
ANTERO RESOURCES

**Watson Ranch 23D-17-07-95
PICEANCE
Garfield County , Colorado**

Cement Surface Casing
14-Sep-2009

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 337854	Ship To #: 2742191	Quote #:	Sales Order #: 6866251
Customer: ANTERO RESOURCES		Customer Rep: Stark, Foran	
Well Name: Watson Ranch		Well #: 23D-17-07-95	API/UWI #:
Field: PICEANCE	City (SAP): BATTLEMENT MESA	County/Parish: Garfield	State: Colorado
Contractor: FRONTIER 12		Rig/Platform Name/Num: FRONTIER 12	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: METLI, MARSHALL		Srvc Supervisor: NELSON, RYAN	MBU ID Emp #: 386514

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
KUKUS, CRAIG A	11	369124	MOGK, JOHN	11	465036	NELSON, RYAN Cody	11	386514
ONEAL, TALLEY Jack	11	456423	SALAZAR, PAUL Omar	11	445614			

Equipment

HES Unit #	Distance-1 way						
10567589C	120 mile	10722398	120 mile	10867322	120 mile	10951245	120 mile
10995027	120 mile	10998512	120 mile	1113990	120 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9-14-09	11	2.5						

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	14 - Sep - 2009	11:00	MST
Form Type		BHST	Job Started	14 - Sep - 2009	14:00	MST
Job depth MD	2330. ft	Job Depth TVD	Job Completed	14 - Sep - 2009	19:50	MST
Water Depth		Wk Ht Above Floor	Departed Loc	14 - Sep - 2009	21:30	MST
Perforation Depth (MD)	From	To			23:00	MST

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
12 1/4 Open Hole Section				12.25				0	2330.		
8 5/8 Surface Casing			8.625	8.097				0	2308.2		

Sales/Rental/3rd Party (HES)

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

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	8 5/8	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	8 5/8	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	Fresh Water Spacer		20.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	441.0	sacks	12.3	2.37	13.76		13.42
3	Tail Cement	VERSACEM (TM) SYSTEM (452010)	137.0	sacks	12.8	2.11	11.75		11.46
4	Mud Displacement		144.40	bbl	11.3	.0	.0	.0	
Calculated Values		Pressures		Volumes					
Displacement	144.4	Shut In: Instant		Lost Returns	NO	Cement Slurry	238.4	Pad	
Top Of Cement	0	5 Min		Cement Returns	144	Actual Displacement	144.4	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	33.9 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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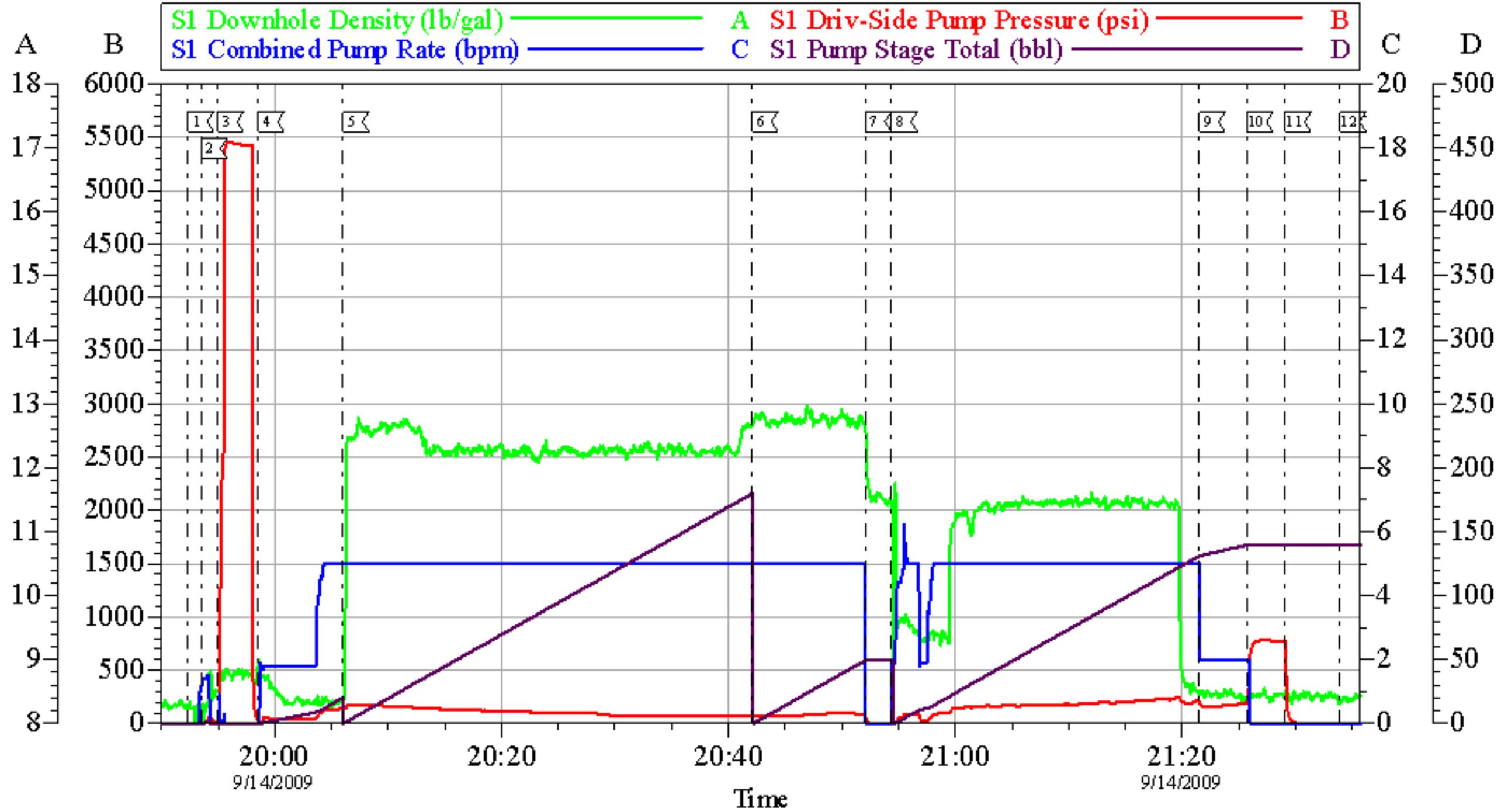
Sold To #: 337854		Ship To #: 2742191		Quote #:		Sales Order #: 6866251	
Customer: ANTERO RESOURCES				Customer Rep: Stark, Foran			
Well Name: Watson Ranch			Well #: 23D-17-07-95		API/UWI #:		
Field: PICEANCE		City (SAP): BATTLEMENT MESA		County/Parish: Garfield		State: Colorado	
Legal Description:							
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.				Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.			
Contractor: FRONTIER 12			Rig/Platform Name/Num: FRONTIER 12				
Job Purpose: Cement Surface Casing					Ticket Amount:		
Well Type: Development Well			Job Type: Cement Surface Casing				
Sales Person: METLI, MARSHALL			Srvc Supervisor: NELSON, RYAN		MBU ID Emp #: 386514		

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/14/2009 11:00							
Arrive At Loc	09/14/2009 14:00							Rig running casing
Assessment Of Location Safety Meeting	09/14/2009 14:05							
Pre-Rig Up Safety Meeting	09/14/2009 17:00							
Rig-Up Equipment	09/14/2009 17:05							
Pre-Job Safety Meeting	09/14/2009 19:40							
Start Job	09/14/2009 19:53							TD- 2330' TP-2308.2' SJ-33.9' CASING 8 5/8" 32# from 0-880' 24# from 880-2308' HOLE 12.25" MUD 11.3
Other	09/14/2009 19:53			1				Fill lines
Test Lines	09/14/2009 19:55						5580.0	
Pump Spacer 1	09/14/2009 19:58		5	20			173.0	Fresh water
Pump Lead Cement	09/14/2009 20:06		5	186.9			142.0	441 sks 12.3 ppg 2.38 yield 13.75 gal/sk
Pump Tail Cement	09/14/2009 20:42		5	51.5			118.0	137 sks 12.8 ppg 2.11 yield 11.75 gal/sk
Shutdown	09/14/2009 20:52							
Drop Top Plug	09/14/2009 20:54							
Pump Displacement	09/14/2009 20:55		5	144.4			315.0	Mud
Cement Returns to Surface	09/14/2009 20:55							Well circulated 144 bbls of cement to surface

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Slow Rate	09/14/2009 21:21		2	130			270.0	
Bump Plug	09/14/2009 21:26		2	144.4			830.0	
Check Floats	09/14/2009 21:29							Floats Held
End Job	09/14/2009 21:35							Well was circulated prior to the job. Good returns throughout the job. Pipe was static throughout the job. Thank you for using Halliburton-Ryan Nelson & Crew

Antero

8 5/8" Surface



Local Event Log			
1 Start Job	19:52:20	2 Fill Lines	19:53:30
3 Pressure Test	19:54:58	4 Pump Spacer	19:58:33
5 Pump Lead Cement	20:06:00	6 Pump Tail Cement	20:42:05
7 Shut Down/Drop Plug	20:52:04	8 Pump Displacement	20:54:23
9 Slow Rate	21:21:31	10 Bump Plug	21:25:44
11 Check Floats	21:29:05	12 End Job	21:33:56

Customer: Antero	Job Date: 14-Sep-2009	Sales Order #: 6866251
Well Description: WR 23D-17-07-95	Job Type: Surface	ADC Used: Yes
Company Rep: Dawn	Cement Supervisor: Ryan Nelson	Elite #: 3