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NSL

4/16/01

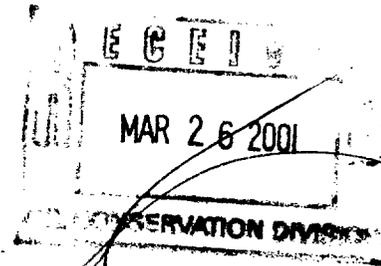
Deborah Marberry
Regulatory Analyst
Lobo/San Juan Business Unit
Exploration Production, North America

Conoco Inc.
600 N. Dairy Ashford, Dubai 3084
Houston, Texas 77079
(281) 293-1005

March 9, 2001

Mr. Michael E. Stogner
Oil Conservation Division
State of New Mexico
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: **Application for Administrative Approval
Unorthodox Basin Dakota well location
Proposed Hamilton 1B
1455' FSL and 2600' FSL *FWC*
S/2 Section 30-T32N-R10W
San Juan County, New Mexico**



Fax
281
293
5466

4-27-01
call Deborah to
the location is
from the
Westline

Dear Mr. Stogner:

Conoco Inc. hereby requests administrative approval for an unorthodox location for the referenced proposed well due to geologic reasons.

Conoco Inc. is requesting to drill the Hamilton 1B well to target the Mesaverde and Dakota formations at the above location, which is non-standard for the Dakota formation only. This well will be the third Mesaverde well in the laydown GPU, while the Dakota will be a step-out opportunity outside of proven production.

The Dakota is not a viable stand-alone project. The Mesaverde in the area has been highly productive and poses some drainage concerns, particularly if the location is too close to current producers. In order to justify targeting the Dakota, the well needs to provide a Mesaverde location furthest from the drainage ellipses (see attached) of the current producers. A standard Dakota location would cause the well to be located roughly 1000 feet from the Hamilton No. 1 that has produced 6.9 BCF from the Mesaverde. At that location, the negative impact of the Mesaverde drainage would supercede the benefits of taking the well to the Dakota. The proposed location would be 1675 feet from the Hamilton No. 1. This will allow the well to target the Dakota without compromising the expected quality of the Mesaverde.

Further, locating the Dakota completion in the proposed spot would not negatively impact correlative rights. Conoco owns all of the Dakota rights throughout section 30. Because the proposed location is east of a standard location within the interior of the south half spacing unit, does not encroach upon the outer boundaries of the GPU and does not encroach on other units either north or south we are not adversely affecting the rights of any other owners.

Enclosed in support of this application is a map reflecting Conoco's Dakota Rights within the above section and current Mesaverde producers in this vicinity. Offset operators have been sent notice of our application (operator list attached).

Conoco respectfully requests that a non-standard location for the Basin Dakota Pool be issued for the referenced well for the reasons cited above. If there are any questions concerning this application, please feel free to call me at (281) 293-1005. Geological questions may be directed to Lisa Campbell at (281) 293-6527, and land questions to Bill Franklin at (281) 293-6535.

Sincerely,

Deborah Marberry
Deborah Marberry
Regulatory Analyst
CONOCO INC.

OFFSET OPERATORS - Notification

Burlington Resources
Farmington NM District Office
3535 E. 30th St.
Farmington, NM 87402
Attn: Peggy Cole

Amoco Production
P.O. Box 3092
Houston, TX 77253
Attn: Regulatory

ELLIPTICAL DRAINAGE PATTERNS AND WELL PLACEMENT

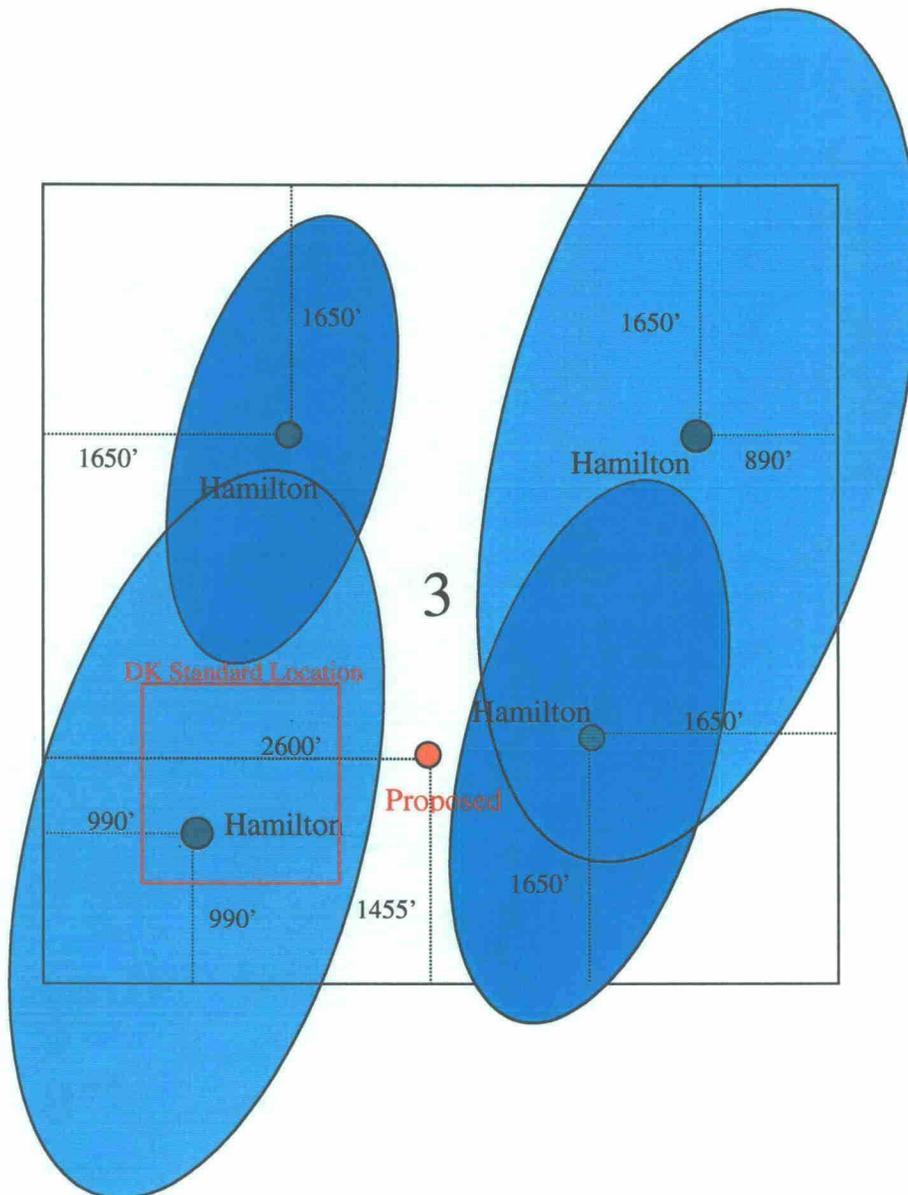
Mesaverde Formation, Sec 30 T32N-10W

Explanation of Ellipses:

Original gas-in-place estimates for this area (from net pay and P/Z data) indicate 33 BCF per section at an original pressure of approximately 1200 psi. Extrapolation of the P/Z data indicates current reservoir pressure is approximately 400 psi. A permeability anisotropy of five (k_{max}/k_{min}) was assumed for the reservoir, which yields an elliptical drainage pattern with an aspect ratio of $\sqrt{5} = 2.23$ (Harstad, Teufel, et al). The drainage ellipses of each existing Mesaverde well shown below represents the volume that has been drained by each well down to the current estimated pressure (67% of the gas in that area has been produced). Ellipse orientation is 15 degrees East of North.

For example, the Hamilton 2 well has made 9.5 BCF of cumulative production (29% of the total gas in the 640 acre section). Consequently, it has drained 100% of the gas that was originally contained in an area of $640 \times .29 \times 43560 = 8084736 \text{ ft}^2$. It has drained 67% of the gas in an area 1.5 times that large. Its elliptical drainage encompasses $1.5 \times 8084736 = 12127104 \text{ ft}^2$, which is an ellipse with a minor axis length of 2627' and a major axis length of 5876'.

It should be noted that these ellipses do not constitute a boundary for a given well. The wells have undoubtedly drained gas from outside of these ellipses. They also don't account for interference between wells. The ellipses just indicate the relative magnitude of the drainage for each well (in this case, for an area with average pressure of 400#). The proposed location will not have virgin pressure, but we expect it will have pressure higher than 400# and will provide a much better location than a well located in a standard Dakota location in the SW/4.



T32N R10W Section 30



⊕ Proposed Well
 ● Mesa Verde Wells
 ● Dakota Wells
 GPU
 Dakota Lease/Tracts
 0.00 - 0.26
 0.26 - 0.51
 0.51 - 0.76
 0.76 - 1.00




 San Juan Basin, N. M.
 Non Standard Location
Hamilton 1B

Author: Angela Whitfield	Date: 3-22-2001
Compiled by:	Map of
MD File:	

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

04/23/01 14:39:54
OGOMES -TPOW
PAGE NO: 1

Sec : 30 Twp : 32N Rng : 10W Section Type : NORMAL

8 40.54 Federal owned	7 41.24 Federal owned	6 41.43 Federal owned	5 41.72 Federal owned
9 40.44 Federal owned	10 41.14 Federal owned A	11 41.13 Federal owned A	12 41.42 Federal owned A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

04/23/01 14:39:57
OGOMES -TPOW
PAGE NO: 2

Sec : 30 Twp : 32N Rng : 10W Section Type : NORMAL

16 40.26 Federal owned	15 40.73 Federal owned	14 40.65 Federal owned	13 41.06 Federal owned
17 39.80 Federal owned A A A	18 40.26 Federal owned	19 40.36 Federal owned	20 40.77 Federal owned

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 PF12

323.89

1455' FSL
+ 2600' FEU

108071658

NSL 4/16/01

Adm Steve Hayden

Deborah Marberry
Regulatory Analyst
Lobo/San Juan Business Unit
Exploration Production, North America

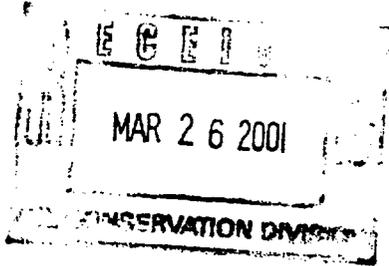
Conoco Inc.
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Houston, Texas 77079
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March 9, 2001

4-23-2001

For your review and comments.

Mr. Michael E. Stogner
Oil Conservation Division
State of New Mexico
2040 South Pacheco
Santa Fe, New Mexico 87505



Thanks,
M. Hayden

RE: Application for Administrative Approval
Unorthodox Basin Dakota well location
Proposed Hamilton 1B

4-27-2001
OK'd by
Steve

Approval for an unorthodox location for the referenced proposed well

This well to target the Mesaverde and Dakota formations at the above formation only. This well will be the third Mesaverde well in the area. It is an opportunity outside of proven production.

The Mesaverde in the area has been highly productive and poses a risk to current producers. In order to justify targeting the Mesaverde location furthest from the drainage ellipses (see attached) of the area would cause the well to be located roughly 1000 feet from the Mesaverde. At that location, the negative impact of the benefits of taking the well to the Dakota. The proposed location would allow the well to target the Dakota without compromising the

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Sincerely,

Deborah Marberry
Regulatory Analyst
CONOCO INC.

108647658

NSL

4/16/01

Att: Charlie Perrin

Deborah Marberry
Regulatory Analyst
Lobo/San Juan Business Unit
Exploration Production, North America

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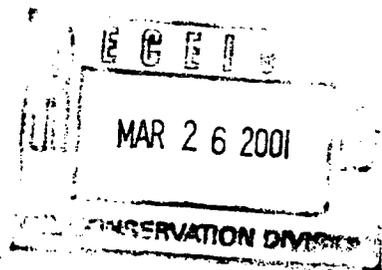
For your review and

Comments

Thanks.

M. Stogner

Mr. Michael E. Stogner
Oil Conservation Division
State of New Mexico
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Santa Fe, New Mexico 87505



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