

Cementing Service Report

Customer PIONEER NATURAL RESOURCES USA, INC						Job Number 2206749885		
Well Saratoga #44-3			Location (legal)			Schlumberger Location Vernal, UT		
Field Lay Creek			Formation Name/Type Clean-Sandstone			Deviation °		Well MD 4,400 ft
County Moffat			State/Province Colorado			BHP psi		BHST 110 °F
Well Master: 0630859012			API / UWI:			BHCT 95 °F		
Rig Name GRAYWOLF			Drilled For Gas			Service Via		
Offshore Zone			Well Class New			Well Type Exploration		
Drilling Fluid Type			Max. Density lb/gal			Plastic Viscosity cp		
Service Line Cementing			Job Type Cem Prod Casing			Casing/Liner		
Max. Allowed Tubing Pressure psi			Max. Allowed Ann. Pressure psi			Wellhead Connection Single cement head		
Service Instructions Provide Equipment, Materials, and Services to Cement 5 1/2" Production casing in two stage. As Per Customer Request			Depth, ft 4250			Size, in 5.5		Weight, lb/ft 15.5
Tubing/Drill Pipe			Depth, ft			Size, in		Weight, lb/ft
Parforations/Open Hole			Top, ft			Bottom, ft		spf
No. of Shots			Total Interval ft			Diameter in		
Treat Down Casing			Displacement 109 bbl			Packer Type None		Packer Depth ft
Tubing Vol. bbl			Casing Vol. bbl			Annular Vol. bbl		Open Hole Vol. bbl
Casing/Tubing Secured <input checked="" type="checkbox"/>			1 Hole Volume Circulated prior to Cementing <input checked="" type="checkbox"/>			Casing Tools		
Lift Pressure: psi			Pipe Rotated <input type="checkbox"/>			Pipe Reciprocated <input type="checkbox"/>		
Shoe Type: Guide			Shoe Depth: 3990 ft			Squeeze Job		
No. Centralizers: Top Plugs:			Bottom Plugs:			Squeeze Type		
Cement Head Type: Single			Stage Tool Type: DV			Tool Depth: ft		
Job Scheduled For: 2006-Dec-27 5:30			Arrived on Location: 2006-Dec-27 18:00			Stage Tool Depth: 632 ft		
Collar Type: Float			Collar Depth: 3953 ft			Tail Pipe Size: in		
Tail Pipe Depth: ft			Sqz Total Vol: bbl			Message		
Date	Time	Treating Pressure psi	Flow Rate bbl/min	Density lb/gal	Volume bbl	0	0	0
	24 hr clock					0	0	0
2006-Dec-27	14:39	-5	0.0	8.33	0.0	0	0	0
2006-Dec-27	14:39							Start Job
2006-Dec-27	14:39	-5	0.0	8.33	0.0	0	0	SLB Pumped broke down, required different pump down 10.5 hours
2006-Dec-27	14:39							Held a safety meeting and JSA
2006-Dec-27	14:39							Arrived on Loc at 19:00 (12/26/06)
2006-Dec-27	14:39							Water tested good for cement
2006-Dec-27	14:39	-5	0.0	8.33	0.0	0	0	
2006-Dec-27	14:44	2421	0.0	8.33	0.2	0	0	
2006-Dec-27	14:49	251	7.8	8.28	19.3	0	0	
2006-Dec-27	14:52	228	7.8	8.28	41.1	0	0	
2006-Dec-27	14:52							Pumped 20 bbl spacer ahead
2006-Dec-27	14:54	155	6.6	8.20	58.2	0	0	
2006-Dec-27	14:56							Pumped 50 bbl CW
2006-Dec-27	14:56	200	7.8	10.94	72.5	0	0	
2006-Dec-27	14:57							Start Mixing Lead Slurry
2006-Dec-27	14:57	200	7.8	11.08	73.6	0	0	
2006-Dec-27	14:59	155	7.8	11.44	95.3	0	0	
2006-Dec-27	15:04	109	6.6	11.02	131.3	0	0	
2006-Dec-27	15:09	164	7.8	11.08	166.9	0	0	

Well		Field		Service Date		Customer			Job Number
Saratoga ##44-3		Lay Creek		06361-Dec-27		PIONEER NATURAL RESOURCES USA, INC			2206749885
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0	
2006-Dec-27	15:14	159	7.8	11.27	200.5	0	0	0	
2006-Dec-27	15:19	59	5.2	14.07	231.3	0	0	0	
2006-Dec-27	15:24	136	6.6	14.05	262.3	0	0	0	
2006-Dec-27	15:29	155	6.6	14.27	294.1	0	0	0	
2006-Dec-27	15:34	127	5.1	13.92	327.9	0	0	0	
2006-Dec-27	15:37								Lead cement was 200 sks/yield was 3.91 cu/ft/sk
2006-Dec-27	15:37								Lead slurry was 139 bbl at 11 ppg
2006-Dec-27	15:37	-24	0.0	9.34	335.7	0	0	0	
2006-Dec-27	15:37	-24	0.0	9.33	335.7	0	0	0	
2006-Dec-27	15:37								Star displacement
2006-Dec-27	15:37								Pumped 118 bbl of tail cement at 14.1 ppg
2006-Dec-27	15:37								Tail cement was 400 sks yield was 1.64 cu/ft/sk
2006-Dec-27	15:37								We got returns while both lead and tail cement
2006-Dec-27	15:37								We took wet and dry samples of all slurries
2006-Dec-27	15:37								We dropped the dard after washing up to the pit
2006-Dec-27	15:39	-15	0.0	7.92	335.7	0	0	0	
2006-Dec-27	15:44	-15	0.2	8.40	337.8	0	0	0	
2006-Dec-27	15:47								
2006-Dec-27	15:47	4	2.9	8.27	353.0	0	0	0	
2006-Dec-27	15:49	68	7.8	8.27	365.0	0	0	0	
2006-Dec-27	15:54	736	7.8	8.20	404.3	0	0	0	
2006-Dec-27	15:59	667	2.7	8.14	436.6	0	0	0	
2006-Dec-27	16:03	1812	0.0	8.13	442.6	0	0	0	
2006-Dec-27	16:03								Finish displacement 94 bbl gone
2006-Dec-27	16:03								Bumped the plug to 1600 psi
2006-Dec-27	16:03	1812	0.0	8.13	442.6	0	0	0	
2006-Dec-27	16:04								Float held very good
2006-Dec-27	16:04	594	1.7	8.13	442.8	0	0	0	
2006-Dec-27	16:04	1954	2.7	8.13	444.2	0	0	0	
2006-Dec-27	16:09	-19	0.0	8.22	444.4	0	0	0	
2006-Dec-27	16:14	-19	0.0	8.26	444.4	0	0	0	
2006-Dec-27	16:19	4	7.8	8.18	471.6	0	0	0	
2006-Dec-27	16:24	-15	7.9	8.18	510.9	0	0	0	
2006-Dec-27	16:27	141	6.6	11.09	526.9	0	0	0	
2006-Dec-27	16:27								Drop the bomb waited 5 min and pressure up to 2100 psi
2006-Dec-27	16:27								Open the DV Tool successfully
2006-Dec-27	16:27	114	6.6	11.08	527.0	0	0	0	
2006-Dec-27	16:27								Start 2nd stage
2006-Dec-27	16:28	86	5.1	11.11	536.2	0	0	0	
2006-Dec-27	16:28								Pumped 20 bbl CW
2006-Dec-27	16:28								Pumped 20 bbl spacer ahead
2006-Dec-27	16:28	54	5.2	11.11	536.5	0	0	0	
2006-Dec-27	16:28								Start Lead cement
2006-Dec-27	16:29	22	4.2	10.80	540.9	0	0	0	
2006-Dec-27	16:34	-19	0.0	9.86	548.0	0	0	0	
2006-Dec-27	16:38	123	2.7	9.78	559.2	0	0	0	
2006-Dec-27	16:38								Finish lead cement 35 bbl at 11 ppg

Well		Field		Service Date		Customer		Job Number	
Saratoga ##44-3		Lay Creek		06361-Dec-27		PIONEER NATURAL RESOURCES USA, INC		2206749885	
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message
	24 hr clock	psi	bbf/min	lb/gal	bbf	0	0	0	
2006-Dec-27	16:38								Finish Displacement 15 bbl
2006-Dec-27	16:38								Drop top plug and start displacement
2006-Dec-27	16:39	-19	0.0	9.77	561.4	0	0	0	
2006-Dec-27	16:41								Bump the plug to 3,000 psi
2006-Dec-27	16:41	-19	0.0	9.79	561.4	0	0	0	
2006-Dec-27	16:41	-19	0.0	9.79	561.4	0	0	0	
2006-Dec-27	16:41								Met Objective
2006-Dec-27	16:41								Float held very good
2006-Dec-27	16:44	-19	0.0	9.80	561.4	0	0	0	
2006-Dec-27	16:49	-19	0.0	9.79	561.4	0	0	0	
2006-Dec-27	16:50	-19	0.0	9.79	561.4	0	0	0	
2006-Dec-27	16:50								End Job
Post Job Summary									
Average Pump Rates, bpm					Volume of Fluid Injected, bbl				
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2		
				291		70			
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum	Final	Average	Bump Plug to	Breakdown	Volume	Density			
4500		2000	1600		bbf	lb/gal			
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	<input checked="" type="checkbox"/> Cement Circulated to Surface?	Volume				
%	291 bbl	109 bbl	65 °F	<input type="checkbox"/> Washed Thru Perfs	To	ft			
Customer or Authorized Representative			Schlumberger Supervisor						
Herring, Tommy			Moreno, Alfredo			<input type="checkbox"/> CirculationLost		<input checked="" type="checkbox"/> Job Completed	

Well	Saratga #44-3	Client	Pioneer Resources
Field	Lay Creek	SIR No.	
Engineer	Alfredo Moreno	Job Type	Production
Country	United States	Job Date	12-27-2006

