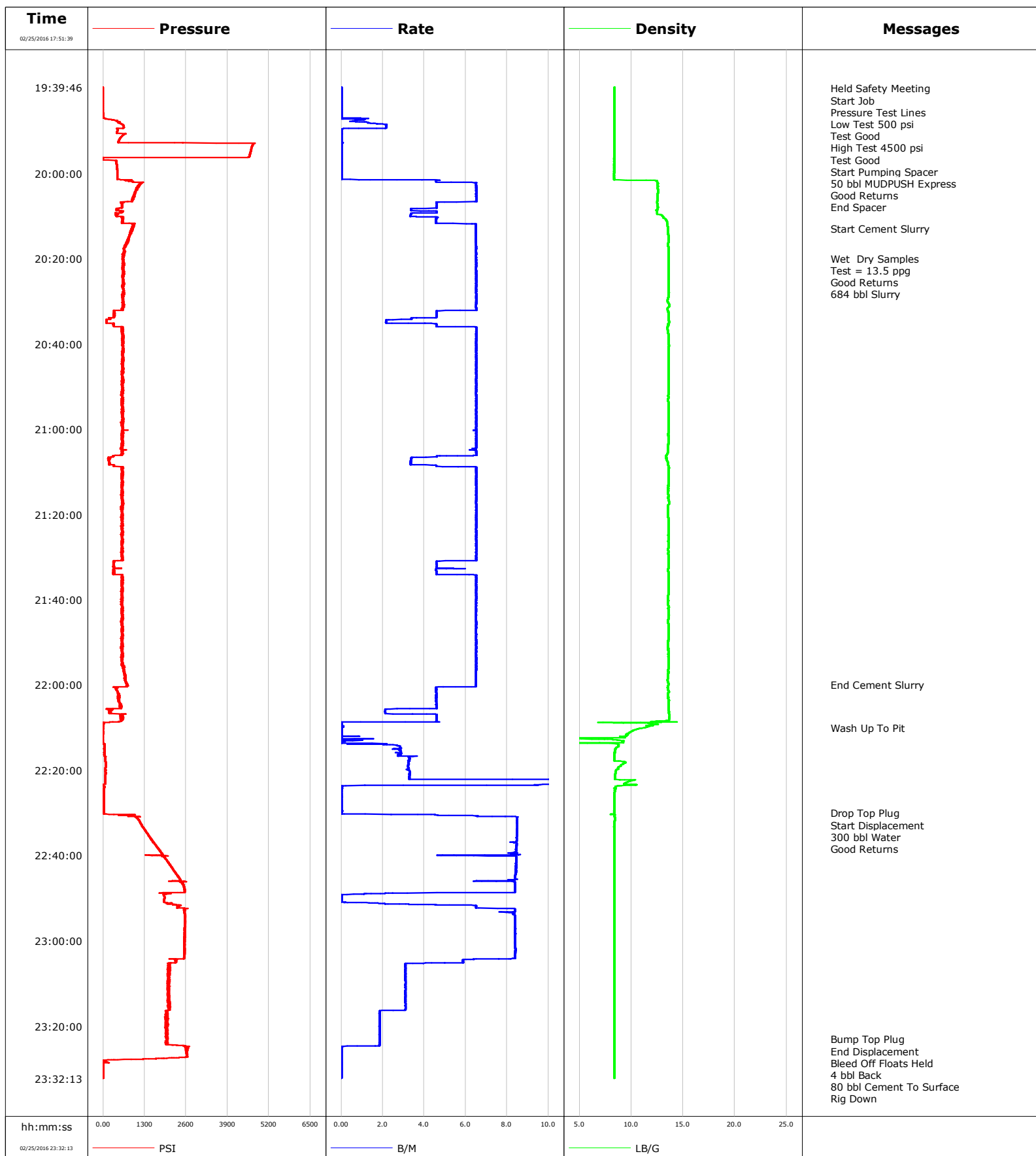


Well Horsetail 07E-0604
Field
Engineer Jordan Moreland / Stacy Terry
Country

Client Whiting Oil Gas
SIR No. DKFJ-00007
Job Type 5 1/2 Production
Job Date



Cementing Service Report

				Customer Whiting Oil & Gas				Job Number DKFJ-00007			
Well Horsetail 07E-0604			Location (legal)			Schlumberger Location			Job Start Feb/25/2016		
Field		Formation Name/Type		Deviation deg		Bit Size 8.5 in		Well MD ft		Well TVD ft	
County		State/Province Colorado		BHP psi		BHST 214 degF		BHCT 214 degF		Pore Press. Gradient lb/gal	
Well Master 0631641693		API/UWI 05123416520000									
Rig Name Unit 409		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		13563.0		5.5		20.0	
						0.0		0.0		0.0	
Drilling Fluid Type		Max. Density 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 psi		Max. Allowed Ann. Press psi		WH Connection		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
										No. of Shots	
										Total Interval ft	
						ft		ft			
						ft		ft			
						ft		ft		Diameter in	
						Treat Down Casing		Displacement 300.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 301.0 bbl		Annular Vol. 568.0 bbl	
										Openhole Vol. 883.0 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 psi						Shoe Type Float				Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 13563.0 ft				Tool Type	
No. Centralizers		Top Plugs 1		Bottom Plugs 1		Stage Tool Type				Tool Depth ft	
Cement Head Type Double						Stage Tool Depth ft				Tail Pipe Size in	
Job Scheduled For Feb/25/2016		Arrived on Location Feb/25/2016		Leave Location Feb/25/2016		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 13515.0 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
02/25/2016	17:51:39	17	0.0	8.36	0.0						
02/25/2016	17:53:39	-1	0.0	8.36	0.0						
02/25/2016	17:55:39	-1	0.0	8.36	0.0						
02/25/2016	17:57:39	-1	0.0	8.36	0.0						
02/25/2016	17:59:39	-1	0.0	8.36	0.0						
02/25/2016	18:01:39	-2	0.0	8.35	0.0						
02/25/2016	18:03:39	-2	0.0	8.35	0.0						
02/25/2016	18:05:39	-1	0.0	8.36	0.0						
02/25/2016	18:07:39	-1	0.0	8.35	0.0						
02/25/2016	18:09:39	-1	0.0	8.35	0.0						
02/25/2016	18:11:39	-1	0.0	8.35	0.0						
02/25/2016	18:13:39	-1	0.0	8.35	0.0						
02/25/2016	18:15:39	-1	0.0	8.35	0.0						
02/25/2016	18:17:39	-2	0.0	8.35	0.0						
02/25/2016	18:19:39	-1	0.0	8.35	0.0						
02/25/2016	18:21:39	-1	0.0	8.35	0.0						
02/25/2016	18:23:39	-1	0.0	8.35	0.0						
02/25/2016	18:25:39	-1	0.0	8.35	0.0						
02/25/2016	18:27:39	-1	0.0	8.35	0.0						
02/25/2016	18:29:39	-1	0.0	8.35	0.0						
02/25/2016	18:31:39	-1	0.0	8.35	0.0						

Well Horsetail 07E-0604			Field		Job Start Feb/25/2016		Customer Whiting Oil & Gas		Job Number DKFJ-00007	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL		Message	
02/25/2016	18:35:39	-1		0.0	8.35		0.0			
02/25/2016	18:37:39	-1		0.0	8.35		0.0			
02/25/2016	18:39:39	-1		0.0	8.35		0.0			
02/25/2016	18:41:39	-1		0.0	8.35		0.0			
02/25/2016	18:43:39	-1		0.0	8.36		0.0			
02/25/2016	18:45:39	-1		0.0	8.36		0.0			
02/25/2016	18:47:39	-1		0.0	8.36		0.0			
02/25/2016	18:49:39	-1		0.0	8.36		0.0			
02/25/2016	18:51:39	-2		0.0	8.36		0.0			
02/25/2016	18:53:39	-1		0.0	8.36		0.0			
02/25/2016	18:55:39	-1		0.0	8.36		0.0			
02/25/2016	18:57:39	-1		0.0	8.36		0.0			
02/25/2016	18:59:39	-4		0.0	8.36		0.0			
02/25/2016	19:01:39	-4		0.0	8.36		0.0			
02/25/2016	19:03:39	-4		0.0	8.36		0.0			
02/25/2016	19:05:39	-3		0.0	8.36		0.0			
02/25/2016	19:07:39	-3		0.0	8.36		0.0			
02/25/2016	19:09:39	-4		0.0	8.36		0.0			
02/25/2016	19:11:39	-4		0.0	8.36		0.0			
02/25/2016	19:13:39	-4		0.0	8.36		0.0			
02/25/2016	19:15:39	-4		0.0	8.36		0.0			
02/25/2016	19:17:39	-4		0.0	8.36		0.0			
02/25/2016	19:19:39	-4		0.0	8.36		0.0			
02/25/2016	19:21:39	-4		0.0	8.36		0.0			
02/25/2016	19:23:39	-3		0.0	8.36		0.0			
02/25/2016	19:25:39	-4		0.0	8.36		0.0			
02/25/2016	19:27:39	-3		0.0	8.36		0.0			
02/25/2016	19:29:39	-4		0.0	8.36		0.0			
02/25/2016	19:31:39	-3		0.0	8.36		0.0			
02/25/2016	19:33:39	-3		0.0	8.36		0.0			
02/25/2016	19:35:39	-4		0.0	8.36		0.0			
02/25/2016	19:37:39	-4		0.0	8.36		0.0			
02/25/2016	19:39:00	-3		0.0	8.36		0.0		Rig Up Per Standard	
02/25/2016	19:39:39	-4		0.0	8.36		0.0			
02/25/2016	19:40:00	-4		0.0	8.36		0.0		Held Safety Meeting	
02/25/2016	19:41:39	-5		0.0	8.36		0.0			
02/25/2016	19:43:39	-4		0.0	8.36		0.0			
02/25/2016	19:45:00	-3		0.0	8.36		0.0		Pressure Test Lines	
02/25/2016	19:45:39	-4		0.0	8.36		0.0			
02/25/2016	19:46:00	14		0.0	8.36		0.0		Low Test 500 psi	
02/25/2016	19:47:00	14		0.0	8.36		0.0		Test Good	
02/25/2016	19:47:39	445		0.7	8.38		0.4			
02/25/2016	19:48:00	478		1.2	8.37		0.7		High Test 4500 psi	
02/25/2016	19:49:00	643		2.2	8.35		2.5		Test Good	
02/25/2016	19:49:39	454		0.0	8.35		3.5			
02/25/2016	19:50:00	447		0.0	8.35		3.5		Start Pumping Spacer	
02/25/2016	19:51:00	632		0.0	8.35		3.6		50 bbl MUDPUSH Express	
02/25/2016	19:51:39	544		0.0	8.35		3.6			
02/25/2016	19:53:39	4668		0.0	8.35		3.6			
02/25/2016	19:55:39	4597		0.0	8.35		3.6			
02/25/2016	19:57:39	413		0.0	8.35		3.6			
02/25/2016	19:58:11	427		0.0	8.35		3.6		Good Returns	
02/25/2016	19:59:39	443		0.0	8.35		0.0			
02/25/2016	20:00:00	446		0.0	8.35		0.0		End Spacer	

Well			Field		Job Start		Customer		Job Number	
Horsetail 07E-0604					Feb/25/2016		Whiting Oil & Gas		DKFJ-00007	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL	Message		
02/25/2016	20:03:39	1080		6.5	12.56		12.7			
02/25/2016	20:05:39	937		6.5	12.55		25.7			
02/25/2016	20:07:39	597		4.6	12.53		36.9			
02/25/2016	20:09:39	403		3.4	12.74		45.0			
02/25/2016	20:11:39	610		4.6	13.46		53.5			
02/25/2016	20:13:00	881		6.5	13.55		61.9	Start Cement Slurry		
02/25/2016	20:13:39	865		6.5	13.55		66.2			
02/25/2016	20:15:39	774		6.5	13.60		79.1			
02/25/2016	20:17:39	637		6.5	13.58		92.1			
02/25/2016	20:19:39	607		6.5	13.58		105.1			
02/25/2016	20:20:00	621		6.5	13.58		107.4	Wet Dry Samples		
02/25/2016	20:21:00	609		6.5	13.59		113.9	Test = 13.5 ppg		
02/25/2016	20:21:39	635		6.5	13.60		118.2			
02/25/2016	20:22:00	639		6.5	13.59		120.4	Good Returns		
02/25/2016	20:23:00	633		6.5	13.59		126.9	684 bbl Slurry		
02/25/2016	20:23:39	655		6.5	13.58		131.2			
02/25/2016	20:27:39	653		6.5	13.61		157.2			
02/25/2016	20:29:39	629		6.5	13.51		170.2			
02/25/2016	20:31:39	591		6.5	13.51		183.2			
02/25/2016	20:33:39	336		4.6	13.57		193.4			
02/25/2016	20:35:39	340		4.6	13.59		200.0			
02/25/2016	20:37:39	599		6.5	13.57		212.4			
02/25/2016	20:39:39	614		6.5	13.61		225.4			
02/25/2016	20:41:39	660		6.5	13.61		238.4			
02/25/2016	20:43:39	607		6.5	13.59		251.4			
02/25/2016	20:45:39	604		6.5	13.59		264.5			
02/25/2016	20:47:39	621		6.5	13.60		277.5			
02/25/2016	20:49:39	623		6.5	13.58		290.5			
02/25/2016	20:51:39	613		6.5	13.58		303.5			
02/25/2016	20:53:39	606		6.5	13.57		316.5			
02/25/2016	20:55:39	635		6.5	13.59		329.6			
02/25/2016	20:57:39	637		6.5	13.59		342.6			
02/25/2016	20:59:39	615		6.5	13.60		355.6			
02/25/2016	21:01:39	567		6.5	13.57		368.6			
02/25/2016	21:03:39	627		6.5	13.57		381.6			
02/25/2016	21:05:39	621		6.5	13.51		394.6			
02/25/2016	21:07:39	191		3.3	13.50		403.6			
02/25/2016	21:09:39	594		6.5	13.58		413.5			
02/25/2016	21:11:39	570		6.5	13.59		426.5			
02/25/2016	21:13:39	605		6.5	13.55		439.5			
02/25/2016	21:15:39	615		6.5	13.58		452.5			
02/25/2016	21:17:39	599		6.5	13.62		465.6			
02/25/2016	21:19:39	585		6.5	13.56		478.6			
02/25/2016	21:21:39	611		6.5	13.57		491.6			
02/25/2016	21:23:39	602		6.5	13.57		504.6			
02/25/2016	21:25:39	602		6.5	13.57		517.6			
02/25/2016	21:27:39	584		6.5	13.57		530.7			
02/25/2016	21:29:39	614		6.5	13.58		543.7			
02/25/2016	21:31:39	318		4.6	13.57		555.3			
02/25/2016	21:33:39	314		4.6	13.57		564.5			
02/25/2016	21:35:39	630		6.5	13.59		576.7			
02/25/2016	21:37:39	604		6.5	13.57		589.7			
02/25/2016	21:39:39	608		6.5	13.53		602.7			
02/25/2016	21:41:39	603		6.5	13.61		615.7			

Well			Field		Job Start		Customer		Job Number	
Horsetail 07E-0604					Feb/25/2016		Whiting Oil & Gas		DKFJ-00007	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
02/25/2016	21:45:39	579	6.5	13.57	641.7					
02/25/2016	21:47:39	588	6.5	13.60	654.7					
02/25/2016	21:49:39	607	6.5	13.56	667.7					
02/25/2016	21:51:39	592	6.5	13.57	680.7					
02/25/2016	21:53:39	596	6.5	13.57	693.7					
02/25/2016	21:55:39	660	6.5	13.58	706.8					
02/25/2016	21:57:39	706	6.5	13.56	719.8					
02/25/2016	21:59:39	746	6.5	13.57	732.8					
02/25/2016	22:00:00	741	6.5	13.58	735.0	End Cement Slurry				
02/25/2016	22:01:39	451	4.6	13.62	743.4					
02/25/2016	22:03:39	482	4.6	13.63	752.6					
02/25/2016	22:05:39	194	2.2	13.59	761.5					
02/25/2016	22:07:39	548	4.6	13.66	767.9					
02/25/2016	22:09:39	4	0.0	11.72	0.0					
02/25/2016	22:10:00	-0	0.0	11.27	0.0	Wash Up To Pit				
02/25/2016	22:11:39	-1	0.0	9.67	0.0					
02/25/2016	22:13:39	4	0.0	2.59	0.2					
02/25/2016	22:15:39	40	2.9	8.40	5.3					
02/25/2016	22:17:39	70	3.3	8.36	11.4					
02/25/2016	22:19:39	75	3.2	8.74	17.9					
02/25/2016	22:21:39	69	3.3	8.41	24.5					
02/25/2016	22:23:39	5	0.0	8.67	52.0					
02/25/2016	22:25:39	29	0.0	8.39	52.0					
02/25/2016	22:27:39	28	0.0	8.39	52.1					
02/25/2016	22:29:39	28	0.0	8.37	0.0					
02/25/2016	22:30:00	28	0.0	8.37	0.0	Drop Top Plug				
02/25/2016	22:31:00	1027	8.5	8.40	4.3	Start Displacement				
02/25/2016	22:31:39	1126	8.5	8.41	9.8					
02/25/2016	22:32:00	1153	8.5	8.37	12.8	300 bbl Water				
02/25/2016	22:33:00	1219	8.5	8.36	21.3	Good Returns				
02/25/2016	22:33:39	1285	8.5	8.36	26.8					
02/25/2016	22:35:39	1463	8.4	8.36	43.7					
02/25/2016	22:37:39	1661	8.4	8.36	60.6					
02/25/2016	22:39:39	1865	8.4	8.36	77.4					
02/25/2016	22:41:39	2057	8.4	8.36	93.7					
02/25/2016	22:43:39	2235	8.4	8.36	110.6					
02/25/2016	22:45:39	2404	8.0	8.36	127.4					
02/25/2016	22:47:39	2546	8.4	8.36	143.9					
02/25/2016	22:49:39	1917	0.0	8.36	153.5					
02/25/2016	22:51:39	2430	6.5	8.36	155.4					
02/25/2016	22:53:39	2556	8.3	8.36	170.8					
02/25/2016	22:55:39	2568	8.4	8.36	187.6					
02/25/2016	22:57:39	2558	8.4	8.36	204.4					
02/25/2016	22:59:39	2547	8.4	8.36	221.1					
02/25/2016	23:01:39	2544	8.4	8.36	237.9					
02/25/2016	23:03:39	2541	8.4	8.36	254.7					
02/25/2016	23:05:39	2070	3.1	8.36	266.6					
02/25/2016	23:07:39	2067	3.1	8.35	272.8					
02/25/2016	23:09:39	2029	3.1	8.36	279.0					
02/25/2016	23:11:39	2048	3.1	8.36	285.2					
02/25/2016	23:13:39	2021	3.1	8.36	291.3					
02/25/2016	23:15:39	2067	3.1	8.36	297.5					
02/25/2016	23:17:39	1962	1.9	8.36	302.0					
02/25/2016	23:19:39	2043	1.9	8.36	305.7					

Well			Field		Job Start		Customer		Job Number	
Horsetail 07E-0604					Feb/25/2016		Whiting Oil & Gas		DKFJ-00007	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
02/25/2016	23:23:00	2005	1.9	8.36	312.0	Bump Top Plug				
02/25/2016	23:23:39	1988	1.8	8.36	313.2					
02/25/2016	23:25:00	2584	0.0	8.36	315.1	End Displacement				
02/25/2016	23:25:39	2649	0.0	8.36	315.1					
02/25/2016	23:26:00	2609	0.0	8.36	315.1	Bleed Off Floats Held				
02/25/2016	23:27:00	2626	0.0	8.36	315.1	4 bbl Back				
02/25/2016	23:27:39	1437	0.0	8.36	315.1					
02/25/2016	23:28:00	17	0.0	8.36	315.1	80 bbl Cement To Surface				
02/25/2016	23:29:00	2	0.0	8.36	315.1	Rig Down				
02/25/2016	23:29:39	1	0.0	8.36	315.1					
02/25/2016	23:30:00	0	0.0	8.36	315.1	End Job				

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry	N2	Mud	Maximum Rate		Total Slurry	Mud	Spacer	N2				
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum	Final 0	Average	Bump Plug to	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 0.0 bbl	Displacement bbl	Mix Water Temp 64 degF	Cement Circulated to Surface?		<input checked="" type="checkbox"/>	Volume bbl					
				Washed Thru Perfs		<input type="checkbox"/>	To ft					
Customer or Authorized Representative			Schlumberger Supervisor Jordan Moreland / Stacy Terry			Circulation Lost	<input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>				
						-						