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***Rocky Mountain Area Laboratory
CEMENTING REPORT***

Prepared for:
Bayswater Exploration And Prod.
Booth 19-23
Weld County, Colorado
Lab Report #C06-038-13

Longstring
05-123-37504-0000

***Rocky Mountain Area Laboratory
899 Baseline Place
Brighton, CO 80601
Phone (303) 659-7347***

ANALYST: Marc Babel

***BAKER HUGHES TECHNICAL REPRESENTATIVE
Crystal Mapes***

Submitted by: Scott Pollard

June 9, 2013



CEMENTING LABORATORY REPORT

Lab Report #C06-038-13

COMPANY :	Bayswater Exploration And Prod.	DATE:	June 9, 2013
WELL NAME:	Booth 19-23	LOCATION:	Weld County, Colorado
DISTRICT:	Brighton	TYPE JOB:	Longstring
API #	05-123-37504-0000	TOC(md):	
DEPTH MD(ft):	7,355 ft	BHST(°F):	227 °F
CASING SIZE("):	4 1/2 in	BHCT(°F):	155 °F
TUBING SIZE("):		BHSqT(°F):	191 °F
HOLE SIZE("):	7 7/8 in	TOL (°F):	Static Circ

SLURRY DESIGN DATA

#1	1st Lead Slurry : Premium Lite Cement + 8 pps CSE + 4% Bentonite + 0.6% Sodium Metasilicate
#2	2nd Lead Slurry : Premium Lite Cement + 2% Bentonite + 0.4% FL-52 + 0.2% R-3
#3	Tail Slurry : (50:50) Poz:Class G Cement + 0.4% FL-52 + 0.1% CD-32 + 0.1% Sodium Metasilicate

SLURRY PROPERTIES		#1	#2	#3
Density : ppg		11.00	12.50	14.60
Yield :cu.ft./sk.		3.22	1.87	1.16
Mixing Water: gal/sk.		19.86	10.28	5.01
Water Type:		Fresh	Fresh	Fresh
Testing Temperature :		155 °F	155 °F	156 °F
Thickening Time: hrs:mins.		9:19	5:57	5:24
Free Water: mls.				
Fluid Loss:ml/30min				
Compressive Strength:				
	hrs.			
	hrs.			
Rheologies	RPM			
	300			
	200			
	100			
	6			
	3			
	600			
	PV			
	YP			
Gel Strength : #/100sq.ft.	10 sec.			
	10 min.			

11 ppg slurry required one 30 minute motor shut down in order to demonstrate that the slurry would thicken once pumping had stopped.

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.

Customer/Well Information

Company:	Bayswater Exploration And Production	Depth MD:	7,355 ft	Date:	June 9, 2013
Well Name:	Booth 19-23	Depth TVD:	7,355 ft	Prepared for:	Crystal Mapes
API #	05-123-37504-0000	TOC(md):		Submitted by:	Scott Pollard
Location:	Weld County, Colorado	Casing Size:	4 1/2 in	Prepared by:	Marc Babel
District:	Brighton	Tubing Size:		Water Type:	Fresh
Type Job:	Longstring	Hole size:	7 7/8 in		

BHST: 227 °F BHCT: 155 °F BHSqT: 191 °F

Slurry Design Data

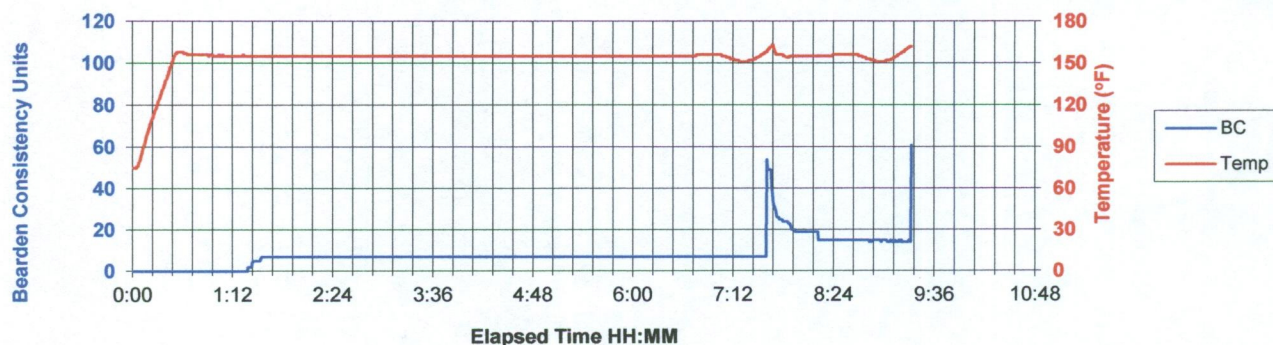
1st Lead Slurry : Premium Lite Cement + 8 pps CSE + 4% Bentonite + 0.6% Sodium Metasilicate

Slurry Properties

Density:	11.0 ppg	Fluid Loss:		Test Temp:	155 °F
Yield:	3.22 cf/sack	Free Water:		Time to 70bc:	
Mix Water:	19.86 gps	Total Fluid:		Time to 100 bc:	

Rheology:	600 rpm	300 rpm	200 rpm	100 rpm	6 rpm	3 rpm	PV	YP	Gel Strength	
									10 sec	10 min

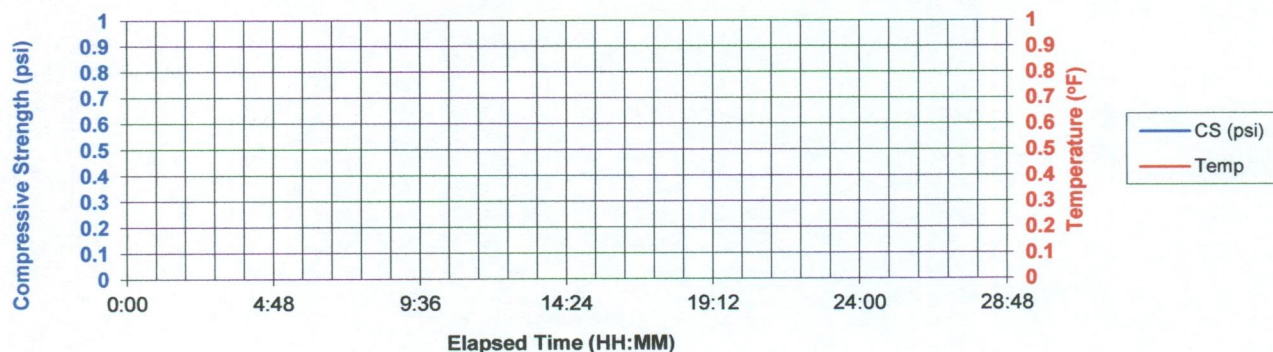
Consistometer Recording of Bearden Consistency:



Compressive Strength Data:

Temperature	12 hours	24 hours	36 hours	48 hours
25 psi				

Ultrasonic Cement Analyzer Data Chart:



Notice: This report is presented in good faith based upon present day technology and information provided: but because of variable conditions and other information which must be relied upon, Baker Hughes, Inc. makes no warranty, express or implied, as to the accuracy of the data or of any calculations or opinions expressed herein. You agree that Baker Hughes, Inc. shall not be liable for any loss or damage, whether due to negligence or otherwise, arising out of or in connection with such data, calculations, or opinions.

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Location:	Weld County, Colorado	Casing Size:	4 1/2 in	Prepared by:	Marc Babel
District:	Brighton	Tubing Size:		Water Type:	Fresh
Type Job:	Longstring	Hole size:	7 7/8 in		

BHST: 227 °F BHCT: 155 °F BHSqT: 191 °F

Slurry Design Data

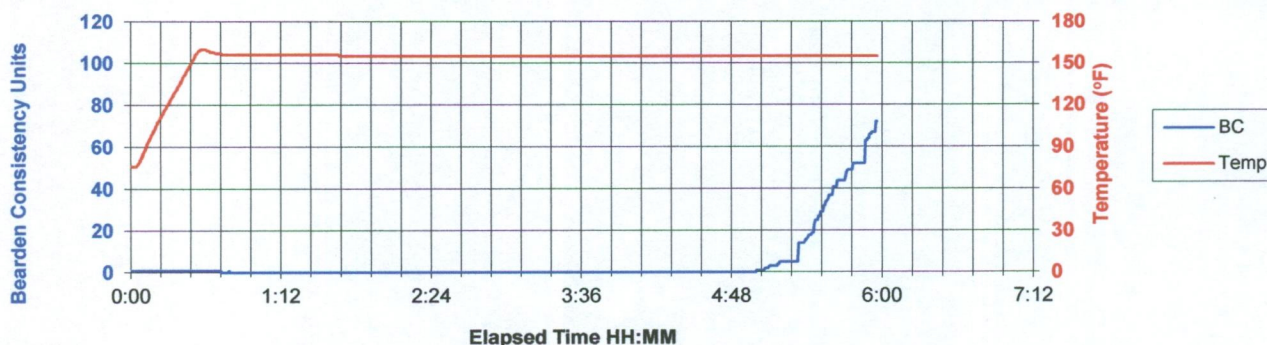
2nd Lead Slurry : Premium Lite Cement + 2% Bentonite + 0.4% FL-52 + 0.2% R-3

Slurry Properties

Density:	12.5 ppg	Fluid Loss:		Test Temp:	155 °F
Yield:	1.87 cf/sack	Free Water:		Time to 70bc:	5:57 hrs:min
Mix Water:	10.28 gps	Total Fluid:		Time to 100 bc:	

Rheology:	600 rpm	300 rpm	200 rpm	100 rpm	6 rpm	3 rpm	PV	YP	Gel Strength	
									10 sec	10 min

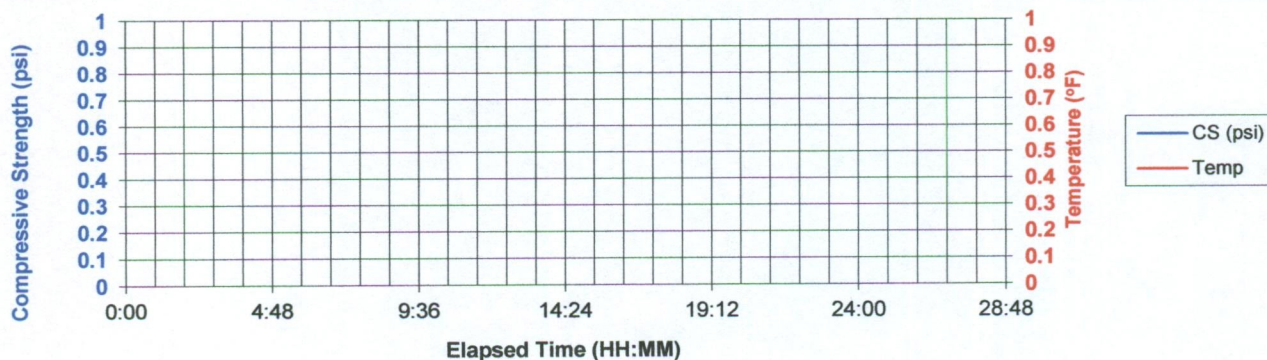
Consistometer Recording of Bearden Consistency:



Compressive Strength Data:

Temperature		12 hours	24 hours	36 hours	48 hours
	25 psi				

Ultrasonic Cement Analyzer Data Chart:



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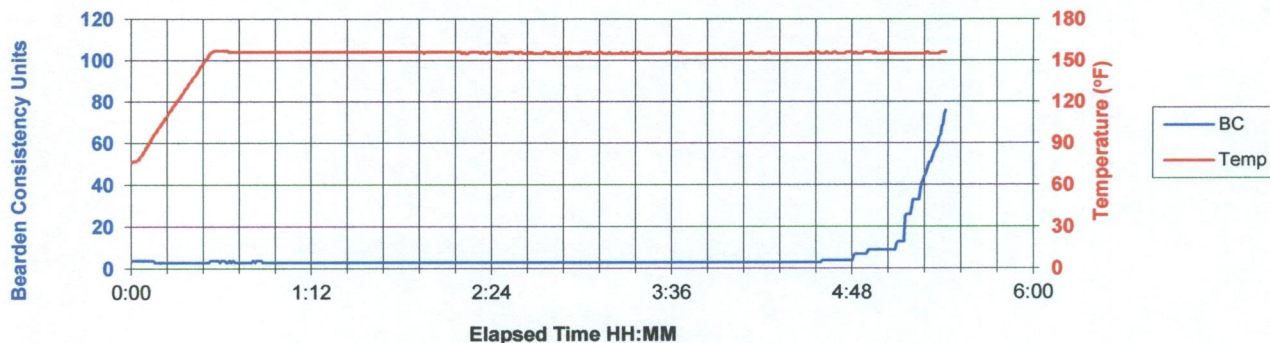
Tail Slurry : (50:50) Poz:Class G Cement + 0.4% FL-52 + 0.1% CD-32 + 0.1% Sodium Metasilicate

Slurry Properties

Density:	14.6 ppg	Fluid Loss:		Test Temp:	156 °F
Yield:	1.16 cf/sack	Free Water:		Time to 70bc:	5:24 hrs:min
Mix Water:	5.01 gps	Total Fluid:		Time to 100 bc:	

Rheology:	600 rpm	300 rpm	200 rpm	100 rpm	6 rpm	3 rpm	PV	YP	Gel Strength	
									10 sec	10 min

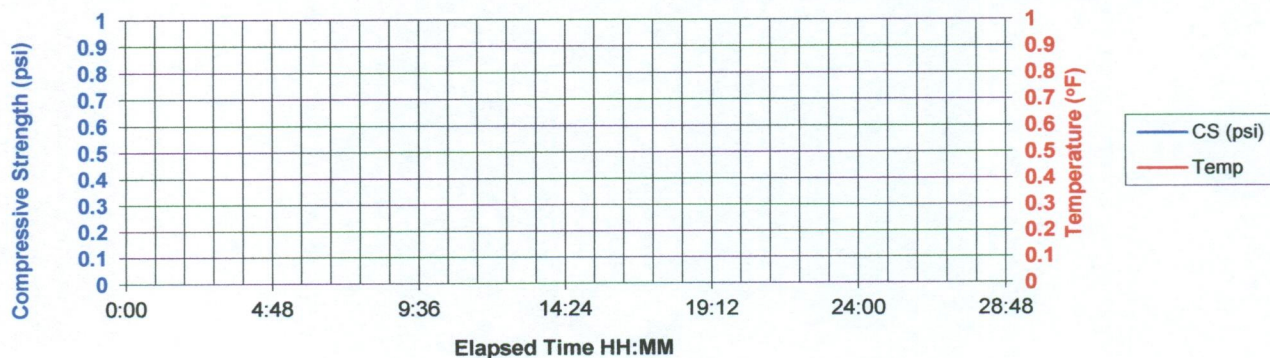
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