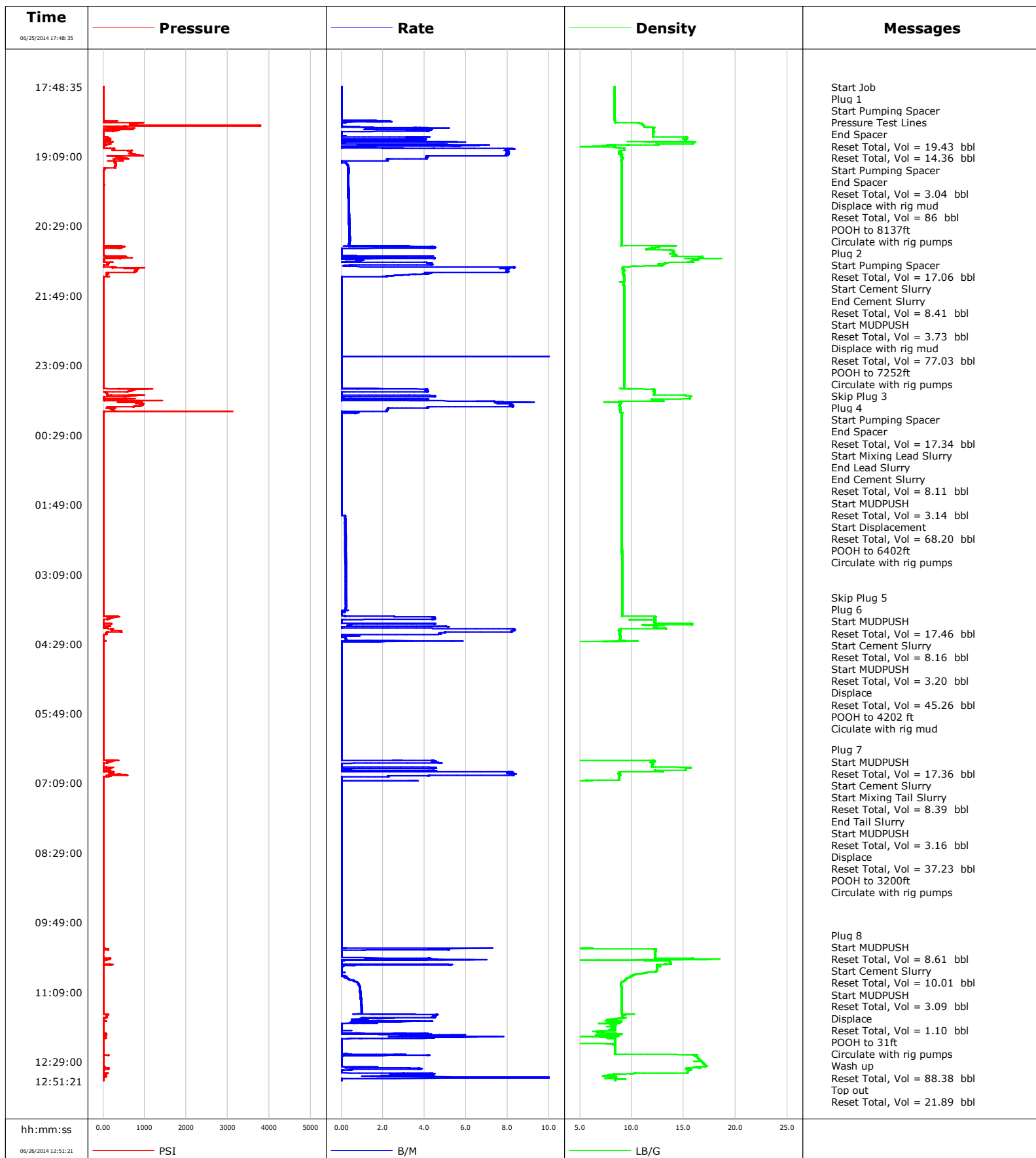


Well Knoss
Field Old Homestead
Engineer Michael Simon/ T Morrow
Country United States

Client Nighthawk Production
SIR No. CWJN-00133
Job Type P A
Job Date 06-25-2014

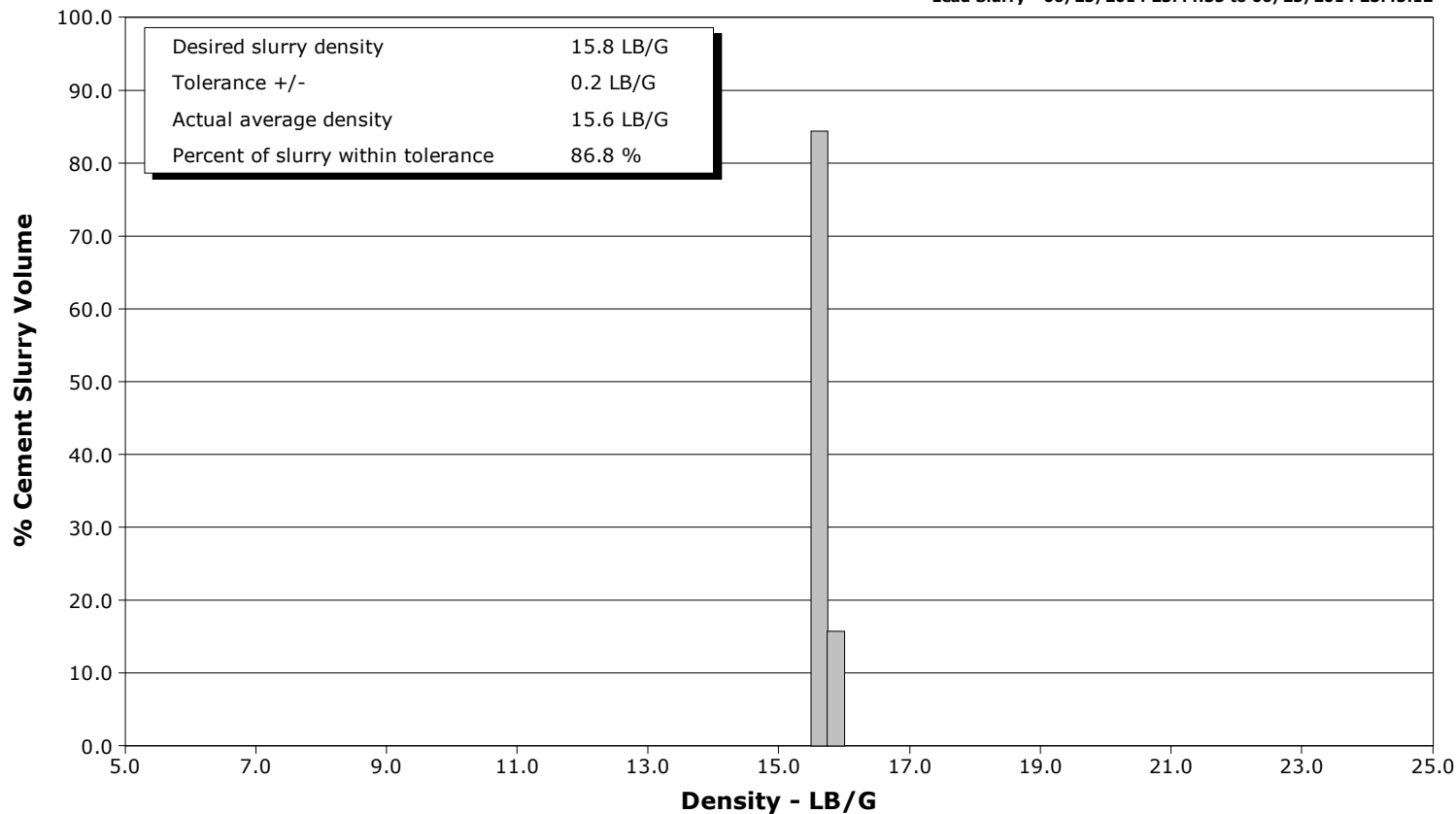


Schlumberger Cementing Qa/Qc Density Report

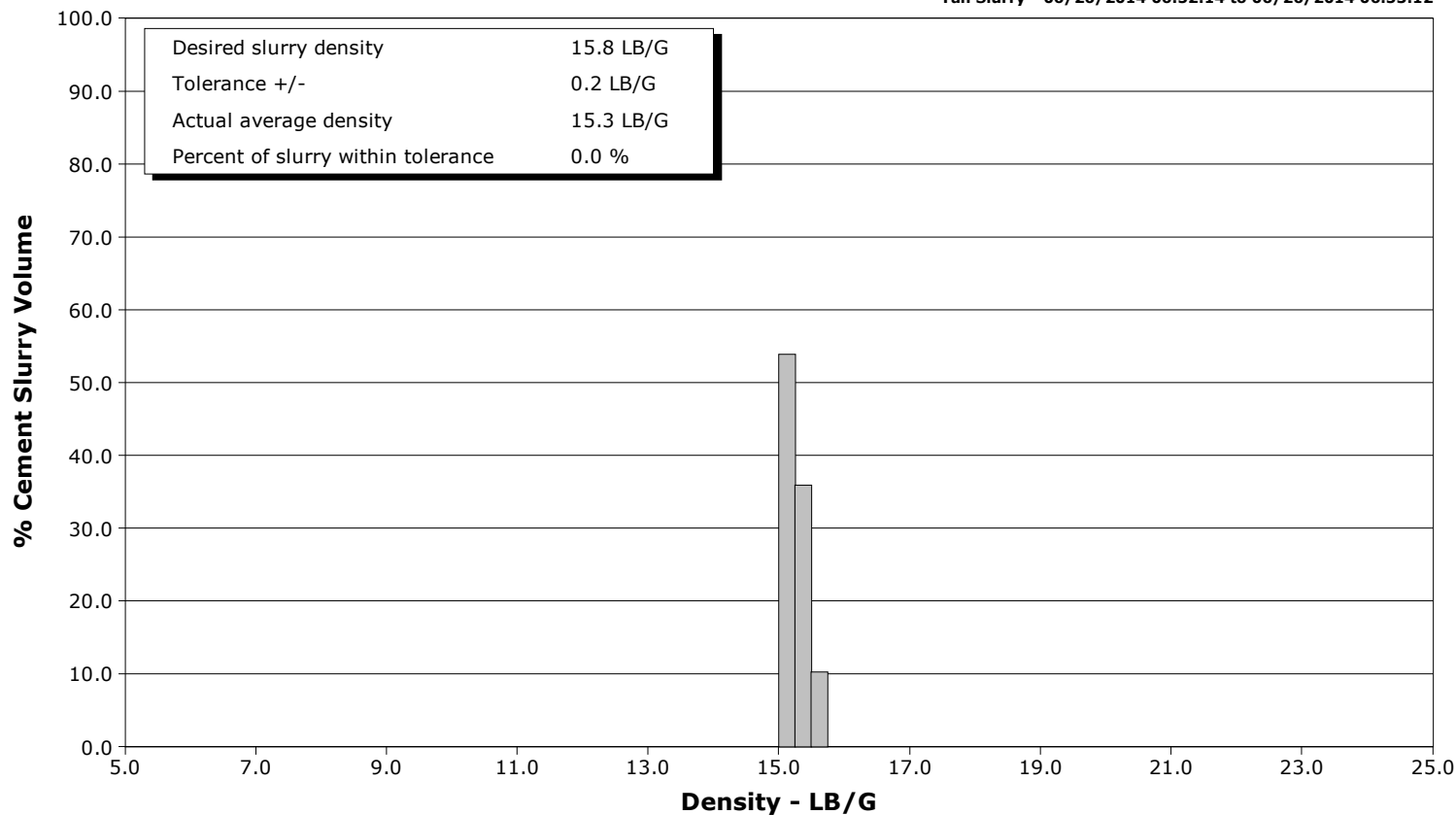
Well Knoss
Field Old Homestead
Engineer Michael Simon/ T Morrow
Country United States

Client Nighthawk Production
SIR No. CWJN-00133
Job Type P A
Job Date 06-25-2014

Lead Slurry - 06/25/2014 23:44:35 to 06/25/2014 23:45:12



Tail Slurry - 06/26/2014 06:52:14 to 06/26/2014 06:53:12





Cementing Service Report

				Customer Nighthawk Production		Job Number CWJN-00133				
Well Knoss 0631519040			Location (legal) Limon		Schlumberger Location Rock Springs		Job Start Jun/25/2014			
Field Old Homestead		Formation Name/Type		Deviation	Bit Size	Well MD 8635.0 ft	Well TVD			
County		State/Province Colorado		BHP	BHST 206 degF	BHCT 163 degF	Pore Press. Gradient			
Well Master 631519040		API/UWI								
Rig Name Xtreme 11		Drilled For Oil & Gas		Service Via Land		Casing/Liner				
				Depth, ft	Size, in	Weight, lb/ft	Grade	Thread		
Offshore Zone		Well Class New		Well Type Exploration		8635.0	4.000	0.0		
				0.0	0.000	0.0				
Drilling Fluid Type		Max. Density		Plastic Viscosity		Tubing/Drill Pipe				
						Depth,	Size,	Weight,	Grade	Thread
Service Line Cementing		Job Type P & A								
Max. Allowed Tub. Press		Max. Allowed Ann. Press		WH Connection 4" FH DP pin		Perforations/Open Hole				
						Top,	Bottom,		No. of Shots	Total Interval
Service Instructions										Diameter
		Treat Down Casing		Displacement		Packer Type		Packer Depth		
Tubing Vol.		Casing Vol.		Annular Vol.		Openhole Vol.				
Casing/Tubing Secured <input type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input type="checkbox"/>		Casing Tools		Squeeze Job				
Lift Pressure				Shoe Type		Squeeze Type				
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth		Tool Type				
No. Centralizers		Top Plugs		Bottom Plugs		Stage Tool Type		Tool Depth		
Cement Head Type				Stage Tool Depth		Tail Pipe Size				
Job Scheduled For Jun/25/2014		Arrived on Location Jun/25/2014		Leave Location Jun/25/2014		Collar Type		Tail Pipe Depth		
						Collar Depth		Sqz. Total Vol.		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/25/2014	17:47:28					Started Acquisition				
06/25/2014	17:48:35	7	0.0	8.38	0.0					
06/25/2014	17:48:37					Start Job				
06/25/2014	17:48:37	7	0.0	8.38	0.0					
06/25/2014	17:48:39					Plug 1				
06/25/2014	17:48:39	7	0.0	8.38	0.0					
06/25/2014	17:48:40					Start Pumping Spacer				
06/25/2014	17:48:40	7	0.0	8.38	0.0					
06/25/2014	17:48:46					Pressure Test Lines				
06/25/2014	17:48:46	6	0.0	8.38	0.0					
06/25/2014	17:50:28	7	0.0	8.38	0.0					
06/25/2014	17:53:28	7	0.0	8.38	0.0					
06/25/2014	17:56:28	7	0.0	8.38	0.0					
06/25/2014	17:59:28	5	0.0	8.38	0.0					
06/25/2014	18:02:28	5	0.0	8.38	0.0					
06/25/2014	18:05:28	5	0.0	8.38	0.0					
06/25/2014	18:08:28	5	0.0	8.38	0.0					
06/25/2014	18:11:28	5	0.0	8.38	0.0					
06/25/2014	18:14:28	5	0.0	8.38	0.0					
06/25/2014	18:17:28	6	0.0	8.38	0.0					
06/25/2014	18:20:28	9	0.0	8.38	0.0					

Well			Field		Job Start		Customer		Job Number	
Knoss 0631519040			Old Homestead		Jun/25/2014		Nighthawk Production		CWJN-00133	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/25/2014	18:26:28	8	0.0	8.38	0.0					
06/25/2014	18:29:28	241	2.4	8.39	2.3					
06/25/2014	18:32:28	662	0.0	11.06	2.5					
06/25/2014	18:35:28	264	1.0	11.29	2.6					
06/25/2014	18:38:28	274	4.0	12.07	12.5					
06/25/2014	18:40:46					End Spacer				
06/25/2014	18:40:46	3	0.0	12.11	20.4					
06/25/2014	18:40:51					Reset Total, Vol = 19.43 bbl				
06/25/2014	18:40:51	3	0.0	12.11	20.4					
06/25/2014	18:41:28	4	0.0	12.10	20.4					
06/25/2014	18:44:28	4	0.0	12.04	20.4					
06/25/2014	18:47:28	100	3.2	15.34	22.3					
06/25/2014	18:50:28	6	0.0	15.15	30.7					
06/25/2014	18:53:28	21	0.0	15.96	34.1					
06/25/2014	18:55:20					Reset Total, Vol = 14.36 bbl				
06/25/2014	18:55:20	133	5.1	12.38	36.5					
06/25/2014	18:55:24					Start Pumping Spacer				
06/25/2014	18:55:24	129	5.1	12.38	36.9					
06/25/2014	18:56:26					End Spacer				
06/25/2014	18:56:26	22	4.1	7.70	40.4					
06/25/2014	18:56:28	28	4.2	7.62	40.6					
06/25/2014	18:56:34					Reset Total, Vol = 3.04 bbl				
06/25/2014	18:56:34	36	4.4	7.53	41.0					
06/25/2014	18:59:28	0	0.0	8.86	44.6					
06/25/2014	19:00:46					Displace with rig mud				
06/25/2014	19:00:46	242	8.0	9.27	51.4					
06/25/2014	19:02:28	610	7.9	9.26	65.0					
06/25/2014	19:05:28	651	8.0	8.80	89.0					
06/25/2014	19:08:28	138	4.2	8.98	112.6					
06/25/2014	19:11:28	570	4.1	9.12	124.9					
06/25/2014	19:14:20					Reset Total, Vol = 86 bbl				
06/25/2014	19:14:20	117	0.4	8.99	131.9					
06/25/2014	19:14:28	265	0.0	9.00	131.9					
06/25/2014	19:15:53					POOH to 8137ft				
06/25/2014	19:15:53	287	0.0	9.02	131.9					
06/25/2014	19:17:28	304	0.3	9.02	132.1					
06/25/2014	19:20:28	296	0.3	9.02	133.0					
06/25/2014	19:23:28	33	0.3	9.02	134.0					
06/25/2014	19:26:28	11	0.3	9.02	135.0					
06/25/2014	19:29:28	11	0.3	9.02	136.0					
06/25/2014	19:32:28	11	0.3	9.02	137.0					
06/25/2014	19:35:28	11	0.3	9.02	138.0					
06/25/2014	19:38:28	11	0.3	9.02	138.9					
06/25/2014	19:41:28	12	0.3	9.02	139.9					
06/25/2014	19:44:28	8	0.3	9.02	140.9					
06/25/2014	19:47:28	9	0.3	9.02	141.9					
06/25/2014	19:50:28	9	0.3	9.02	142.9					
06/25/2014	19:53:28	9	0.3	9.02	143.9					
06/25/2014	19:56:28	9	0.3	9.02	145.0					
06/25/2014	19:59:28	9	0.3	9.02	146.0					
06/25/2014	20:02:28	9	0.3	9.02	147.0					
06/25/2014	20:05:28	10	0.3	9.02	148.0					
06/25/2014	20:06:18					Circulate with rig pumps				
06/25/2014	20:06:18	9	0.3	9.02	148.3					

Well			Field		Job Start		Customer		Job Number	
Knoss 0631519040			Old Homestead		Jun/25/2014		Nighthawk Production		CWJN-00133	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/25/2014	20:11:28	9	0.3	9.02	150.1					
06/25/2014	20:14:28	9	0.3	9.02	151.2					
06/25/2014	20:17:28	9	0.3	9.02	152.2					
06/25/2014	20:20:28	9	0.4	9.02	153.3					
06/25/2014	20:23:28	8	0.4	9.03	154.4					
06/25/2014	20:26:28	9	0.4	9.03	155.4					
06/25/2014	20:29:28	8	0.4	9.03	156.5					
06/25/2014	20:32:28	9	0.4	9.03	157.6					
06/25/2014	20:35:28	9	0.4	9.03	158.7					
06/25/2014	20:38:28	9	0.4	9.03	159.7					
06/25/2014	20:41:28	9	0.4	9.03	160.9					
06/25/2014	20:44:28	9	0.4	9.03	162.0					
06/25/2014	20:47:28	10	0.4	9.01	163.2					
06/25/2014	20:50:28	8	0.4	9.01	164.3					
06/25/2014	20:52:47					Plug 2				
06/25/2014	20:52:47	389	3.8	12.45	167.2					
06/25/2014	20:52:53					Start Pumping Spacer				
06/25/2014	20:52:53	490	4.3	12.64	167.6					
06/25/2014	20:53:28	453	4.5	12.59	170.2					
06/25/2014	20:55:07					Reset Total, Vol = 17.06 bbl				
06/25/2014	20:55:07	7	0.0	11.94	176.0					
06/25/2014	20:56:23					Start Cement Slurry				
06/25/2014	20:56:23	10	0.0	12.55	176.0					
06/25/2014	20:56:28	11	0.0	12.92	176.0					
06/25/2014	20:59:28	9	0.0	13.99	176.0					
06/25/2014	21:02:28	9	0.0	14.21	176.0					
06/25/2014	21:05:28	368	4.0	16.82	178.7					
06/25/2014	21:08:28	17	1.0	16.07	183.7					
06/25/2014	21:11:28	126	4.3	13.17	186.8					
06/25/2014	21:14:17					End Cement Slurry				
06/25/2014	21:14:17	11	0.3	12.95	197.4					
06/25/2014	21:14:19					Reset Total, Vol = 8.41 bbl				
06/25/2014	21:14:19	10	0.2	12.95	197.4					
06/25/2014	21:14:23					Start MUDPUSH				
06/25/2014	21:14:23	11	0.2	12.94	197.4					
06/25/2014	21:14:28	11	0.2	12.93	197.4					
06/25/2014	21:15:35					Reset Total, Vol = 3.73 bbl				
06/25/2014	21:15:35	10	0.2	10.30	197.6					
06/25/2014	21:16:21					Displace with rig mud				
06/25/2014	21:16:21	237	8.3	9.13	200.9					
06/25/2014	21:17:28	862	8.0	9.12	210.2					
06/25/2014	21:20:28	799	8.0	9.25	234.1					
06/25/2014	21:23:28	94	4.3	9.19	253.4					
06/25/2014	21:26:28	84	2.3	9.24	263.5					
06/25/2014	21:27:43					Reset Total, Vol = 77.03 bbl				
06/25/2014	21:27:43	2	0.0	9.24	265.8					
06/25/2014	21:29:28	4	0.0	9.25	265.8					
06/25/2014	21:32:28	8	0.0	9.25	265.8					
06/25/2014	21:35:28	7	0.0	9.23	265.8					
06/25/2014	21:38:28	8	0.0	9.25	265.8					
06/25/2014	21:39:20					POOH to 7252ft				
06/25/2014	21:39:20	8	0.0	9.26	265.8					
06/25/2014	21:39:47					Circulate with rig pumps				
06/25/2014	21:39:47	8	0.0	9.26	265.8					

Well Knoss 0631519040			Field Old Homestead	Job Start Jun/25/2014	Customer Nighthawk Production	Job Number CWJN-00133
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
06/25/2014	21:44:28	6	0.0	9.27	265.8	
06/25/2014	21:47:28	6	0.0	9.27	265.8	
06/25/2014	21:50:28	6	0.0	9.27	265.8	
06/25/2014	21:53:28	6	0.0	9.27	265.8	
06/25/2014	21:56:28	5	0.0	9.27	265.8	
06/25/2014	21:59:28	5	0.0	9.27	265.8	
06/25/2014	22:02:28	6	0.0	9.27	265.8	
06/25/2014	22:05:28	6	0.0	9.27	265.8	
06/25/2014	22:08:28	6	0.0	9.27	265.8	
06/25/2014	22:11:28	5	0.0	9.27	265.8	
06/25/2014	22:14:28	8	0.0	9.27	265.8	
06/25/2014	22:17:28	8	0.0	9.27	265.8	
06/25/2014	22:20:28	7	0.0	9.28	265.8	
06/25/2014	22:23:28	7	0.0	9.28	265.8	
06/25/2014	22:26:28	7	0.0	9.28	265.8	
06/25/2014	22:29:28	7	0.0	9.28	265.8	
06/25/2014	22:32:28	7	0.0	9.28	265.8	
06/25/2014	22:35:28	7	0.0	9.28	265.8	
06/25/2014	22:38:28	7	0.0	9.28	265.8	
06/25/2014	22:41:28	7	0.0	9.28	265.8	
06/25/2014	22:44:28	7	0.0	9.28	265.8	
06/25/2014	22:47:28	7	0.0	9.28	265.8	
06/25/2014	22:50:28	6	0.0	9.28	265.8	
06/25/2014	22:53:28	7	0.0	9.28	265.8	
06/25/2014	22:56:28	7	0.0	9.28	265.8	
06/25/2014	22:59:28	6	0.0	9.28	268.0	
06/25/2014	23:02:28	7	0.0	9.29	268.0	
06/25/2014	23:05:28	6	0.0	9.29	268.0	
06/25/2014	23:08:28	7	0.0	9.29	268.0	
06/25/2014	23:11:28	6	0.0	9.29	268.0	
06/25/2014	23:14:28	6	0.0	9.29	268.0	
06/25/2014	23:17:28	6	0.0	9.29	268.0	
06/25/2014	23:20:28	6	0.0	9.29	268.0	
06/25/2014	23:23:28	6	0.0	9.29	268.0	
06/25/2014	23:23:33					Skip Plug 3
06/25/2014	23:23:33	6	0.0	9.29	268.0	
06/25/2014	23:24:26					Plug 4
06/25/2014	23:24:26	6	0.0	9.29	268.0	
06/25/2014	23:25:24					Start Pumping Spacer
06/25/2014	23:25:24	5	0.0	9.29	268.0	
06/25/2014	23:26:28	6	0.0	9.29	268.0	
06/25/2014	23:29:28	11	0.0	9.29	268.0	
06/25/2014	23:32:28	10	0.0	9.29	268.0	
06/25/2014	23:35:28	10	0.0	9.29	268.0	
06/25/2014	23:38:28	657	4.1	12.18	276.9	
06/25/2014	23:40:37					End Spacer
06/25/2014	23:40:37	71	0.0	12.18	281.2	
06/25/2014	23:40:38					Reset Total, Vol = 17.34 bbl
06/25/2014	23:40:38	71	0.0	12.18	281.2	
06/25/2014	23:41:28	85	0.0	12.18	281.2	
06/25/2014	23:44:28	619	4.5	15.64	284.6	
06/25/2014	23:44:35					Start Mixing Lead Slurry
06/25/2014	23:44:35	617	4.5	15.63	285.1	
06/25/2014	23:45:12					End Lead Slurry

Well			Field		Job Start	Customer	Job Number
Knoss 0631519040			Old Homestead		Jun/25/2014	Nighthawk Production	CWJN-00133
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
06/25/2014	23:45:13					End Cement Slurry	
06/25/2014	23:45:13	20	1.2	15.60	287.8		
06/25/2014	23:45:14					Reset Total, Vol = 8.11 bbl	
06/25/2014	23:45:14	20	0.9	15.61	287.8		
06/25/2014	23:47:01					Start MUDPUSH	
06/25/2014	23:47:01	21	0.0	15.60	287.9		
06/25/2014	23:47:28	17	0.0	15.60	287.9		
06/25/2014	23:48:29					Reset Total, Vol = 3.14 bbl	
06/25/2014	23:48:29	17	1.8	11.96	290.9		
06/25/2014	23:49:02					Start Displacement	
06/25/2014	23:49:02	18	0.0	12.64	291.2		
06/25/2014	23:50:28	645	6.7	13.03	294.0		
06/25/2014	23:53:28	977	8.1	8.87	316.9		
06/25/2014	23:56:28	756	8.3	8.85	341.5		
06/25/2014	23:59:28	207	2.2	8.83	352.9		
06/26/2014	00:02:28	17	0.0	8.89	359.1		
06/26/2014	00:02:36					Reset Total, Vol = 68.20 bbl	
06/26/2014	00:02:36	14	0.0	8.89	359.1		
06/26/2014	00:05:28	8	0.0	9.03	360.0		
06/26/2014	00:08:28	8	0.0	9.02	360.0		
06/26/2014	00:09:06					POOH to 6402ft	
06/26/2014	00:09:06	7	0.0	9.02	360.0		
06/26/2014	00:09:23					Circulate with rig pumps	
06/26/2014	00:09:23	8	0.0	9.02	360.0		
06/26/2014	00:11:28	8	0.0	9.01	360.0		
06/26/2014	00:14:28	8	0.0	9.02	360.0		
06/26/2014	00:17:28	8	0.0	9.02	360.0		
06/26/2014	00:20:28	8	0.0	9.02	360.0		
06/26/2014	00:23:28	7	0.0	9.02	360.0		
06/26/2014	00:26:28	7	0.0	9.02	360.0		
06/26/2014	00:29:28	7	0.0	9.02	360.0		
06/26/2014	00:32:28	7	0.0	9.02	360.0		
06/26/2014	00:35:28	7	0.0	9.02	360.0		
06/26/2014	00:38:28	8	0.0	9.02	360.0		
06/26/2014	00:41:28	7	0.0	9.02	360.0		
06/26/2014	00:44:28	7	0.0	9.02	360.0		
06/26/2014	00:47:28	7	0.0	9.02	360.0		
06/26/2014	00:50:28	6	0.0	9.03	360.0		
06/26/2014	00:53:28	6	0.0	9.03	360.0		
06/26/2014	00:56:28	6	0.0	9.03	360.0		
06/26/2014	00:59:28	7	0.0	9.03	360.0		
06/26/2014	01:02:28	6	0.0	9.03	360.0		
06/26/2014	01:05:28	7	0.0	9.03	360.0		
06/26/2014	01:08:28	6	0.0	9.03	360.0		
06/26/2014	01:11:28	6	0.0	9.03	360.0		
06/26/2014	01:14:28	5	0.0	9.03	360.0		
06/26/2014	01:17:28	6	0.0	9.03	360.0		
06/26/2014	01:20:28	5	0.0	9.03	360.0		
06/26/2014	01:23:28	4	0.0	9.03	360.0		
06/26/2014	01:26:28	4	0.0	9.03	360.0		
06/26/2014	01:29:28	3	0.0	9.03	360.0		
06/26/2014	01:32:28	3	0.0	9.03	360.0		
06/26/2014	01:35:28	2	0.0	9.03	360.0		
06/26/2014	01:38:28	3	0.0	9.03	360.0		

Well			Field		Job Start	Customer	Job Number
Knoss 0631519040			Old Homestead		Jun/25/2014	Nighthawk Production	CWJN-00133
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
06/26/2014	01:44:28	2	0.0	9.04	360.0		
06/26/2014	01:47:28	2	0.0	9.04	360.0		
06/26/2014	01:50:28	2	0.0	9.04	360.0		
06/26/2014	01:53:28	1	0.0	9.04	360.0		
06/26/2014	01:56:28	1	0.0	9.04	360.0		
06/26/2014	01:59:28	1	0.0	9.04	360.0		
06/26/2014	02:02:28	2	0.2	9.04	360.0		
06/26/2014	02:05:28	1	0.2	9.04	360.5		
06/26/2014	02:08:28	1	0.2	9.04	361.1		
06/26/2014	02:11:28	1	0.2	9.04	361.6		
06/26/2014	02:14:28	1	0.2	9.04	362.1		
06/26/2014	02:17:28	1	0.2	9.04	362.7		
06/26/2014	02:20:28	1	0.2	9.04	363.2		
06/26/2014	02:23:28	-0	0.2	9.05	363.8		
06/26/2014	02:26:28	0	0.2	9.05	364.3		
06/26/2014	02:29:28	0	0.2	9.05	364.9		
06/26/2014	02:32:28	0	0.2	9.05	365.4		
06/26/2014	02:35:28	0	0.2	9.05	366.0		
06/26/2014	02:38:28	0	0.2	9.05	366.6		
06/26/2014	02:41:28	0	0.2	9.05	367.1		
06/26/2014	02:44:28	0	0.2	9.05	367.7		
06/26/2014	02:47:28	0	0.2	9.05	368.2		
06/26/2014	02:50:28	-0	0.2	9.05	368.8		
06/26/2014	02:53:28	0	0.2	9.05	369.4		
06/26/2014	02:56:28	0	0.2	9.05	370.0		
06/26/2014	02:59:28	-0	0.2	9.05	370.5		
06/26/2014	03:02:28	0	0.2	9.05	371.1		
06/26/2014	03:05:28	-0	0.2	9.05	371.7		
06/26/2014	03:08:28	-0	0.2	9.05	372.3		
06/26/2014	03:11:28	0	0.2	9.05	372.9		
06/26/2014	03:14:28	-0	0.2	9.05	373.5		
06/26/2014	03:17:28	0	0.2	9.05	374.1		
06/26/2014	03:20:28	-0	0.2	9.05	374.7		
06/26/2014	03:23:28	0	0.2	9.05	375.3		
06/26/2014	03:26:28	0	0.2	9.05	375.9		
06/26/2014	03:29:28	0	0.2	9.05	376.5		
06/26/2014	03:32:28	0	0.2	9.05	377.1		
06/26/2014	03:35:28	1	0.2	9.05	377.7		
06/26/2014	03:35:59					Skip Plug 5	
06/26/2014	03:35:59	1	0.2	9.06	377.9		
06/26/2014	03:36:25					Plug 6	
06/26/2014	03:36:25	0	0.2	9.06	377.9		
06/26/2014	03:38:28	0	0.2	9.06	378.4		
06/26/2014	03:41:28	-1	0.2	9.06	379.0		
06/26/2014	03:44:28	0	0.2	9.06	379.6		
06/26/2014	03:47:28	1	0.2	9.06	380.3		
06/26/2014	03:48:01					Start MUDPUSH	
06/26/2014	03:48:01	1	0.2	9.06	380.4		
06/26/2014	03:50:28	1	0.2	9.06	380.9		
06/26/2014	03:53:28	5	0.0	9.06	381.2		
06/26/2014	03:56:28	4	0.0	9.06	381.2		
06/26/2014	03:59:28	206	4.5	12.15	388.9		
06/26/2014	04:02:28	1	0.0	12.28	396.6		
06/26/2014	04:02:30					Reset Total, Vol = 17.46 bbl	

Well			Field		Job Start		Customer		Job Number		
Knoss 0631519040			Old Homestead		Jun/25/2014		Nighthawk Production		CWJN-00133		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
06/26/2014	04:04:06					Start Cement Slurry					
06/26/2014	04:04:06	0	0.0	12.24	396.6						
06/26/2014	04:05:28	73	3.4	15.27	396.9						
06/26/2014	04:08:28	13	0.4	12.20	403.5						
06/26/2014	04:10:09					Reset Total, Vol = 8.16 bbl					
06/26/2014	04:10:09	1	0.0	12.14	406.9						
06/26/2014	04:10:33					Start MUDPUSH					
06/26/2014	04:10:33	0	0.0	12.34	406.9						
06/26/2014	04:10:39					Reset Total, Vol = 3.20 bbl					
06/26/2014	04:10:39	0	0.0	12.42	406.9						
06/26/2014	04:11:28	106	4.3	13.25	407.3						
06/26/2014	04:11:52					Displace					
06/26/2014	04:11:52	212	8.3	8.89	410.2						
06/26/2014	04:14:28	416	8.2	8.86	431.8						
06/26/2014	04:17:28	72	4.7	8.81	450.4						
06/26/2014	04:18:31					Reset Total, Vol = 45.26 bbl					
06/26/2014	04:18:31	1	0.2	8.87	454.9						
06/26/2014	04:19:19					POOH to 4202 ft					
06/26/2014	04:19:19	2	0.0	8.88	454.9						
06/26/2014	04:20:19					Circulate with rig mud					
06/26/2014	04:20:19	2	0.2	8.88	455.2						
06/26/2014	04:20:28	2	0.0	8.89	455.3						
06/26/2014	04:23:28	2	0.2	8.86	455.5						
06/26/2014	04:26:28	11	0.0	8.73	457.2						
06/26/2014	04:29:28	6	0.0	0.57	457.7						
06/26/2014	04:32:28	3	0.0	0.45	457.7						
06/26/2014	04:35:28	3	0.0	0.40	457.7						
06/26/2014	04:38:28	3	0.0	0.40	457.7						
06/26/2014	04:41:28	2	0.0	0.41	457.7						
06/26/2014	04:44:28	2	0.0	0.41	457.7						
06/26/2014	04:47:28	2	0.0	0.41	457.7						
06/26/2014	04:50:28	1	0.0	0.42	457.7						
06/26/2014	04:53:28	3	0.0	0.42	457.7						
06/26/2014	04:56:28	1	0.0	0.42	457.7						
06/26/2014	04:59:28	0	0.0	0.43	457.7						
06/26/2014	05:02:28	1	0.0	0.43	457.7						
06/26/2014	05:05:28	1	0.0	0.43	457.7						
06/26/2014	05:08:28	1	0.0	0.43	457.7						
06/26/2014	05:11:28	1	0.0	0.43	457.7						
06/26/2014	05:14:28	1	0.0	0.43	457.7						
06/26/2014	05:17:28	1	0.0	0.43	457.7						
06/26/2014	05:20:28	1	0.0	0.43	457.7						
06/26/2014	05:23:28	1	0.0	0.43	457.7						
06/26/2014	05:26:28	1	0.0	0.43	457.7						
06/26/2014	05:29:28	0	0.0	0.43	457.7						
06/26/2014	05:32:28	1	0.0	0.43	457.7						
06/26/2014	05:35:28	1	0.0	0.44	457.7						
06/26/2014	05:38:28	0	0.0	0.44	457.7						
06/26/2014	05:41:28	1	0.0	0.44	457.7						
06/26/2014	05:44:28	0	0.0	0.44	457.7						
06/26/2014	05:47:28	1	0.0	0.44	457.7						
06/26/2014	05:50:28	0	0.0	0.44	457.7						
06/26/2014	05:53:28	0	0.0	0.44	457.7						
06/26/2014	05:56:28	1	0.0	0.44	457.7						

Well			Field		Job Start		Customer		Job Number	
Knoss 0631519040			Old Homestead		Jun/25/2014		Nighthawk Production		CWJN-00133	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/26/2014	06:02:28	1	0.0	0.44	457.7					
06/26/2014	06:05:28	1	0.0	0.44	457.7					
06/26/2014	06:08:28	0	0.0	0.44	457.7					
06/26/2014	06:11:28	0	0.0	0.45	457.7					
06/26/2014	06:14:28	0	0.0	0.45	457.7					
06/26/2014	06:17:28	1	0.0	0.45	457.7					
06/26/2014	06:20:28	1	0.0	0.45	457.7					
06/26/2014	06:23:28	0	0.0	0.45	457.7					
06/26/2014	06:26:28	1	0.0	0.45	457.7					
06/26/2014	06:29:28	1	0.0	0.45	457.7					
06/26/2014	06:30:35					Plug 7				
06/26/2014	06:30:35	1	0.0	0.45	457.7					
06/26/2014	06:32:28	1	0.0	0.45	457.7					
06/26/2014	06:35:28	1	0.0	0.46	457.7					
06/26/2014	06:37:06					Start MUDPUSH				
06/26/2014	06:37:06	1	0.0	0.46	457.7					
06/26/2014	06:38:28	0	0.0	0.46	457.7					
06/26/2014	06:41:28	2	0.0	0.46	457.7					
06/26/2014	06:44:28	180	4.5	12.19	463.6					
06/26/2014	06:46:28					Reset Total, Vol = 17.36 bbl				
06/26/2014	06:46:28	-1	0.0	12.01	472.1					
06/26/2014	06:47:28	2	0.0	12.00	472.1					
06/26/2014	06:50:28	-1	0.0	11.96	472.1					
06/26/2014	06:52:13					Start Cement Slurry				
06/26/2014	06:52:13	139	4.5	15.62	478.1					
06/26/2014	06:52:14					Start Mixing Tail Slurry				
06/26/2014	06:52:14	167	4.5	15.55	478.2					
06/26/2014	06:52:18					Reset Total, Vol = 8.39 bbl				
06/26/2014	06:52:18	14	2.0	15.19	478.5					
06/26/2014	06:53:12					End Tail Slurry				
06/26/2014	06:53:12	-1	0.0	15.21	478.6					
06/26/2014	06:53:28	-1	0.0	15.21	478.6					
06/26/2014	06:53:34					Start MUDPUSH				
06/26/2014	06:53:34	-1	0.0	15.21	478.6					
06/26/2014	06:56:28	211	8.2	12.97	484.3					
06/26/2014	06:57:52					Reset Total, Vol = 3.16 bbl				
06/26/2014	06:57:52	182	8.0	8.75	495.6					
06/26/2014	06:58:06					Displace				
06/26/2014	06:58:06	251	8.0	8.76	497.5					
06/26/2014	06:59:28	428	8.3	8.87	508.8					
06/26/2014	07:01:56					Reset Total, Vol = 37.23 bbl				
06/26/2014	07:01:56	23	0.0	8.78	520.4					
06/26/2014	07:02:28	4	0.0	8.79	520.4					
06/26/2014	07:03:41					POOH to 3200ft				
06/26/2014	07:03:41	2	0.0	8.80	520.4					
06/26/2014	07:04:29					Circulate with rig pumps				
06/26/2014	07:04:29	3	0.0	8.79	520.4					
06/26/2014	07:05:28	2	0.0	8.79	520.4					
06/26/2014	07:08:28	1	0.0	0.00	520.8					
06/26/2014	07:11:28	1	0.0	0.00	520.8					
06/26/2014	07:14:28	1	0.0	0.00	520.8					
06/26/2014	07:17:28	2	0.0	0.00	520.8					
06/26/2014	07:20:28	1	0.0	0.00	520.8					
06/26/2014	07:23:28	1	0.0	0.00	520.8					

Well			Field		Job Start		Customer		Job Number	
Knoss 0631519040			Old Homestead		Jun/25/2014		Nighthawk Production		CWJN-00133	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/26/2014	07:29:28	1	0.0	0.00	520.8					
06/26/2014	07:32:28	1	0.0	0.00	520.8					
06/26/2014	07:35:28	1	0.0	0.00	520.8					
06/26/2014	07:38:28	1	0.0	0.00	520.8					
06/26/2014	07:41:28	2	0.0	0.00	520.8					
06/26/2014	07:44:28	2	0.0	0.00	520.8					
06/26/2014	07:47:28	1	0.0	0.00	520.8					
06/26/2014	07:50:28	2	0.0	0.00	520.8					
06/26/2014	07:53:28	1	0.0	0.00	520.8					
06/26/2014	07:56:28	1	0.0	0.00	520.8					
06/26/2014	07:59:28	1	0.0	0.00	520.8					
06/26/2014	08:02:28	1	0.0	0.00	520.8					
06/26/2014	08:05:28	1	0.0	0.00	520.8					
06/26/2014	08:08:28	2	0.0	0.00	520.8					
06/26/2014	08:11:28	2	0.0	0.00	520.8					
06/26/2014	08:14:28	2	0.0	0.00	520.8					
06/26/2014	08:17:28	1	0.0	0.00	520.8					
06/26/2014	08:20:28	1	0.0	0.00	520.8					
06/26/2014	08:23:28	2	0.0	0.00	520.8					
06/26/2014	08:26:28	2	0.0	0.00	520.8					
06/26/2014	08:29:28	1	0.0	0.00	520.8					
06/26/2014	08:32:28	2	0.0	0.00	520.8					
06/26/2014	08:35:28	2	0.0	0.00	520.8					
06/26/2014	08:38:28	2	0.0	0.00	520.8					
06/26/2014	08:41:28	1	0.0	0.00	520.8					
06/26/2014	08:44:28	2	0.0	0.00	520.8					
06/26/2014	08:47:28	2	0.0	0.00	520.8					
06/26/2014	08:50:28	1	0.0	0.00	520.8					
06/26/2014	08:53:28	2	0.0	0.00	520.8					
06/26/2014	08:56:28	1	0.0	0.00	520.8					
06/26/2014	08:59:28	1	0.0	0.00	520.8					
06/26/2014	09:02:28	2	0.0	0.00	520.8					
06/26/2014	09:05:28	2	0.0	0.00	520.8					
06/26/2014	09:08:28	2	0.0	0.00	520.8					
06/26/2014	09:11:28	2	0.0	0.00	520.8					
06/26/2014	09:14:28	2	0.0	0.00	520.8					
06/26/2014	09:17:28	1	0.0	0.00	520.8					
06/26/2014	09:20:28	2	0.0	0.00	520.8					
06/26/2014	09:23:28	2	0.0	0.00	520.8					
06/26/2014	09:26:28	1	0.0	0.00	520.8					
06/26/2014	09:29:28	1	0.0	0.00	520.8					
06/26/2014	09:32:28	3	0.0	0.00	520.8					
06/26/2014	09:35:28	2	0.0	0.00	520.8					
06/26/2014	09:38:28	6	0.0	0.00	520.8					
06/26/2014	09:41:28	6	0.0	0.00	520.8					
06/26/2014	09:44:28	2	0.0	0.00	520.8					
06/26/2014	09:47:28	3	0.0	0.00	520.8					
06/26/2014	09:50:28	6	0.0	0.00	520.8					
06/26/2014	09:53:28	6	0.0	0.00	520.8					
06/26/2014	09:56:28	3	0.0	0.00	520.8					
06/26/2014	09:59:28	2	0.0	0.00	520.8					
06/26/2014	10:02:28	2	0.0	0.00	520.8					
06/26/2014	10:03:24					Plug 8				
06/26/2014	10:03:24	3	0.0	0.00	520.8					

Well			Field		Job Start		Customer		Job Number	
Knoss 0631519040			Old Homestead		Jun/25/2014		Nighthawk Production		CWJN-00133	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
06/26/2014	10:03:42	3	0.0	0.00	520.8					
06/26/2014	10:05:28	6	0.0	0.00	520.8					
06/26/2014	10:08:28	3	0.0	0.00	520.8					
06/26/2014	10:11:28	3	0.0	0.00	520.8					
06/26/2014	10:14:28	3	0.0	0.00	520.8					
06/26/2014	10:15:56					Reset Total, Vol = 8.61 bbl				
06/26/2014	10:15:56	3	0.0	0.00	520.8					
06/26/2014	10:16:22					Start Cement Slurry				
06/26/2014	10:16:22	3	0.0	0.00	520.8					
06/26/2014	10:17:28	3	0.0	0.00	520.8					
06/26/2014	10:19:57					Reset Total, Vol = 10.01 bbl				
06/26/2014	10:19:57	97	4.7	12.34	523.8					
06/26/2014	10:20:28	113	5.1	12.25	526.3					
06/26/2014	10:22:22					Start MUDPUSH				
06/26/2014	10:22:22	-0	0.0	12.28	529.0					
06/26/2014	10:23:28	-1	0.0	12.27	529.0					
06/26/2014	10:25:25					Reset Total, Vol = 3.09 bbl				
06/26/2014	10:25:25	0	0.0	12.25	529.0					
06/26/2014	10:26:28	-1	0.0	12.24	529.0					
06/26/2014	10:29:28	-1	0.0	12.24	529.0					
06/26/2014	10:30:23					Displace				
06/26/2014	10:30:23	163	4.3	15.85	529.9					
06/26/2014	10:32:28	50	1.0	7.07	538.5					
06/26/2014	10:33:30					Reset Total, Vol = 1.10 bbl				
06/26/2014	10:33:30	11	0.0	13.50	538.9					
06/26/2014	10:35:07					POOH to 31ft				
06/26/2014	10:35:07	8	0.0	13.70	538.9					
06/26/2014	10:35:28	7	0.0	13.71	538.9					
06/26/2014	10:38:28	26	0.2	12.41	543.7					
06/26/2014	10:41:28	8	0.0	12.41	543.9					
06/26/2014	10:44:28	7	0.0	12.44	543.9					
06/26/2014	10:47:28	8	0.0	11.32	544.0					
06/26/2014	10:50:28	7	0.2	9.96	544.0					
06/26/2014	10:53:28	7	0.2	9.57	544.4					
06/26/2014	10:54:22					Circulate with rig pumps				
06/26/2014	10:54:22	7	0.3	9.46	544.7					
06/26/2014	10:56:28	7	0.6	9.27	545.7					
06/26/2014	10:59:28	5	0.8	8.97	547.8					
06/26/2014	11:02:28	5	0.9	9.00	550.3					
06/26/2014	11:05:28	5	0.9	9.02	552.9					
06/26/2014	11:08:28	6	0.9	9.03	555.6					
06/26/2014	11:11:28	5	0.9	9.03	558.3					
06/26/2014	11:14:28	5	0.9	9.03	561.1					
06/26/2014	11:17:28	5	0.9	9.03	563.9					
06/26/2014	11:20:28	6	0.9	9.03	566.7					
06/26/2014	11:23:28	6	1.0	9.03	569.5					
06/26/2014	11:26:28	6	1.0	9.03	572.4					
06/26/2014	11:29:28	5	1.0	9.03	575.3					
06/26/2014	11:32:28	5	1.0	9.03	578.3					
06/26/2014	11:35:28	109	4.6	9.36	583.3					
06/26/2014	11:37:49					Wash up				
06/26/2014	11:37:49	77	4.5	9.10	593.9					
06/26/2014	11:38:28	83	4.4	9.17	596.8					
06/26/2014	11:41:28	5	0.8	8.24	601.9					

Well			Field		Job Start	Customer		Job Number	
Knoss 0631519040			Old Homestead		Jun/25/2014	Nighthawk Production		CWJN-00133	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
06/26/2014	11:47:28	6	0.0	8.23	608.0				
06/26/2014	11:50:28	7	0.0	8.12	608.0				
06/26/2014	11:53:28	7	0.0	8.40	608.0				
06/26/2014	11:56:28	9	0.0	6.87	608.0				
06/26/2014	11:59:28	63	4.7	8.44	617.6				
06/26/2014	12:02:28	16	2.9	8.11	631.9				
06/26/2014	12:05:28	4	0.0	8.40	632.5				
06/26/2014	12:06:17					Reset Total, Vol = 88.38 bbl			
06/26/2014	12:06:17	5	0.0	8.40	632.5				
06/26/2014	12:08:28	2	0.0	3.20	632.5				
06/26/2014	12:11:28	1	0.0	8.39	632.5				
06/26/2014	12:14:28	1	0.0	8.40	632.5				
06/26/2014	12:17:28	3	0.0	8.40	632.5				
06/26/2014	12:20:28	1	0.0	8.39	632.5				
06/26/2014	12:20:58					Top out			
06/26/2014	12:20:58	-25	0.3	8.94	632.6				
06/26/2014	12:23:28	1	0.0	16.24	636.1				
06/26/2014	12:26:28	3	0.0	16.47	636.1				
06/26/2014	12:29:28	3	0.0	16.77	636.1				
06/26/2014	12:32:28	4	0.0	17.01	636.1				
06/26/2014	12:35:28	19	1.3	16.19	636.3				
06/26/2014	12:38:28	15	0.4	15.68	643.5				
06/26/2014	12:41:28	9	0.0	15.41	643.7				
06/26/2014	12:44:28	16	2.4	7.84	652.2				
06/26/2014	12:47:28	-6	20.1	8.48	672.8				
06/26/2014	12:50:28	5	0.0	8.39	691.3				
06/26/2014	12:51:03					Reset Total, Vol = 21.89 bbl			
06/26/2014	12:51:03	5	0.0	8.40	691.3				
06/26/2014	12:51:17					Wash up			
06/26/2014	12:51:17	6	0.0	8.40	691.3				
06/26/2014	12:51:19					Reset Total, Vol = 25 bbl			
06/26/2014	12:51:19	5	0.0	8.40	691.3				
06/26/2014	12:51:21	6	0.0	8.40	691.3				
06/26/2014	12:51:21					Stopped Acquisition			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry 1.7	N2	Mud 0.0	Maximum Rate 132.9		Total Slurry 80.0	Mud 0.0	Spacer 150.0	N2			
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum 3785	Final 6	Average 46	Bump Plug to	Breakdown	Type		Volume		Density		
Avg. N2 Percent		Designed Slurry Volume		Displacement 0.0 bbl		Mix Water Temp 70 degF		Cement Circulated to Surface?	<input type="checkbox"/>	Volume	
								Washed Thru Perfs	<input type="checkbox"/>	To	
Customer or Authorized Representative Jim Weir				Schlumberger Supervisor Michael Simon/ T Morrow				Circulation Lost	<input type="checkbox"/>	Job Completed	<input type="checkbox"/>
								-		-	