State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

David Martin
Cabinet Secretary

David R. Catanach, Division Director Oil Conservation Division SHERWARD OF THE STREET

September 14, 2015

Brett F. Woods, Ph.D. Deputy Cabinet Secretary

Brian Collins or Ocean Munds-Dry, Esq.

GOG Operating, LLC 2208 W. Main Street Artesia, NM 88210 RANDY COULSON
BREITBURN OPERATING LP
1401 MCKINNEY SE(24th FL)
HOUSTON, TX 77010

RE:

Exception to Allow Compressive Strength Option per Rule 19.15.16.10 G(2) NMAC

Breitburn Operating LP, Libby Ranch Drilling for year 2015

Primary Cement Wait Time - Surface Casing

Harding County, New Mexico

Dear Sir or Madame:

Reference is made to your request on behalf of Breitburn Operating LP (OGRID 370080; "Breitburn") received by the Division on September 14, 2015.

The data you have submitted indicate that compressive strength for the surface casing cement under the best assumptions for the slurry, mixing, and hole conditions will likely achieve at least 500 psi compressive strength within 8 hours.

Based on the data supplied, you are hereby granted an exception to the mandatory 18 hour wait-on-cement time for the surface cement job on the wells to be drilled in 2015 by Breitburn within Harding County, NM and may use the method as detailed in Rule 19.15.16.10 G(2) NMAC to verify cement competency.

The other requirements of Rule 19.15.16 (G and H) remain in place, including the 8-hour stationary wait-on-cement, and detailed reporting on form C-103 of cementing details. In addition, the Division requires cement to be circulated on all surface casing strings.

The Division Director may rescind this exception if it becomes apparent that cement volume and quantity is not adequate and zonal isolation is not being achieved.

Sincerely,

DAVID R. CATANACH

Director

DRC/wvjj

cc:

Oil Conservation Division - Santa Fe

API's: 30-021-20686/20572/20579/20682/20688/20691

9-14-2015

From: Randy J Coulson

Senior Drilling Engineer Breitburn Operating LP

1401 McKinney Street, 24th Floor

Houston, Texas 77010

To: W

William V. Jones
District IV Supervisor

New Mexico Oil Conservation Division

Dear Sir:

Breitburn Operating LP hereby requests an exception to rule paragraph (2) Subsection G, 19.15.16.10 NMAC. The exception to the rule would allow Harding County to be included in the 500 psi requirement option as described in paragraph (2).

This request would cover all 6 wells in the current Libby Ranch drilling program and would include both surface and production strings for all wells. The estimated formation temperatures, mixing temperatures, and cement types / additives are planned and projected to be very similar for the 6 wells.

Attached for your information is the current lab test of the planned surface blend for the first upcoming well. The lab test indicates an 8 hour compressive strength of 594 psi and a 12 hour strength of 930 psi. We do not anticipate commencing testing operations prior to 10 hours after cement is in place. Additional lab tests for the production casing will be provided to further support this request.

If you should require further information, please contact myself at the contact number below.

Thank you for your consideration with this request.

Regards

Randy Coulson

Randy Coulson

Sr. Drilling & Completions Engineer

Breitburn Operating LP

1401 McKinney Street, Suite 2400

Houston, TX 77010

office: (713) 437-8024 celt: (832) 752-1956

amail: randv.coulson@brettburn.com

website: breitburn.com





Allied Oil and Gas Services

Oklahoma City Laboratory 1105 Cornell Parkway Oklahoma City, OK 73108 Tel. (405) 948-0995 Fax (405) 820-0033

Customer: Breitburn
Well Name: Surface

County:

District: Liberal

Lab Analyst: Randy Hadlock

TVD: 750 ft.

MD: 750 ft.

внят: 80°F

внст: 80 °F

Test Date: 4/20/2015

Requested By: Kevin Aldridge

Stage Number: N/A

Sturry: Surface Tail

Blend Type: Pilot

Sturry Information

Mix Water: 6.34 gal/sk

Density: 14.80 ppg

Yield: 1.35 cuft/sk

Mix Water %: 56.28

Mud Density: 9.00 ppg

Cement Blend:

CA-100 CLC-CPF 2.0 % bwoc

0.25 lb/sk

Whickening Ame Q		80%	
Time to Temp	Time	Вс	Final Pressure
4	2:36	8	1500 psi
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Compressive Sin	mults @	89°F
Time	UCA CS	
8 Hr.	594 p si	
12 Hr.	930 psi	
24 Hr.	1726 psi	
48 Hr.	2885 psi	
72 Hr.	3526 psi	
50 psi	2:21	
500 psi	7:01	

Pluid Properties			 Rhook) <u>මා</u> ල්ව පිරේදුල	cP)		** =** =			
Temperature	FL	FW		300	200	10 0	6	3	10 sec	10 min
80°F		0.0 ml/250	81	61	54	46	28	21	19	6 6
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Competits	 **************************************
TT with a 10 min hesitation at 13 min. Passed hesitation at 4 bc	
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