



Rocky Mountain Region Laboratory
285 Weld County Rd 27
Brighton, CO 80601
Phone (303) 659-7347
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***Rocky Mountain Region Laboratory
CEMENTING REPORT***

Prepared for:
***Kerr-McGee Corporation
Denver #15-18
Weld County, Colorado
Lab Report #C04-068-11***

Squeeze
AP# 05-123-32634-0000

***Rocky Mountain Region Laboratory
285 Weld County Rd 27
Brighton, CO 80601
Phone (303) 659-7347***

ANALYST: Tom Smith

BJ SERVICES TECHNICAL REPRESENTATIVE

Submitted by: Shawn Purvis

April 18, 2011



CEMENTING LABORATORY REPORT
Lab Report #C04-068-11

COMPANY :	Kerr-McGee Corporation	DATE:	April 18, 2011
WELL NAME:	Denver #15-18	LOCATION:	Weld County, Colorado
DISTRICT:	Brighton	TYPE JOB:	Squeeze
API #	05-123-32634-0000	TOC(md):	
DEPTH MD(ft):	7,210 ft	BHST(°F):	239 °F
CASING SIZE("):	4 1/2 in	BHCT(°F):	200 °F
TUBING SIZE("):	2 3/8 in	BHSqT(°F):	200 °F
HOLE SIZE("):		TOL (°F):	Static Circ

SLURRY DESIGN DATA

#1	Slurry No.1- Class G:FA (50:50) + 20% S-8 + 3% Bentonite + 0.4% FL-52 + 0.1% SMS
#2	Slurry No.2 - Class G Cement + 0.1% R-3
#3	Slurry No.3 - Class G Cement + 0.1% R-3

SLURRY PROPERTIES		#1	#2	#3
Density : ppg		13.50	15.80	15.80
Yield :cu.ft./sk.		1.71	1.15	1.15
Mixing Water: gal/sk.		8.30	4.99	4.99
Water Type:		Fresh	Fresh	Fresh
Testing Temperature :		200 °F	201 °F	201 °F
Thickening Time: hrs:mins.		2:58	1:42	1:42
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.			

REMARKS :

COMMENTS : The above data is supplied solely for informational purposes and BJ 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.



BJ Services Rocky Mountain Region Laboratory Report

Report #: C04-068-11

Customer/Well Information

Company:	Kerr-McGee Corporation	Depth MD:	7,210 ft	Date:	April 18, 2011
Well Name:	Denver #15-18	Depth TVD:	7,210 ft	Prepared for:	
API #	05-123-32634-0000	TOC(md):		Submitted by:	Shawn Purvis
Location:	Weld County, Colorado	Casing Size:	4 1/2 in	Prepared by:	Tom Smith
District:	Brighton	Tubing Size:	2 3/8 in	Water Type:	Fresh
Type Job:	Squeeze	Hole size:			

BHST: 239 °F BHCT: 200 °F BHSqT: 200 °F

Slurry Design Data

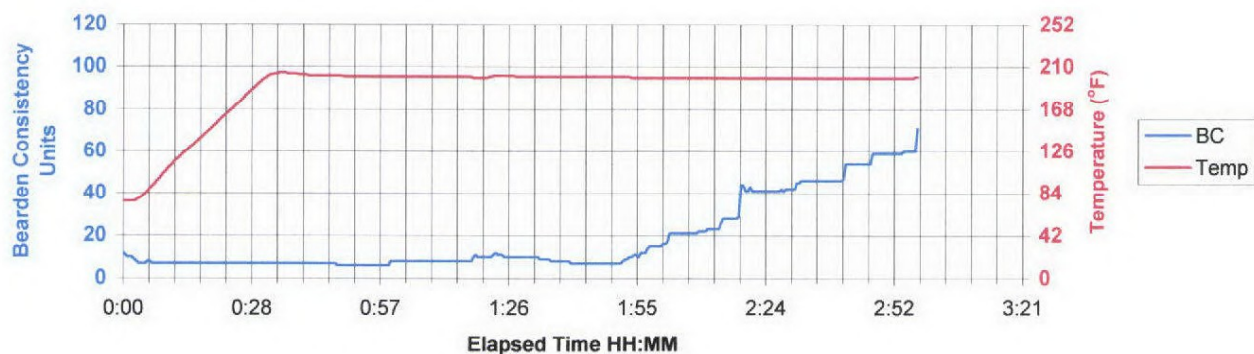
Slurry No.1- Class G:FA (50:50) + 20% S-8 + 3% Bentonite + 0.4% FL-52 + 0.1% SMS

Slurry Properties

Density:	13.5 ppg	Fluid Loss:		Test Temp:	200 °F
Yield:	1.71 cf/sack	Free Water:		Time to 70bc:	2:58 hrs:min
Mix Water:	8.30 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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Type Job:	Squeeze	Hole size:			

BHST: 239 °F BHCT: 200 °F BHSqT: 200 °F

Slurry Design Data

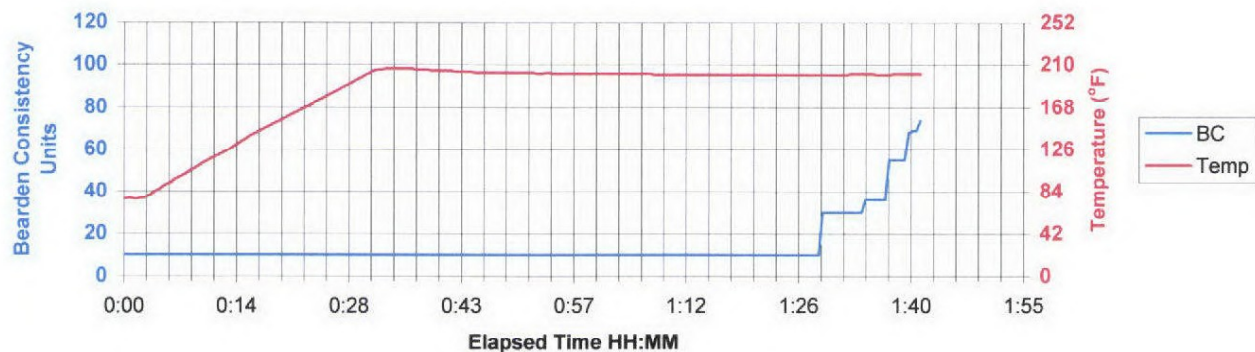
Slurry No.2 - Class G Cement + 0.1% R-3

Slurry Properties

Density:	15.8 ppg	Fluid Loss:		Test Temp:	201 °F
Yield:	1.15 cf/sack	Free Water:		Time to 70bc:	1:42 hrs:min
Mix Water:	4.99 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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Type Job:	Squeeze	Hole size:			

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Slurry Design Data

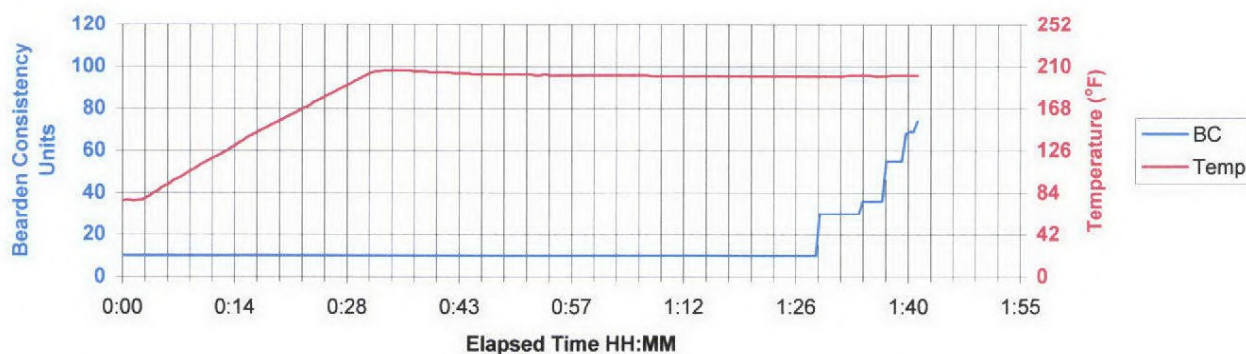
Slurry No.3 - Class G Cement + 0.1% R-3

Slurry Properties

Density:	15.8 ppg	Fluid Loss:		Test Temp:	201 °F
Yield:	1.15 cf/sack	Free Water:		Time to 70bc:	1:42 hrs:min
Mix Water:	4.99 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

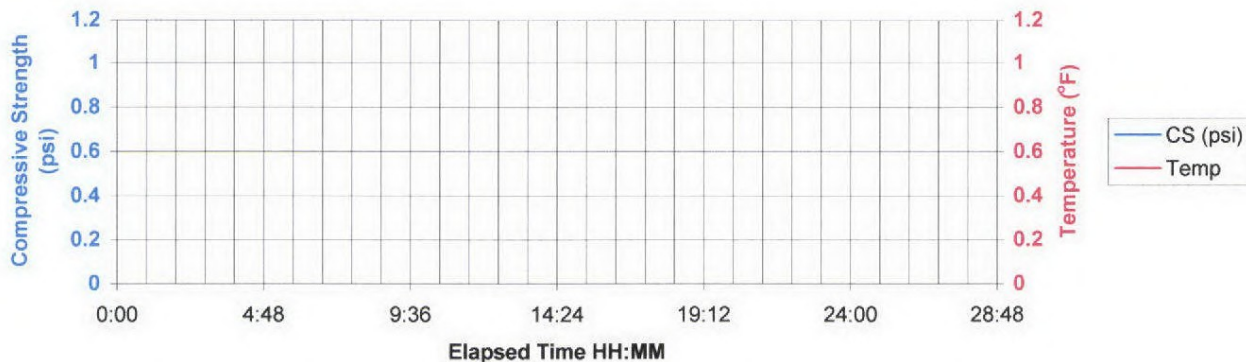
Consistometer Recording of Bearden Consistency:



Compressive Strength Data:

Temperature	12 hours	24 hours	36 hours	48 hours
25 psi				

Ultrasonic Cement Analyzer Data Chart:



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