

				Customer NightHawk			Job Number 2019057				
Well Blackcomb 5-14 5-14			Location (legal) CWY			Schlumberger Location CWY			Job Start Sep/13/2014		
Field Arikaree Creek		Formation Name/Type Shale		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 203 degF		BHCT 172 degF		Pore Press. Gradient lb/gal	
Well Master 631530015		API/UWI 63150015									
Rig Name Xtreme 11		Drilled For Oil		Service Via Land		Casing/Liner					
						Depth, ft		Size, in		Weight, lb/ft	
						250.0		8.6		24.0	
Offshore Zone		Well Class New		Well Type Development		8365.0		5.3		16.0	
										Grade	
										155	
										8RD	
										8RD	
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 5.5 Production									
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi		WH Connection Single Cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
						ft		ft		No. of Shots	
						ft		ft		Total Interval ft	
										Diameter in	
						Treat Down Casing		Displacement 192.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 194.0 bbl		Annular Vol. 259.0 bbl	
										Openhole Vol. 455.0 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 Guide		Shoe Depth 8365.0 ft		Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input checked="" type="checkbox"/>		Stage Tool Type		Stage Tool Depth ft		Tool Depth ft			
No. Centralizers		Top Plugs 1		Bottom Plugs		Tail Pipe Size in					
Cement Head Type Single				Collar Type Float		Collar Depth 8271.0 ft		Tail Pipe Depth ft			
Job Scheduled For Sep/13/2014 14:00		Arrived on Location Sep/13/2014 00:15		Leave Location Sep/13/2014 23:00		Sqz. Total Vol. bbl					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
09/13/2014	18:55:01	3	0.0	8.35	0.0	Started Acquisition					
09/13/2014	18:55:04	3	0.0	8.35	0.0	Start Job					
09/13/2014	18:55:05	3	0.0	8.35	0.0	Rig Up					
09/13/2014	18:55:09	3	0.0	8.35	0.0	Pressure Test Lines					
09/13/2014	18:55:11	2	0.0	8.35	0.0	Low 700 = Good					
09/13/2014	18:56:31	-0	0.0	8.35	0.0						
09/13/2014	18:58:01	134	1.6	8.35	1.3						
09/13/2014	18:59:31	39	1.8	8.35	2.2						
09/13/2014	19:01:01	138	1.8	8.35	2.9						
09/13/2014	19:02:31	32	0.0	8.35	3.2						
09/13/2014	19:04:01	31	0.0	8.36	3.2						
09/13/2014	19:05:31	33	0.0	8.35	4.1						
09/13/2014	19:07:01	2	0.0	8.35	6.7						
09/13/2014	19:08:31	1	0.0	8.35	6.8						
09/13/2014	19:10:01	1	0.0	8.36	6.8						
09/13/2014	19:11:31	3	0.0	8.36	6.8						
09/13/2014	19:13:01	3	0.0	8.36	6.8						
09/13/2014	19:14:31	3	0.0	8.36	6.8						
09/13/2014	19:16:01	3	0.0	8.36	6.8						
09/13/2014	19:17:31	3	0.0	8.36	6.8						
09/13/2014	19:19:01	33	0.3	8.36	6.8						

Well			Field		Job Start		Customer		Job Number	
Blackcomb 5-14 5-14			Arikaree Creek		Sep/13/2014		NightHawk		2019057	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
09/13/2014	19:22:01	13	0.0	8.35	11.0					
09/13/2014	19:23:31	6	0.0	8.35	11.0					
09/13/2014	19:25:01	7	0.0	8.35	11.0					
09/13/2014	19:26:31	820	0.0	8.35	11.1					
09/13/2014	19:28:01	741	0.0	8.35	11.1					
09/13/2014	19:29:31	4918	0.0	8.35	11.1					
09/13/2014	19:31:01	4882	0.0	8.35	11.1					
09/13/2014	19:32:31	9	0.0	8.35	11.1					
09/13/2014	19:33:24	11	0.0	8.35	11.1	Start Pumping Spacer				
09/13/2014	19:34:01	106	1.5	10.48	0.6					
09/13/2014	19:34:08	195	1.5	10.57	0.8	Pump 20 BBLs 10.5 MudPush				
09/13/2014	19:35:31	161	2.4	10.50	3.9					
09/13/2014	19:37:01	180	2.3	10.58	6.8					
09/13/2014	19:38:22	224	2.3	11.08	10.0	End Spacer				
09/13/2014	19:38:31	211	2.3	11.18	10.3					
09/13/2014	19:40:01	439	6.1	11.70	5.4					
09/13/2014	19:40:05	488	6.1	11.71	5.8	Start Cement Slurry				
09/13/2014	19:40:06	488	6.1	11.71	5.9	Start Mixing Lead Slurry				
09/13/2014	19:40:08	500	6.1	11.71	6.1	Pump 274 BBLs 12.0 PPG Lead				
09/13/2014	19:41:31	499	6.1	11.91	14.5					
09/13/2014	19:43:01	308	6.1	12.00	23.7					
09/13/2014	19:44:31	315	6.1	12.01	32.9					
09/13/2014	19:45:35	340	6.1	12.06	39.4	Take Wet Sample				
09/13/2014	19:45:56	242	6.1	12.05	41.6	Good Returns				
09/13/2014	19:46:01	227	6.1	12.05	42.1					
09/13/2014	19:47:31	241	6.1	12.05	51.3					
09/13/2014	19:49:01	222	6.1	12.06	60.5					
09/13/2014	19:50:31	219	6.2	12.04	69.7					
09/13/2014	19:52:01	223	6.1	12.04	79.0					
09/13/2014	19:53:31	223	6.2	12.01	88.2					
09/13/2014	19:55:01	214	6.2	12.01	97.4					
09/13/2014	19:56:31	210	6.2	12.04	106.7					
09/13/2014	19:58:01	219	6.2	12.04	115.9					
09/13/2014	19:59:31	216	6.2	12.05	125.1					
09/13/2014	20:01:01	218	6.2	12.05	134.4					
09/13/2014	20:02:31	203	6.2	12.04	143.6					
09/13/2014	20:05:31	209	6.2	12.01	162.1					
09/13/2014	20:07:01	201	6.2	12.01	171.4					
09/13/2014	20:08:31	233	6.1	12.00	180.6					
09/13/2014	20:10:01	229	6.1	12.03	189.8					
09/13/2014	20:11:31	219	6.1	12.02	199.0					
09/13/2014	20:13:01	207	6.1	12.09	208.2					
09/13/2014	20:14:31	220	6.1	12.08	217.4					
09/13/2014	20:16:01	238	6.1	12.11	226.6					
09/13/2014	20:17:31	248	6.1	12.15	235.8					
09/13/2014	20:19:01	189	6.1	12.16	245.0					
09/13/2014	20:20:31	210	6.2	12.05	254.2					
09/13/2014	20:22:01	129	4.8	12.03	262.0					
09/13/2014	20:23:31	80	3.4	12.07	268.1					
09/13/2014	20:25:01	101	3.5	12.08	275.1					
09/13/2014	20:26:19	67	3.4	12.13	279.5	End Lead Slurry				
09/13/2014	20:26:31	68	3.4	12.13	280.2					
09/13/2014	20:28:01	72	3.2	12.63	3.2					
09/13/2014	20:28:57	232	6.1	12.81	8.2	Start Mixing Tail Slurry				

Well		Field		Job Start		Customer		Job Number	
Blackcomb 5-14 5-14		Arikaree Creek		Sep/13/2014		NightHawk		2019057	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/13/2014	20:29:01	233	6.1	12.83	8.6	Take Wet Sample			
09/13/2014	20:29:31	245	6.1	12.92	11.6				
09/13/2014	20:29:48	255	6.1	12.95	13.3	Good Returns			
09/13/2014	20:31:01	257	6.1	13.00	20.7				
09/13/2014	20:32:31	252	6.1	12.99	29.9				
09/13/2014	20:34:01	232	6.1	12.99	39.0				
09/13/2014	20:35:31	237	6.1	13.00	48.1				
09/13/2014	20:37:01	270	6.1	13.02	57.2				
09/13/2014	20:38:31	309	6.1	12.99	66.3				
09/13/2014	20:40:01	303	6.1	13.04	75.4				
09/13/2014	20:41:31	322	6.1	13.05	84.5				
09/13/2014	20:43:01	327	6.1	13.06	93.6				
09/13/2014	20:44:31	206	4.8	13.04	101.8				
09/13/2014	20:46:01	188	4.8	12.98	109.0				
09/13/2014	20:47:14	52	4.6	12.92	114.8	End Tail Slurry			
09/13/2014	20:47:15	52	3.6	12.92	114.8	Wash Pump To Pit			
09/13/2014	20:47:31	10	0.1	12.95	115.1				
09/13/2014	20:49:01	5	0.0	12.93	115.1				
09/13/2014	20:50:31	13	0.0	12.93	115.1				
09/13/2014	20:52:01	13	0.0	12.93	115.1				
09/13/2014	20:53:31	14	0.0	12.93	115.1				
09/13/2014	20:55:01	104	3.4	9.00	117.3				
09/13/2014	20:56:31	108	3.4	8.66	123.3				
09/13/2014	20:58:01	118	5.1	8.06	128.8				
09/13/2014	20:59:31	196	4.8	8.66	136.2				
09/13/2014	21:01:01	4	0.0	8.36	141.9				
09/13/2014	21:02:31	140	0.4	8.37	142.4				
09/13/2014	21:04:01	6	0.0	8.36	142.5				
09/13/2014	21:04:17	5	0.0	8.36	142.5	Drop Top Plug			
09/13/2014	21:04:18	6	0.0	8.36	142.5	Start Displacement			
09/13/2014	21:05:31	20	1.9	8.35	2.2				
09/13/2014	21:07:01	149	6.2	8.35	9.1				
09/13/2014	21:08:31	205	6.2	8.35	18.4				
09/13/2014	21:10:01	189	6.2	8.35	27.7				
09/13/2014	21:10:32	187	6.2	8.36	30.9	Pump 192 BBLs H2O			
09/13/2014	21:11:31	246	6.1	8.36	36.9				
09/13/2014	21:13:01	282	6.1	8.35	46.1				
09/13/2014	21:14:31	550	6.1	8.36	55.3				
09/13/2014	21:16:01	577	6.1	8.36	64.5				
09/13/2014	21:17:31	564	6.1	8.36	73.7				
09/13/2014	21:19:01	712	6.1	8.36	82.8				
09/13/2014	21:20:31	833	6.1	8.36	92.0				
09/13/2014	21:22:01	1034	6.1	8.36	101.1				
09/13/2014	21:23:31	1007	6.1	8.36	110.3				
09/13/2014	21:25:01	1192	6.1	8.36	119.4				
09/13/2014	21:26:31	1235	6.1	8.36	128.5				
09/13/2014	21:28:01	1409	6.1	8.36	137.6				
09/13/2014	21:29:31	1604	6.1	8.36	146.7				
09/13/2014	21:30:26	1552	6.1	8.36	152.2	55 BBLs Cement To Surface			
09/13/2014	21:31:01	1735	6.1	8.36	155.7				
09/13/2014	21:32:31	1613	6.0	8.36	164.8				
09/13/2014	21:34:01	1864	6.1	8.36	173.9				
09/13/2014	21:35:31	1623	3.6	8.36	182.7				
09/13/2014	21:37:01	1552	1.9	8.35	185.8				

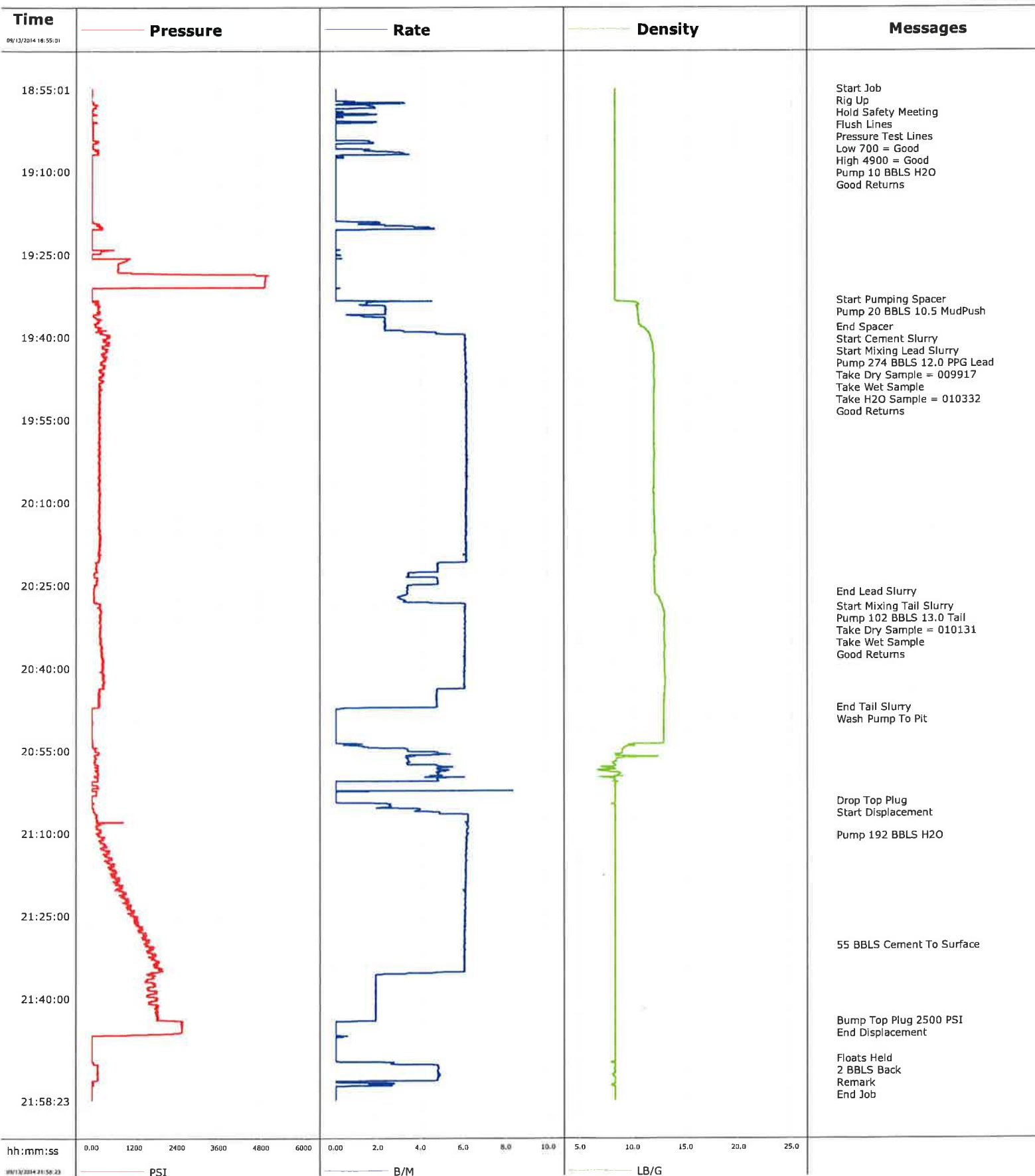
Well		Field		Job Start		Customer		Job Number	
Blackcomb 5-14 5-14		Arikaree Creek		Sep/13/2014		NightHawk		2019057	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/13/2014	21:40:01	1833	1.9	8.35	191.5				
09/13/2014	21:41:31	1832	1.9	8.35	194.3				
09/13/2014	21:43:01	1842	1.9	8.35	197.1				
09/13/2014	21:44:12	2527	1.7	8.35	199.4	Bump Top Plug 2500 PSI			
09/13/2014	21:44:13	2527	1.0	8.35	199.4	End Displacement			
09/13/2014	21:44:31	2568	0.0	8.35	199.4				
09/13/2014	21:46:01	2546	0.0	8.35	199.4				
09/13/2014	21:47:31	3	0.0	8.35	199.5				
09/13/2014	21:49:01	3	0.0	8.35	199.5				
09/13/2014	21:50:31	3	0.0	8.35	199.5				
09/13/2014	21:50:54	2	0.0	8.35	199.5	Floats Held			
09/13/2014	21:50:55	2	0.0	8.35	199.5	2 BBLs Back			
09/13/2014	21:51:10	2	0.0	8.35	199.5	Remark			
09/13/2014	21:51:11	2	0.0	8.35	199.5	End Job			
09/13/2014	21:52:01	179	3.9	8.35	200.7				
09/13/2014	21:53:31	166	4.8	8.29	207.8				
09/13/2014	21:55:01	2	0.7	8.35	214.9				
09/13/2014	21:56:31	2	0.0	8.35	216.3				

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
5.0			8.3	376.0	0.0	20.0	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
4996	1900	458	2500			bbl	lb/gal
Avg. N2 Percent	Designed Slurry Volume		Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume	
%	376.0 bbl		192.0 bbl	55 degF	<input checked="" type="checkbox"/>	55.0 bbl	
Customer or Authorized Representative			Schlumberger Supervisor		Washed Thru Perfs	To	Job Completed
Jim Weir			Conley Jensen/ Lyle Hartsfield		<input type="checkbox"/>	ft	<input checked="" type="checkbox"/>
					Circulation Lost		
					<input type="checkbox"/>		

Well Blackcomb 5-14
Field Arikaree Creek
Engineer Conley Jensen/ Lyle Hartsfield
Country United States

Client NightHawk
SIR No. 2019057
Job Type 5.5 Production
Job Date 09-13-2014



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09/13/2014 21:58:23

PSI

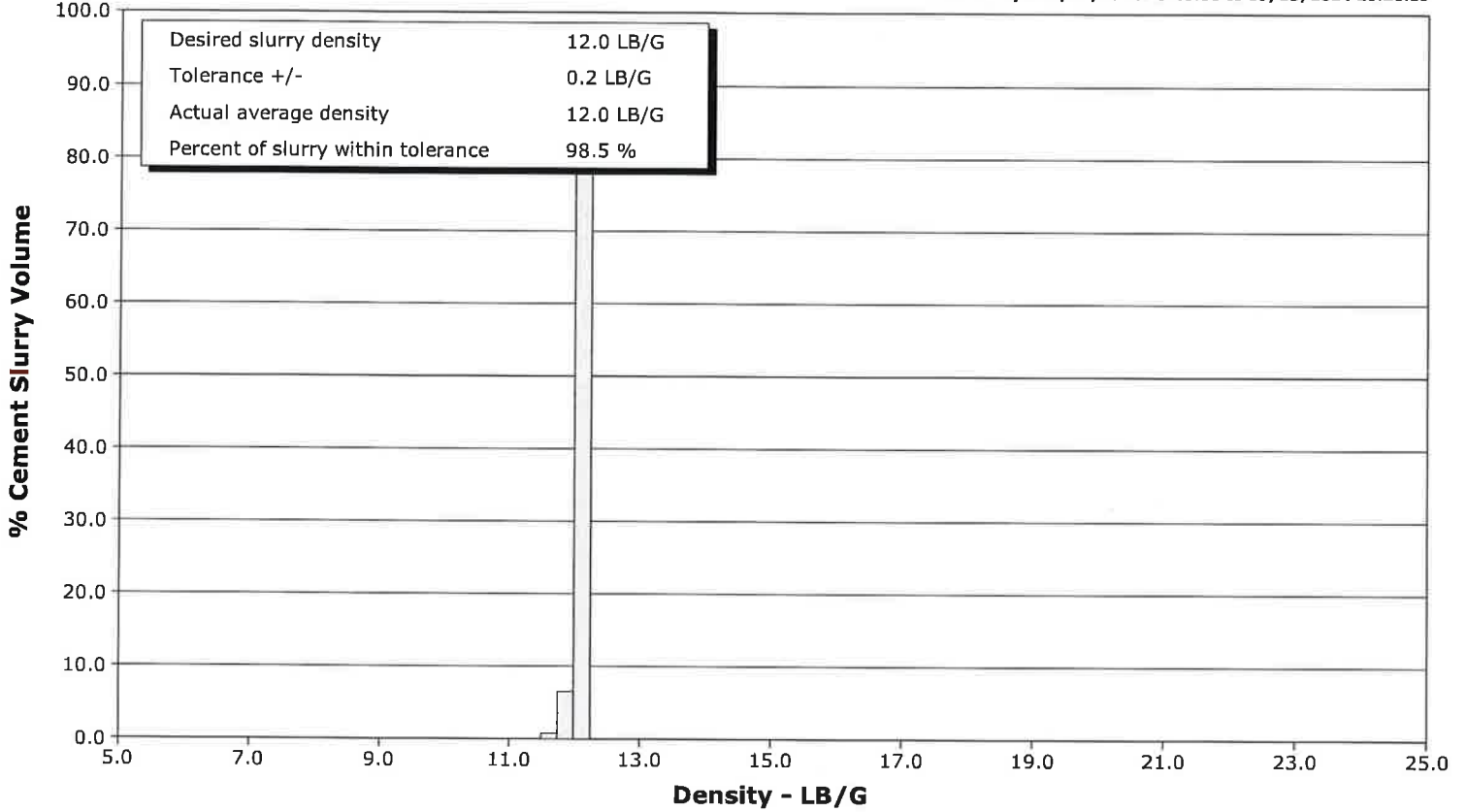
B/M

LB/G

Well Blackcomb 5-14
Field Arikaree Creek
Engineer Conley Jensen/ Lyle Hartsfield
Country United States

Client NightHawk
SIR No. 2019057
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Lead Slurry - 09/13/2014 19:40:06 to 09/13/2014 20:26:19



Tail Slurry - 09/13/2014 20:28:57 to 09/13/2014 20:47:14

