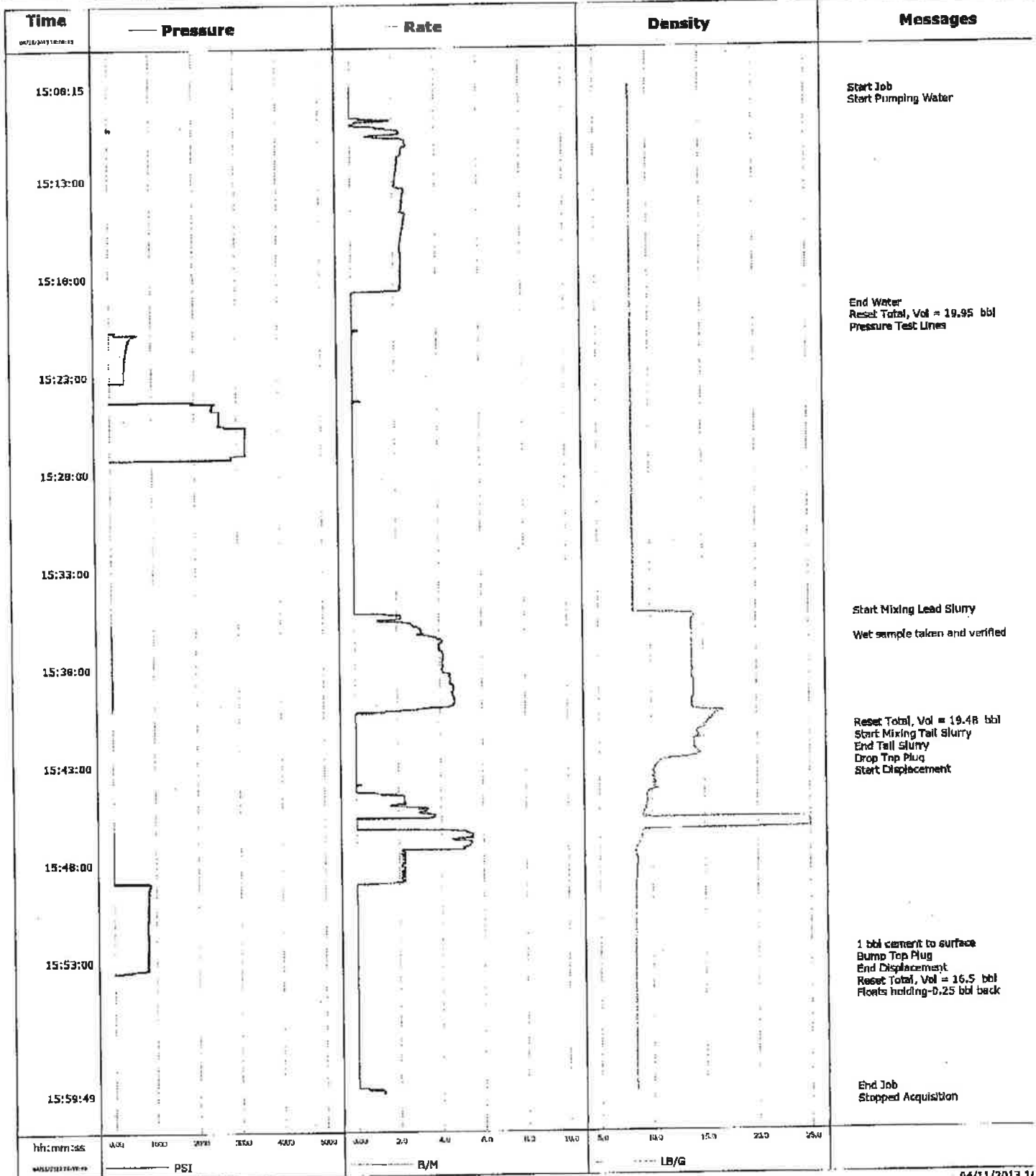


Well	BIG SKY 4-11	Client	NIGHTHAWK PRODUCTION
Field	WILDCAT	SIR No.	CA10-00082
Engineer	Michael Simon	Job Type	SURFACE
Country	United States	Job Date	04-11-2013



Customer				Job Number			
NIGHTHAWK PRODUCTION				CAID-00062			
Well		Location (Legal)		Schlumberger Location		Job Start	
BIG SKY 4-11 4-11		GRAND JUNCTION		Rock Springs		Apr/11/2013	
Field		Formation Name/Type		Deviation		Well TVD	
WILDCAT		Shale		11.0 In		300.0 ft	
County		State/Province		BHP		Pore Press. Gradient	
LINCOLN		Colorado		84 degF		80 degF	
Well Number		API/OWI		Casing/liner			
0631452276		05073065200000					
Rig Name		Drilled For		Service Via		Depth, ft	
		Oil		Land		300.0	
Offshore Zone		Well Class		Well Type		Size, In	
		New		Development		8.630	
Drilling Fluid Type		Max. Density		Plastic Viscosity		Weight, lb/ft	
Bentonite						24.0	
Service Line		Job Type		Grade		Thread	
Cementing		SURFACE		155		BRD	
Max. Allowed Tub. Press		Max. Allowed Ann. Press		WH Connection		Total Interval	
500 psi				Single Cement head			
Service Instructions		Treat Down		Displacement		Packer Type	
		Casing		16.0 bbl		Packer Depth	
		Tubing Vol.		Casing Vol.		Annular Vol.	
				16.7 bbl		Operative Vol.	
Casing/Tubing Secured		1 Hole Vol. Circulated prior to Cement		Casing Tools		Squeeze Job	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
LIFT Pressure		Pipe Rotated		Shoe Type		Squeeze Type	
123 psi		<input type="checkbox"/> Pipe Reciprocated <input type="checkbox"/>		Guide			
No. Centralizers		Top Plugs		Shoe Depth		Tool Type	
4		1		300.0 ft		Tool Depth	
Cement Head Type		Bottom Plugs		Stage Tool Type		Tail Pipe Size	
Single				Stage Tool Depth		Tail Pipe Depth	
Job Scheduled For		Arrived on Location		Collar Type		Float	
Apr/11/2013		Apr/11/2013		Collar Depth		258.0 ft	
Date		Time		Flow Rate		Density	
		24-hr		BPM		LB/G	
		Chart					
		Tireless Pressure		Volume		Stage	
		PST		BBL		BBL	
04/11/2013		14:43:01					
04/11/2013		15:08:15		-63		0.0	
04/11/2013		15:08:38		0.0		8.34	
04/11/2013		15:08:38		-63		0.0	
04/11/2013		15:08:41		0.0		8.34	
04/11/2013		15:08:41		-62		0.0	
04/11/2013		15:10:01		-45		1.9	
04/11/2013		15:13:01		-41		2.1	
04/11/2013		15:16:01		-33		2.4	
04/11/2013		15:19:01		-50		0.0	
04/11/2013		15:19:40					
04/11/2013		15:19:40		-51		0.0	
04/11/2013		15:19:45					
04/11/2013		15:19:45		-50		0.0	
04/11/2013		15:19:50					
04/11/2013		15:19:50		-50		0.0	
04/11/2013		15:22:01		393		0.0	
04/11/2013		15:25:01		2579		0.0	
04/11/2013		15:28:01		-46		0.0	
04/11/2013		15:31:01		-41		0.0	
04/11/2013		15:34:01		-43		0.0	

Well		Fluid			Job Start		Customer		Job Number	
BIG SKY 4-11 4-11		WILDCAT			Apr/11/2013		NIGHTHAWK PRODUCTION		CAIO-00091	
Date	Time (HH:MM)	Treating Pressure PSI	Flow Rate B/M	Density LB/F	Volume BBL	Start BBL	End BBL	Remarks		
04/11/2013	15:35:23	-30	2.1	13.85	0.4		0.4			
04/11/2013	15:36:40							Wet sample taken and verified		
04/11/2013	15:36:40	19	4.1	13.87	4.0		4.0			
04/11/2013	15:37:01	3	3.9	13.87	5.4		5.4			
04/11/2013	15:40:01	13	4.6	13.89	18.5		18.5			
04/11/2013	15:41:08							Reset Total, Vol = 19.48 bbl		
04/11/2013	15:41:08	-47	0.0	15.03	19.5		19.5			
04/11/2013	15:41:11							Start Mixing Tail Slurry		
04/11/2013	15:41:11	-47	0.0	14.99	0.0		0.0			
04/11/2013	15:41:12							End Tail Slurry		
04/11/2013	15:41:12	-47	0.0	14.96	0.0		0.0			
04/11/2013	15:41:15							Drop Top Plug		
04/11/2013	15:41:15	-46	0.0	14.89	0.0		0.0			
04/11/2013	15:41:16							Start Displacement		
04/11/2013	15:41:16	-45	0.0	14.85	0.0		0.0			
04/11/2013	15:43:01	-50	0.0	10.66	0.0		0.0			
04/11/2013	15:46:01	-31	0.0	25.00	3.5		3.5			
04/11/2013	15:49:01	-4	2.2	8.47	12.4		12.4			
04/11/2013	15:52:01	813	0.0	8.38	12.6		12.6			
04/11/2013	15:52:30							1 bbl cement to surface		
04/11/2013	15:52:30	813	0.0	8.38	12.6		12.6			
04/11/2013	15:52:43							Bump Top Plug		
04/11/2013	15:52:43	808	0.0	8.38	12.6		12.6			
04/11/2013	15:52:44							End Displacement		
04/11/2013	15:52:44	808	0.0	8.38	12.6		12.6			
04/11/2013	15:52:49							Reset Total, Vol = 16.5 bbl		
04/11/2013	15:52:49	807	0.0	8.37	12.6		12.6			
04/11/2013	15:54:31							Floats holding 0.25 bbl back		
04/11/2013	15:54:31	-57	0.0	8.37	0.0		0.0			
04/11/2013	15:55:01	-56	0.0	8.37	0.0		0.0			
04/11/2013	15:56:01	-59	0.0	8.37	0.0		0.0			
04/11/2013	15:59:44							End Job		
04/11/2013	15:59:44	-45	1.2	8.39	0.1		0.1			
04/11/2013	15:59:49	-45	1.2	8.39	0.2		0.2			

Post Job Summary

Average Pump Rates				Volume of Fluid Injected, bbl			
Slurry	H ₂ O	Mud	Maximum Rate	Total Slurry	Mud	Spacer	H ₂ O
				19.0			
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug In	Breakdown	Type	Volume	Density
808	808		600				
Avg. H ₂ O Percent		Designated Slurry Volume		Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume
		19.0 bbl		16.5 bbl	47 degF	<input checked="" type="checkbox"/>	1.0 bbl
Customer or Authorized Representative				Schlumberger Supervisor		Washed This Part?	To
JIM WEIR				Michael Simon		<input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>
				Circulation Lost		<input type="checkbox"/>	