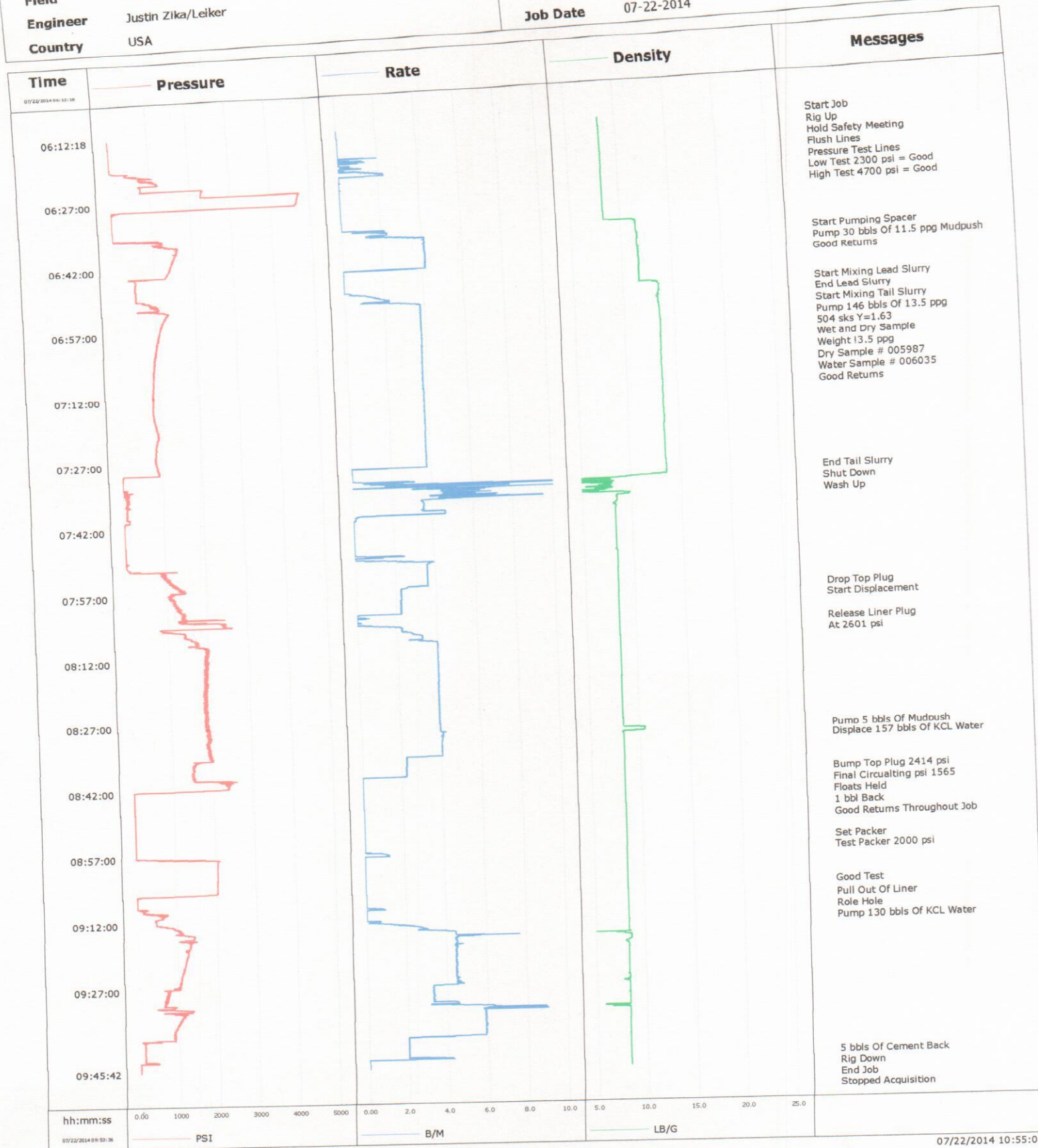


mberger

## Cementing Job Report

Field Horsetail 30F-3107  
 Engineer Wildcat  
 Country Justin Zika/Leiker  
 USA

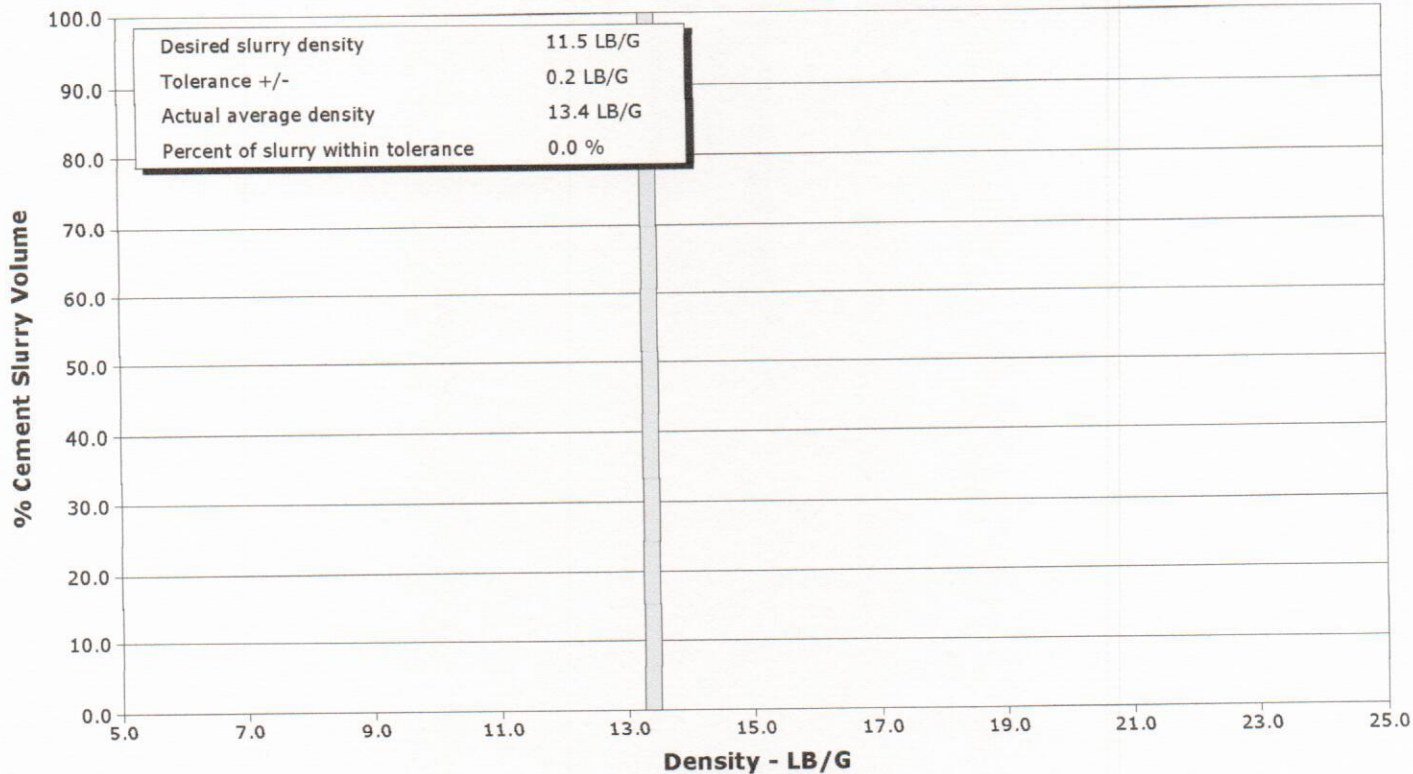
Client Whiting  
 SIR No.  
 Job Type Liner  
 Job Date 07-22-2014



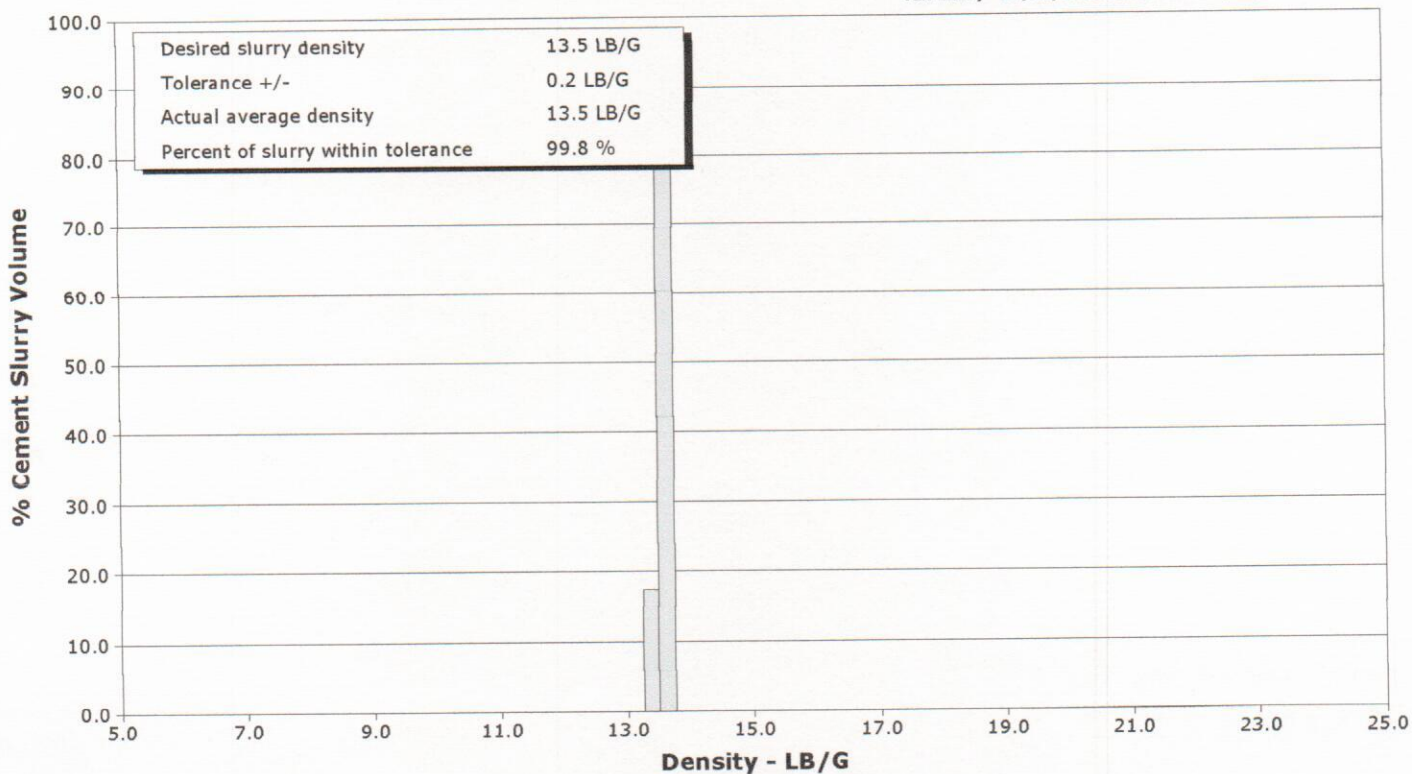
**Well** Horsetail 30F-3107  
**Field** Wildcat  
**Engineer** Justin Zika/Leiker  
**Country** USA

**Client** Whiting  
**SIR No.**  
**Job Type** Liner  
**Job Date** 07-22-2014

Lead Slurry - 07/22/2014 06:49:42 to 07/22/2014 06:49:43



Tail Slurry - 07/22/2014 06:49:45 to 07/22/2014 07:31:55







# Cementing Service Report

Customer Whiting				Job Number 1996782			
Well Horsetail 30F-3107 30F-3107		Location (legal) Cheyenne, WY		Schlumberger Location Cheyenne, WY		Job Start Jul/22/2014	
Field Wildcat		Formation Name/Type Shale		Deviation		Well MD 13071.0 ft	
County Weld		State/Province Colorado		BHP		Well TVD	
Well Master 0631546515		API/ UWI 05123392010000		BHST 200 degF		BHCT 200 degF	
Rig Name Xtreme 24		Drilled For Oil		Service Via Land		Casing/ Liner	
Offshore Zone		Well Class New		Well Type Development		Pore Press. Gradient	
Drilling Fluid Type		Max. Density		Plastic Viscosity		Tubing/Drill Pipe	
Service Line Cementing		Job Type Liner		Depth, ft		Size, in	
Max. Allowed Tub. Press 2300 psi		Max. Allowed Ann. Press		WH Connection		Weight, lb/ft	
Service Instructions Rig Up Hold Safety Meeting Flush Lines Pressure Test Lines Pump 30 bbls Of 11.5 ppg Mudpush Pump 146 bbls Of 13.5 ppg Cement Shut Down/Wash Up/Drop Wiper Plug Displace Set Packer/Pull Out Of Liner/Role Hole						Grade	
						Thread	
						Perforations/Open Hole	
						Top, Bottom, No. of Shots, Total Interval	
						Diameter	
						Treat Down Displacement Packer Type Packer Depth	
						Casing 0.8 bbl	
						Tubing Vol. Casing Vol. Annular Vol. Openhole Vol.	
						158.0 bbl 243.0 bbl 401.0 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		Pipe Rotated <input type="checkbox"/> Pipe Reciprocated <input type="checkbox"/>		Shoe Type Float		Shoe Depth 13061.0 ft	
No. Centralizers		Top Plugs 1 Bottom Plugs		Stage Tool Type		Tool Type	
Cement Head Type Single				Stage Tool Depth		Tool Depth	
Job Scheduled For Jul/22/2014 22:00		Arrived on Location Jul/22/2014 22:00		Leave Location Jul/22/2014 11:00		Tail Pipe Size	
						Tail Pipe Depth	
						Collar Type Float	
						Collar Depth 13011.0 ft	
						Seq. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
07/22/2014	05:42:16					Started Acquisition	
07/22/2014	06:12:18	5	0.0	8.32	0.0		
07/22/2014	06:12:19					Start Job	
07/22/2014	06:12:19	5	0.0	8.32	0.0		
07/22/2014	06:12:21					Rig Up	
07/22/2014	06:12:21					Hold Safety Meeting	
07/22/2014	06:12:21					Flush Lines	
07/22/2014	06:12:21	4	0.0	8.32	0.0		
07/22/2014	06:12:24					Pressure Test Lines	
07/22/2014	06:12:24	4	0.0	8.33	0.0		
07/22/2014	06:12:26					Low Test 2300 psi = Good	
07/22/2014	06:12:26					High Test 4700 psi = Good	
07/22/2014	06:12:26	4	0.0	8.32	0.0		
07/22/2014	06:12:36	5	0.0	8.32	0.0		
07/22/2014	06:14:46	2	0.0	8.33	0.0		
07/22/2014	06:16:56	3	0.0	8.33	0.0		
07/22/2014	06:19:06	6	0.0	8.33	0.3		
07/22/2014	06:21:16	722	0.0	8.32	1.1		
07/22/2014	06:23:26	769	0.0	8.32	3.1		
07/22/2014	06:25:36	2273	0.0	8.32	3.1		
07/22/2014	06:27:46	4661	0.0	8.32	3.1		



Well			Field		Job Start		Customer		Job Number	
Horsetail 30F-3107 30F-3107			Wildcat		Jul/22/2014		Whiting		1996782	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
07/22/2014	06:32:06	1	0.0	8.32	3.1					
07/22/2014	06:34:16	2	0.0	8.32	3.1					
07/22/2014	06:36:26	1009	1.4	11.48	5.3					
07/22/2014	06:38:09					Start Pumping Spacer				
07/22/2014	06:38:09	1585	4.1	11.54	11.0					
07/22/2014	06:38:11					Pump 30 bbls Of 11.5 ppg Mudpush				
07/22/2014	06:38:11	1585	4.1	11.54	11.2					
07/22/2014	06:38:12					Good Returns				
07/22/2014	06:38:12	1585	4.1	11.55	11.2					
07/22/2014	06:38:36	1548	4.1	11.60	12.9					
07/22/2014	06:40:46	1453	4.1	11.56	21.8					
07/22/2014	06:42:56	1353	4.1	11.63	30.7					
07/22/2014	06:45:06	540	0.0	11.68	36.1					
07/22/2014	06:47:16	525	0.0	11.63	36.1					
07/22/2014	06:49:26	684	0.4	11.73	36.1					
07/22/2014	06:49:42					Start Mixing Lead Slurry				
07/22/2014	06:49:42	749	0.4	13.37	36.2					
07/22/2014	06:49:43					End Lead Slurry				
07/22/2014	06:49:43	749	0.4	13.39	36.2					
07/22/2014	06:49:45					Start Mixing Tail Slurry				
07/22/2014	06:49:45	782	0.6	13.42	36.2					
07/22/2014	06:49:46					Pump 146 bbls Of 13.5 ppg				
07/22/2014	06:49:46					504 sks Y=1.63				
07/22/2014	06:49:46					Wet and Dry Sample				
07/22/2014	06:49:46					Weight 13.5 ppg				
07/22/2014	06:49:46					Dry Sample # 005987				
07/22/2014	06:49:46					Water Sample # 006035				
07/22/2014	06:49:46	789	0.6	13.42	36.2					
07/22/2014	06:49:47					Good Returns				
07/22/2014	06:49:47	789	0.6	13.43	36.2					
07/22/2014	06:51:36	962	1.6	13.56	39.2					
07/22/2014	06:53:46	1206	3.8	13.41	46.8					
07/22/2014	06:55:56	1095	3.8	13.49	54.9					
07/22/2014	06:58:06	1034	3.8	13.56	63.1					
07/22/2014	07:00:16	973	3.8	13.55	71.3					
07/22/2014	07:02:26	937	3.8	13.55	79.4					
07/22/2014	07:04:36	918	3.8	13.54	87.6					
07/22/2014	07:06:46	893	3.8	13.53	95.8					
07/22/2014	07:08:56	882	3.8	13.53	104.0					
07/22/2014	07:11:06	853	3.8	13.53	112.1					
07/22/2014	07:13:16	837	3.8	13.52	120.3					
07/22/2014	07:15:26	837	3.8	13.53	128.5					
07/22/2014	07:17:36	883	3.8	13.51	136.6					
07/22/2014	07:19:46	934	3.8	13.57	144.8					
07/22/2014	07:21:56	908	3.8	13.51	153.0					
07/22/2014	07:24:06	867	3.8	13.55	161.2					
07/22/2014	07:26:16	853	3.8	13.55	169.3					
07/22/2014	07:28:26	922	3.8	13.54	177.5					
07/22/2014	07:30:36	8	0.0	13.58	180.7					
07/22/2014	07:31:55					End Tail Slurry				
07/22/2014	07:31:55	9	0.0	13.57	180.7					
07/22/2014	07:31:56					Shut Down				
07/22/2014	07:31:56					Wash Up				
07/22/2014	07:31:56	9	0.0	13.57	180.7					



Well Horsetail 30F-3107 30F-3107			Field Wildcat	Job Start Jul/22/2014	Customer Whiting	Job Number 1996782
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
07/22/2014	07:34:56	122	5.6	6.90	191.1	
07/22/2014	07:37:06	88	3.4	9.45	202.1	
07/22/2014	07:39:16	88	3.5	8.15	209.8	
07/22/2014	07:41:26	10	0.0	8.32	214.1	
07/22/2014	07:43:36	8	0.0	8.32	214.1	
07/22/2014	07:45:46	15	0.0	8.32	214.1	
07/22/2014	07:47:56	15	0.0	8.32	214.1	
07/22/2014	07:50:06	10	0.0	8.36	214.9	
07/22/2014	07:52:16	913	3.6	8.34	221.0	
07/22/2014	07:54:26	1135	3.6	8.32	228.8	
07/22/2014	07:56:36	1145	2.5	8.33	236.3	
07/22/2014	07:58:04					Drop Top Plug
07/22/2014	07:58:04	1160	2.2	8.33	239.6	
07/22/2014	07:58:09					Start Displacement
07/22/2014	07:58:09	1182	2.2	8.33	239.8	
07/22/2014	07:58:46	1174	2.2	8.33	241.1	
07/22/2014	08:00:56	1429	2.2	8.32	246.0	
07/22/2014	08:03:06	1974	0.5	8.32	249.3	
07/22/2014	08:05:16	1364	2.0	8.32	250.0	
07/22/2014	08:05:42					Release Liner Plug
07/22/2014	08:05:42					At 2601 psi
07/22/2014	08:05:42	1438	2.2	8.32	251.0	
07/22/2014	08:07:26	1716	3.3	8.32	255.5	
07/22/2014	08:09:36	1990	4.0	8.32	263.2	
07/22/2014	08:11:46	1963	4.0	8.32	271.8	
07/22/2014	08:13:56	1900	4.0	8.32	280.4	
07/22/2014	08:16:06	1901	4.0	8.32	289.0	
07/22/2014	08:18:16	1932	4.0	8.32	297.6	
07/22/2014	08:20:26	1905	4.0	8.32	306.2	
07/22/2014	08:22:36	1856	4.0	8.32	314.8	
07/22/2014	08:24:46	1883	4.0	8.31	323.4	
07/22/2014	08:26:56	1905	4.0	8.31	332.1	
07/22/2014	08:29:06	1950	4.0	8.32	340.7	
07/22/2014	08:30:11					Pump 5 bbls Of Mudpush
07/22/2014	08:30:11	1929	4.1	10.50	345.0	
07/22/2014	08:31:16	1920	4.1	8.28	349.4	
07/22/2014	08:32:19					Displace 157 bbls Of KCL Water
07/22/2014	08:32:19	1892	4.0	8.31	353.7	
07/22/2014	08:33:26	1939	4.0	8.31	358.2	
07/22/2014	08:35:36	1561	2.2	8.32	366.4	
07/22/2014	08:37:46	1489	2.2	8.31	371.2	
07/22/2014	08:39:56	2483	0.0	8.31	375.8	
07/22/2014	08:40:04					Bump Top Plug 2414 psi
07/22/2014	08:40:04	2248	0.0	8.31	375.8	
07/22/2014	08:40:07					Final Circulating psi 1565
07/22/2014	08:40:07					Floats Held
07/22/2014	08:40:07					1 bbl Back
07/22/2014	08:40:07					Good Returns Throughout Job
07/22/2014	08:40:07	2215	0.0	8.31	375.8	
07/22/2014	08:42:06	10	0.0	8.32	375.8	
07/22/2014	08:44:16	15	0.0	8.32	375.8	
07/22/2014	08:46:26	15	0.0	8.32	375.8	
07/22/2014	08:48:36	15	0.0	8.32	375.8	
07/22/2014	08:50:46	15	0.0	8.31	375.8	



Well			Field		Job Start	Customer		Job Number	
Horsetail 30F-3107 30F-3107			Wildcat		Jul/22/2014	Whiting		1996782	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G	Volume BBL	Message		
07/22/2014	08:55:00						Set Packer		
07/22/2014	08:55:00						Test Packer 2000 psi		
07/22/2014	08:55:00	15		0.0	8.32	375.8			
07/22/2014	08:55:06	15		0.0	8.32	375.8			
07/22/2014	08:57:16	801		1.1	8.32	376.2			
07/22/2014	08:59:26	2055		0.0	8.31	376.7			
07/22/2014	09:01:36	2049		0.0	8.31	376.7			
07/22/2014	09:03:46	2045		0.0	8.31	376.7			
07/22/2014	09:05:00						Good Test		
07/22/2014	09:05:00	2036		0.0	8.31	376.7			
07/22/2014	09:05:56	15		0.0	8.31	376.7			
07/22/2014	09:08:00						Pull Out Of Liner		
07/22/2014	09:08:00						Role Hole		
07/22/2014	09:08:00						Pump 130 bbls Of KCL Water		
07/22/2014	09:08:00	18		0.0	8.31	376.7			
07/22/2014	09:08:06	18		0.0	8.31	376.7			
07/22/2014	09:10:16	652		0.0	8.31	376.9			
07/22/2014	09:12:26	719		0.4	8.32	377.0			
07/22/2014	09:14:36	1310		3.8	8.32	381.5			
07/22/2014	09:16:46	1331		4.5	8.59	391.4			
07/22/2014	09:18:56	1264		4.5	8.34	401.2			
07/22/2014	09:21:06	1187		4.5	8.31	410.9			
07/22/2014	09:23:16	1114		4.5	8.31	420.6			
07/22/2014	09:25:26	1051		4.5	8.30	430.4			
07/22/2014	09:27:36	750		3.3	8.31	439.3			
07/22/2014	09:29:46	644		3.3	8.32	446.4			
07/22/2014	09:31:56	628		7.4	6.76	456.1			
07/22/2014	09:34:06	1040		5.9	8.31	469.3			
07/22/2014	09:36:16	878		5.9	8.31	482.1			
07/22/2014	09:38:26	454		4.3	8.27	494.7			
07/22/2014	09:40:36	135		2.0	8.31	499.4			
07/22/2014	09:42:46	132		2.0	8.31	503.7			
07/22/2014	09:43:00						5 bbls Of Cement Back		
07/22/2014	09:43:00						Rig Down		
07/22/2014	09:43:00						End Job		
07/22/2014	09:43:00	145		2.0	8.31	504.2			
07/22/2014	09:44:56	15		0.0	8.31	506.0			
07/22/2014	09:47:06	15		0.0	8.31	506.0			
07/22/2014	09:49:16	12		0.0	8.31	506.0			
07/22/2014	09:51:26	14		0.0	8.31	506.3			
07/22/2014	09:53:36	15		0.0	8.31	506.5			

Well Horsetail 30F-3107 30F-3107	Field Wildcat	Job Start Jul/22/2014	Customer Whiting	Job Number 1996782
-------------------------------------	------------------	--------------------------	---------------------	-----------------------

### Post Job Summary

Average Pump Rates,				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry 146.0	Mud	Spacer 30.0	N2
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum 2300	Final 1565	Average	Bump Plug to 2414	Breakdown	Type	Volume	Density
Avg. N2 Percent	Designed Slurry Volume 146.0 bbl	Displacement 158.0 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 5.0 bbl		
				Washed Thru Perfs <input type="checkbox"/>	To		
Customer or Authorized Representative Brady Sharp		Schlumberger Supervisor Justin Zika		Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
				-	-		