

## CEMENT JOB REPORT



<b>CUSTOMER</b> CARRIZO OIL & GAS INC XML		<b>DATE</b> 02-NOV-14		<b>F.R. #</b> 10011114400		<b>SERV. SUPV.</b> Anthony J Staples								
<b>LEASE &amp; WELL NAME</b> HEMBERGER #4-26-8-60 - API 05123393310000		<b>LOCATION</b> 26-8N-60W		<b>COUNTY-PARISH-BLOCK</b> Weld Colorado										
<b>DISTRICT</b> Brighton		<b>DRILLING CONTRACTOR RIG #</b> XTREME 19		<b>TYPE OF JOB</b> Surface										
<b>SIZE &amp; TYPE OF PLUGS</b>	<b>LIST-CSG-HARDWARE</b>	<b>MECHANICAL BARRIERS</b>		<b>MD</b>	<b>TVD</b>	<b>HANGER TYPES</b>	<b>MD</b> <b>TVD</b>							
Cement Plug, Rubber, Top 9-5/8 in	Float Shoe 9-5/8 - 8rd													
	Float Collar, Auto Fill, 9-5/8 - 8rd													
	Centralizer, with Pins, 9-5/8 in													
<b>MATERIALS FURNISHED BY BJ</b>		<b>LAB REPORT NO.</b>		<b>PHYSICAL SLURRY PROPERTIES</b>										
		<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>							
Fresh Water + 2 lbs Red Dye		0	8.34	0	0		15							
Type III Cmt + adds		146	14.5	1.41	6.82	02:00	36.58 23.70							
Premium Lite Cmt + adds		400	13	1.81	9.46	04:10	129.24 90.09							
Fresh Water		0	8.34	0	0	00:00	108.7							
Type III Cement		100	15.8	1.15	4.96		20.3 11.70							
<b>Available Mix Water</b> 250 <b>Bbl.</b>		<b>Available Displ. Fluid</b> 250 <b>Bbl.</b>		<b>TOTAL</b>		309.82 125.49								
<b>HOLE</b>		<b>TBG-CSG-D.P.</b>				<b>COLLAR DEPTHS</b>								
<b>SIZE</b>	<b>% EXCESS</b>	<b>DEPTH</b>	<b>ID</b>	<b>OD</b>	<b>WGT.</b>	<b>TYPE</b>	<b>MD</b>	<b>TVD</b>	<b>GRADE</b>	<b>SHOE</b>	<b>FLOAT</b>	<b>STAGE</b>		
12.25	100	1471	8.921	9.625	36	CSG	1451	1451	J-55	1451	1406	1		
<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>ID</b>	<b>OD</b>	<b>WGT</b>	<b>TYPE</b>	<b>MD</b>	<b>TVD</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>
15.	16	65		70	70	No Packer		0	0	0	9.625	8RND	WATER BASED	8.5
<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>				
108.7	BBLS	Fresh Water	8.34	383	0	0	0	0	2816	1800	Rig Tank			
<b>Circulation Prior to Job</b>														
Circulated Well: Rig <input checked="" type="checkbox"/> BJ <input type="checkbox"/>						Circulation Time: 1		Circulation Rate: 4 BPM						
Mud Density In: 8.5 LBS/GAL Mud Density Out: 8.54 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 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 checked="" type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE														
Centralizers: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES						Quantity: 10		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: 0						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: 0 FT		Bottom of Plug: 0 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: 0		Fluid Weight: 0 LBS/GAL								
<b>Casing Test (Update Original Treatment Report for Primary Job)</b>														
Casing Test Pressure: 1500 PSI						With 8.34 LBS/GAL Mud		Time Held: 00 Hours 15 Minutes						
<b>EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: None</b>														

# CEMENT JOB REPORT



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

Depth Drilled out of Shoe: 0 FT Target EMW: 0 LBS/GAL Actual EMW: 0 LBS/GAL  
 Number of Times Tests Conducted: 0 Mud Weight When Test was Conducted: 0 LBS/GAL

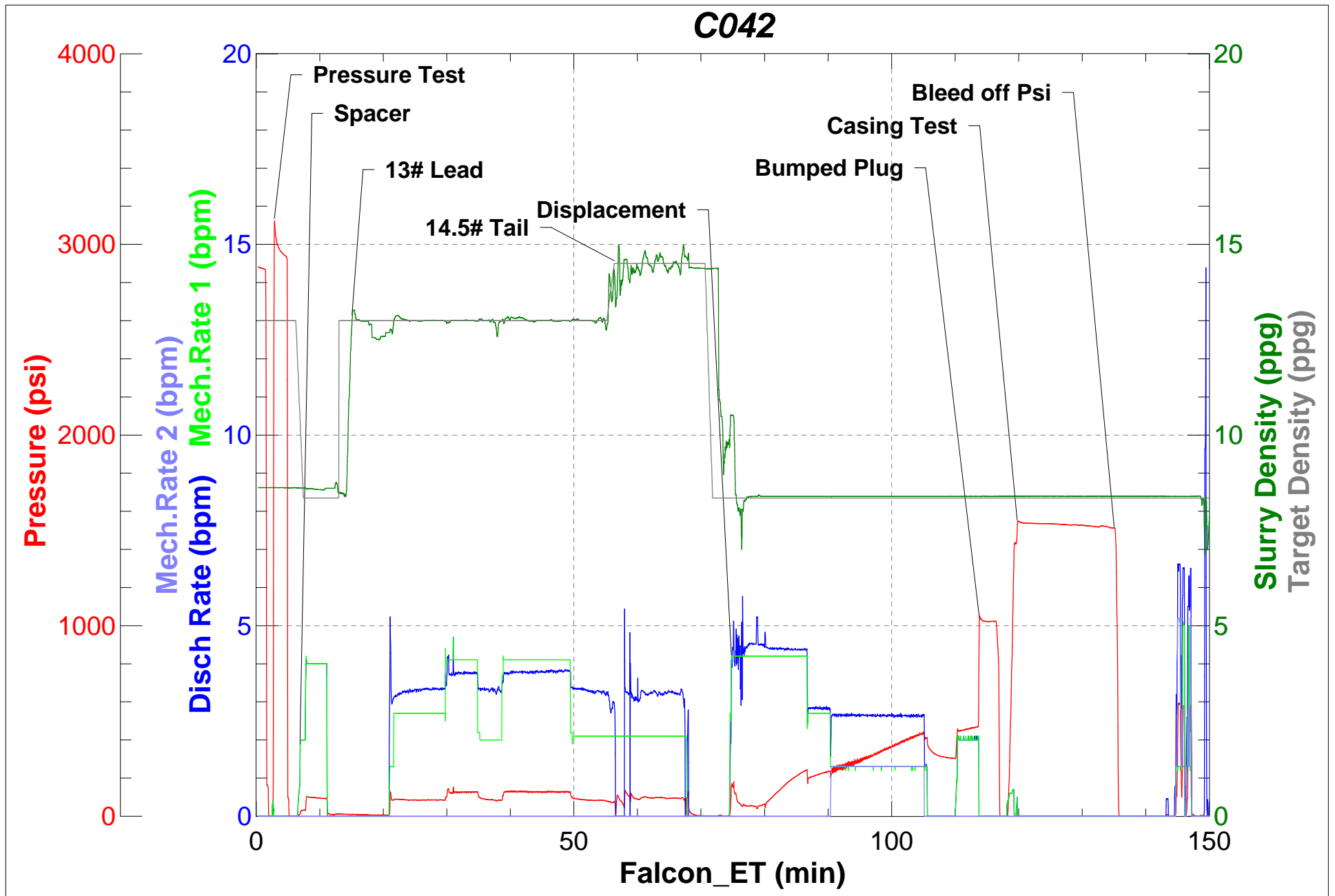
Problems Before Job (I.E. Running Casing, Circulating Well, ETC)  
 None

Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)  
 None

Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC)  
 None

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 checked="" type="checkbox"/>
	PIPE	ANNULUS				TEST LINES 3057 PSI
						CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>
16:35	0	0	0	0	N/A	Leave Yard
18:14	0	0	0	0	N/A	Arrive on Location 77 Miles Rig Running Casing
21:20	0	0	0	0	N/A	Spot Trucks
21:30	0	0	0	0	N/A	Pre-Rig Up Safety Meeting
22:02	0	0	0	0	N/A	Pre-Job Safety Meeting
22:42	12	0	1	1.5	H2O	Load Lines
22:45	0	0	0	0	N/A	Pressure Test Wouldn't Hold
23:04	3057	0	0	0	H2O	Pressure Test
23:18	96	0	4	15	H2O	Fresh Water + Dye Spacer
23:32	153	0	3.7	127	CMT	Batch, Weigh and Pump 13# PLC + .04% Static Free + 3% CaCL + 3% NaCl + .25 lbs/sk Cello Flake
00:10	96	0	3.1	35	CMT	Pump 14.5# Type III + .04 lbs/sk Static Free + 1.5% CaCl + .25 lbs/sk Cello Flake
00:22	0	0	0	0	H2O	Shut Down, Wash Up Mixing Tub
00:28	0	0	0	0	H2O	Drop Plug
00:28	243	0	4.5	50	H2O	Displacement
00:41	408	0	2.7	50	H2O	Rate Change
00:59	313	0	0	0	H2O	Shut Down let CMT Drop
01:04	470	0	2	8	H2O	Resumed Pumping
01:07	0	0	0	0	H2O	Bumped Plug at 108 Bbls away, 60 total Bbls CMT to Surface
01:11	0	0	0	0	H2O	Check Floats .5Bbls Back
01:12	1539	0	0	0	H2O	Casing Test
01:27	0	0	0	0	N/A	Bleed Off Pressure
01:28	0	0	0	0	N/A	Customer Requesting 30 min wait period to see if Top Out Required
01:58	0	0	0	0	N/A	Released By Customer
02:00	0	0	0	0	N/A	Pre-Rig Down Safety Meeting

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	470	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	60	287	0	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	





# CEMENTING LABORATORY REPORT

Lab Report #C11-005-14

COMPANY :	Carrizo Oil & Gas Inc	DATE:	November 2, 2014
WELL NAME:	Hemberger #6-26-8-60	LOCATION:	Weld County, Colorado
DISTRICT:	Brighton	TYPE JOB:	Surface
API #	05-123-39331-0000	TOC(md):	
DEPTH MD(ft):	1,440 ft	BHST(°F):	109 °F
CASING SIZE("):	9 5/8 in	BHCT(°F):	85 °F
TUBING SIZE("):		BHSqT(°F):	94 °F
HOLE SIZE("):	12 1/4 in	TOL (°F):	Static Circ

## SLURRY DESIGN DATA

#1	Lead Slurry: Premium Lite Cement + 6% Bentonite II + 3% CaCl <sub>2</sub> + 3% NaCl <sub>2</sub> + 0.04% Static Free + 0.25 pps Cello Flake + 0.5 gals/100 sack FP-6L
#2	Tail Slurry: Type III Cement + 1.5% CaCl <sub>2</sub> + 0.04 pps Static Free + 0.25 pps Cello Flake + 0.5 gals/100 sack FP-6L
#3	

SLURRY PROPERTIES			#1	#2	#3
Density : ppg			13.00	14.50	
Yield :cu.ft./sk.			1.81	1.41	
Mixing Water: gal/sk.			9.46	6.82	
Water Type:			Fresh	Fresh	
Testing Temperature :			85 °F	85 °F	
Thickening Time: hrs:mins.			4:10	2:00	
Free Water: mls.					
Fluid Loss:ml/30min					
Compressive Strength:					
		hrs.			
		hrs.			
Rheologies		RPM			
		300			
		200			
		100			
		60			
		30			
		6			
		3			
		600			
		PV			
		YP			
Gel Strength : #/100sq.ft.		10 sec.			
		10 min.			

REMARKS :	
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