
ANTERO RESOURCES

**CSF 32C-09-07-91
WILDCAT
Garfield County , Colorado**

Cement Surface Casing **04-Sep-2010**

Post Job Report

The Road to Excellence Starts with Safety

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Sold To #: 337854	Ship To #: 2805502	Quote #:	Sales Order #: 7618482
Customer: ANTERO RESOURCES		Customer Rep: Honeycutt, Matt	
Well Name: CSF		Well #: 32C-09-07-91	API/UWI #: 05-045-19816
Field:	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Lat: N 39.459 deg. OR N 39 deg. 27 min. 30.647 secs.		Long: W 107.559 deg. OR W -108 deg. 26 min. 27.946 secs.	
Contractor: RatHole		Rig/Platform Name/Num: RAT HOLE	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: METLI, MARSHALL		Srvc Supervisor: MILLER, KEVIN	MBU ID Emp #: 443040

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
LYNGSTAD, FREDRICK D	15	403742	MILLER, KEVIN Paul	15	443040	RAMSEY, STANTON Michael	15	477609
SMITH, CHRISTOPHER Scott	15	452619						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10867094	120 mile	10872429	120 mile	11259885	120 mile	11360883	120 mile

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9/4/10	6	0	9/5/10	9	2			

TOTAL Total is the sum of each column separately

Job

Formation Name	Job	Job Times
Formation Depth (MD)	Top Bottom	Called Out Date Time Time Zone
Form Type	BHST	On Location 04 - Sep - 2010 18:00 MST
Job depth MD	1103. ft Job Depth TVD 1103. ft	Job Started 04 - Sep - 2010 07:26 MST
Water Depth	Wk Ht Above Floor 1. ft	Job Completed 04 - Sep - 2010 08:26 MST
Perforation Depth (MD)	From To	Departed Loc

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
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Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
R/A DENSOMETER W/CHART RECORDER,/JOB,ZI	1	JOB		
PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI	1	JOB		
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
PLUG,CMTG,TOP,8 5/8,HWE,7.20 MIN/8.09 MA	1	EA		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	8.625	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	8.625	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	Water Spacer		20.00	bbl	.	.0	.0	.0		
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	126.0	sacks	12.3	2.38	13.77		13.77	
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	175.0	sacks	14.2	1.43	6.85		6.85	
6.85 Gal		FRESH WATER								
4	Displacement		65.00	bbl	.	.0	.0	.0		
Calculated Values		Pressures		Volumes						
Displacement	64.4	Shut In: Instant		Lost Returns		Cement Slurry	98	Pad		
Top Of Cement	SURFACE	5 Min		Cement Returns	8	Actual Displacement	64.4	Treatment		
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job		
Rates										
Circulating		Mixing	5	Displacement	6	Avg. Job	6			
Cement Left In Pipe	Amount	44.55 ft	Reason	Shoe Joint						
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID			
The Information Stated Herein Is Correct				Customer Representative Signature						

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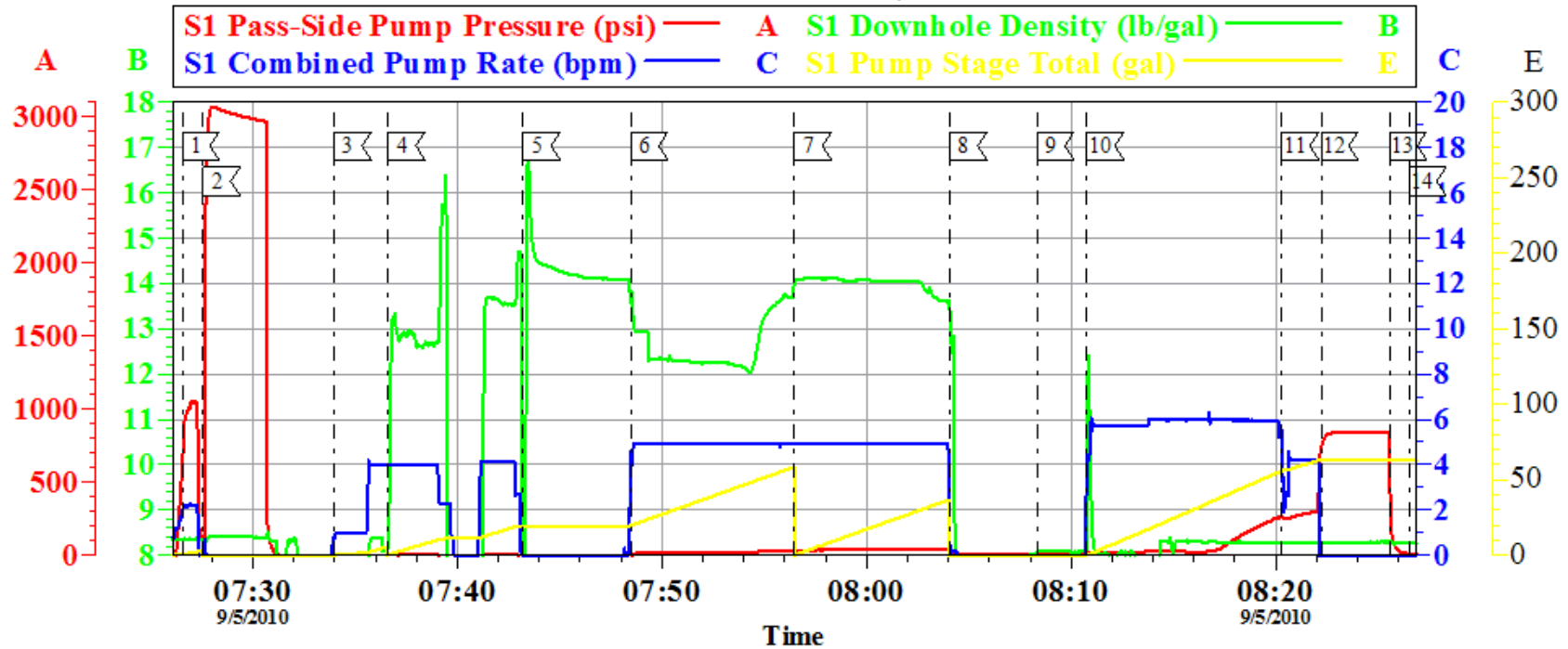
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Field:		City (SAP): SILT		County/Parish: Garfield			State: Colorado
Legal Description:							
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Contractor: RatHole			Rig/Platform Name/Num: RAT HOLE				
Job Purpose: Cement Surface Casing						Ticket Amount:	
Well Type: Development Well			Job Type: Cement Surface Casing				
Sales Person: METLI, MARSHALL			Srv Supervisor: MILLER, KEVIN			MBU ID Emp #: 443040	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Up Equipment	09/04/2010 06:10							
Rig-Up Completed	09/04/2010 07:00							
Start Job	09/04/2010 07:26							TP- 1103, TD- 1110, SJ- 44.55, CSG- 8.625 32# J-55, OH- 12 1/4, RIG AND CREW LEFT LOCATION PRIOR TO PUMPING CEMENT
Pressure Test	09/04/2010 07:27							ALL LINES HELD PRESSURE AT 3000 PSI
Pre-Job Safety Meeting	09/04/2010 07:30							ALL HES PERSONEL AND RIG CREW
Pump Spacer 1	09/04/2010 07:33		5	5			20.0	FRESH WATER, ONLY 150 BBLS OF H2O ON LOCATION SO WE HAD TO CUT THE WATER SPACER FROM 20 TO 5 BBLS
Pump Lead Cement	09/04/2010 07:36		5	53.4			48.0	126 SKS, 12.3 PPG, 2.38 FT3/SK, 13.77 GAL/SK, WATER HOSE PACKED OFF ON START OF LEAD CEMENT AND HAD TO SHUT DOWN TO SWAP LINES TO RESUME PUMPING, DENSITY GOT HIGH BUT THAT CEMENT CAME TO SURFACE.
Pump Tail Cement	09/04/2010 07:56		5	44.5			50.0	175 SKS, 14.2 PPG, 1.43 FT3/ SK, 6.85 GAL/SK

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	09/04/2010 08:04							
Drop Top Plug	09/04/2010 08:08							
Pump Displacement	09/04/2010 08:10		6	64.4			300.0	FRESH WATER, 8 BBLs OF CEMENT TO SURFACE
Slow Rate	09/04/2010 08:20		4	54			300.0	
Bump Plug	09/04/2010 08:22		4	64.4			800.0	
End Job	09/04/2010 08:22							
Check Floats	09/04/2010 08:25							FLOATS HELD,
Post-Job Safety Meeting (Pre Rig-Down)	09/04/2010 08:30							ALL HES PERSONEL
Other	09/04/2010 08:31							THANK YOU FOR CHOOSING HALLIBURTON, KEVIN MILLER AND CREW
Pre-Convoy Safety Meeting	09/04/2010 16:00							ALL HES PERSONEL
Crew Leave Yard	09/04/2010 16:15							
Arrive At Loc	09/04/2010 18:00							RIG WAS STILL DRILLING UPON HES ARRIVAL
Assessment Of Location Safety Meeting	09/04/2010 18:10							ALL HES PERSONEL

ANTERO

CSF Well #32C-09-07-91, SURFACE



Local Event Log							
Maximum		SPPP		Maximum		SPPP	
1	START JOB	07:26:33	1052	2	PRESSURE TEST	07:27:34	3068
3	H2O SPACER	07:33:59	-6.696	4	LEAD CEMENT	07:36:37	7.304
5	SHUT DOWN	07:43:13	-5.249	6	RESUME LEAD CEMENT	07:48:29	33.30
7	TAIL CEMENT	07:56:28	42.30	8	SHUT DOWN	08:04:05	30.30
9	DROP TOP PLUG	08:08:20	9.659	10	PUMP DISPLACEMENT	08:10:46	259.3
11	SLOW RATE	08:20:18	731.9	12	BUMP PLUG	08:22:13	840.3
13	CHECK FLOATS	08:25:33	836.3	14	END JOB	08:26:31	304.3

Customer: ANTERO	Job Date: 05-Sep-2010	Sales Order #: 7618482
Well Description: CSF 32C-09-07-91	Job type: SURFACE	ADC Used: YES
Customer Rep: MATTHONEYCUT	Service Supervisor: KEVIN MILLER	Operator/Pump: SMITH/11