 Bbl Back	
05/17/2016	13:28:39	1	0.0	8.41	151.8	End Surface Job	
05/17/2016	13:28:41	1	0.0	8.41	151.8		
05/17/2016	14:06:11	6	0.0	0.01	153.1		
05/17/2016	14:06:56	6	0.0	0.01	153.1		
05/17/2016	14:07:41	6	0.0	0.01	153.1		
05/17/2016	14:08:26	8	0.0	0.01	0.0		
05/17/2016	14:09:11	13	0.0	0.01	0.0		
05/17/2016	14:09:56	13	0.0	0.01	0.0		
05/17/2016	14:10:41	6	0.0	0.01	0.0		
05/17/2016	14:10:53	7	0.0	0.01	0.0	Topout Previous Wells	
05/17/2016	14:11:26	6	0.0	0.01	0.0		
05/17/2016	14:12:11	5	0.0	0.01	0.0		
05/17/2016	14:12:56	6	0.0	0.01	0.0		
05/17/2016	14:13:41	6	0.0	0.01	0.0		
05/17/2016	14:14:26	6	0.0	0.01	0.0		
05/17/2016	14:15:11	6	0.0	0.01	0.0		

Well			Field		Job Start		Customer		Job Number	
Land Fed 13N-32HZ			Wattenberg		May/17/2016		Anadarko			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
05/17/2016	14:16:41	5	0.0	0.01	0.0					
05/17/2016	14:18:11	5	0.0	0.01	0.0					
05/17/2016	14:18:56	5	0.0	0.01	0.0					
05/17/2016	14:19:41	5	0.0	0.01	0.0					
05/17/2016	14:19:47	5	0.0	0.01	0.0	Start 34C-32HZ				
05/17/2016	14:20:26	5	0.0	0.01	0.0					
05/17/2016	14:21:11	5	0.0	0.01	0.0					
05/17/2016	14:21:56	5	0.0	0.01	0.0					
05/17/2016	14:22:41	5	0.0	0.01	0.0					
05/17/2016	14:23:26	12	0.0	0.01	0.0					
05/17/2016	14:24:11	11	0.0	0.01	0.0					
05/17/2016	14:24:56	11	0.0	0.01	0.0					
05/17/2016	14:25:41	11	0.0	0.01	0.0					
05/17/2016	14:26:26	11	0.0	0.01	0.0					
05/17/2016	14:27:11	11	0.0	0.01	0.0					
05/17/2016	14:27:56	12	0.0	0.01	0.0					
05/17/2016	14:28:41	11	0.0	0.01	0.0					
05/17/2016	14:29:26	12	0.0	0.01	0.0					
05/17/2016	14:30:11	27	3.2	13.71	0.2					
05/17/2016	14:30:56	28	1.0	15.93	0.9					
05/17/2016	14:31:41	1	0.0	15.93	1.0					
05/17/2016	14:32:26	1	0.0	15.92	1.0					
05/17/2016	14:33:11	3	0.1	16.01	1.2					
05/17/2016	14:33:56	3	0.0	15.91	1.2					
05/17/2016	14:34:41	3	0.0	15.90	1.2					
05/17/2016	14:35:26	2	0.0	15.90	1.2					
05/17/2016	14:35:47	3	0.0	15.90	1.2	Reset Total, Vol = 1.2 bbl				
05/17/2016	14:35:48	3	0.0	15.90	1.2	End				
05/17/2016	14:35:49	3	0.0	15.90	1.2	Start 29N-29HZ Top Out				
05/17/2016	14:36:11	3	0.0	15.90	1.2					
05/17/2016	14:36:56	3	0.0	15.90	1.2					
05/17/2016	14:37:41	3	0.1	15.90	1.2					
05/17/2016	14:38:26	17	0.7	16.01	1.2					
05/17/2016	14:39:11	16	0.7	15.99	1.8					
05/17/2016	14:39:56	16	0.7	15.99	2.3					
05/17/2016	14:40:41	18	0.8	15.94	2.9					
05/17/2016	14:41:26	18	0.8	15.93	3.5					
05/17/2016	14:42:11	1	0.0	15.86	3.8					
05/17/2016	14:42:56	20	0.6	15.84	3.8					
05/17/2016	14:43:41	1	0.0	15.82	3.9					
05/17/2016	14:44:26	1	0.0	15.81	3.9					
05/17/2016	14:45:11	1	0.0	15.81	3.9					
05/17/2016	14:45:56	2	0.0	15.81	3.9					
05/17/2016	14:46:41	3	0.0	15.82	3.9					
05/17/2016	14:47:08	3	0.0	15.82	3.9	Reset Total, Vol = 2.7 bbl				
05/17/2016	14:47:09	3	0.0	15.82	3.9	End				
05/17/2016	14:47:26	3	0.0	15.80	3.9					
05/17/2016	14:48:11	18	0.6	8.88	4.2					
05/17/2016	14:48:50	20	0.7	8.51	4.6	Washup Pump and Line				

Well Land Fed 13N-32HZ	Field Wattenberg	Job Start May/17/2016	Customer Anadarko	Job Number
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 0.8	N2	Mud	Maximum Rate 3.3	Total Slurry 1.0	Mud 0.0	Spacer 0.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 108	Final 19	Average 8	Bump Plug to 100	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %	Designed Slurry Volume 200.0 bbl	Displacement 0.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 34.0 bbl			
				Washed Thru Perfs <input type="checkbox"/>	To ft			
Customer or Authorized Representative			Schlumberger Supervisor Ryan Drilling/Ken Sovereign		Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
					-	-		