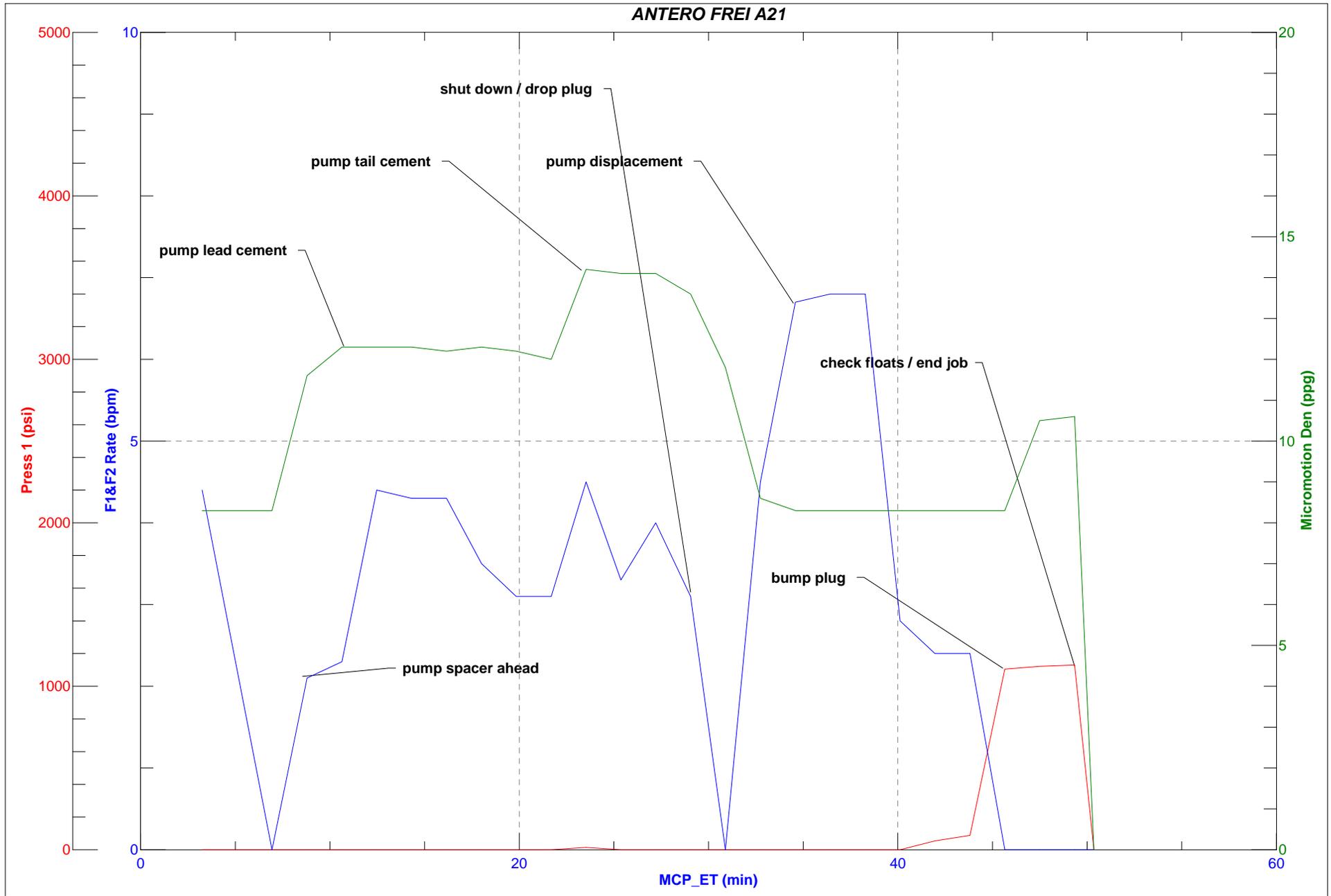


# **Surface Job**



# CEMENT JOB REPORT



<b>CUSTOMER</b> Antero Resources Corporation			<b>DATE</b> 30-JUN-10		<b>F.R. #</b> 1001642294		<b>SERV. SUPV.</b> JOSE E CARCAMO					
<b>LEASE &amp; WELL NAME</b> FREI A21 - API 05045196390000			<b>LOCATION</b> 7-6S-91W			<b>COUNTY-PARISH-BLOCK</b> Garfield Colorado						
<b>DISTRICT</b> Grand Junction			<b>DRILLING CONTRACTOR RIG #</b>			<b>TYPE OF JOB</b> Surface						
<b>SIZE &amp; TYPE OF PLUGS</b>		<b>LIST-CSG-HARDWARE</b>				<b>PHYSICAL SLURRY PROPERTIES</b>						
8-5/8" Top Cem Plug, Nitrile cvr, Phe		Float Collar, AI Flap, 8-5/8 - 8rd				<b>SACKS OF CEMENT</b>	<b>SLURRY WGT PPG</b>	<b>SLURRY YLD FT<sup>3</sup></b>	<b>WATER GPS</b>	<b>PUMP TIME HR:MIN</b>	<b>Bbl SLURRY</b>	<b>Bbl MIX WATER</b>
<b>MATERIALS FURNISHED BY BJ</b>												
WATER						0	8.34	0	0	00:00	20	
(35:65) poz (fly ash) type III cmt +.04 lbs/sk						157	12.3	2.09	11.62		61.01	45.35
static free+1% CaCl <sub>2</sub> + .25 lbs/sk cello flake+.5 gal							12.3		11.62		0	
gals/100sk FP-13L+8% bentonite II						0	12.3	2.09	11.62	03:00	0	0
Type III cmt+.04 lbs/sk static free+1% CaCl <sub>2</sub> + .25%						110	14.2	1.47	7.35		28.7	19.18
bwoc cello flake+.5 gals/100sks FP-13L						0	14.2	1.47	7.35		0	0
WATER							8.34				58.8	
<b>Available Mix Water</b> 400 Bbl. <b>Available Displ. Fluid</b> 400 Bbl.						<b>TOTAL</b>					168.51	64.53
<b>HOLE</b>			<b>TBG-CSG-D.P.</b>					<b>COLLAR DEPTHS</b>				
<b>SIZE</b>	<b>% EXCESS</b>	<b>DEPTH</b>	<b>SIZE</b>	<b>WGT.</b>	<b>TYPE</b>	<b>DEPTH</b>	<b>GRADE</b>	<b>SHOE</b>	<b>FLOAT</b>	<b>STAGE</b>		
12.25		1011	8.625	24	CSG	1000						
<b>LAST CASING</b>			<b>PKR-CMT RET-BR PL-LINER</b>			<b>PERF. DEPTH</b>		<b>TOP CONN</b>		<b>WELL FLUID</b>		
<b>SIZE</b>	<b>WGT</b>	<b>TYPE</b>	<b>DEPTH</b>	<b>BRAND &amp; TYPE</b>		<b>DEPTH</b>	<b>TOP</b>	<b>BTM</b>	<b>SIZE</b>	<b>THREAD</b>	<b>TYPE</b>	<b>WGT.</b>
				NO PACKER		0	0	0	8.625	8 RD	WATER BASED MU	9.7
<b>DISPL. VOLUME</b>		<b>DISPL. FLUID</b>		<b>CAL. PSI</b>	<b>CAL. MAX PSI</b>	<b>OP. MAX</b>	<b>MAX TBG PSI</b>		<b>MAX CSG PSI</b>		<b>MIX WATER</b>	
<b>VOLUME</b>	<b>UOM</b>	<b>TYPE</b>	<b>WGT.</b>	<b>BUMP PLUG</b>	<b>TO REV.</b>	<b>SQ. PSI</b>	<b>RATED</b>	<b>Operator</b>	<b>RATED</b>	<b>Operator</b>		
58.8	BBLS	WATER	8.34	229	0	0	0	0	3144	1500	DAY TANK	
<b>Circulation Prior to Job</b>												
Circulated Well: Rig <input checked="" type="checkbox"/> BJ <input type="checkbox"/>						Circulation Time:			Circulation Rate: BPM			
Mud Density In: 9.7 LBS/GAL			Mud Density Out: 9.7 LBS/GAL			PV & YP Mud In:			PV & YP Mud Out:			
Gas Present: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> Units:						Solids Present at End of Circulation: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>						
<b>Displacement And Mud Removal</b>												
Displaced By: Rig <input type="checkbox"/> BJ <input checked="" type="checkbox"/>						Amount Bled Back After Job: .5 BBLS						
Returns During Job: <input type="checkbox"/> NONE <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/> FULL						Method Used to Verify Returns: VISUAL						
Cement Returns at Surface: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO						Were Returns Planned at Surface: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES						
Pipe Movement: <input type="checkbox"/> ROTATION <input type="checkbox"/> RECIPROCATION <input type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE												
Centralizers: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES						Quantity:			Type: <input type="checkbox"/> BOW <input type="checkbox"/> RIGID			
Job Pumped Through: <input type="checkbox"/> CHOKE MANIFOLD <input type="checkbox"/> SQUEEZE MANIFOLD <input checked="" type="checkbox"/> MANIFOLD <input type="checkbox"/> NO MANIFOLD												
<b>Plugs</b>												
Number of Attempts by BJ: Competition:						Wiper Balls Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Quantity:						
Plug Catcher Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES						Parabow Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES						
Was There a Bottom: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES						Top of Plug: FT			Bottom of Plug: FT			
<b>Squeezes (Update Original Treatment Report for Primary Job)</b>												
BLOCK SQUEEZE <input type="checkbox"/> SHOE SQUEEZE <input type="checkbox"/> TOP OF LINER SQUEEZE <input type="checkbox"/> PLANNED <input type="checkbox"/> UNPLANNED <input type="checkbox"/>												
Liner Packer: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES						Bond Log: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			PSI Applied: Fluid Weight: LBS/GAL			
<b>Casing Test (Update Original Treatment Report for Primary Job)</b>												
Casing Test Pressure: PSI With LBS/GAL Mud   Time Held: Hours Minutes												
EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: NONE												

# CEMENT JOB REPORT



## Shoe Test (Update Original Treatment Report for Primary Job)

Depth Drilled out of Shoe: FT	Target EMW: LBS/GAL	Actual EMW: LBS/GAL
Number of Times Tests Conducted:	Mud Weight When Test was Conducted: LBS/GAL	

Problems Before Job (I.E. Running Casing, Circulating Well, ETC)

Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)

Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC)

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES	2731 PSI
						CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>	
10:00						PRE CONVOY SAFETY MEETING	
10:30						LEAVE YARD	
15:30						ARRIVED ON LOCATION	
15:40						LOCATION ASSESTMENT	
15:50						SPOT EQUIPMENT	
16:00						PRE RIG UP SAFETY MEETING	
16:10						START TO RIG UP	
16:50						PRE JOB SAFETY MEETING	
17:19						START JOB	
17:22	2731					PRESSURE TEST LINES	
17:24	69		4.4	20	WATER	PUMP SPACER AHEAD	
17:31	77		4		CEMENT	START TO PUMP LEAD CEMENT SLURRY	
17:38	69		4.5	30	CEMENT	PUMP LEAD CEMENT SLURRY	
17:44	119		5	60	CEMENT	PUMP LEAD CEMENT	
17:45	118		5		CEMENT	PUMP TAIL CEMENT	
17:47	113		5	12	CEMENT	PUMP TAIL CEMENT	
17:51	122		3	29	CEMENT	PUMP TAIL CEMENT	
17:52						SHUT DOWN /DROP PLUG	
17:54					WATERT	PUMP DISPLACEMENT	
17:57	137		6.9	20	WATERT	PUMP DISPLACEMENT	
17:59	195		6.9	30	WATER	PUMP DISPLACEMENT	
18:00	235		2.7	48	WATER	SLOW RATE ON DISPLACEMENT	
18:06	1269		2.5	58.8	WATER	BUMP PLUG	
18:11	1269					CHECK FLOATS / FLOATS HELD	
						6 BBLs OF CEMENT BACK TO SURFACE	
18:20						POST JOB SAFETY MEETING	
18:40						START TO RIG DOWN	
19:30						POST CONVOY SAFETY MEETING	
19:35						DEPART LOCATION	

BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	Service Supervisor Signature:
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1269	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	6	169	0	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	