

Helton Engineering & Geological Services, Inc.

CONSULTING PETROLEUM ENGINEERS AND GEOLOGISTS
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December 4, 1978



State of New Mexico
Energy and Minerals Department
Oil Conservation Division
1000 Rio Brazos Road
Axtec, New Mexico 87410

Attention: Mr. A. R. Kendrick

Re: Brent Wells on Diamond Trail
Ranch

Dear Mr. Kendrick:

We apologize for not communicating with you sooner on the subject item. As we discussed sometime ago, we did call your office for approval prior to plugging the wells. Unfortunately, we did not record the name of the person we spoke to; however, my notes reflect that I was told, on May 15, 1978, to cover the Dakota and the top of the Morrison on the No. 1 well and the top of the surface casing only. I relayed these orders to the rig immediately after and the field notes reflect this because it is not common to not have to plug the bottom of the surface pipe.

The orders for the No. 3 well were received on May 29, and were to cover the Dakota and Entrada. Once again, we failed to record the name of the person we spoke to.

The wells have been reviewed, and we offer the following to show the wells were plugged in a satisfactory manner:

<u>Brent No. 1</u>		
<u>Tops</u>	<u>Porosity</u>	<u>Interval Plugged</u>
Surface pipe 0-125		10 sacks on top 0-30
Mancos 440	6 - 8 (samples)	
Greenhorn 1589	10 - 12	
Dakota 1621	10 - 21	1600
Morrison 1809	11 - 15	to 1840

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The sample log for the Mancos describes it as very poor porosity, and is estimated to be the 6-8% shown above. The only show was at $\pm$ 400', and was described as a dead oil stain.

The Greenhorn was described as a shale with sand stringers to a maximum of 50%, and no shows were recorded. Although the Greenhorn log analysis shows 10-12% porosity, the sample log and drilling time curve indicate very little capacity in the section.

Brent No. 3

<u>Tops</u>	<u>Porosity</u>	<u>Interval Plugged</u>
Surface pipe 0-124		0 - 30
Greenhorn 875	8	867
Dakota 911	20	to 1107
Summerville 1815	4	
Todilto 1890	4 - 8	
Entrada 2010		1937 to 2070

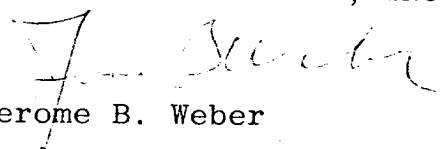
Both the Summerville and Todilto formations are very tight from the logs, sample description and drilling time.

To summarize the above, we feel that all potential fluid bearing zones were plugged. We did call for permission and we did plug in good faith.

We hope this will satisfy your requirements. Please contact us if you have any questions.

Very truly yours,

HELTON ENGINEERING &
GEOLOGICAL SERVICES, INC.


Jerome B. Weber

JBW:vbs

