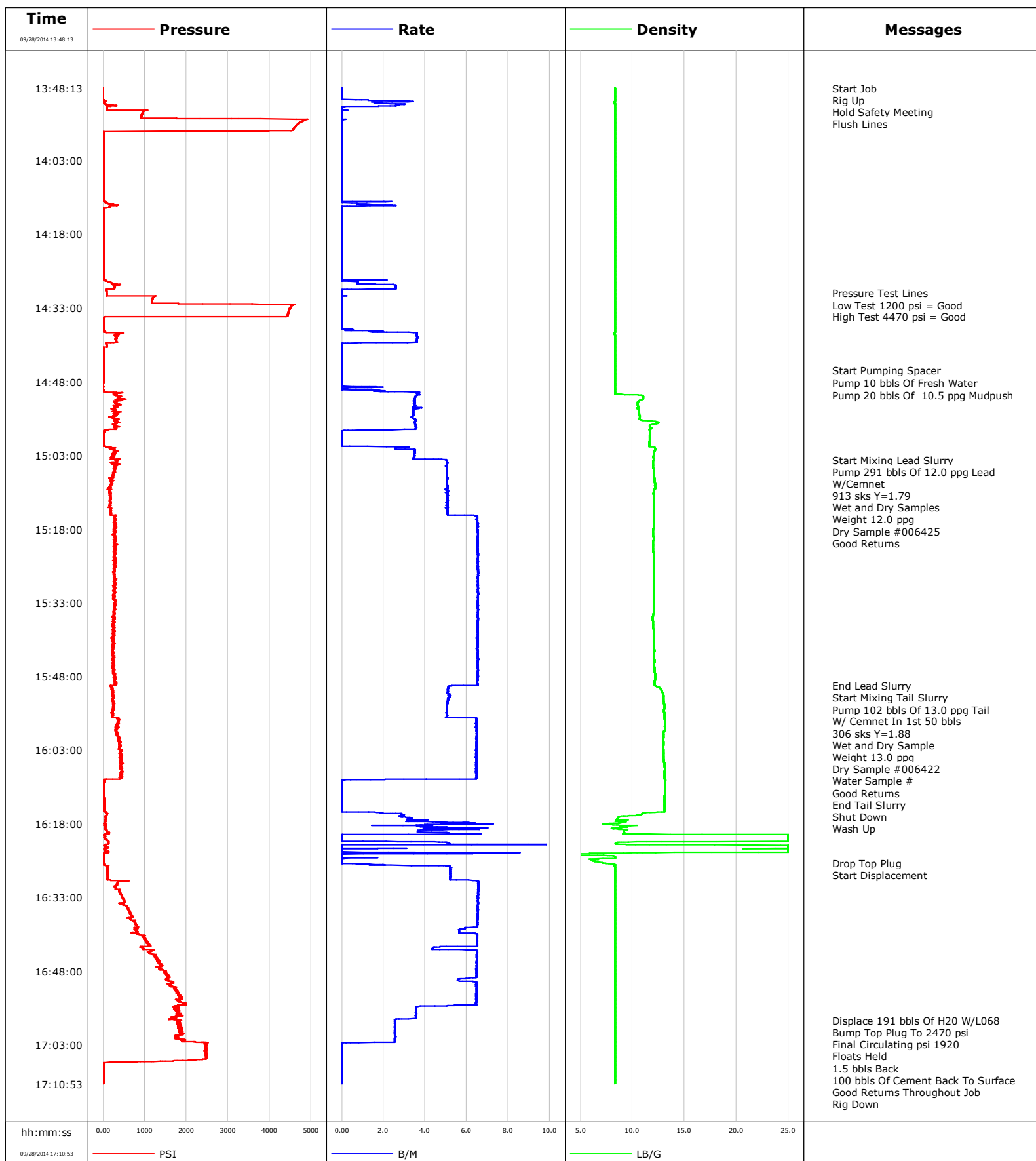


**Well** Salen 14-35  
**Field** Arikaree Creek  
**Engineer** Justin Zika/Leiker  
**Country** United States

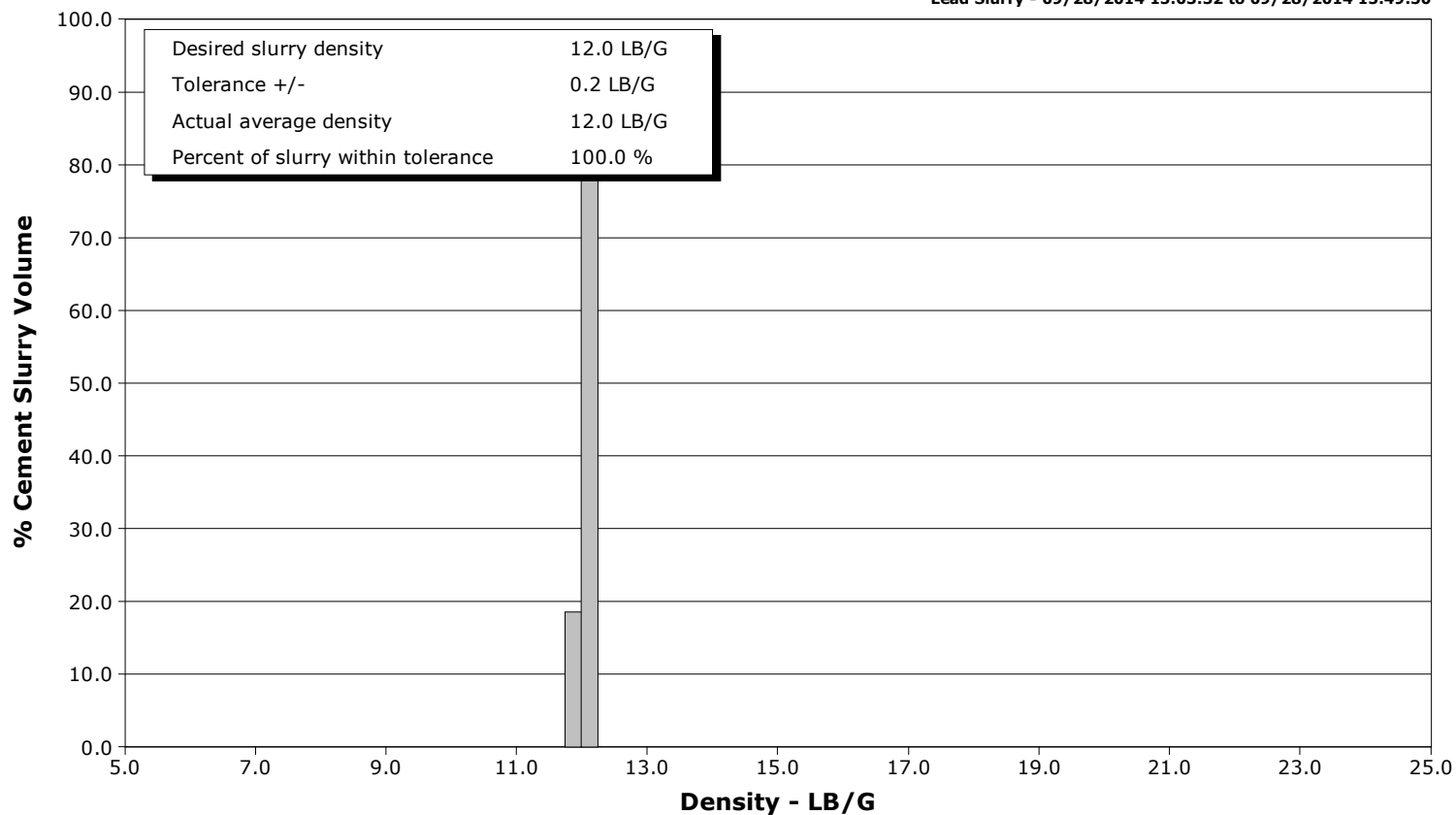
**Client** Nighthawk  
**SIR No.**  
**Job Type** Production  
**Job Date** 09-28-2014



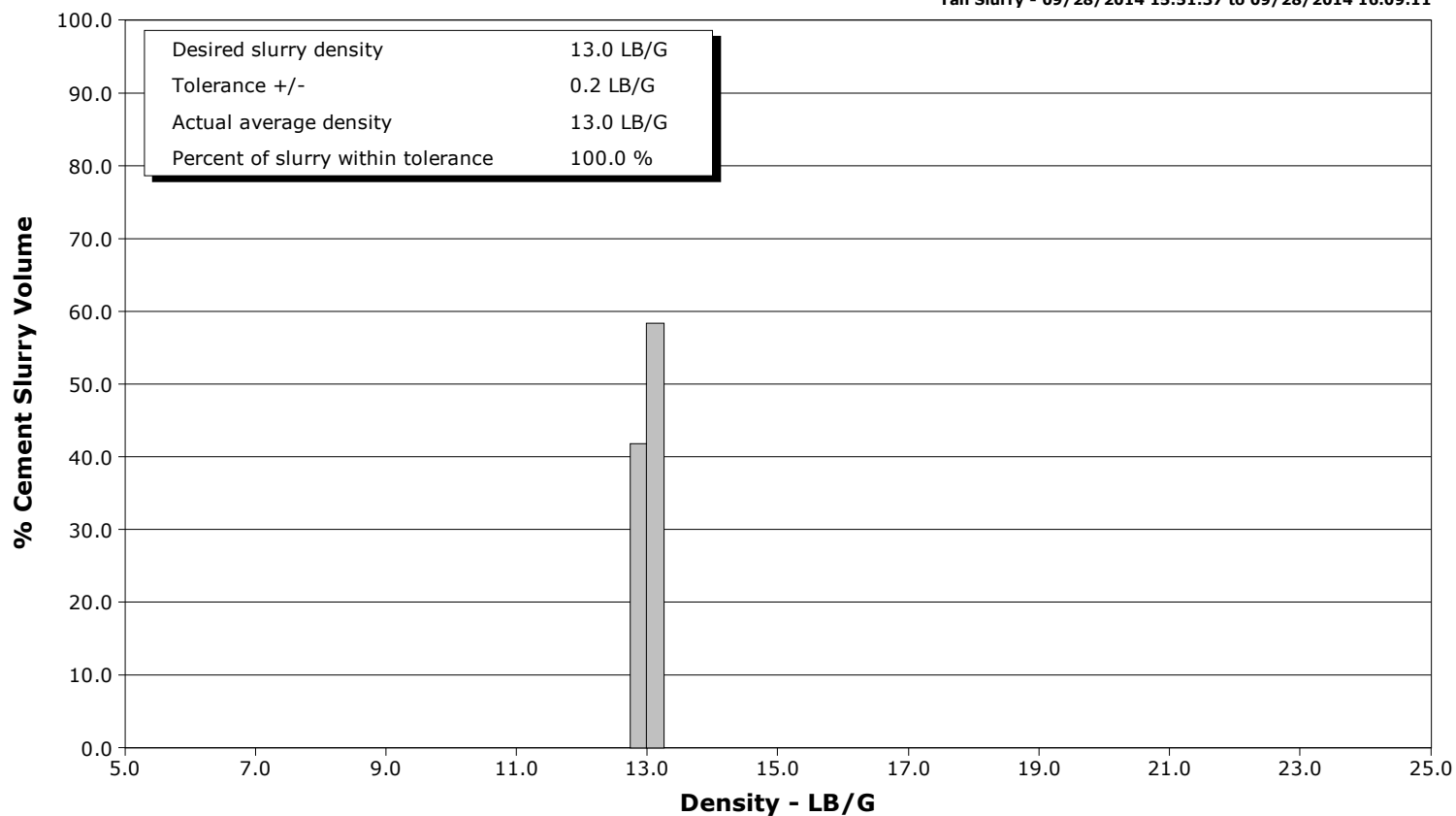
**Well** Salen 14-35  
**Field** Arikaree Creek  
**Engineer** Justin Zika/Leiker  
**Country** United States

**Client** Nighthawk  
**SIR No.**  
**Job Type** Production  
**Job Date** 09-28-2014

**Lead Slurry - 09/28/2014 15:03:52 to 09/28/2014 15:49:50**



**Tail Slurry - 09/28/2014 15:51:37 to 09/28/2014 16:09:11**





# Cementing Service Report

				Customer Nighthawk		Job Number 2027060	
Well Salen 14-35 14-35			Location (legal) Cheyenne,WY		Schlumberger Location Cheyenne, WY		Job Start Sep/28/2014
Field Arikaree Creek		Formation Name/Type Shale		Deviation	Bit Size 7.9 in	Well MD 8310.0 ft	Well TVD
County Washington		State/Province Colorado		BHP	BHST 202 degF	BHCT 171 degF	Pore Press. Gradient
Well Master		API/UWI 631587377					
Rig Name Xtreme 11		Drilled For Oil	Service Via Land	Casing/Liner			
				Depth, ft	Size, in	Weight, lb/ft	Grade
Offshore Zone		Well Class New	Well Type Development	8307.0	5.500	17.0	N80
				0.0	0.000	0.0	
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe			
				Depth,	Size,	Weight,	Grade
Service Line Cementing		Job Type Production					
Max. Allowed Tub. Press 4500 psi		Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole			
				Top,	Bottom,	No. of Shots	Total Interval
							Diameter
				Treat Down Casing	Displacement 191.0 bbl	Packer Type	Packer Depth
				Tubing Vol.	Casing Vol. 452.0 bbl	Annular Vol. 258.0 bbl	Openhole Vol.
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job	
Lift Pressure 5944 psi				Shoe Type Float		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input checked="" type="checkbox"/>		Shoe Depth 8307.0 ft		Tool Type	
No. Centralizers		Top Plugs 1	Bottom Plugs	Stage Tool Type		Tool Depth	
Cement Head Type Single				Stage Tool Depth		Tail Pipe Size	
Job Scheduled For Sep/28/2014 07:00		Arrived on Location Sep/28/2014 12:00	Leave Location Sep/28/2014 19:00	Collar Type Float		Tail Pipe Depth	
				Collar Depth 8214.0 ft		Sqz. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/28/2014	13:19:17					Started Acquisition	
09/28/2014	13:48:13	-0	0.0	8.29	0.0		
09/28/2014	13:48:14					Start Job	
09/28/2014	13:48:14	-0	0.0	8.29	0.0		
09/28/2014	13:48:16					Rig Up	
09/28/2014	13:48:16					Hold Safety Meeting	
09/28/2014	13:48:16					Flush Lines	
09/28/2014	13:48:16	-0	0.0	8.29	0.0		
09/28/2014	13:49:17	-0	0.0	8.29	0.0		
09/28/2014	13:50:57	54	3.4	8.29	0.6		
09/28/2014	13:52:37	88	0.0	8.29	3.1		
09/28/2014	13:54:17	914	0.0	8.29	3.1		
09/28/2014	13:55:57	4638	0.0	8.29	3.1		
09/28/2014	13:57:37	5	0.0	8.29	3.1		
09/28/2014	13:59:17	4	0.0	8.29	3.1		
09/28/2014	14:00:57	4	0.0	8.29	3.1		
09/28/2014	14:02:37	3	0.0	8.29	3.1		
09/28/2014	14:04:17	3	0.0	8.29	3.1		
09/28/2014	14:05:57	3	0.0	8.29	3.1		
09/28/2014	14:07:37	3	0.0	8.29	3.1		
09/28/2014	14:09:17	3	0.0	8.29	3.1		

Well			Field	Job Start	Customer	Job Number
Salen 14-35 14-35			Arikaree Creek	Sep/28/2014	Nighthawk	2027060
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
09/28/2014	14:12:37	145	0.0	8.29	4.3	
09/28/2014	14:14:17	3	0.0	8.29	4.3	
09/28/2014	14:15:57	2	0.0	8.29	4.3	
09/28/2014	14:17:37	2	0.0	8.29	4.3	
09/28/2014	14:19:17	2	0.0	8.29	4.3	
09/28/2014	14:20:57	2	0.0	8.29	4.3	
09/28/2014	14:22:37	2	0.0	8.29	4.3	
09/28/2014	14:24:17	1	0.0	8.29	4.3	
09/28/2014	14:25:57	2	0.0	8.29	4.3	
09/28/2014	14:27:37	113	0.7	8.29	4.6	
09/28/2014	14:29:17	67	0.2	8.29	7.6	
09/28/2014	14:30:00					Pressure Test Lines
09/28/2014	14:30:00	72	0.0	8.29	7.6	
09/28/2014	14:30:01					Low Test 1200 psi = Good
09/28/2014	14:30:01	72	0.0	8.29	7.6	
09/28/2014	14:30:02					High Test 4470 psi = Good
09/28/2014	14:30:02	72	0.0	8.29	7.6	
09/28/2014	14:30:57	1194	0.0	8.29	7.6	
09/28/2014	14:32:37	4529	0.0	8.29	7.6	
09/28/2014	14:34:17	4440	0.0	8.29	7.6	
09/28/2014	14:35:57	3	0.0	8.30	7.6	
09/28/2014	14:37:37	9	0.4	8.30	7.6	
09/28/2014	14:39:17	290	3.6	8.29	13.0	
09/28/2014	14:40:57	87	0.0	8.30	15.9	
09/28/2014	14:42:37	2	0.0	8.30	15.9	
09/28/2014	14:44:17	1	0.0	8.30	15.9	
09/28/2014	14:45:44					Start Pumping Spacer
09/28/2014	14:45:44	1	0.0	8.30	15.9	
09/28/2014	14:45:46					Pump 10 bbls Of Fresh Water
09/28/2014	14:45:46	1	0.0	8.30	15.9	
09/28/2014	14:45:57	1	0.0	8.30	15.9	
09/28/2014	14:47:37	1	0.0	8.30	15.9	
09/28/2014	14:49:17	-11	0.7	8.30	16.2	
09/28/2014	14:50:46					Pump 20 bbls Of 10.5 ppg Mudpush
09/28/2014	14:50:46	277	3.6	10.78	19.3	
09/28/2014	14:50:57	450	3.6	11.01	20.0	
09/28/2014	14:52:37	387	3.5	10.51	25.8	
09/28/2014	14:54:17	371	3.4	10.60	31.7	
09/28/2014	14:55:57	323	3.6	11.23	37.4	
09/28/2014	14:57:37	306	3.5	11.76	43.3	
09/28/2014	14:59:17	7	0.0	11.64	44.1	
09/28/2014	15:00:57	7	0.0	11.61	44.1	
09/28/2014	15:02:37	232	3.5	12.07	48.6	
09/28/2014	15:03:52					Start Mixing Lead Slurry
09/28/2014	15:03:52	389	4.9	12.02	53.0	
09/28/2014	15:03:53					Pump 291 bbls Of 12.0 ppg Lead
09/28/2014	15:03:53	376	4.9	12.02	53.1	
09/28/2014	15:03:54					W/Cemnet
09/28/2014	15:03:54					913 sks Y=1.79
09/28/2014	15:03:54					Wet and Dry Samples
09/28/2014	15:03:54					Weight 12.0 ppg
09/28/2014	15:03:54	376	5.0	12.02	53.2	
09/28/2014	15:03:55					Dry Sample #006425
09/28/2014	15:03:55					Good Returns

Well			Field		Job Start	Customer	Job Number
Salen 14-35 14-35			Arikaree Creek		Sep/28/2014	Nighthawk	2027060
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/28/2014	15:04:17	328	5.0	11.98	55.1		
09/28/2014	15:05:57	294	5.0	12.02	63.5		
09/28/2014	15:07:37	154	5.1	12.08	72.0		
09/28/2014	15:09:17	174	5.1	12.14	80.4		
09/28/2014	15:10:57	177	5.1	12.01	88.8		
09/28/2014	15:12:37	187	5.0	12.08	97.3		
09/28/2014	15:14:17	175	5.1	12.02	105.8		
09/28/2014	15:15:57	293	6.5	12.01	115.3		
09/28/2014	15:17:37	288	6.5	12.03	126.1		
09/28/2014	15:19:17	284	6.5	11.99	137.0		
09/28/2014	15:20:57	300	6.5	11.99	147.9		
09/28/2014	15:22:37	275	6.5	12.00	158.8		
09/28/2014	15:24:17	287	6.5	12.01	169.7		
09/28/2014	15:25:57	270	6.5	12.03	180.6		
09/28/2014	15:27:37	258	6.5	12.05	191.5		
09/28/2014	15:29:17	266	6.5	12.03	202.4		
09/28/2014	15:30:57	272	6.5	12.04	213.3		
09/28/2014	15:32:37	271	6.5	12.02	224.2		
09/28/2014	15:34:17	288	6.5	12.04	235.0		
09/28/2014	15:35:57	233	6.5	11.94	245.9		
09/28/2014	15:37:37	222	6.5	11.97	256.8		
09/28/2014	15:39:17	217	6.5	12.02	267.7		
09/28/2014	15:40:57	223	6.5	12.03	278.6		
09/28/2014	15:42:37	235	6.5	12.10	289.5		
09/28/2014	15:44:17	251	6.5	12.01	300.3		
09/28/2014	15:45:57	227	6.5	12.06	311.2		
09/28/2014	15:47:37	275	6.5	12.15	322.1		
09/28/2014	15:49:17	264	6.5	12.14	333.0		
09/28/2014	15:49:50					End Lead Slurry	
09/28/2014	15:49:50	177	6.5	12.13	336.6		
09/28/2014	15:50:57	212	5.1	12.79	342.3		
09/28/2014	15:51:37					Start Mixing Tail Slurry	
09/28/2014	15:51:37	228	5.2	12.91	345.7		
09/28/2014	15:51:52					Pump 102 bbls Of 13.0 ppg Tail	
09/28/2014	15:51:52					W/ Cemnet In 1st 50 bbls	
09/28/2014	15:51:52					306 sks Y=1.88	
09/28/2014	15:51:52					Wet and Dry Sample	
09/28/2014	15:51:52					Weight 13.0 ppg	
09/28/2014	15:51:52	241	5.2	12.97	347.0		
09/28/2014	15:51:53					Dry Sample #006422	
09/28/2014	15:51:53					Water Sample #	
09/28/2014	15:51:53					Good Returns	
09/28/2014	15:51:53	234	5.2	12.97	347.1		
09/28/2014	15:52:37	221	5.1	12.98	350.9		
09/28/2014	15:54:17	250	5.1	13.06	359.3		
09/28/2014	15:55:57	242	5.0	13.07	367.8		
09/28/2014	15:57:37	375	6.5	13.11	377.9		
09/28/2014	15:59:17	325	6.5	13.01	388.7		
09/28/2014	16:00:57	365	6.5	12.92	399.5		
09/28/2014	16:02:37	382	6.5	12.91	410.3		
09/28/2014	16:04:17	416	6.5	12.96	421.1		
09/28/2014	16:05:57	435	6.5	13.08	431.8		
09/28/2014	16:07:37	469	6.5	13.08	442.6		
09/28/2014	16:09:11					End Tail Slurry	

Well			Field		Job Start	Customer	Job Number
Salen 14-35 14-35			Arikaree Creek		Sep/28/2014	Nighthawk	2027060
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/28/2014	16:09:12					Shut Down	
09/28/2014	16:09:12					Wash Up	
09/28/2014	16:09:12	15	0.0	13.15	451.3		
09/28/2014	16:09:17	15	0.0	13.15	451.3		
09/28/2014	16:10:57	9	0.0	13.12	451.3		
09/28/2014	16:12:37	10	0.0	13.07	451.3		
09/28/2014	16:14:17	17	0.0	13.08	451.3		
09/28/2014	16:15:57	79	2.8	10.95	452.0		
09/28/2014	16:17:37	42	4.6	9.21	457.3		
09/28/2014	16:19:17	76	3.7	9.26	465.4		
09/28/2014	16:20:57	45	0.0	25.00	469.1		
09/28/2014	16:22:37	30	0.0	25.00	472.6		
09/28/2014	16:24:17	2	0.0	0.36	474.4		
09/28/2014	16:25:57	3	0.0	7.17	474.4		
09/28/2014	16:26:00					Drop Top Plug	
09/28/2014	16:26:00					Start Displacement	
09/28/2014	16:26:00	3	0.0	7.30	474.4		
09/28/2014	16:27:37	105	5.2	8.31	480.9		
09/28/2014	16:29:17	101	5.2	8.31	489.6		
09/28/2014	16:30:57	285	6.6	8.31	500.3		
09/28/2014	16:32:37	438	6.5	8.31	511.2		
09/28/2014	16:34:17	448	6.5	8.31	522.1		
09/28/2014	16:35:57	633	6.5	8.31	533.0		
09/28/2014	16:37:37	732	6.5	8.31	543.8		
09/28/2014	16:39:17	771	5.9	8.31	554.6		
09/28/2014	16:40:57	954	6.5	8.31	564.6		
09/28/2014	16:42:37	1068	6.5	8.31	575.4		
09/28/2014	16:44:17	1128	6.5	8.31	584.9		
09/28/2014	16:45:57	1345	6.5	8.31	595.7		
09/28/2014	16:47:37	1355	6.5	8.31	606.5		
09/28/2014	16:49:17	1564	6.5	8.32	617.3		
09/28/2014	16:50:57	1630	6.5	8.31	627.6		
09/28/2014	16:52:37	1833	6.5	8.31	638.4		
09/28/2014	16:54:17	1859	6.5	8.31	649.2		
09/28/2014	16:55:57	1816	3.6	8.31	657.2		
09/28/2014	16:57:37	1652	3.6	8.31	663.1		
09/28/2014	16:58:00					Displace 191 bbls Of H2O W/L068	
09/28/2014	16:58:00					Bump Top Plug To 2470 psi	
09/28/2014	16:58:00					Final Circulating psi 1920	
09/28/2014	16:58:00					Floats Held	
09/28/2014	16:58:00					1.5 bbls Back	
09/28/2014	16:58:00					100 bbls Of Cement Back To Surface	
09/28/2014	16:58:00					Good Returns Throughout Job	
09/28/2014	16:58:00					Rig Down	
09/28/2014	16:58:00					End Job	
09/28/2014	16:58:00	1853	2.6	8.31	664.2		
09/28/2014	16:59:17	1886	2.5	8.31	667.4		
09/28/2014	17:00:57	1852	2.6	8.31	671.7		
09/28/2014	17:02:37	2470	0.0	8.30	675.6		
09/28/2014	17:04:17	2466	0.0	8.30	675.6		
09/28/2014	17:05:57	2398	0.0	8.30	675.6		
09/28/2014	17:07:37	9	0.0	8.30	675.6		
09/28/2014	17:09:17	7	0.0	8.30	675.6		

<b>Well</b> Salen 14-35 14-35	<b>Field</b> Arikaree Creek	<b>Job Start</b> Sep/28/2014	<b>Customer</b> Nighthawk	<b>Job Number</b> 2027060
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Post Job Summary

Average Pump Rates,					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate		Total Slurry 394.0	Mud	Spacer 30.0	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 4500	Final 1920	Average	Bump Plug to 2470	Breakdown	Type	Volume	Density	
Avg. N2 Percent	Designed Slurry Volume 394.0 bbl		Displacement 191.0 bbl	Mix Water Temp 73 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 100.0 bbl		
Customer or Authorized Representative Lynn Gibbs				Schlumberger Supervisor Justin Zika		Washed Thru Perfs <input type="checkbox"/>	To	
						Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	