

Amoco Production Company (USA)

Houston Region–West 501 WestLake Park Boulevard Post Office Box 3092 Houston, Texas 77253

R. G. Smith Regional Engineering Manager-West

November 1, 1983

File: JCA-986.51NM-3349

Re: Application to Downhole Commingle

Turner Well No. 3

Blinebry and Tubb Oil and Gas Pools

Lea County, New Mexico

State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 Santa Fe. NM 87501

NOV 3 1983

MARTIN

Attention: Mr. Joe D. Ramey

Gentlemen:

Amoco's Hobbs District office submitted the subject application for administrative approval by letter dated October 7, 1983 (File: SJO-1985-WF). Mobil, as an offset operator, has entered an objection to the approval of the same because of the relatively large differential in the reported bottom hole pressures (BHP) of the zones to be commingled. We have subsequently obtained more accurate BHP information and herewith submit it for your consideration. This data shows only a minimal differences between the shut-in BHP's of these zones. Therefore, we respectfully request this application be granted administrative approval.

Exhibit "A," attached hereto, contains the newly acquired BHP data and resulting calculations which more accurately reflect the current Blinebry BHP. As can be seen, at a common datum, the SI BHP of the Blinebry is only 20.7% lower than that of the Tubb. Therefore, there is no potential for significant cross flow between these zones.

It is our understanding, Mobil's only objection to this application was based on the fact that the BHP data did not meet with the Division's criteria for administrative approval. In light of the newly acquired data, it is now evident that the BHP's of these zones do comply with said criteria. Therefore, by copy of this letter we are requesting

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Mobil withdraw its objection. If Mobil's objection is withdrawn, we respectfully request the Division proceed with granting administrative approval; however, if this is not possible, please schedule this matter for the December 15, 1983 Examiner hearing.

If you have any questions regarding this matter, please contact Larry Sheppard (713/556-3941) in our Houston Region-West Proration Group.

Very truly yours,

R I Smith you

LWS/agd 1039/K

Attachments

cc: Offset Operators - See Attached List

OFFSET OPERATORS

Arco Oil and Gas Company P. O. Box 1610 Midland, TX 79702

Getty 0il Company P. O. Box 730 Hobbs, NM 88240

Gulf Oil Exploration and Production Company P. O. Box 670 Hobbs, NM 88240

Marathon Oil Company P. O. Box 552 Midland, TX 79702

Mobil Producing Texas and New Mexico Nine Greenway Plaza Suite 2700 Houston, TX 77046

Petro-Lewis Corporation P. O. Box 16200 1111 West Loop 289 Lubbock, TX 79416

Sohio Petroleum Company P. O. Box 3000 Midland, TX 79702

Estimation of BHP Turner Well No. 3

- I. Blinebry
 - A. Data Fluid level shot 10/27/83 SICP = 32 psig Fluid level = 4540' Pressure Datum = 5600'
 - B. Calculations
 - 1. Fluid Column (5600-4540) (.465 psi/ft) = 492.9 psi
 - 2. Gas Column $P_2 = P_1 \exp (0.01875 \times SG \times D \div ZT)$ $P_2 = (45.2) \exp ((0.01875 \times 0.744 \times 4540) \div (1.00 \times 520))$ $P_2 = 51.1 \text{ psia or } 37.9 \text{ psi}$
 - C. Shut In BHP = 530.8 psi
- II. Tubb

BHP =
$$\underline{669}$$
 psi (shown in 10/7/83 application)

III. Differences in SI BHP at Common Datum

$$669-530.8 = 138.2 \text{ psi}$$

$$138.2 \div 669 = 20.7\%$$