
ANTERO RESOURCES

**WATSON RANCH BAT 13B-17-07-95
PARACHUTE
Garfield County , Colorado**

**Cement Surface Casing
14-May-2010**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 337854	Ship To #: 2783096	Quote #:	Sales Order #: 7352796
Customer: ANTERO RESOURCES		Customer Rep: Stark, Foran	
Well Name: WATSON RANCH BAT		Well #: 13B-17-07-95	API/UWI #: 05-045-19108
Field: PARACHUTE	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.433 deg. OR N 39 deg. 25 min. 59.412 secs.		Long: W 108.025 deg. OR W -109 deg. 58 min. 29.284 secs.	
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: STILLSON, ERIC	MBU ID Emp #: 393789

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANDERSON, ADAM S	8	456683	BRUN, JUSTIN M	8	459269	STILLSON, ERIC W	8	393789
YOUNG, JEREMY R	8	418013						

Equipment

HES Unit #	Distance-1 way						
10565341	100 mile	10616651C	100 mile	10724583	100 mile	10876398	100 mile
10951246	100 mile	10995025	100 mile	11021972	100 mile	11027039	100 mile

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
05-13-10	1	0	05-14-10	7	2			

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					13 - May - 2010	17:30	MST
Form Type			BHST	On Location	13 - May - 2010	22:00	MST
Job depth MD	2075. ft		Job Depth TVD	2075. ft	14 - May - 2010	04:35	MST
Water Depth			Wk Ht Above Floor	4. ft	14 - May - 2010	05:50	MST
Perforation Depth (MD)	From		To		Departed Loc	14 - May - 2010	07:00

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbf/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
OPEN HOLE SECTION				12.25				.	2075.		
SURFACE CASING	Unknown		8.625	7.921	32.			.	2062.		

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		

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	
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	8.625	1	
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	6.0	
2	VersaCem GJC085	VERSACEM (TM) SYSTEM (452010)	235.0	sacks	12.3	2.38	13.75	6.0	13.75
	13.75 Gal	FRESH WATER							
3	Versacem	VERSACEM (TM) SYSTEM (452010)	200.0	sacks	12.8	2.11	11.75	6.0	11.75
	11.75 Gal	FRESH WATER							
4	Fresh Water Displacement		123.00	bbl	8.33	.0	.0	8.0	
Calculated Values		Pressures		Volumes					
Displacement	123.2	Shut In: Instant		Lost Returns	0	Cement Slurry	175	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	60	Actual Displacement	123.2	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	
Rates									
Circulating	RIG	Mixing	6	Displacement	8	Avg. Job	7		
Cement Left In Pipe	Amount	39.3 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					

The Road to Excellence Starts with Safety

Sold To #: 337854	Ship To #: 2783096	Quote #:	Sales Order #: 7352796
Customer: ANTERO RESOURCES		Customer Rep: Stark, Foran	
Well Name: WATSON RANCH BAT		Well #: 13B-17-07-95	API/UWI #: 05-045-19108
Field: PARACHUTE	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.433 deg. OR N 39 deg. 25 min. 59.412 secs.		Long: W 108.025 deg. OR W -109 deg. 58 min. 29.284 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: STILLSON, ERIC	MBU ID Emp #: 393789

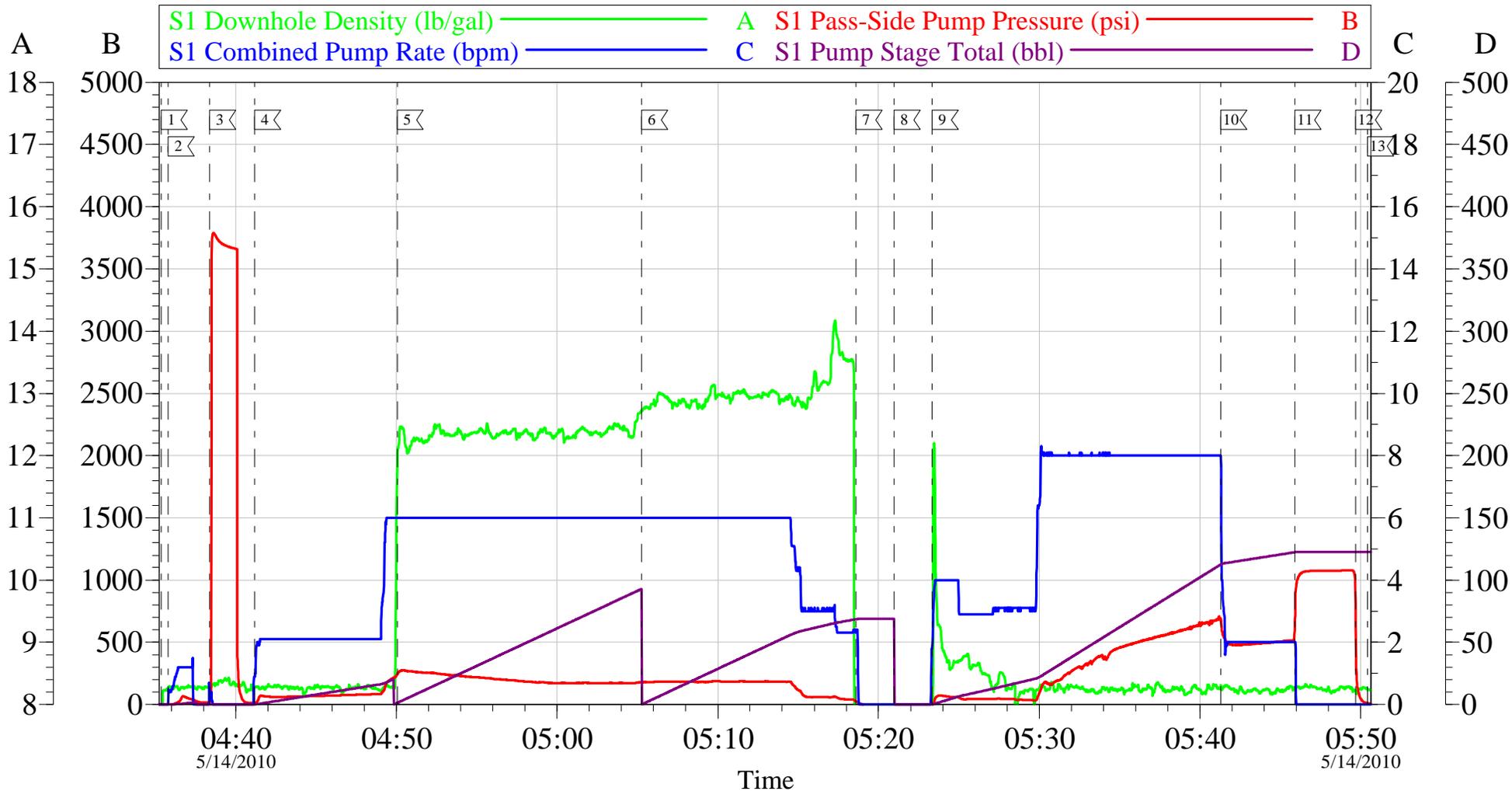
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	05/13/2010 17:30							8 5/8 SURFACE CASING, ANTERO, FRONTIER 12, WATSON RANCH 13B-17-07-95
Pre-Convoy Safety Meeting	05/13/2010 20:00							ENTIRE CREW, OBSERVE ALL SAFE DRIVING PROCEDURES
Arrive At Loc	05/13/2010 22:00							ARRIVED EARLY, RIG RUNNING CASING HAVE TO WAIT TO SPOT EQUIPMENT.
Assessment Of Location Safety Meeting	05/14/2010 02:45							REVIEWED EMERGENCY PLAN, ASSESSED WORK AREA AND SPOTTED EQUIPMENT.
Pre-Rig Up Safety Meeting	05/14/2010 02:55							ENTIRE CREW, WALKED THROUGH RIG UP LOOKING FOR HAZARDS.
Rig-Up Equipment	05/14/2010 03:00							1 PICK UP, 1 HT400 PUMP TRUCK, 2 660 BULK CEMENT TRUCKS, 1 QUICK LATCH HEAD WITH PLUG, BROUGHT BOOSTER PUMP BUT DID NOT USE IT OR THE HOSES.
Pre-Job Safety Meeting	05/14/2010 04:20							ENTIRE CREW, CO REP AND RIG CREW.

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Start Job	05/14/2010 04:35							TD 2075 TP 2062 SJ 29.32 FC 2022.68 MW 10.3 PPG, 8 5/8 32# CASING IN 12 1/4 HOLE. RIG CIRC APPROX 1 HR, 8 BPM 550 PSI, 15 GAS UNITS.
Pump Water	05/14/2010 04:35		1	1			66.0	FILL LINES BEFORE TESTING
Pressure Test	05/14/2010 04:38		0.5	0.1			3500. 0	HELD PRESSURE FOR 2 MIN, PRESSURE HELD, NO LEAKS.
Pump Spacer 1	05/14/2010 04:41		6	20			195.0	FRESH WATER, PUMPED AT 2 BPM UNTIL CEMENT TUB UP TO WEIGHT AND WEIGHED WITH SCALES, SPED RATE TO 6 BPM AT 16 BBLS GONE.
Pump Lead Cement	05/14/2010 04:50		6	99.6			270.0	235 SKS VERSACEM, 12.3 PPG, 2.38 CUFT/SK, 13.75 GAL/SK.
Pump Tail Cement	05/14/2010 05:05		6	75.2			195.0	200 SKS VERSACEM, 12.8 PPG, 2.11 CUFT/SK, 11.75 GAL/SK. SLOWED RATE TO 3 BPM THE LAST 8 BBLS DUE TO CEMENT QUAG.
Shutdown	05/14/2010 05:18							
Drop Top Plug	05/14/2010 05:20							VARIFIED PLUG LEFT CONTAINER.
Pump Displacement	05/14/2010 05:23		8	123.2			690.0	FRESH WATER, PUMPED AT 4 BPM THE FIRST 20 BBLS TO WASH UP ON TOP OF PLUG PER CO REP, SPED RATE TO 8 BPM, CEMENT TO SURFACE AT 63 BBLS GONE, 60 BBLS OF CEMENT TO SURFACE. USED 120 LBS SUGAR.

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Slow Rate	05/14/2010 05:41		2	113			525.0	SLOWED RATE TO 2 BPM TO BUMP PLUG.
Bump Plug	05/14/2010 05:45		2	123.2			1050.0	PLUG LANDED AT 525 PSI, BUMPED UP TO 1050 PSI AND HELD FOR 3 MIN PER CO REP.
Check Floats	05/14/2010 05:49							FLOATS HELD, WHEN RELEASED PRESSURE GOT 1 BBL OF WATER BACK TO TRUCK.
End Job	05/14/2010 05:50							GOOD RETURNS THROUGHOUT, DID NOT RECIPROCATE PIPE DURING JOB.
Post-Job Safety Meeting (Pre Rig-Down)	05/14/2010 05:55							ENTIRE CREW
Rig-Down Equipment	05/14/2010 06:15							
Pre-Convoy Safety Meeting	05/14/2010 06:55							ENTIRE CREW, OBSERVE ALL SAFE DRIVING PROCEDURES
Crew Leave Location	05/14/2010 07:00							THANK YOU FOR USING HALLIBURTON, ERIC STILLSON AND CREW.

ANTERO

8 5/8 SURFACE



Local Event Log			
1 START JOB	04:35:21	2 FILL LINES	04:35:47
3 TEST LINES	04:38:22	4 PUMP H2O SPACER	04:41:09
5 PUMP LEAD CEMENT	04:50:03	6 PUMP TAIL CEMENT	05:05:16
7 SHUTDOWN	05:18:36	8 DROP PLUG	05:20:58
9 PUMP H2O DISPLACEMENT	05:23:19	10 SLOW RATE	05:41:17
11 BUMP PLUG	05:45:55	12 CHECK FLOATS	05:49:42
13 END JOB	05:50:26		

Customer: ANTERO	Job Date: 14-May-2010	Sales Order #: 7352976
Well Description: WATSON RANCH 13B-17-07-95	Job Type: SURFACE	ADC Used: YES
Company Rep: FORAN STARK	Cement Supervisor: ERIC STILLSON	Elite #: 4/JUSTIN BRUN