



Cementing Service Report

Customer ANTERO RESOURCES CORPORATION						Job Number 2218528279											
Well Northbanks C3			Location (legal)			Schlumberger Location Grand Junction, CO			Job Start 2008-Apr-16								
Field Mamm Creek		Formation Name/Type Surface		Deviation 8.5 in		Well MD ft		Well TVD ft									
County Garfield		State/Province Colorado		BHP 0 psi		BHST °F		BHCT °F		Pore Press. Gradient 0 psi/ft							
Well Master: 0631004185		API / UWI:		Casing/Liner													
Rig Name PATTERSON 500		Drilled For Gas		Service Via		Depth, ft 1208		Size, in 8.625		Weight, lb/ft 24		Grade K-55		Thread 8RD			
Offshore Zone		Well Class New		Well Type Development		Tubing/Drill Pipe											
Drilling Fluid Type Bentonite		Max. Density lb/gal		Plastic Viscosity cp		Depth, ft		Size, in		Weight, lb/ft		Grade		Thread			
Service Line Cementing		Job Type Set Cement Plug P/W		Perforations/Open Hole													
Max. Allowed Tubing Pressure 4000 psi		Max. Allowed Ann. Pressure 1000 psi		Wellhead Connection 3 1/2 IF Drill Pin		Top, ft 0		Bottom, ft 0		spf 0		No. of Shots 0		Total Interval 0 ft			
Service Instructions Set 3 Cement Plugs 1st: 171sks 15.8 G 500ft (4878-4378) 2nd: 70sks 13.5 HMS 200ft (3850-3650) 3rd: 197sks 17ppg G 500ft (2300-1800)						0		0		0		0		Diameter			
						0		0		0		0		0		in	
						0		0		0		0		0		in	
						Treat Down Drill Pipe		Displacement 23 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				Squeeze Job							
Lift Pressure: psi						Shoe Type: Guide				Squeeze Type							
Pipe Rotated <input type="checkbox"/> Pipe Reciprocated <input type="checkbox"/>						Shoe Depth: ft				Tool Type:							
No. Centralizers: Top Plugs: 1 Bottom Plugs: 0						Stage Tool Type:				Tool Depth: ft							
Cement Head Type: Single						Stage Tool Depth: ft				Tail Pipe Size: in							
Job Scheduled For: 2008-Apr-16 8:00						Arrived on Location: 2008-Apr-16 14:00				Leave Location: 2008-Apr-16 14:00							
Collar Type: Float						Collar Depth: ft				Tail Pipe Depth: ft							
Collar Depth: ft						Sqz Total Vol: bbl											
Date	Time	Treating Pressure psi	Flow Rate bbl/min	Density lb/gal	Volume bbl	0	0	0	Message								
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48								Held Safety Meeting								
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48								Start 1st Plug								
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48								Held Safety Meeting								
2008-Apr-16	9:48								Start 1st Plug								
2008-Apr-16	9:48								Start Job								
2008-Apr-16	9:48								Start Job								
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48								Pressure Test Lines								
2008-Apr-16	9:48								Pressure Test Lines								
2008-Apr-16	9:48	-5	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48								Test To 2000psi								
2008-Apr-16	9:48	-4	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48	-4	0.0	-0.02	0.0	0	0	0									
2008-Apr-16	9:48								Test To 2000psi								
2008-Apr-16	9:48								Test= Successful								

Well		Field			Service Date		Customer			Job Number
Northbanks #C3		Mamm Creek			08107-Apr-16		ANTERO RESOURCES CORPORATION			2218528279
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message	
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0		
2008-Apr-16	9:48								Test= Succesfull	
2008-Apr-16	9:50	26	1.6	-0.02	0.3	0	0	0		
2008-Apr-16	9:50	26	1.6	-0.02	0.3	0	0	0		
2008-Apr-16	9:52	267	1.1	-0.02	1.4	0	0	0		
2008-Apr-16	9:52	267	1.1	-0.02	1.4	0	0	0		
2008-Apr-16	9:54	65	0.0	-0.02	2.1	0	0	0		
2008-Apr-16	9:54	65	0.0	-0.02	2.1	0	0	0		
2008-Apr-16	9:55								Reset Total, Vol = 2.37 bbl	
2008-Apr-16	9:55	130	1.5	0.08	2.4	0	0	0		
2008-Apr-16	9:55	130	1.5	0.08	2.4	0	0	0		
2008-Apr-16	9:55								Reset Total, Vol = 2.37 bbl	
2008-Apr-16	9:56								Start Cement Slurry	
2008-Apr-16	9:56								Start Cement Slurry	
2008-Apr-16	9:56	297	1.6	16.16	3.4	0	0	0		
2008-Apr-16	9:56	297	1.6	16.16	3.4	0	0	0		
2008-Apr-16	9:56	294	1.6	16.16	3.5	0	0	0		
2008-Apr-16	9:56								35bbls @ 15.8ppg	
2008-Apr-16	9:56	294	1.6	16.16	3.5	0	0	0		
2008-Apr-16	9:56								35bbls @ 15.8ppg	
2008-Apr-16	9:56								Take Wet&Dry Sample	
2008-Apr-16	9:56								Take Wet&Dry Sample	
2008-Apr-16	9:56	294	1.6	16.14	3.5	0	0	0		
2008-Apr-16	9:56	294	1.6	16.14	3.5	0	0	0		
2008-Apr-16	9:56								Sample= 15.8ppg	
2008-Apr-16	9:56								Sample= 15.8ppg	
2008-Apr-16	9:56	291	1.6	16.13	3.5	0	0	0		
2008-Apr-16	9:56	291	1.6	16.13	3.5	0	0	0		
2008-Apr-16	9:56	287	1.6	16.29	3.8	0	0	0		
2008-Apr-16	9:56	287	1.6	16.29	3.8	0	0	0		
2008-Apr-16	9:58	567	3.6	15.75	8.6	0	0	0		
2008-Apr-16	9:58	567	3.6	15.75	8.6	0	0	0		
2008-Apr-16	10:00	350	3.6	15.08	16.0	0	0	0		
2008-Apr-16	10:00	350	3.6	15.08	16.0	0	0	0		
2008-Apr-16	10:02	225	3.7	15.61	23.4	0	0	0		
2008-Apr-16	10:02	225	3.7	15.61	23.4	0	0	0		
2008-Apr-16	10:04	73	2.0	15.91	28.7	0	0	0		
2008-Apr-16	10:04	73	2.0	15.91	28.7	0	0	0		
2008-Apr-16	10:06								End Cement Slurry	
2008-Apr-16	10:06	-7	1.3	16.87	31.8	0	0	0		
2008-Apr-16	10:06	-7	1.3	16.87	31.8	0	0	0		
2008-Apr-16	10:06								End Cement Slurry	
2008-Apr-16	10:06								Start Pumping Mud	
2008-Apr-16	10:06	-16	0.0	16.01	31.9	0	0	0		
2008-Apr-16	10:06	-16	0.0	16.01	31.9	0	0	0		
2008-Apr-16	10:06								Start Pumping Mud	
2008-Apr-16	10:06	-16	0.0	15.68	31.9	0	0	0		
2008-Apr-16	10:06								30bbls Mud	
2008-Apr-16	10:06								30bbls Mud	
2008-Apr-16	10:06	-16	0.0	15.68	31.9	0	0	0		
2008-Apr-16	10:06	-14	0.0	16.29	31.9	0	0	0		
2008-Apr-16	10:06	-14	0.0	16.29	31.9	0	0	0		
2008-Apr-16	10:08	-4	0.0	15.94	31.9	0	0	0		
2008-Apr-16	10:08	-4	0.0	15.94	31.9	0	0	0		
2008-Apr-16	10:10	96	2.0	11.94	34.6	0	0	0		

Well		Field			Service Date		Customer			Job Number
Northbanks #C3		Mamm Creek			08107-Apr-16		ANTERO RESOURCES CORPORATION			2218528279
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message	
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0		
2008-Apr-16	10:10	96	2.0	11.94	34.6	0	0	0		
2008-Apr-16	10:12	138	3.7	12.06	41.6	0	0	0		
2008-Apr-16	10:12	138	3.7	12.06	41.6	0	0	0		
2008-Apr-16	10:14	284	3.9	12.20	49.2	0	0	0		
2008-Apr-16	10:14	284	3.9	12.20	49.2	0	0	0		
2008-Apr-16	10:16	227	2.0	12.21	56.0	0	0	0		
2008-Apr-16	10:16	227	2.0	12.21	56.0	0	0	0		
2008-Apr-16	10:18	305	2.0	12.21	59.9	0	0	0		
2008-Apr-16	10:18	305	2.0	12.21	59.9	0	0	0		
2008-Apr-16	10:20	-16	0.0	12.21	61.3	0	0	0		
2008-Apr-16	10:20	-16	0.0	12.21	61.3	0	0	0		
2008-Apr-16	10:22	-12	0.0	12.21	61.3	0	0	0		
2008-Apr-16	10:22	-12	0.0	12.21	61.3	0	0	0		
2008-Apr-16	10:24	197	1.5	11.92	63.4	0	0	0		
2008-Apr-16	10:24	197	1.5	11.92	63.4	0	0	0		
2008-Apr-16	10:26	23	1.5	8.84	66.0	0	0	0		
2008-Apr-16	10:26								End Mud	
2008-Apr-16	10:26								End Mud	
2008-Apr-16	10:26	23	1.5	8.84	66.0	0	0	0		
2008-Apr-16	10:26	18	1.6	8.74	66.5	0	0	0		
2008-Apr-16	10:26	18	1.6	8.74	66.5	0	0	0		
2008-Apr-16	10:28	25	1.6	11.99	69.6	0	0	0		
2008-Apr-16	10:28	25	1.6	11.99	69.6	0	0	0		
2008-Apr-16	10:30	-8	0.0	2.57	72.4	0	0	0		
2008-Apr-16	10:30	-8	0.0	2.57	72.4	0	0	0		
2008-Apr-16	10:32	-7	0.0	12.02	72.4	0	0	0		
2008-Apr-16	10:32	-7	0.0	12.02	72.4	0	0	0		
2008-Apr-16	10:34	-8	0.0	11.97	72.4	0	0	0		
2008-Apr-16	10:34	-8	0.0	11.97	72.4	0	0	0		
2008-Apr-16	10:36	-8	0.0	10.05	72.4	0	0	0		
2008-Apr-16	10:36	-8	0.0	10.05	72.4	0	0	0		
2008-Apr-16	10:38	-9	0.0	9.78	72.4	0	0	0		
2008-Apr-16	10:38	-9	0.0	9.78	72.4	0	0	0		
2008-Apr-16	10:40	-10	0.0	9.58	72.4	0	0	0		
2008-Apr-16	10:40	-10	0.0	9.58	72.4	0	0	0		
2008-Apr-16	10:42	-9	0.0	9.44	72.4	0	0	0		
2008-Apr-16	10:42	-9	0.0	9.44	72.4	0	0	0		
2008-Apr-16	10:44	-9	0.0	9.33	72.4	0	0	0		
2008-Apr-16	10:44	-9	0.0	9.33	72.4	0	0	0		
2008-Apr-16	10:46	-9	0.0	9.23	72.4	0	0	0		
2008-Apr-16	10:46	-9	0.0	9.23	72.4	0	0	0		
2008-Apr-16	10:48	-9	0.0	9.05	72.4	0	0	0		
2008-Apr-16	10:48	-9	0.0	9.05	72.4	0	0	0		
2008-Apr-16	10:50	-8	0.0	8.92	72.4	0	0	0		
2008-Apr-16	10:50	-8	0.0	8.92	72.4	0	0	0		
2008-Apr-16	10:52	-8	0.0	8.62	72.4	0	0	0		
2008-Apr-16	10:52	-8	0.0	8.62	72.4	0	0	0		
2008-Apr-16	10:54	-9	0.0	8.56	72.4	0	0	0		
2008-Apr-16	10:54	-9	0.0	8.56	72.4	0	0	0		
2008-Apr-16	10:56	-8	0.0	8.56	72.4	0	0	0		
2008-Apr-16	10:56	-8	0.0	8.56	72.4	0	0	0		
2008-Apr-16	10:57								Start 2nd Plug	
2008-Apr-16	10:57								Start 2nd Plug	
2008-Apr-16	10:57	-8	0.0	8.56	72.4	0	0	0		

Well		Field		Service Date		Customer			Job Number
Northbanks #C3		Mamm Creek		08107-Apr-16		ANTERO RESOURCES CORPORATION			2218528279
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0	
2008-Apr-16	10:57	-8	0.0	8.56	72.4	0	0	0	
2008-Apr-16	10:58	540	2.2	8.61	74.4	0	0	0	
2008-Apr-16	10:58	540	2.2	8.61	74.4	0	0	0	
2008-Apr-16	10:59	136	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59								Reset Total, Vol = 72.23 bbl
2008-Apr-16	10:59	136	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59								Reset Total, Vol = 72.23 bbl
2008-Apr-16	10:59								Start Cement Slurry
2008-Apr-16	10:59								Start Cement Slurry
2008-Apr-16	10:59	137	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59	137	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59	138	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59								Takw Wet&Dry Sample
2008-Apr-16	10:59								17bbbls @ 13.5ppg
2008-Apr-16	10:59								17bbbls @ 13.5ppg
2008-Apr-16	10:59	138	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59								Takw Wet&Dry Sample
2008-Apr-16	10:59								Sample= 13.5ppg
2008-Apr-16	10:59								Sample= 13.5ppg
2008-Apr-16	10:59	138	0.0	8.56	74.6	0	0	0	
2008-Apr-16	10:59	138	0.0	8.56	74.6	0	0	0	
2008-Apr-16	11:00	390	0.6	9.46	74.7	0	0	0	
2008-Apr-16	11:00	390	0.6	9.46	74.7	0	0	0	
2008-Apr-16	11:02	581	2.3	13.85	77.0	0	0	0	
2008-Apr-16	11:02	581	2.3	13.85	77.0	0	0	0	
2008-Apr-16	11:04	525	2.3	13.38	81.5	0	0	0	
2008-Apr-16	11:04	525	2.3	13.38	81.5	0	0	0	
2008-Apr-16	11:06	477	2.3	13.44	85.9	0	0	0	
2008-Apr-16	11:06	477	2.3	13.44	85.9	0	0	0	
2008-Apr-16	11:08	351	2.3	13.25	90.4	0	0	0	
2008-Apr-16	11:08	351	2.3	13.25	90.4	0	0	0	
2008-Apr-16	11:09								End Cement Slurry
2008-Apr-16	11:09								End Cement Slurry
2008-Apr-16	11:09	229	1.4	13.25	91.5	0	0	0	
2008-Apr-16	11:09	229	1.4	13.25	91.5	0	0	0	
2008-Apr-16	11:09	78	1.0	13.25	91.6	0	0	0	
2008-Apr-16	11:09	78	1.0	13.25	91.6	0	0	0	
2008-Apr-16	11:09								Reset Total, Vol = 17.04 bbl
2008-Apr-16	11:09								Reset Total, Vol = 17.04 bbl
2008-Apr-16	11:09								Start Pumping Mud
2008-Apr-16	11:09	15	0.4	13.28	91.7	0	0	0	
2008-Apr-16	11:09	15	0.4	13.28	91.7	0	0	0	
2008-Apr-16	11:09								Start Pumping Mud
2008-Apr-16	11:09	15	0.4	13.30	91.7	0	0	0	
2008-Apr-16	11:09								26bbbls Mud
2008-Apr-16	11:09								26bbbls Mud
2008-Apr-16	11:09	15	0.4	13.30	91.7	0	0	0	
2008-Apr-16	11:09	15	0.1	13.31	91.7	0	0	0	
2008-Apr-16	11:09	15	0.1	13.31	91.7	0	0	0	
2008-Apr-16	11:09								Good Returns
2008-Apr-16	11:09								Good Returns
2008-Apr-16	11:10	319	2.3	10.99	93.5	0	0	0	
2008-Apr-16	11:10	319	2.3	10.99	93.5	0	0	0	
2008-Apr-16	11:12	445	3.1	11.27	99.1	0	0	0	

Well		Field			Service Date		Customer			Job Number
Northbanks #C3		Mamm Creek			08107-Apr-16		ANTERO RESOURCES CORPORATION			2218528279
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message	
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0		
2008-Apr-16	11:12	445	3.1	11.27	99.1	0	0	0		
2008-Apr-16	11:14	552	3.1	11.65	105.2	0	0	0		
2008-Apr-16	11:14	552	3.1	11.65	105.2	0	0	0		
2008-Apr-16	11:16	659	3.1	11.66	111.3	0	0	0		
2008-Apr-16	11:16	659	3.1	11.66	111.3	0	0	0		
2008-Apr-16	11:18	588	1.9	12.15	116.0	0	0	0		
2008-Apr-16	11:18	588	1.9	12.15	116.0	0	0	0		
2008-Apr-16	11:19	182	1.2	12.17	118.1	0	0	0		
2008-Apr-16	11:19								End Mud	
2008-Apr-16	11:19								End Mud	
2008-Apr-16	11:19	182	1.2	12.17	118.1	0	0	0		
2008-Apr-16	11:20	173	0.0	12.19	118.2	0	0	0		
2008-Apr-16	11:20	173	0.0	12.19	118.2	0	0	0		
2008-Apr-16	11:22	-7	0.0	12.19	118.2	0	0	0		
2008-Apr-16	11:22	-7	0.0	12.19	118.2	0	0	0		
2008-Apr-16	11:24	24	0.9	9.70	119.2	0	0	0		
2008-Apr-16	11:24	24	0.9	9.70	119.2	0	0	0		
2008-Apr-16	11:26	12	0.9	9.46	121.1	0	0	0		
2008-Apr-16	11:26	12	0.9	9.46	121.1	0	0	0		
2008-Apr-16	11:28	19	0.9	8.80	123.0	0	0	0		
2008-Apr-16	11:28	19	0.9	8.80	123.0	0	0	0		
2008-Apr-16	11:30	13	0.9	9.14	124.9	0	0	0		
2008-Apr-16	11:30	13	0.9	9.14	124.9	0	0	0		
2008-Apr-16	11:32	35	1.7	9.42	127.1	0	0	0		
2008-Apr-16	11:32	35	1.7	9.42	127.1	0	0	0		
2008-Apr-16	11:34	-10	0.0	9.23	129.9	0	0	0		
2008-Apr-16	11:34	-10	0.0	9.23	129.9	0	0	0		
2008-Apr-16	11:36	-13	0.0	8.76	129.9	0	0	0		
2008-Apr-16	11:36	-13	0.0	8.76	129.9	0	0	0		
2008-Apr-16	11:38	-13	0.0	8.63	129.9	0	0	0		
2008-Apr-16	11:38	-13	0.0	8.63	129.9	0	0	0		
2008-Apr-16	11:40	-12	0.0	8.60	129.9	0	0	0		
2008-Apr-16	11:40	-12	0.0	8.60	129.9	0	0	0		
2008-Apr-16	11:42	-12	0.0	8.59	129.9	0	0	0		
2008-Apr-16	11:42	-12	0.0	8.59	129.9	0	0	0		
2008-Apr-16	11:44	-13	0.0	8.59	129.9	0	0	0		
2008-Apr-16	11:44	-13	0.0	8.59	129.9	0	0	0		
2008-Apr-16	11:46	-14	0.0	8.59	129.9	0	0	0		
2008-Apr-16	11:46	-14	0.0	8.59	129.9	0	0	0		
2008-Apr-16	11:48	-13	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:48	-13	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:50	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:50	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:52	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:52	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:54	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:54	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:56	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:56	-11	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:58	-12	0.0	8.58	129.9	0	0	0		
2008-Apr-16	11:58	-12	0.0	8.58	129.9	0	0	0		
2008-Apr-16	12:00	-12	0.0	8.58	129.9	0	0	0		
2008-Apr-16	12:00	-12	0.0	8.58	129.9	0	0	0		
2008-Apr-16	12:02	-9	0.0	8.58	129.9	0	0	0		

Well		Field			Service Date		Customer		Job Number
Northbanks #C3		Mamm Creek			08107-Apr-16		ANTERO RESOURCES CORPORATION		2218528279
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0	
2008-Apr-16	12:02	-9	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:04	-10	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:04	-10	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:06	-11	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:06	-11	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:08	-12	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:08	-12	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:10	-13	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:10	-13	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:12	-13	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:12	-13	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:14	-12	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:14	-12	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:16	-8	0.0	8.57	129.9	0	0	0	
2008-Apr-16	12:16	-8	0.0	8.57	129.9	0	0	0	
2008-Apr-16	12:18	-8	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:18	-8	0.0	8.58	129.9	0	0	0	
2008-Apr-16	12:19								Start 3rd Plug
2008-Apr-16	12:19	-8	0.0	8.57	129.9	0	0	0	
2008-Apr-16	12:19								Start 3rd Plug
2008-Apr-16	12:19	-8	0.0	8.57	129.9	0	0	0	
2008-Apr-16	12:20	813	1.9	8.58	130.6	0	0	0	
2008-Apr-16	12:20	813	1.9	8.58	130.6	0	0	0	
2008-Apr-16	12:22	499	0.0	8.55	131.2	0	0	0	
2008-Apr-16	12:22	499	0.0	8.55	131.2	0	0	0	
2008-Apr-16	12:23	622	0.2	8.55	131.2	0	0	0	
2008-Apr-16	12:23	622	0.2	8.55	131.2	0	0	0	
2008-Apr-16	12:23								Start Cement Slurry
2008-Apr-16	12:23								Start Cement Slurry
2008-Apr-16	12:23								35bbls @ 17ppg
2008-Apr-16	12:23								35bbls @ 17ppg
2008-Apr-16	12:23	820	0.6	8.55	131.2	0	0	0	
2008-Apr-16	12:23	820	0.6	8.55	131.2	0	0	0	
2008-Apr-16	12:23								Sample=17ppg
2008-Apr-16	12:23	686	1.0	8.55	131.2	0	0	0	
2008-Apr-16	12:23	686	1.0	8.55	131.2	0	0	0	
2008-Apr-16	12:23								Take Wet&Dry Sample
2008-Apr-16	12:23								Sample=17ppg
2008-Apr-16	12:23								Take Wet&Dry Sample
2008-Apr-16	12:23								Good Returns
2008-Apr-16	12:23	641	2.0	15.40	132.1	0	0	0	
2008-Apr-16	12:23	641	2.0	15.40	132.1	0	0	0	
2008-Apr-16	12:23								Good Returns
2008-Apr-16	12:24	475	2.2	16.33	134.0	0	0	0	
2008-Apr-16	12:24	475	2.2	16.33	134.0	0	0	0	
2008-Apr-16	12:26	162	2.2	17.23	138.3	0	0	0	
2008-Apr-16	12:26	162	2.2	17.23	138.3	0	0	0	
2008-Apr-16	12:28	212	4.1	16.68	145.4	0	0	0	
2008-Apr-16	12:28	212	4.1	16.68	145.4	0	0	0	
2008-Apr-16	12:30	183	4.1	16.81	153.5	0	0	0	
2008-Apr-16	12:30	183	4.1	16.81	153.5	0	0	0	
2008-Apr-16	12:32	98	2.2	16.64	161.1	0	0	0	
2008-Apr-16	12:32	98	2.2	16.64	161.1	0	0	0	
2008-Apr-16	12:33								End Cement Slurry

Well		Field			Service Date		Customer			Job Number
Northbanks #C3		Mamm Creek			08107-Apr-16		ANTERO RESOURCES CORPORATION			2218528279
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message	
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0		
2008-Apr-16	12:33	-5	0.8	16.80	163.3	0	0	0		
2008-Apr-16	12:33								End Cement Slurry	
2008-Apr-16	12:33	-5	0.8	16.80	163.3	0	0	0		
2008-Apr-16	12:33								Start Pumping Mud	
2008-Apr-16	12:33	-15	0.0	16.88	163.3	0	0	0		
2008-Apr-16	12:33								Start Pumping Mud	
2008-Apr-16	12:33	-15	0.0	16.88	163.3	0	0	0		
2008-Apr-16	12:34								Good Returns	
2008-Apr-16	12:34	-15	0.0	16.83	163.3	0	0	0		
2008-Apr-16	12:34	-15	0.0	16.83	163.3	0	0	0		
2008-Apr-16	12:34								13bbbls Mud	
2008-Apr-16	12:34								13bbbls Mud	
2008-Apr-16	12:34								Good Returns	
2008-Apr-16	12:34	-12	0.0	16.57	163.3	0	0	0		
2008-Apr-16	12:34	-12	0.0	16.57	163.3	0	0	0		
2008-Apr-16	12:36	66	2.3	11.05	165.4	0	0	0		
2008-Apr-16	12:36	66	2.3	11.05	165.4	0	0	0		
2008-Apr-16	12:38	112	2.2	12.20	169.9	0	0	0		
2008-Apr-16	12:38	112	2.2	12.20	169.9	0	0	0		
2008-Apr-16	12:40	250	2.3	12.19	174.3	0	0	0		
2008-Apr-16	12:40	250	2.3	12.19	174.3	0	0	0		
2008-Apr-16	12:42	4	0.0	12.22	175.5	0	0	0		
2008-Apr-16	12:42	4	0.0	12.22	175.5	0	0	0		
2008-Apr-16	12:44	-12	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:44	-12	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:46	-12	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:48	-13	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:48	-13	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:49	-13	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:49								End Mud	
2008-Apr-16	12:49	-13	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:49								End Mud	
2008-Apr-16	12:49	-13	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:49	-13	0.0	12.21	175.5	0	0	0		
2008-Apr-16	12:49								End Job	
2008-Apr-16	12:49								End Job	
2008-Apr-16	12:50	-13	0.0	12.22	175.5	0	0	0		
2008-Apr-16	12:50	-13	0.0	12.22	175.5	0	0	0		

Well		Northbanks #C3		Field		Mamm Creek		Service Date		08107-Apr-16		Customer		ANTERO RESOURCES CORPORATION		Job Number		2218528279	
Date	Time	Treating Pressure	Flow Rate	Density	Volume	0	0	0	Message										
	24 hr clock	psi	bbl/min	lb/gal	bbl	0	0	0											
Post Job Summary																			
Average Pump Rates, bpm										Volume of Fluid Injected, bbl									
Slurry		N2		Mud		Maximum Rate		Total Slurry		Mud		Spacer		N2					
								87		67									
Treating Pressure Summary, psi										Breakdown Fluid									
Maximum		Final		Average		Bump Plug to		Breakdown		Volume		Density							
2000												bbl		lb/gal					
Avg. N2 Percent		Designed Slurry Volume		Displacement		Mix Water Temp		<input type="checkbox"/> Cement Circulated to Surface?		Volume		bbl							
		87 bbl		bbl		73 °F		<input type="checkbox"/> Washed Thru Perfs		To		ft							
Customer or Authorized Representative				Schlumberger Supervisor				<input type="checkbox"/> CirculationLost				<input checked="" type="checkbox"/> Job Completed							
Sonnier, Jim				Crick, Jason															

Well	NOTHBANKS C3	Client	ANTERO
Field		SIR No.	GJC028279
Engineer	Chris Dellit	Job Type	PLUG
Country	United States	Job Date	04-16-2008

