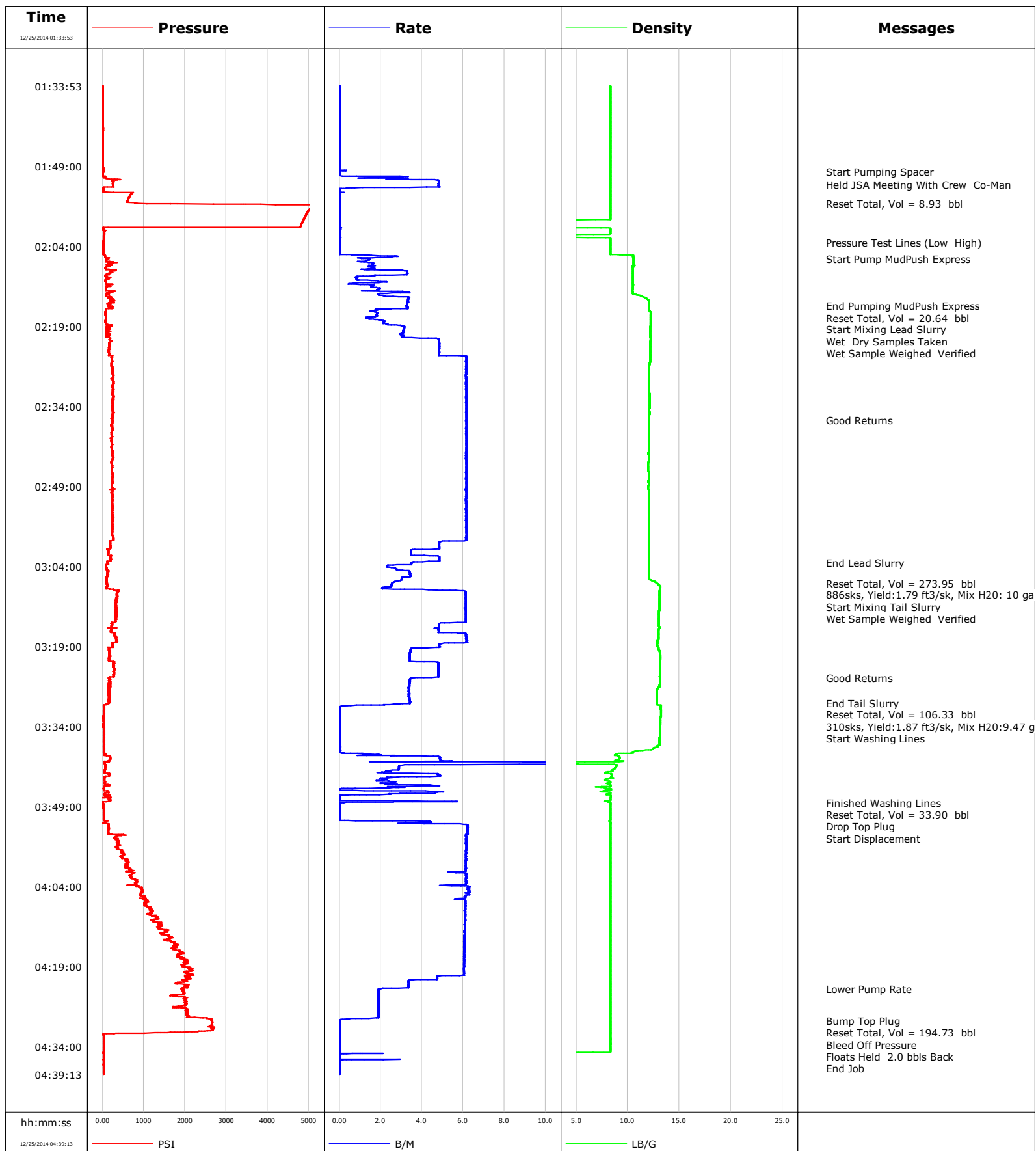


Well Keystone 3-7
Field Old 10
Engineer Jason Holt
Country United States

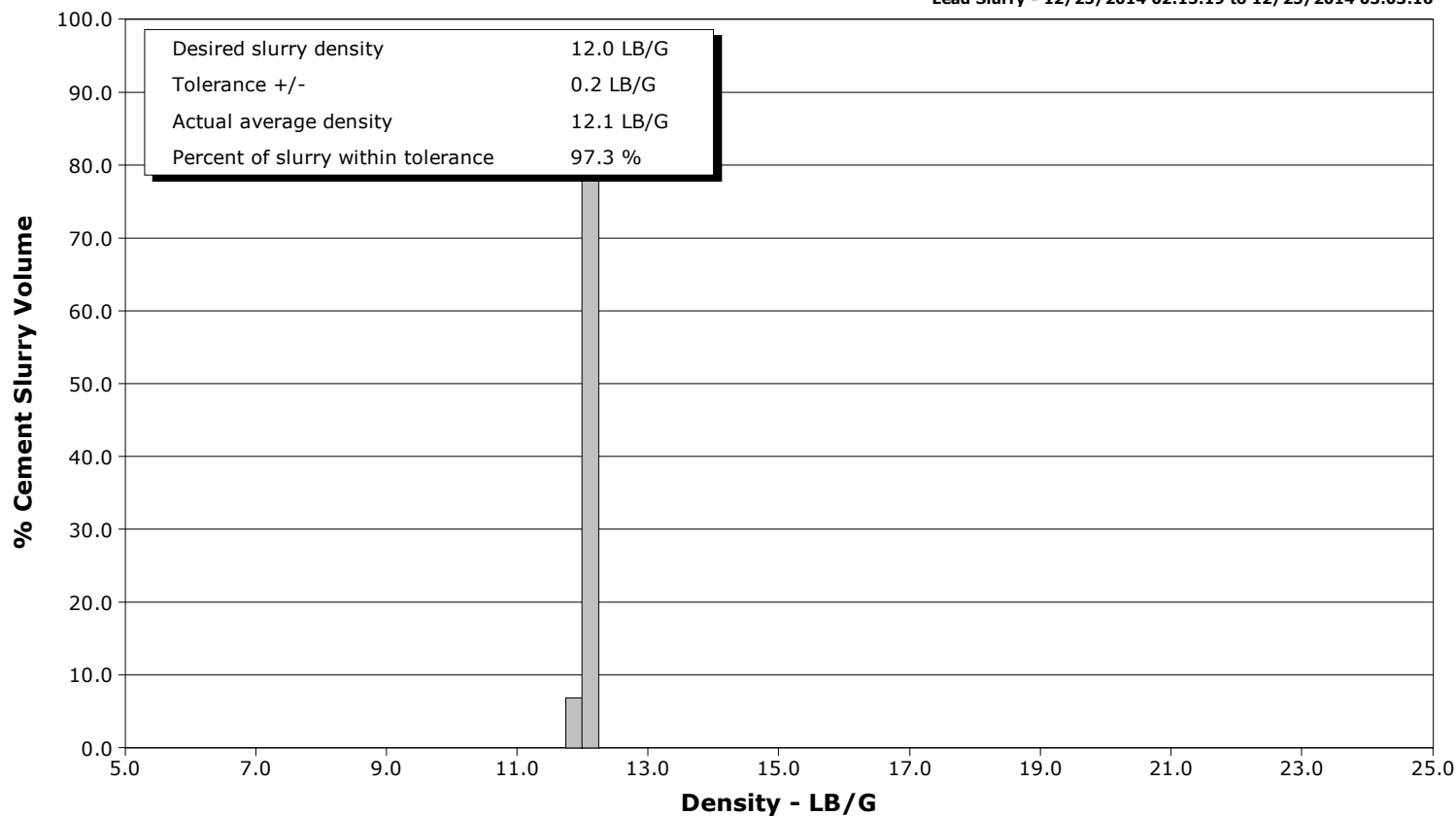
Client Night Hawk Production LLC
SIR No. D2IK-00590
Job Type 5 1/2" Production
Job Date 12-25-2014



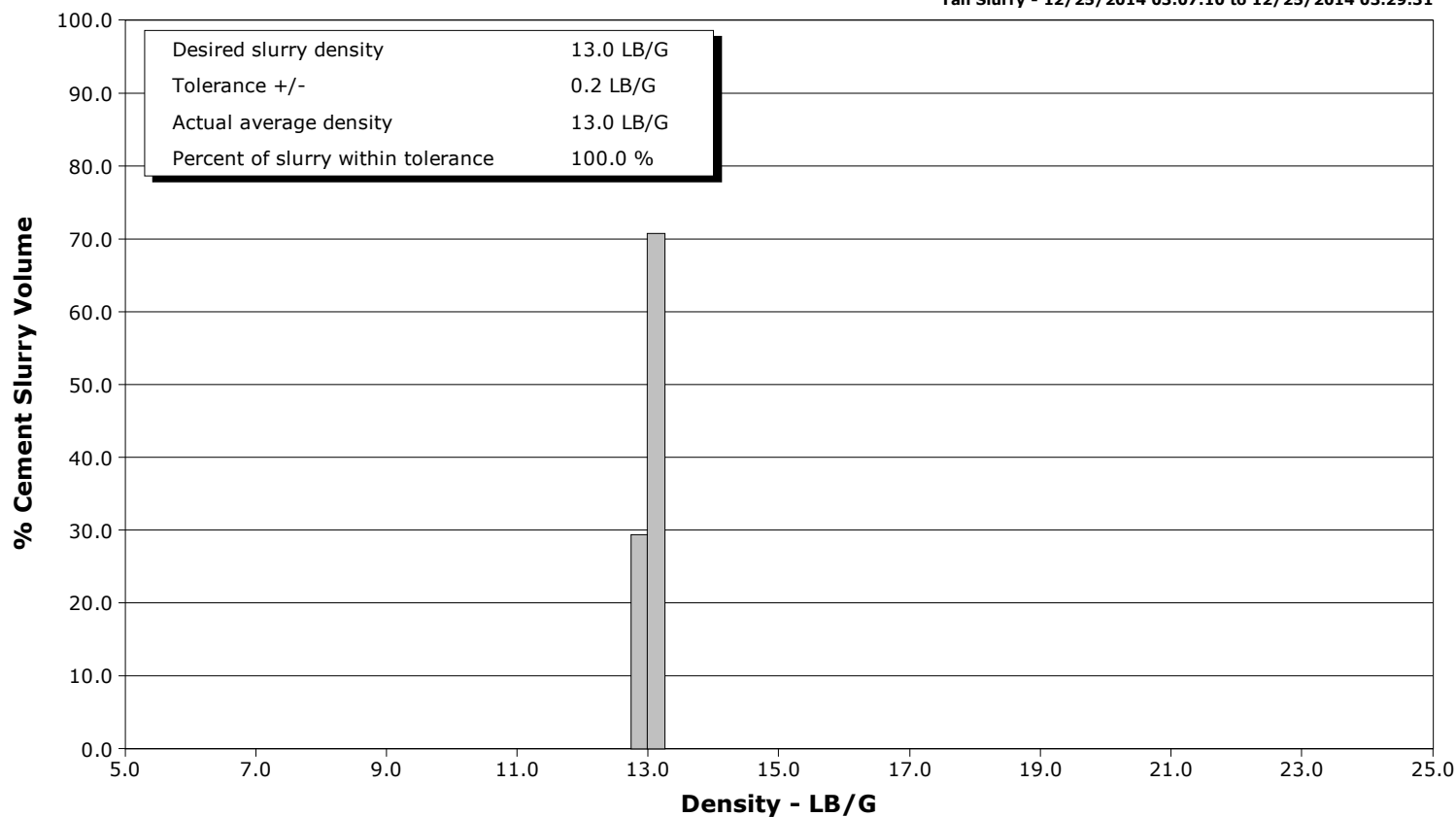
Well Keystone 3-7
Field Old 10
Engineer Jason Holt
Country United States

Client Night Hawk Production LLC
SIR No. D2IK-00590
Job Type 5 1/2" Production
Job Date 12-25-2014

Lead Slurry - 12/25/2014 02:15:19 to 12/25/2014 03:03:16



Tail Slurry - 12/25/2014 03:07:10 to 12/25/2014 03:29:31



				Customer Night Hawk Production LLC			Job Number D2IK-00590	
Well Keystone 3-7 3-7			Location (legal) Sec 15-T6S-R54W			Schlumberger Location Cheyenne, WY		Job Start Dec/25/2014
Field Old 10		Formation Name/Type Dirty-Sandstone		Deviation deg	Bit Size 7.9 in	Well MD 8500.0 ft		Well TVD 8500.0 ft
County Lincoln		State/Province Colorado		BHP psi	BHST 199 degF	BHCT 163 degF		Pore Press. Gradient 1802.00 lb/gal
Well Master 0631586742		API/UWI						
Rig Name Xtreme 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 Other	8478.0	5.5	17.0	N-80	LTC
	0.0	0.0	0.0					
Drilling Fluid Type Bentonite		Max. Density 9.30 lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
	T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread		
Service Line Cementing	Job Type 5 1/2" Production							
Max. Allowed Tub. Press 5649 psi	Max. Allowed Ann. Press 4152 psi		WH Connection 5 1/2"	Perforations/Open Hole				
	Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft			
	ft	ft					Diameter in	
	ft	ft						
Service Instructions Set 5.5" 17#/ft production casing at 8,500 feet in an 8.75" open hole using 12.00 ppg TXI Lead to surface and 13.00 ppg TXI Tail to 6,000 ft. Run 10 lb/bbl of CemNet+ in the MudPUSH Run 2 lb/bbl of CemNet in all 282 bbl of Lead Run 2 lb/bbl of CemNet in the first 50 bbls of Tail Thank you.	Treat Down Casing	Displacement 194.9 bbl		Packer Type		Packer Depth ft		
	Tubing Vol. bbl	Casing Vol. 197.1 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 6066 psi		Shoe Type Float		Squeeze Type				
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 8485.5 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 Dec/25/2014		Arrived on Location Dec/25/2014		Leave Location Dec/25/2014		Collar Type Float		Tail Pipe Depth ft
						Collar Depth 8393.5 ft		Sqz. Total Vol. bbl
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENSITY LB/G	CPF1_TTL_RATE B/M	CPF1_TTL_VOLUME BBL	Message		
12/25/2014	01:33:53	9	8.30	0.0	0.0	Start Job		
12/25/2014	01:38:53	5	8.30	0.0	0.0			
12/25/2014	01:43:53	7	8.30	0.0	0.0			
12/25/2014	01:48:53	8	8.30	0.0	0.0			
12/25/2014	01:50:02	12	8.30	0.0	0.0	Start Pumping Spacer		
12/25/2014	01:52:23	261	8.29	4.8	6.2	Held JSA Meeting With Crew Co-Man		
12/25/2014	01:53:53	261	8.30	0.2	8.9			
12/25/2014	01:55:53	793	8.30	0.0	8.9	Reset Total, Vol = 8.93 bbl		
12/25/2014	01:58:53	4879	8.30	0.0	0.0			
12/25/2014	02:03:12	23	8.30	0.0	0.0	Pressure Test Lines (Low High)		
12/25/2014	02:03:53	20	8.30	0.0	0.0			
12/25/2014	02:06:13	146	10.54	1.1	1.3	Start Pump MudPush Express		
12/25/2014	02:08:53	210	10.52	3.3	6.0			
12/25/2014	02:13:53	291	11.91	3.3	15.9			
12/25/2014	02:15:09	192	12.04	3.2	20.1	End Pumping MudPush Express		
12/25/2014	02:15:18	256	12.04	3.3	20.6	Reset Total, Vol = 20.64 bbl		
12/25/2014	02:15:19	251	12.04	3.3	20.6	Start Mixing Lead Slurry		
12/25/2014	02:18:53	126	12.20	3.0	27.9			
12/25/2014	02:19:23	173	12.18	3.1	29.5	Wet Dry Samples Taken		
12/25/2014	02:22:17	155	12.18	4.8	40.4	Wet Sample Weighed Verified		
12/25/2014	02:23:53	153	12.16	4.8	48.1			

Well Keystone 3-7 3-7			Field Old 10		Job Start Dec/25/2014	Customer Night Hawk Production LLC	Job Number D2IK-00590
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENSITY LB/G	CPF1_TTL_RATE B/M	CPF1_TTL_VOLUME BBL	Message	
12/25/2014	02:33:53	247	12.10	6.1	108.8		
12/25/2014	02:36:32	231	12.07	6.2	125.1	Good Returns	
12/25/2014	02:38:53	217	12.05	6.2	139.6		
12/25/2014	02:43:53	247	12.01	6.2	170.4		
12/25/2014	02:48:53	222	12.00	6.2	201.2		
12/25/2014	02:53:53	252	12.04	6.1	231.9		
12/25/2014	02:58:53	244	12.03	6.2	262.7		
12/25/2014	03:03:16	125	12.02	3.5	282.6	End Lead Slurry	
12/25/2014	03:03:53	82	12.02	2.3	284.6		
12/25/2014	03:07:07	108	12.79	2.6	294.3	Reset Total, Vol = 273.95 bbl	
12/25/2014	03:07:08	108	12.80	2.6	294.4	886sks, Yield:1.79 ft3/sk, Mix H2O: 10 gal/sk	
12/25/2014	03:07:10	106	12.83	2.6	294.5	Start Mixing Tail Slurry	
12/25/2014	03:08:53	370	13.09	6.1	300.3		
12/25/2014	03:12:35	326	13.04	6.1	323.0	Wet Sample Weighed Verified	
12/25/2014	03:13:53	329	13.04	6.1	331.0		
12/25/2014	03:18:53	244	12.85	4.8	358.5		
12/25/2014	03:23:53	296	13.12	4.8	378.9		
12/25/2014	03:24:57	147	13.10	3.5	383.9	Good Returns	
12/25/2014	03:28:53	168	12.85	3.4	397.2		
12/25/2014	03:29:31	156	12.85	3.4	399.4	End Tail Slurry	
12/25/2014	03:30:23	31	13.18	0.0	400.9	Reset Total, Vol = 106.33 bbl	
12/25/2014	03:30:24	26	13.18	0.0	0.0	310sks, Yield:1.87 ft3/sk, Mix H2O:9.47 gal/sk	
12/25/2014	03:30:30	58	13.20	0.0	0.0	Start Washing Lines	
12/25/2014	03:33:53	36	13.14	0.0	0.0		
12/25/2014	03:38:53	34	10.44	0.1	0.0		
12/25/2014	03:43:53	48	7.92	2.2	25.1		
12/25/2014	03:48:16	5	8.31	0.2	33.9	Finished Washing Lines	
12/25/2014	03:48:17	6	8.31	0.1	33.9	Reset Total, Vol = 33.90 bbl	
12/25/2014	03:48:53	21	8.32	0.0	0.0		
12/25/2014	03:51:52	71	8.30	4.4	0.7	Drop Top Plug	
12/25/2014	03:51:54	64	8.32	4.4	0.9	Start Displacement	
12/25/2014	03:53:53	141	8.33	6.2	12.4		
12/25/2014	03:58:53	607	8.33	6.1	43.1		
12/25/2014	04:03:53	884	8.33	5.9	73.5		
12/25/2014	04:08:53	1199	8.33	6.1	104.2		
12/25/2014	04:13:53	1626	8.33	6.1	134.6		
12/25/2014	04:18:53	1946	8.33	6.1	164.9		
12/25/2014	04:23:14	1930	8.33	1.9	185.3	Lower Pump Rate	
12/25/2014	04:23:53	1978	8.33	1.9	186.5		
12/25/2014	04:28:53	2632	8.33	0.4	195.7		
12/25/2014	04:29:10	2650	8.33	0.0	195.7	Bump Top Plug	
12/25/2014	04:29:18	2658	8.33	0.0	195.7	Reset Total, Vol = 194.73 bbl	
12/25/2014	04:32:04	25	8.33	0.0	0.0	Bleed Off Pressure	
12/25/2014	04:32:49	26	8.33	0.0	0.0	Floats Held 2.0 bbls Back	
12/25/2014	04:33:25	29	8.33	0.0	0.0	End Job	
12/25/2014	04:33:53	28	8.33	0.0	0.0		

Well Keystone 3-7 3-7	Field Old 10	Job Start Dec/25/2014	Customer Night Hawk Production LLC	Job Number D2IK-00590
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry	N2		Mud		Maximum Rate		Total Slurry 380.2	Mud 20.6	Spacer	N2
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum	Final 0	Average	Bump Plug to 2300	Breakdown		Type FreshWater	Volume 194.9 bbl		Density 8.34 lb/gal	
Avg. N2 Percent %		Designed Slurry Volume 385.0 bbl		Displacement 194.9 bbl		Mix Water Temp 72 degF		Cement Circulated to Surface?		Volume bbl
Customer or Authorized Representative Jim Weir		Schlumberger Supervisor Jason Holt		Circulation Lost		Washed Thru Perfs		To ft		
						-		-		
								Job Completed		<input checked="" type="checkbox"/>