

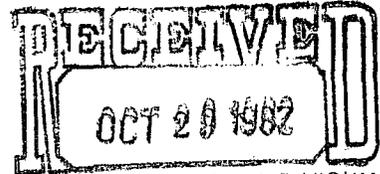


**Amoco Production Company (USA)**

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

R. G. Smith  
Regional Engineering  
Manager-West

October 26, 1982



OIL CONSERVATION DIVISION  
SANTA FE

File: JCA-986.51 NM-3331

Re: Request for Administrative Approval  
Unorthodox Location  
Federal "CY" Com No. 1  
S/2 Section 18, T-22-S, R-23-E  
Eddy County, New Mexico

*NSL 1609  
Pennsylvania information  
Rule 104 F  
11-19-82*

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

Attention: Mr. Joe D. Ramey (3)

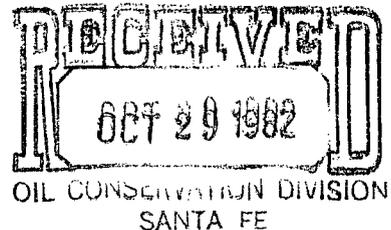
Gentlemen:

Amoco Production Company (USA) hereby makes application for administrative approval of an unorthodox gas well location under the provisions stipulated in Statewide Rule 104(F). The following is presented in support thereof:

- (1) Amoco seeks approval of this unorthodox gas well location for its Federal "CY" Com No. 1 (i.e., "the subject well") which is proposed to be drilled 660' FSL X 990' FEL of Section 18, Township-22-South, Range-23-East in Eddy County, New Mexico (i.e., "the subject location").
- (2) The subject well is proposed to be drilled to a total depth of ±9,450' in order to test the Morrow formation along with another potentially gas bearing horizon in the Upper Pennsylvanian, the Cisco.

- (3) Amoco proposes to dedicate the S/2 of Section 18 to the subject well in order to form a 320 acre (horizontal  $\frac{1}{2}$  section) proration unit (i.e., "the subject spacing unit").
- (4) The necessity of the subject location is due to geological conditions. These conditions are presented in the exhibits attached hereto.
- (5) In support of this application, it is accompanied by the following exhibits:
  - (a) Exhibit No. 1 is a copy of the county ownership map which depicts the ownership of all leases and the wells completed thereon offsetting the subject spacing unit.
  - (b) Exhibit No. 2 is a certified Form C-102 (i.e., "Well Location and Acreage Dedication Plat") showing the surveyed well location, the subject spacing unit and diversity of leasehold ownership within that spacing unit. Amoco Production Company holds the lease on the 40 tract in the SW/4 of the SE/4 of Section 18 while Coquina Oil Corporation is the lessee of the remainder of the acreage in the subject unit. The United States of America is the lessor for all acreage in said unit.
  - (c) Exhibit No. 3 is a discussion of the reservoir characteristics and geological interpretation which justify the necessity of the subject unorthodox location.
  - (d) Exhibit No. 4 is a plat of the area showing the cumulative production of offset producers.
  - (e) Exhibit No. 5 is a geological structure map contoured on the top of the Cisco.
  - (f) Exhibit No. 6 is a geological cross-section depicting the projected structural position of the subject well.
  - (g) Exhibit No. 7 is a list of all operators of proration or spacing units offsetting the subject unit.
- (6) Amoco, as Applicant, certifies that as of the date of this application, a copy of the same and a request for waiver of objection was forwarded by certified mail to each offset

State of New Mexico  
October 26, 1982  
Page 3



operator listed in Exhibit No. 7. Therefore, the Applicant requests that action be taken on this application upon receipt of waivers from said offset operators or within 20 days of the receipt of this application if no objections are entered.

In summary, Amoco Production Company (USA), as Applicant in this case, hereby requests administrative approval for an unorthodox gas well location in the S/2 of Section 18, Township-22-South, Range-23-East of Eddy County, New Mexico. This proposed location will facilitate the drilling of a  $\pm 13,600'$  Morrow formation test and thereby afford the Applicant the opportunity to produce its just and equitable share of hydrocarbons from the Morrow and/or any other Pennsylvanian formations underlying its property. The necessity of the unorthodox location results from geological conditions which are documented in the geological discussion contained herein. It is imperative the subject well be drilled as close to the east lease line as possible in order to assure maximum probability of encountering the Pennsylvanian horizons in a structurally favorable position, thereby affording the best chance of establishing commercial production. Therefore, approval of this application will prevent the economic loss caused by drilling unnecessary wells and is otherwise in the interest of conservation by the prevention of waste and protection of correlative rights.

If there are any question concerning this matter, please contact Larry Sheppard (713/556-3928) of our Houston Region - West Proration Section.

Yours very truly,

A handwritten signature in cursive script, appearing to read "R. L. Smith".

LWS/cag  
1190/J

Attachment

cc: Chevron USA, Inc.  
700 South Colorado Blvd.  
P. O. Box 599  
Denver, CO 80201

Chevron USA, Inc.  
800 Wall Towers East Building  
P. O. Box 1660  
Midland, TX 79702

State of New Mexico  
October 26, 1982  
Page 4

Coquina Oil Corporation  
400 North Marienfeld  
P. O. Drawer 2960  
Midland, TX 79702

Monsanto Company  
1330 Midland National Bank Tower  
500 West Texas  
Midland, TX 79701

State of New Mexico  
Energy and Mineral Department  
Oil Conservation Division  
P. O. Box 1980  
Hobbs, NM 88240

Inexco Oil Company  
1100 Milam Building  
Suite 1900  
Houston, TX 77002

Mineral Management Services  
P. O. Drawer 1897  
Roswell, NM 88201

Mineral Management Services  
505 Marquette Avenue  
NW #815  
Albuquerque, NM 87102

Attention: Mr. Gene F. Daniels

OFFSET OPERATORS

NORTH OFFSET

Coquina - No Wells

NORTHWEST AND WEST OFFSET

Inexo - No Wells

SOUTHWEST OFFSET

Monsanto - No Wells

SOUTH OFFSET

Coquina - No Wells

SOUTHEAST OFFSET

Chevron - No Wells

EAST AND NORTHEAST OFFSET

Chevron Bogle Flats Unit No. 9  
Indian Basin Upper Penn Field

LWS/cag  
1190/L

Amoco Production Company

EXHIBIT NO. 7  
DOCKET NO. N/A  
DATE 10/26/82

<p>25 Inexco Marathon DIA 10 19 66</p>	<p>25 ERTINSLEY III 10 1 81 44503</p> <p>Inexco Majoras-Fed TORIO DIA 10 19 66</p>	<p>30 Marathon Fed DIA 10 19 66</p>	<p>29 Marathon DIA 10 19 66</p>	<p>28 C.C.M.</p>	<p>27 Indian Basin US</p>
<p>35 Inexco 2 1 90 29597</p>	<p>36 Morton Maiores DIA 10 19 66</p>	<p>31 R G Monagan DIA 10 19 66</p>	<p>32 Monsanto DIA 10 19 66</p>	<p>33 Chevron DIA 10 19 66</p>	<p>34 Indian Basin US</p>
<p>2 Coquina DIA 10 19 66</p>	<p>1 Chevron DIA 10 19 66</p>	<p>6 Weaver DIA 10 19 66</p>	<p>5 Bogie Flats Unit US</p>	<p>4 Chevron DIA 10 19 66</p>	<p>Amoco DIA 10 19 66</p>
<p>11 Inexco DIA 10 19 66</p>	<p>12 Inexco DIA 10 19 66</p>	<p>7 Chevron DIA 10 19 66</p>	<p>8 Bogie Flats US</p>	<p>9 Chevron DIA 10 19 66</p>	<p>10 Bogie Flats Unit US</p>
<p>14 Inexco DIA 10 19 66</p>	<p>13 Inexco DIA 10 19 66</p>	<p>18 Coquina DIA 10 19 66</p>	<p>17 Mobil DIA 10 19 66</p>	<p>16 Chevron DIA 10 19 66</p>	<p>22 Sage Flats State</p>
<p>23 Inexco DIA 10 19 66</p>	<p>24 Amoco DIA 10 19 66</p>	<p>19 Amoco DIA 10 19 66</p>	<p>20 Mobil DIA 10 19 66</p>	<p>21 Prudential DIA 10 19 66</p>	<p>22 Hebing Fed US</p>
<p>26 Inexco DIA 10 19 66</p>	<p>25 Amoco DIA 10 19 66</p>	<p>30 Amoco DIA 10 19 66</p>	<p>29 Mobil DIA 10 19 66</p>	<p>28 S.P. Martin Yates DIA 10 19 66</p>	<p>27 S.P. Martin Yates DIA 10 19 66</p>
<p>35 New Mexico Oil DIA 10 19 66</p>	<p>36 Monsanto DIA 10 19 66</p>	<p>31 Coquina DIA 10 19 66</p>	<p>30 Mobil DIA 10 19 66</p>	<p>29 S.P. Martin Yates DIA 10 19 66</p>	<p>34 S.P. Martin Yates DIA 10 19 66</p>
<p>35 New Mexico Oil DIA 10 19 66</p>	<p>36 Inexco DIA 10 19 66</p>	<p>31 Monsanto DIA 10 19 66</p>	<p>30 Mobil DIA 10 19 66</p>	<p>29 S.P. Martin Yates DIA 10 19 66</p>	<p>34 Yates Pet DIA 10 19 66</p>
<p>35 New Mexico Oil DIA 10 19 66</p>	<p>36 Monsanto DIA 10 19 66</p>	<p>31 Monsanto DIA 10 19 66</p>	<p>30 Mobil DIA 10 19 66</p>	<p>29 S.P. Martin Yates DIA 10 19 66</p>	<p>34 Yates Pet DIA 10 19 66</p>

Amoco Production Company

EXHIBIT NO. 1  
DOCKET NO. N/A  
DATE 10/26/82 33

Ralph  
Mobil  
DIA  
DATE

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

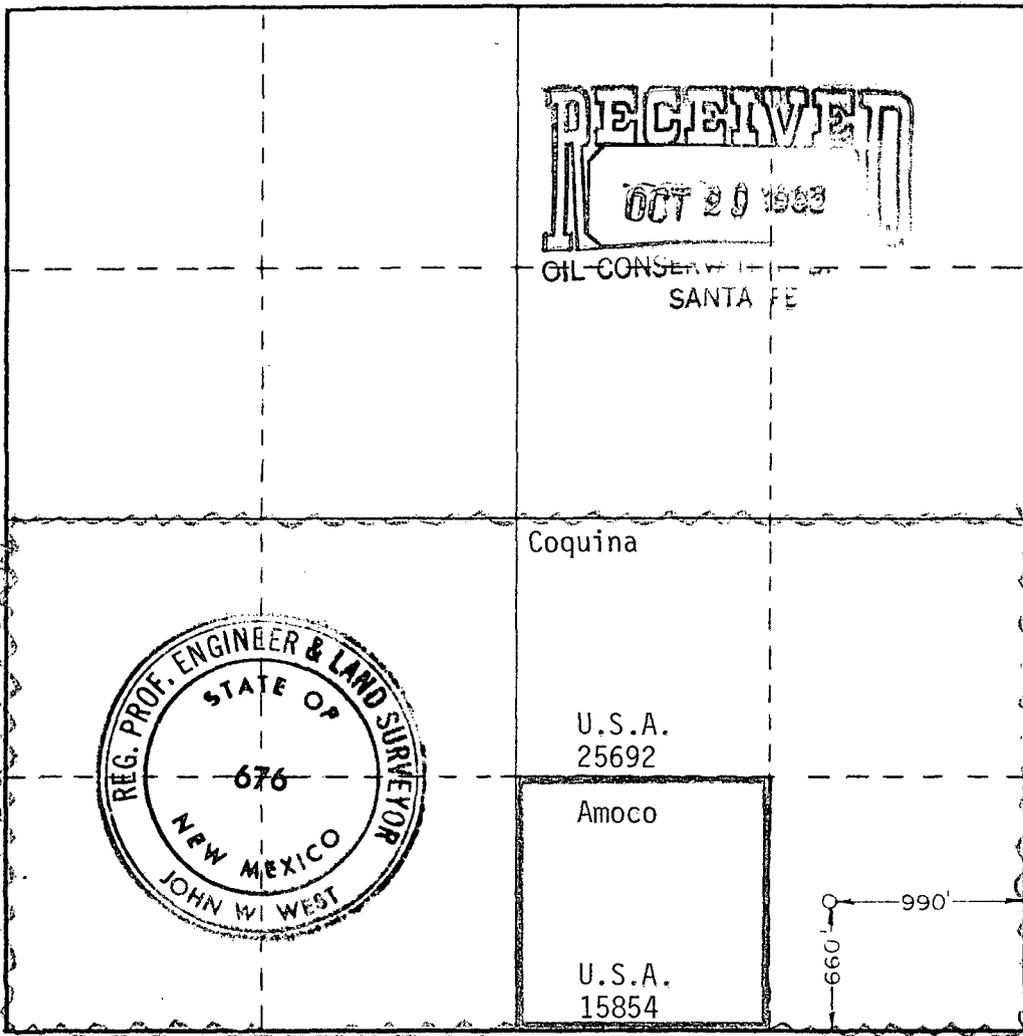
Operator <b>AMOCO PRODUCTION COMPANY</b>		Lease <b>FEDERAL CY GAS COM.</b>		Well No. <b>1</b>
Unit Letter <b>P</b>	Section <b>18</b>	Township <b>22 SOUTH</b>	Range <b>23 EAST</b>	County <b>EDDY</b>
Actual Footage Location of Well: <b>660</b> feet from the <b>SOUTH</b> line and <b>990</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>4273.8</b>	Producing Formation <b>Morrow</b>	Pool <b>Wildcat</b>	Dedicated Acreage: <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

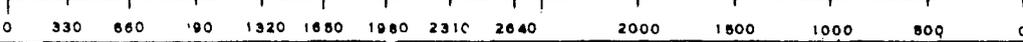
If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name	Larry W. Sheppard <i>[Signature]</i>
Position	Staff Petroleum Engineer
Company	Amoco Production Company (USA)
Date	October 26, 1982
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	10/26/82
Registered Professional Engineer and/or Land Surveyor	<i>[Signature]</i>
Certificate No.	JOHN W. WEST 676 PATRICK A. ROMERO 6668 Ronald J. Eidson 3239

EXHIBIT NO. 2  
DOCKET NO. N/A  
DATE 10/26/82

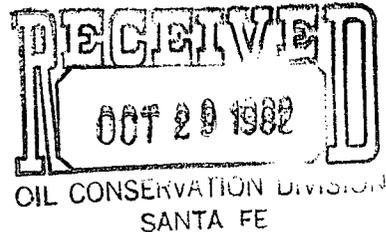




Amoco Production Company  
Houston, Texas

September 24, 1982

Re: Justification of Location  
Federal "CY" Com. No. 1  
660' FSL & 990' FEL Sec. 18, T-22-S, R-23-E  
Indian Basin Field  
Eddy County, New Mexico



Memorandum To File

The structure of the top of the Cisco Formation is shown on Exhibit 5. A large anticlinal feature trends south-southwesterly from the Indian Basin field. This anticline was subsequently cut by a north-south trending normal fault, with the west side being downthrown. The proposed well is located near the crest of the structure on the downthrown (west) side of the fault.

The Morrow and Cisco Formations are the producing horizons in the Indian Basin field. Production is structurally controlled. A discussion of the Morrow and the Cisco follows.

Morrow: Morrow production is from a number of sand bodies which have proven to be wet in a down-dip direction. Therefore, a location at the crest of the structure should provide the best possibility of finding commercial quantities of hydrocarbon gas.

Cisco: The Cisco Formation produces from a clean, porous carbonate near the top of the formation. This clean carbonate may be traced over the entire field with little variation. Structure is essential for production from the Cisco. As may be seen from the production and structure maps (Exhibits 4 and 5), production falls off rapidly in a down-dip direction. Therefore, a location at the crest of the structure is extremely important.

Conclusions

An unorthodox location of 660' FSL and 990' FEL results in the best structural position to encounter productive Morrow and Cisco sections.

Amoco Production Company

Steve Terry

ST/cdb

EXHIBIT NO. 3  
DOCKET NO. N/A  
DATE 10/26/82



1594

**Amoco Production Company (USA)**

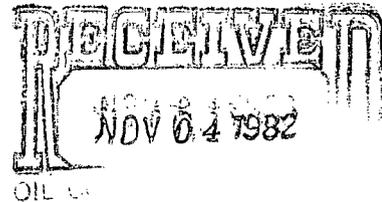
Houston Region-West  
500 Jefferson Building  
Post Office Box 3092  
Houston, Texas 77001

R. G. Smith  
Regional Engineering  
Manager-West

October 29, 1982

File: JCA-986.51-3338

Re: Simultaneous Acreage Dedication  
and Unorthodox Drilling Location  
State "A-6" No. 2  
Lea County, New Mexico



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

Gentlemen:

Doyle Hartman has filed an application for simultaneous dedication of 160 acres consisting of the SW/4, Section 6, T-19-S, R-37-E, Lea County, New Mexico to be dedicated to their existing State "A-6" No. 1 and State "A-6" No. 2 and for authority to drill State "A-6" Well No. 2 at an unorthodox Eumont gas location 330' FSL and 1650' FWL of Section 6.

As an offset operator Amoco Production Company has no objection to Doyle Hartman's application as stated above.

Yours very truly,

MLC/sm

cc: Doyle Hartman  
P. O. Box 10426  
Midland, TX 79702



1609

OCT 29 1982

**Amoco Production Company (USA)**

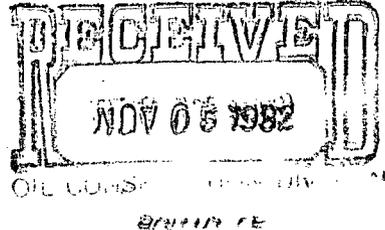
Houston Region-West  
500 Jefferson Building  
Post Office Box 3092  
Houston, Texas 77001

R. G. Smith  
Regional Engineering  
Manager-West

October 27, 1982

File: JCA-986.51NM-3336

Re: Request for Waiver of Objection  
Unorthodox Location  
Federal "CY" Com No. 1  
Wildcat Morrow  
Eddy County, New Mexico



Addressee List Attached

Gentlemen:

Amoco Production Company (USA) has made application with the State of New Mexico Oil Conservation Division for administrative approval of an unorthodox gas well location. A copy of this application is attached for your information. In order to expedite the approval of the said application, we request you, as an offset operator, provide a waiver of objection in regards to this matter. To do this, please sign one copy of this letter and forward to:

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

Attention: Mr. Joe D. Ramey

Your cooperation in this matter is appreciated. If we can be of any assistance, please contact Larry Sheppard (713/556-3928) in our Houston Region-West Proration Section.

Yours very truly,

LWS/mes  
886/J

Attachment

File: JCA-986.51NM-3336  
October 27, 1982  
Page 2

We the undersigned, as an offset operator to the proposed unorthodox location, hereby waiver any objection to the same.

Company: Coguisa Oil Corporation  
Authorized By: L. E. Opper  
Date: 11-1-82

ADDRESSEE LIST  
FOR  
OFFSET OPERATORS

Chevron USA, Inc.  
700 South Colorado Blvd.  
P. O. Box 599  
Denver, CO 80201

Chevron USA, Inc.  
800 Wall Towers East Building  
P. O. Box 1660  
Midland, TX 79702

Coquina Oil Corporation  
400 North Marienfeld  
P. O. Drawer 2960  
Midland, TX 79702

Inexco Oil Company  
1100 Milam Building  
Suite 1900  
Houston, TX 77002

Monsanto Company  
1330 Midland National Bank Tower  
500 West Texas  
Midland, TX 79701

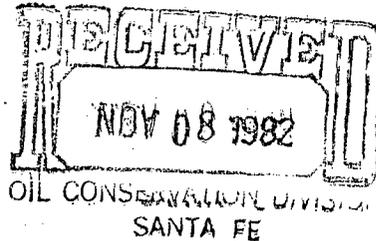


INEXCO OIL COMPANY

October 29, 1982

Amoco Production Company (USA)  
P.O. Box 3092  
Houston, Texas 77001

Att: R.G. Smith  
Regional Engineering



Re: Unorthodox Location  
Federal CY Com No. 1  
Wildcat Morrow  
Eddy County, New Mexico  
N. Arroyo NM 148

Gentlemen:

Please be advised that Inexco's leasehold interest in the area near the referenced location has expired and returned to federal inventory. However, had we still owned an interest we would have had no objections to your location.

Very truly yours,

  
L.J. Tacconi  
Area Landman

LJT/bkb

CC/ State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501  
Att: Joe D. Ramey

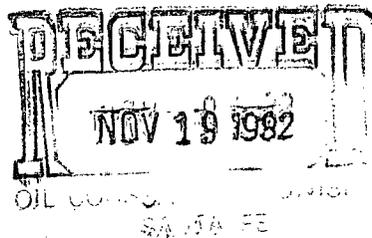
File: JCA-986.51NM-3336  
October 27, 1982  
Page 2

We the undersigned, as an offset operator to the proposed unorthodox location, hereby waiver any objection to the same.

Company: MONSANTO OIL COMPANY

Authorized By: *[Signature]*

Date: 11/16/82



File: JCA-986.51NM-3336  
October 27, 1982  
Page 2

We the undersigned, as an offset operator to the proposed unorthodox location, hereby waiver any objection to the same.

Company: CHEVRON U.S.A. INC.

Authorized By: W. A. Goudeau

Date: W. A. GOUDEAU  
AREA SUPERINTENDING 11/3/82

