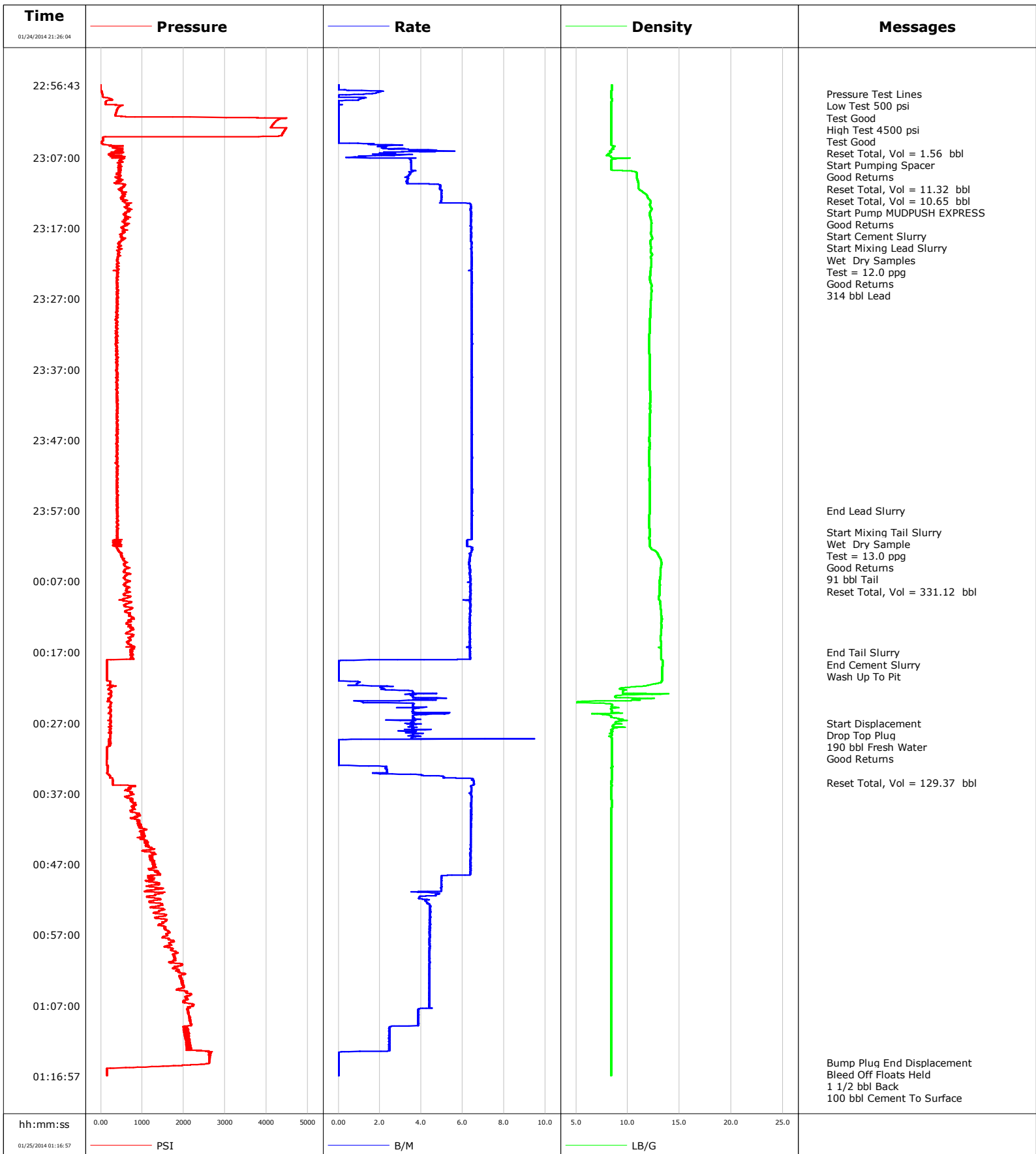


Well	Big Sky 13-11	Client	Nighthawk Production
Field	Arikaree Creek	SIR No.	COU5-00329
Engineer	Jordan Moreland / TJ Morrow	Job Type	5 1/2 Production
Country		Job Date	



Cementing Service Report

Customer Nighthawk Production				Job Number COU5-00329							
Well Big Sky 13-11			Location (legal)			Schlumberger Location GCO		Job Start Jan/25/2014			
Field Arikaree Creek		Formation Name/Type		Deviation		Bit Size 7.9 in		Well MD		Well TVD	
County lincoln		State/Province Colorado		BHP		BHST 188 degF		BHCT 152 degF		Pore Press. Gradient	
Well Master		API/UWI									
Rig Name Extreme 11		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		350.0	8.630	24.0	J55	8RD	
						8271.0	5.500	17.0	n80	8RD	
Drilling Fluid Type		Max. Density		Plastic Viscosity		Tubing/Drill Pipe					
						Depth,	Size,	Weight,	Grade	Thread	
Service Line Cementing		Job Type 5 1/2 Production									
Max. Allowed Tub. Press 4500 psi		Max. Allowed Ann. Press		WH Connection Single Cement head		Perforations/Open Hole					
						Top,	Bottom,	No. of Shots		Total Interval	
Service Instructions										Diameter	
						Treat Down Casing	Displacement 190.0 bbl		Packer Type		Packer Depth
						Tubing Vol.	Casing Vol. 192.0 bbl		Annular Vol. 256.0 bbl		Openhole Vol. 450.0 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 5918 psi				Shoe Type Float		Squeeze Type					
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input checked="" type="checkbox"/>		Shoe Depth 8271.0 ft		Tool Type					
No. Centralizers		Top Plugs 1		Bottom Plugs		Stage Tool Type		Tool Depth			
Cement Head Type Single						Stage Tool Depth		Tail Pipe Size			
Job Scheduled For Jan/25/2014		Arrived on Location Jan/25/2014		Leave Location Jan/25/2014		Collar Type Float		Tail Pipe Depth			
						Collar Depth 8181.0 ft		Sqz. Total Vol.			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
01/01/1970	00:00:00					End Displacement					
01/24/2014	19:37:40					Started Acquisition					
01/24/2014	21:26:04	3	0.0	8.43	0.0						
01/24/2014	21:28:00	3	0.0	8.43	0.0						
01/24/2014	21:30:00	3	0.0	8.43	0.0						
01/24/2014	21:32:00	3	0.0	8.43	0.0						
01/24/2014	22:58:00					Pressure Test Lines					
01/24/2014	22:58:00					Low Test 500 psi					
01/24/2014	22:58:00					Test Good					
01/24/2014	22:58:00					High Test 4500 psi					
01/24/2014	22:58:00					Test Good					
01/24/2014	22:58:00	33	1.6	8.41	0.9						
01/24/2014	23:00:00	413	0.0	8.42	1.6						
01/24/2014	23:02:00	4208	0.0	8.42	1.6						
01/24/2014	23:04:00	4302	0.0	8.42	1.6						
01/24/2014	23:04:29					Reset Total, Vol = 1.56 bbl					
01/24/2014	23:04:29	51	0.0	8.42	1.6						
01/24/2014	23:06:00	437	4.6	8.39	2.4						
01/24/2014	23:07:00					Start Pumping Spacer					
01/24/2014	23:07:00					Good Returns					
01/24/2014	23:07:00	523	0.5	8.39	5.0						

Well			Field		Job Start	Customer	Job Number
Big Sky 13-11			Arikaree Creek		Jan/25/2014	Nighthawk Production	COU5-00329
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/24/2014	23:08:52					Reset Total, Vol = 11.32 bbl	
01/24/2014	23:08:52	419	3.7	9.51	0.0		
01/24/2014	23:10:00	427	3.4	10.90	3.9		
01/24/2014	23:11:37					Reset Total, Vol = 10.65 bbl	
01/24/2014	23:11:37	443	5.0	11.18	0.0		
01/24/2014	23:12:00					Start Pump MUDPUSH EXPRESS	
01/24/2014	23:12:00					Good Returns	
01/24/2014	23:12:00	586	5.0	11.54	1.9		
01/24/2014	23:14:00	583	6.4	12.19	12.6		
01/24/2014	23:16:00					Start Cement Slurry	
01/24/2014	23:16:00					Start Mixing Lead Slurry	
01/24/2014	23:16:00	585	6.4	12.26	25.4		
01/24/2014	23:17:00					Wet Dry Samples	
01/24/2014	23:17:00					Test = 12.0 ppg	
01/24/2014	23:17:00					Good Returns	
01/24/2014	23:17:00					314 bbl Lead	
01/24/2014	23:17:00	546	6.4	12.26	31.8		
01/24/2014	23:18:00	499	6.4	12.26	38.2		
01/24/2014	23:20:00	476	6.4	12.23	51.0		
01/24/2014	23:22:00	395	6.4	12.25	63.9		
01/24/2014	23:24:00	376	6.4	12.14	76.8		
01/24/2014	23:26:00	380	6.4	12.29	89.6		
01/24/2014	23:28:00	391	6.4	12.21	102.5		
01/24/2014	23:30:00	372	6.5	12.14	115.4		
01/24/2014	23:32:00	370	6.5	12.09	128.3		
01/24/2014	23:34:00	376	6.4	12.09	141.2		
01/24/2014	23:36:00	371	6.5	12.11	154.1		
01/24/2014	23:38:00	405	6.4	12.14	167.0		
01/24/2014	23:40:00	387	6.4	12.14	179.8		
01/24/2014	23:42:00	405	6.5	12.14	192.7		
01/24/2014	23:44:00	386	6.5	12.12	205.6		
01/24/2014	23:46:00	405	6.4	12.10	218.5		
01/24/2014	23:48:00	385	6.4	12.10	231.4		
01/24/2014	23:50:00	387	6.5	12.07	244.3		
01/24/2014	23:52:00	401	6.4	12.11	257.2		
01/24/2014	23:54:00	392	6.5	12.11	270.1		
01/24/2014	23:56:00	411	6.4	12.10	283.0		
01/24/2014	23:57:00					End Lead Slurry	
01/24/2014	23:57:00	391	6.4	12.10	289.4		
01/24/2014	23:58:00	396	6.5	12.09	295.8		
01/25/2014	00:00:00					Start Mixing Tail Slurry	
01/25/2014	00:00:00					Wet Dry Sample	
01/25/2014	00:00:00					Test = 13.0 ppg	
01/25/2014	00:00:00					Good Returns	
01/25/2014	00:00:00					91 bbl Tail	
01/25/2014	00:00:00	399	6.4	12.10	308.7		
01/25/2014	00:02:00	344	6.2	12.11	321.4		
01/25/2014	00:03:30					Reset Total, Vol = 331.12 bbl	
01/25/2014	00:03:30	522	6.4	13.03	331.0		
01/25/2014	00:04:00	568	6.3	13.20	3.1		
01/25/2014	00:06:00	668	6.3	13.18	15.7		
01/25/2014	00:08:00	616	6.4	13.08	28.5		
01/25/2014	00:10:00	723	6.4	13.13	41.2		
01/25/2014	00:12:00	727	6.3	13.27	53.9		

Well			Field		Job Start	Customer	Job Number
Big Sky 13-11			Arikaree Creek		Jan/25/2014	Nighthawk Production	COU5-00329
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/25/2014	00:16:00	736	6.3	13.20	79.3		
01/25/2014	00:17:00					End Tail Slurry	
01/25/2014	00:17:00	758	6.3	13.20	85.7		
01/25/2014	00:18:00					End Cement Slurry	
01/25/2014	00:18:00	708	6.4	13.21	92.0		
01/25/2014	00:20:00					Wash Up To Pit	
01/25/2014	00:20:00	150	0.0	13.32	92.6		
01/25/2014	00:22:00	254	2.0	9.97	93.7		
01/25/2014	00:24:00	166	1.1	5.40	100.3		
01/25/2014	00:26:00	248	3.6	8.34	107.4		
01/25/2014	00:27:00					Start Displacement	
01/25/2014	00:27:00					Drop Top Plug	
01/25/2014	00:27:00					190 bbl Fresh Water	
01/25/2014	00:27:00					Good Returns	
01/25/2014	00:27:00	241	3.5	8.84	111.0		
01/25/2014	00:28:00	232	4.2	8.37	114.6		
01/25/2014	00:30:00	243	0.0	8.44	119.7		
01/25/2014	00:32:00	144	0.0	8.43	119.7		
01/25/2014	00:34:00	163	2.4	8.46	121.8		
01/25/2014	00:35:30					Reset Total, Vol = 129.37 bbl	
01/25/2014	00:35:30	296	6.5	8.43	129.3		
01/25/2014	00:36:00	824	6.4	8.43	132.5		
01/25/2014	00:38:00	754	6.4	8.43	145.3		
01/25/2014	00:40:00	934	6.4	8.42	158.2		
01/25/2014	00:42:00	1049	6.4	8.42	171.0		
01/25/2014	00:44:00	1148	6.4	8.42	183.7		
01/25/2014	00:46:00	1241	6.4	8.42	196.5		
01/25/2014	00:48:00	1322	6.4	8.42	209.3		
01/25/2014	00:50:00	1225	5.0	8.42	220.0		
01/25/2014	00:52:00	1463	4.3	8.42	229.1		
01/25/2014	00:54:00	1345	4.4	8.42	237.9		
01/25/2014	00:56:00	1551	4.4	8.42	246.7		
01/25/2014	00:58:00	1769	4.4	8.42	255.5		
01/25/2014	01:00:00	1805	4.4	8.42	264.3		
01/25/2014	01:02:00	1869	4.4	8.42	273.1		
01/25/2014	01:04:00	1968	4.4	8.42	281.9		
01/25/2014	01:06:00	2095	4.4	8.42	290.7		
01/25/2014	01:08:00	2109	3.9	8.42	299.2		
01/25/2014	01:10:00	1981	2.5	8.42	306.8		
01/25/2014	01:12:00	2133	2.5	8.41	311.7		
01/25/2014	01:14:00	2606	0.0	8.42	315.4		
01/25/2014	01:15:00					Bump Plug End Displacement	
01/25/2014	01:15:00					Bleed Off Floats Held	
01/25/2014	01:15:00					1 1/2 bbl Back	
01/25/2014	01:15:00					100 bbl Cement To Surface	
01/25/2014	01:15:00					Rig Down	
01/25/2014	01:15:00					End Job	
01/25/2014	01:15:00	2621	0.0	8.42	315.4		

Well Big Sky 13-11	Field Arikaree Creek	Job Start Jan/25/2014	Customer Nighthawk Production	Job Number COU5-00329
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Post Job Summary

Average Pump Rates,					Volume of Fluid Injected,			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2	
Treating Pressure Summary,					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp 55 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume			
Customer or Authorized Representative Jim Weir				Schlumberger Supervisor Jordan Moreland / TJ Morrow	Washed Thru Perfs <input type="checkbox"/>	To		
				Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>			
				-	-			