

# CEMENT JOB REPORT



<b>CUSTOMER</b> CARRIZO OIL & GAS INC XML			<b>DATE</b> 06-DEC-13		<b>F.R. #</b> 10011031512			<b>SERV. SUPV.</b> JASON L SJOBERG						
<b>LEASE &amp; WELL NAME</b> STATE #4-16-9-60 - API 05123384530000			<b>LOCATION</b> 16-9N-60W			<b>COUNTY-PARISH-BLOCK</b> Weld Colorado								
<b>DISTRICT</b> Brighton			<b>DRILLING CONTRACTOR RIG #</b> Xtreme Coil #17			<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 Collar, Auto Fill, 9-5/8 - 8rd												
		Float Shoe 9-5/8 - 8rd												
		Centralizer, with Pins, 9-5/8 in												
		Cement Basket, Slip On, 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								145	14.5	1.42	6.69	02:00	36.62	23.10
Premium Lite Cmt + adds								396	13	1.83	9.36	03:00	128.94	88.24
Fresh Water								0	8.34	0	0		108.23	
Available Mix Water <u>300</u> Bbl.			Available Displ. Fluid <u>300</u> Bbl.			<b>TOTAL</b>						<u>288.79</u>	<u>111.34</u>	
<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	0	1456	8.921	9.625	36	CSG	1431	1431	J-55	1431	1389	0		
<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	CSG	60	60	No Packer		0	0	0	9.625	8 RND	WATER BASED	8.34
<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>			
108.2	BBLS	Fresh Water		8.34	979	0	0	0	0	2816	2000	Rig		
<b>Circulation Prior to Job</b>														
Circulated Well: Rig <input checked="" type="checkbox"/> BJ <input type="checkbox"/>				Circulation Time: 1				Circulation Rate: 6 BPM						
Mud Density In: 8.34 LBS/G				Mud Density Out: 8.34 LBS/GAL				PV & YP Mud In: 0		PV & YP Mud Out: 0				
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: 1 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"/> RECIPROICATION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE														
Centralizers: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES				Quantity: 13				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: 0				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 8.3 LBS/GAL Mud				Time Held: 00 Hours 15 Minutes						
<b>EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: Casing crew was late and had some problems with equipment</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)  
Rig had a bad collar on their landing joint that leaked. They changed it out and the pin didn't leak.

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	4680 PSI
						CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>	
10:30	0	0	0	0	N/A	Yard Call	
14:30	0	0	0	0	N/A	Leave Yard	
16:30	0	0	0	0	N/A	Arrive on Location	
16:45	0	0	0	0	N/A	Spot Trucks/Pre Rig-up Safety Meeting	
00:10	0	0	0	0	N/A	Safety Meeting	
02:55	4680	0	0	0	H2O	Pressure Test Pump and Lines	
03:02	118	0	4.8	10	H2O	Preflush Dye	
03:14	88	0	4.5	122	CMT	Batch, Weigh, Pump 13# PLC + .08% Static Free + 3% CaCl + 3% NaCl + .5 lbs/sack Cello Flake + 2 lbs/sack Kol-Seal + 6% Bentonite	
03:47	35	0	3.6	33	CMT	Pump 14.5# Type III + .08 lbs/sack Static Free + 1.5% CaCl + .5 lbs/sack Cello Flake + 2 lbs/sack Kol-Seal	
03:59	0	0	0	0	N/A	Drop Plug	
04:07	45	0	4.8	20	H2O	Displacement	
04:15	151	0	3.6	35	H2O	Drop Rate	
04:25	204	0	2	45	H2O	Drop Rate	
04:43	328	0	1.5	7	H2O	Drop Rate	
04:51	427	0	1.5	107	H2O	Bump Plug	
04:54	1500	0	0	0	H2O	Casing Test	
05:10	1459	0	0	0	N/A	Check Floats	
05:12	0	0	0	0	N/A	Post Job Safety Meeting	
07:15	0	0	0	0	N/A	Check for cement drop (4.5-5 ft)	
07:20	0	0	0	0	N/A	Rig Down	

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	427	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	60	284	0	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	



**CEMENTING LABORATORY REPORT**  
Lab Report #C12-015-13

<b>COMPANY :</b>	Carrizo Oil & Gas Inc	<b>DATE:</b>	December 6, 2013
<b>WELL NAME:</b>	State 4-16-9-60	<b>LOCATION:</b>	Weld County, Colorado
<b>DISTRICT:</b>	Brighton	<b>TYPE JOB:</b>	Surface
<b>API #</b>	05-123-38453-0000	<b>TOC(md):</b>	
<b>DEPTH MD(ft):</b>	1,440 ft	<b>BHST(°F):</b>	109 °F
<b>CASING SIZE("):</b>	9 5/8 in	<b>BHCT(°F):</b>	85 °F
<b>TUBING SIZE("):</b>		<b>BHSqT(°F):</b>	94 °F
<b>HOLE SIZE("):</b>	12 1/4 in	<b>TOL (°F):</b>	Static      Circ

**SLURRY DESIGN DATA**

#1	Lead Slurry: Premium Lite Cement + 6% Bentonite + 3% Calcium Chloride + 3% Sodium Chloride + 2 pps Kol-Seal + 0.5 pps Cello Flake + 0.08% Static Free
#2	Tail Slurry: Type III Cement + 2 pps Kol-Seal + 1.5% Calcium Chloride + 0.5 pps Cello Flake + 0.08 pps Static Free
#3	

SLURRY PROPERTIES		#1	#2	#3
Density : ppg		13.00	14.50	
Yield :cu.ft./sk.		1.83	1.42	
Mixing Water: gal/sk.		9.36	6.69	
Water Type:		Fresh	Fresh	
Testing Temperature :		85 °F	86 °F	
Thickening Time: hrs:mins.		6:18	4:15	
Free Water: mls.				
Fluid Loss:ml/30min				
Compressive Strength:				
	hrs.			
	hrs.			
<b>Rheologies</b>	<b>RPM</b>			
	300			
	200			
	100			
	6			
	3			
	600			
	PV			
	YP			
<b>Gel Strength : #/100sq.ft.</b>	10 sec.			
	10 min.			

**REMARKS :**

**COMMENTS :** The above data is supplied solely for informational purposes and BHI makes no guarantees or warranties, either express or implied, with respect to the accuracy or use of this data. All product warranties and guarantees shall be governed by the standard contract terms at the time of sale.