STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO
87501

ADMINISTRATIVE ORDER

NFL 37

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator Amerada Hess Corporation Well Name and No. State WE "B" Well No. 6

Location: Unit C Sec. 1 Twp. 21-S Rng. 35-E Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.

(2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is completed in the Eumont Gas Pool, and the standard spacing unit in said pool is 640 acres.

(4) That a 118 -acre proration unit comprising Lots 3, 5 and 6 of Sec. 1, Twp. 21-S, Rng. 35-E, is currently dedicated to the State WE "B" Well No. 3 located in Unit F of said section.

(5) That this proration unit is ( ) standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-1182.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 1,670 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on this 12th day of March, 19 82.

DIVISION DIRECTOR X EXAMINER ___

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO
87501

ADMINISTRATIVE ORDER
NFL 37

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator Amerada Hess Corporation Well Name and No. State WE "B" Well No. 6

Location: Unit C Sec. 1 Twp. 21-S Rng. 35-E Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.

(2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is completed in the Eumont Gas Pool, and the standard spacing unit in said pool is 640 acres.

(4) That a 118 -acre proration unit comprising Lots 3, 5 and 6 of Sec. 1, Twp. 21-S, Rng. 35-E, is currently dedicated to the State WE "B" Well No. 3 located in Unit F of said section.

(5) That this proration unit is ( ) standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-1182.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 1,670 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on this 12th day of March, 19 82.

DIVISION DIRECTOR X EXAMINER ____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

July 9, 1984

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

U.S. Department of Energy
Federal Energy Regulatory Commission
825 North Capitol
Washington, D.C. 20426

Attention: Brooks Carter

RE: N.G.P.A. Section 103 Determination
Amerada Gess Corporation
State WE "F" Well No. 4,located in
Unit K
F.E.R.C. No. JD 81-4831
A.P.I. No. 30-025-26549
State WE "B" Well No. 6 Located in
Unit C
F.E.R.C. No. JD 81-4833
API No. 30-025-26548
Both Wells in Section 1, Township 21 South
Range 35 East, N.M.P.M., Lea County,
New Mexico.

Dear Mr. Carter:

It was called to my attention recently by Mr. Bob Jones with Amerada Hess Corporation, that a letter dated December 10, 1980 from Mr. Kenneth A. Williams of your office (see attachment) requesting additional information on the two subject wells was not answered. I am therefore submitting to your attention, copies of the approved Infill-Well Findings for the two subject wells.

I appoligize for the delay and for any inconvenience this might have caused. If additional information is required, please contact me.

Sincerely,

Michael E. Stogner

MICHAEL E. STOGNER
Petroleum Engineer

CC: Amerada Hess Corporation
P.O. Box 2040
Tulsa, Oklahoma 74102

Attn: Bob Jones

AMERADA HESS CORPORATION

P. O. BOX 2040
TULSA, OKLAHOMA 74102
918-599-4200

June 25, 1984

JUL 5 1984

RECEIVED

Mr. Michael Stogner
New Mexico Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 97501

Re: NGPA Section 103
Well Determination Applications:
State WE "F" 4 (JD 81-4831)
State WE "B" 6 (JD 81-4833)

Dear Mr. Stogner:

In accordance with your request by telephone on June 25, 1984, enclosed is one (1) copy of a letter dated December 10, 1980 from the FERC to your office regarding a request for additional information on the above referenced wells.

You stated during said telephone conversation that you have located a commission order which approves the infill drilling of the State WE "F" #4 and State WE "B" #6 wells. Please send me a copy of said orders.

I would appreciate your early compliance with the FERC request for information dated December 10, 1980.

Thank you for your assistance.

Very truly yours,

AMERADA HESS CORPORATION

Bob Jones

Bob Jones
Sr. Gas Sales Representative

RMJ:dd
Enclosure

cc: Mr. Keith Butler

Federal Energy Regulatory Commission
825 North Capitol Street N.E.
Washington D.C. 20426
Attn: Mr. Brooks Carter

✓ x Copy M. Adamson

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON 20426

IN REPLY REFER TO:

OPPR/NGPA/N860A

DEC 1 1 1980

Mr. Joe D. Ramey
Director, State of
New Mexico
Energy and Minerals
Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 97501

1981 JAN -5 P.M.

Re: Determination of Maximum Lawful Price Under NGPA Section 103 for:
Amerada Hess Corporation
State WE "F" 4
FERC No. JD81-4831
API No. 30-025-26549
State WE "B" 6
FERC No. JD81-4833
API No. 30-025-26548

Dear Mr. Ramey:

On November 5, 1980, the Commission received your notices of determination that the above-referenced wells qualified as new onshore production wells pursuant to Section 103 of the NGPA.

In each application supporting the referenced determinations, Amerada Hess Corporation has indicated that the subject well is the second well in a proration unit, and has submitted a request for a finding that the subject well is necessary to effectively and efficiently drain the respective unit. Neither determination contains such a finding by your agency.

Section 271.305(d) of the Commission regulations as promulgated by Order No. 43-A, issued on November 16, 1979, establishes a rebuttable presumption, for the purposes of Section 103(c)(3)(C) of the NGPA, that a well has not produced and is not capable of producing natural gas in commercial quantities on or after January 1, 1970, if it was plugged and abandoned prior to January 1, 1970, and has not produced natural gas on or after that date. In all other cases, when the subject well is the second well in a proration unit, the jurisdictional agency must make a finding (in accordance with Section 271.305(b) of the regulations) that the well was necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which could not be effectively and efficiently drained by any existing well within the proration unit. Such a finding was

not included with the determinations in this case, and therefore they are incomplete. Sections 271.305(b)(1) and 274.204(f) of the regulations require that such a finding must be based on appropriate geological and engineering data and that such data must be included in the notice of determination submitted to the Commission.

Pursuant to Section 274.104(a)(6), we request that your agency furnish us with an explanatory statement, including the appropriate factual findings, which would provide sufficient information to ascertain the basis for determining that the subject wells qualify under Section 103. Alternatively, an effective and efficient finding by your agency may be submitted pursuant to Section 271.305 of the regulations.

The 45-day period for Commission review will not commence until either an explanatory statement or an effective and efficient finding is received.

Very truly yours,

Kenneth A. WIlliams
Director
Office of Pipeline and
Producer Regulation

cc: Amerada Hess Corporation
P. O. Box 2040
Tulsa, Oklahoma 74102

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-132
Revised 7-15-80

APPLICATION FOR WELLHEAD PRICE CEILING CATEGORY DETERMINATION

1. FOR DIVISION USE ONLY:	5A. Indicate Type of Lease: STATE [X] FEE [ ]
DATE COMPLETE APPLICATION FILED 9/12/80	5. State Oil & Gas Lease No.: E -393
DATE DETERMINATION MADE 10/20/80	
WAS APPLICATION CONTESTED? YES ____ NO ✓	7. Unit Agreement Name: State WE "F"
NAME(S) OF INTERVENOR(S), IF ANY:	8. Farm or Lease Name: State WE "F"
2. Name of Operator: Amerada Hess Corporation	9. Well No.: 4
3. Address of Operator: 1200 Milam Street, 6th Floor, Houston, Texas 77002	10. Field and Pool, or Wildcat: Eumont
4. Location of Well: UNIT LETTER K LOCATED 3420 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE OF SEC. 1 TWP. 21S RGE. 35E NMPM	12. County: Lea
11. Name and Address of Purchaser(s): El Paso Natural Gas Company, P. O. Box 1492, El Paso, Texas 79978	

WELL CATEGORY INFORMATION

Check appropriate box for category sought and information submitted.

RECEIVED
SEP 15 1980
Oil Conservation

1. Category(ies) Sought (By NGPA Section No.) 103
2. All Applications must contain:
   - [X] a. C-101 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK
   - [X] b. C-105 WELL COMPLETION OR RECOMPLETION REPORT
   - [ ] c. DIRECTIONAL DRILLING SURVEY, IF REQUIRED UNDER RULE 111
   - [X] d. AFFIDAVITS OF MAILING OR DELIVERY
3. In addition to the above, all applications must contain the items required by the applicable rule of the Division's "Special Rules for Applications For Wellhead Price Ceiling Category Determinations" as follows:
   - A. NEW NATURAL GAS UNDER SEC. 102(c)(1)(B) (using 2.5 Mile or 1000 Feet Deeper Test)
     - [ ] All items required by Rule 14(1) and/or Rule 14(2)
   - B. NEW NATURAL GAS UNDER SEC. 102(c)(1)(C) (new onshore reservoir)
     - [ ] All items required by Rule 15
   - C. NEW ONSHORE PRODUCTION WELL
     - [X] All items required by Rule 16A or Rule 16B
   - D. DEEP, HIGH-COST NATURAL GAS and TIGHT FORMATION NATURAL GAS
     - [ ] All items required by Rule 17(1) or Rule 17(2)
   - E. STRIPPER WELL NATURAL GAS
     - [ ] All items required by Rule 18

RECEIVED
OCT 12 1980
Oil Conservation

RECEIVED
SEP 15 1980
OIL CONSERVATION DIVISION
SANTA FE

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

D. W. Cook
NAME OF APPLICANT (Type or Print)

D. W. Cook
SIGNATURE OF APPLICANT

Title Vice President

Date 9-11-80

FOR DIVISION USE ONLY

[✓] Approved

[ ] Disapproved

The information contained herein includes all of the information required to be filed by the applicant under Subpart B of Part 274 of the FERC regulations.

EXAMINER

OIL CONSERVATION DIVISION
P. O. BOX 2088
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
SANTA FE, NEW MEXICO 87501

Form C-132
Revised 7-15-80

APPLICATION FOR WELLHEAD PRICE CEILING CATEGORY DETERMINATION

FOR DIVISION USE ONLY:
DATE COMPLETE APPLICATION FILED 9/12/80
DATE DETERMINATION MADE 10/20/80
WAS APPLICATION CONTESTED? YES ____ NO ✓
NAME(S) OF INTERVENOR(S), IF ANY:

5A. Indicate Type of Lease: STATE [X] FEE [ ]
5. State Oil & Gas Lease No.: E-392
7. Unit Agreement Name:
8. Farm or Lease Name: State WE "B"
9. Well No.: 6
10. Field and Pool, or Wildcat: Eumont Yates,7R Queen
12. County: Lea

2. Name of Operator: Amerada Hess Corporation
3. Address of Operator: 1200 Milam Street, 6th Floor, Houston, Texas 77002
4. Location of Well: UNIT LETTER C LOCATED 780 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE OF SEC. 1 TWP. 21S RGE. 35E NMPM
11. Name and Address of Purchaser(s): El Paso Natural Gas Company, P. O. Box 1492, El Paso, Texas 79978

WELL CATEGORY INFORMATION

Check appropriate box for category sought and information submitted.

1. Category(ies) Sought (By NGPA Section No.) 103
2. All Applications must contain:
   - [X] a. C-101 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK
   - [X] b. C-105 WELL COMPLETION OR RECOMPLETION REPORT
   - [ ] c. DIRECTIONAL DRILLING SURVEY, IF REQUIRED UNDER RULE 111
   - [X] d. AFFIDAVITS OF MAILING OR DELIVERY
3. In addition to the above, all applications must contain the items required by the applicable rule of the Division's "Special Rules for Applications For Wellhead Price Ceiling Category Determinations" as follows:
   - A. NEW NATURAL GAS UNDER SEC. 102(c)(1)(B) (using 2.5 Mile or 1000 Feet Deeper Test)
     - [ ] All items required by Rule 14(1) and/or Rule 14(2)
   - B. NEW NATURAL GAS UNDER SEC. 102(c)(1)(C) (new onshore reservoir)
     - [ ] All items required by Rule 15
   - C. NEW ONSHORE PRODUCTION WELL
     - [X] All items required by Rule 16A or Rule 16B
   - D. DEEP, HIGH-COST NATURAL GAS and TIGHT FORMATION NATURAL GAS
     - [ ] All items required by Rule 17(1) or Rule 17(2)
   - E. STRIPPER WELL NATURAL GAS
     - [ ] All items required by Rule 18

RECEIVED
OCT 12 1980
Oil Conservation

RECEIVED
SEP 1 1980
OIL CONSERVATION DIVISION
SANTA FE

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

D. W. Cook
NAME OF APPLICANT (Type or Print)

SIGNATURE OF APPLICANT

Title Vice President

Date 9-11-80

FOR DIVISION USE ONLY

[ ] Approved
[ ] Disapproved

The information contained herein includes all of the information required to be filed by the applicant under Subpart B of Part 274 of the FERC regulations.

EXAMINER

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO
87501

ADMINISTRATIVE ORDER
NFL 37

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator Amerada Hess Corporation Well Name and No. State WE "B" Well No. 6

Location: Unit C Sec. 1 Twp. 21-S Rng. 35-E Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.

(2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is completed in the Eumont Gas Pool, and the standard spacing unit in said pool is 640 acres.

(4) That a 118 -acre proration unit comprising Lots 3, 5 and 6 of Sec. 1, Twp. 21-S, Rng. 35-E, is currently dedicated to the State WE "B" Well No. 3 located in Unit F of said section.

(5) That this proration unit is ( ) standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-1182.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 1,670 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on this 12th day of March, 19 82.

DIVISION DIRECTOR X EXAMINER ____

OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO
87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

ADMINISTRATIVE ORDER

NFL 36

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator AMERADA HESS CORPORATION Well Name and No. State WE "F" Well No. 4

Location: Unit K Sec. 1 Twp. 21-S Rng. 35-E Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.

(2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is completed in the Eumont Gas Pool, and the standard spacing unit in said pool is 640 acres.

(4) That a 160 -acre proration unit comprising the SW/4 of Sec. 1, Twp. 21-S, Rng. 35-E, is currently dedicated to the State WE "F" Well No. 1 located in Unit N of said section.

(5) That this proration unit is ( ) standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-1181.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 3,350 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on this 12th day of March, 19 82.

DIVISION DIRECTOR _____ EXAMINER _____

AMERADA HESS CORPORATION

P. O. BOX 2040
TULSA, OKLAHOMA 74102
918-584-5554

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Request for Administrative NGPA infill well finding, State WE "B" Well No. 6, Eumont Gas Pool, Lea County.

Attn: Mr. R. L. Stamets
Technical Support Chief

Gentlemen:

The Amerada Hess Corporation respectfully requests that an administrative finding be made under the Oil Conservation Division Order R-6013 that the drilling of the AHC State WE "B" No. 6 infill well was necessary to effectively and efficiently drain a portion of the Eumont Gas Pool (Yates, Seven Rivers and Queen formations) covered by a proration unit which cannot be drained by any existing well within the unit.

The following data is submitted to comply with the filing requirements of the order:

1. (Rule 5.) A copy of the approved Form C-101 for the infill well and Form C-102 showing the proration unit dedicated to the infill well is attached.

2. (Rule 6.) The standard proration unit size for the Eumont Gas Pool is 640 acres as designated by Order R-521, dated August 12, 1954, succeeded by Order R-1670.

3. (Rule 7.) The non-standard proration unit dedicated to the subject well was approved by Division Order NSP-1182, dated April 4, 1980.

4. (Rule 8.) There are two wells drilled on this proration unit that are, or have been completed in the Eumont Gas Pool. The data on the first well is as follows:

a. The State WE "B" Well No. 3, located 1980' FNL and 1980' FWL Sec. 1-21S-35E, Lea County.
b. Spud date: August 1, 1954.
c. Completion date: August 21, 1954.
d. The Eumont Gas zone is the annular completion of an oil zone-gas zone dually completed well, producing through the 3-1/2" tubing and 7" casing annular area. This completion has been a low volume producer throughout the history of the well.

e.,f. The well produced an average of 26 Mcf/day during June, 1980.

g. The well-head pressure of the State WE "B" No. 3 has declined to near the gathering system pressure and the well is incapable of draining all of the reserves covered by this proration unit. The geological and reservoir data discussion that follows the data information on Well No. 6 indicates that Well No. 3 will be capable of effectively and efficiently draining only 1.15 Bcf of the estimated 2.82 Bcf of recoverable gas underlying this proration unit.

The data on the second (infill) well completed in the Eumont Gas Pool on this proration unit is as follows:

a. The State WE "B" No. 6, located 780' FNL and 1980' FWL Sec. 1-21S-35E, Lea County.

b. Spud date: January 12, 1980.

c. Completion date: February 26, 1980.

d. This well was completed by the open hole method using gas as the drilling fluid. A comparison of the permeability-thickness (kh) calculations at initial conditions on both wells on the unit indicate a higher value for the infill Well No. 6. This higher value may be due to the open hole completion method resulting in a higher permeability and/or additional productive stringers contributing to the production in the new well.

e.,f. Well No. 6 has been shut-in since completion waiting on the recent sales line connection. The well has a shut-in tubing pressure of 624 psi and an indicated open flow potential of 441 Mcf/day.

g. It is apparent from a projection of the producing history of the first well in this proration unit that only 1.15 Bcf of the total calculated recoverable 2.82 Bcf underlying the unit can be produced by that well before the flowing pressure declines to the sales line pressure. The higher shut-in pressure and better permeability encountered in Well No. 6 indicates that it has the potential of producing the calculated 1.67 Bcf of gas remaining under the unit. In addition, Well No. 6 is approximately 30' higher on structure than Well No. 3 and in a more advantageous location to drain the remaining reserves underlying the unit.

5. (Rule 9.) Geological and reservoir information presented in support of a finding as to the necessity for an infill well includes:

a. A Yates formation structure map with the subject proration unit outlined is attached.

b. It is anticipated that the State WE "B" Well No. 6 will recover 1.67 Bcf of gas that could not be recovered by the existing gas well on the proration unit. This increase was determined from the difference of the volumetric calculation of the recoverable gas reserves contained in this 118 acre proration unit and the estimated ultimate reserves that can be recovered from Well No. 3, described as follows:

1. One accepted method of reserve determination for a volumetric (depletion-type) gas reservoir is the application of the principle of conservation of mass in the standard material balance equation:

$$G_i = Q_t \frac{(P_i/Z_i)}{P_i/Z_i - P_t/Z_t}$$

The solution of this equation at any time, t, and cumulative gas production, Q_t, will result in a single value for original gas in place, G_i. Values for G_i derived from calculations at different times may be averaged to determine an average value of the original gas in place.

A more convenient expression of the equation is:

$$P_t/Z_t = P_i/Z_i - CQ_t, \text{ where } C = \frac{(P_i/Z_i)}{G_i}$$

A indicated by the equation, a graph on coordinate paper of BHP/Z vs cumulative gas production will yield a linear plot. Extrapolation of a best fitting straight line to a zero value of P_t/Z_t will determine the gas-in-place in the reservoir. Recoverable gas would be a fraction of this amount as dictated by the abandonment pressure.

The Eumont Gas Pool has performed as a depletion-type reservoir as is demonstrated by the linear plot of P/Z vs cumulative production on Well No. 3 included in the attached. As this decline indicates no departure from its established trend, it can be assumed that the drainage volume of the well has remained constant and it is reasonable to expect it will not change in the short remaining life of the well. An extrapolation of the trend to the abandonment pressure of 75 psi dictated by the sales line pressure in the area indicates the well could have recovered an ultimate 1.15 Bcf of gas before the well was unable to flow into the sales line.

2. A volumetric calculation of the recoverable gas reserves contained in this 118 acre proration unit is included in the attached. The calculations yields an estimation of 2.82 Bcf for the unit which is 1.67 Bcf more than the above estimated ultimate gas recovery from Well No. 3.

c. A cummulative production/pressure decline curve for Well No. 3 is attached.

d. Calculations for initial recoverable gas and permeability-thickness calculations for Well No. 3 and Well No. 6 are also attached.

6. (Rule 11.) All operators of proration units offsetting the unit for which this infill finding is sought has been notified of this application by certified mail.

Thank You,
Amerada Hess Corporation

Gilbert E. Miller

Gilbert E. Miller
Conservation Supervisor

GEM:ds

Reserve Calculations
State WE "B" Well No. 3
160-Acre Proration Unit

Initial recoverable gas in unit, G_i:

$$G_i = 43560\ A\ h\ \emptyset\ (1 - SW)\ Bg_i\ R$$
$$= 43560\ (118)(64)(.156)(1 - .271)(83.66)(.9)$$
$$= 2.82\ Bcf$$

Where:

Area (a) = 118 acres
Net pay thickness (h) = 64' average
Porosity ($\emptyset$) = 15.6%
Water Saturation (SW) = 27.1%
Initial reservoir pressure = 1100 psi
Gas gravity = .65
Formation temperature = 100°F
Initial compressibility factor (Z_i) = .83
Recovery efficiency (R) = 90%
Reservoir volume factor (Bg_i) = 83.66 scf/ft^3

from: $$Bg_i = 35.35 \frac{P_i}{Z_i\ T_i}$$

$$= 35.35 \frac{1100}{.83(560)} = 83.66$$

Permeability Calculations
State WE "B" Well No. 3
Eumont Field, Lea County

1. $AOF = Q\left[\frac{P_c^2}{P_c^2-P_w^2}\right]^n$

$1.080 = .687\left[\frac{1210}{1158}\right]^n$

$n = .87$

$AOF = 1.08$ MMcfd
$Q = .687$ MMcfd
$P_c = 1100$ psi
$P_w = 228$ psi
data from 1954 test

2. $Q = C(P_c^2-P_w^2)^n$

$C = 1.484 \times 10^{-3}$

3. (a) $Q = \frac{C\pi\ kh\ (P_c^2-P_w^2)\ T_b}{\mu\ P_b\ \ln\left(\frac{re}{rw}\right)\ T_f\ Z}$

$T_b = 60^oF = 520$ R
$\mu = 0.01$
$P_b = 15.025$
$\ln \frac{re}{rw} = \frac{1320}{.292} = 8.416$
$T_f = 568$ R
$Z = 0.947$

(b) $kh = \frac{687\ (0.01)(15.025)(8.416)\ 568\ (0.947)}{1.484 \times 10^{-3}(\pi)(1158)(520)}$

$kh = \underline{\underline{166}}$ md-ft

Permeability Calculations
State WE "B" Well No. 6
Eumont Field, Lea County

1. $AOF = Q\left[\frac{P_c^2}{P_c^2-P_w^2}\right]^n$

$.441 = .367\left[\frac{406}{330.3}\right]^n$

$n = .893$

$AOF = .441$ MMcfd
$Q = .367$ MMcfd
$P_c = 637$ psi
$P_w = 275$ psi

2. $Q = C(P_c^2-P_w^2)^n$

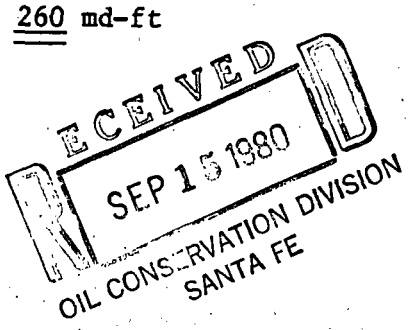
$C = 2.066 \times 10^{-3}$

3. (a) $Q = \frac{C\pi\ kh\ (P_c^2-P_w^2)\ T_b}{\mu\ P_b\ \ln\left[\frac{re}{rw}\right]\ T_f\ Z}$

$T_b = 60^oF = 520$ R
$\mu = 0.01$
$P_b = 15.025$
$\ln \frac{re}{rw} = \frac{990}{.292} = 8.13$
$T_f = 568$ R
$Z = 0.947$

(b) $kh = \frac{441\ (0.01)(15.025)(8.13)\ 568\ (0.947)}{(2.066 \times 10^{-3})\ \pi\ (330.3)\ 520}$

$kh = \underline{260}$ md-ft



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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease STATE [X] FEE [ ]

5. State Oil & Gas Lease No. E-392

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
b. Type of Well
DRILL [X] DEEPEN [ ] PLUG BACK [ ]
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. Unit Agreement Name: State WE"B"

8. Farm or Lease Name: State WE"B"

2. Name of Operator: Amerada Hess Corp.

9. Well No.: 6

3. Address of Operator: Drawer D Monument N.M.

10. Field and Pool, or Wildcat: Eumont

4. Location of Well UNIT LETTER C LOCATED 780 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE OF SEC. 1 TWP. 21S RGE. 35E NMPM

12. County: Lea

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
3400	7-Rivers	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
3555 G.L.	Blanket	Cactus	Dec. 1979

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4	8-5/8		300'	300	Circ.
7-7/8	5-1/2	17#	3150'	4000	Circ.

Drill 12-1/4" hole to 300' and set 8-5/8" casing at 300' and circulate cement. Drill out with 7-7/8" hole to 3150' and set 5-1/2". Drill out from under 5-1/2" with gas to T. D. of 3400'.

Blowout Equipment, consists of 10" Cameron Type "F" series 900 Dbl. Hyd. w/Payne closing unit, gas separator and de-gasser complete w/auto. choke. All BOP equipment will be checked periodically by a Cactus Drlg. Company driller and Amerada Hess well site drilling supervisor.

Gas dedicated to purchaser.

RECEIVED MAR 3 1980 OIL CONSERVATION DIVISION

RECEIVED SEP 15 1980 OIL CONSERVATION DIVISION SANTA FE

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed M Gamson for Title District Engineer Date 11-9-79

(This space for State Use)

APPROVED BY [signature] TITLE SUPERVISOR DISTRICT I DATE NOV 14 1979

CONDITIONS OF APPROVAL, IF ANY:

xc: M Lanman 3-10-80

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	Lease	Well No.
Amerada Hess Corporation	State WE "B"	6

Unit Letter	Section	Township	Range	County
C	1	21-S	35-E	Lea

Actual Footage Location of Well:
780 feet from the North line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3552.6	Seven Rivers Queen	Eumont	118 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

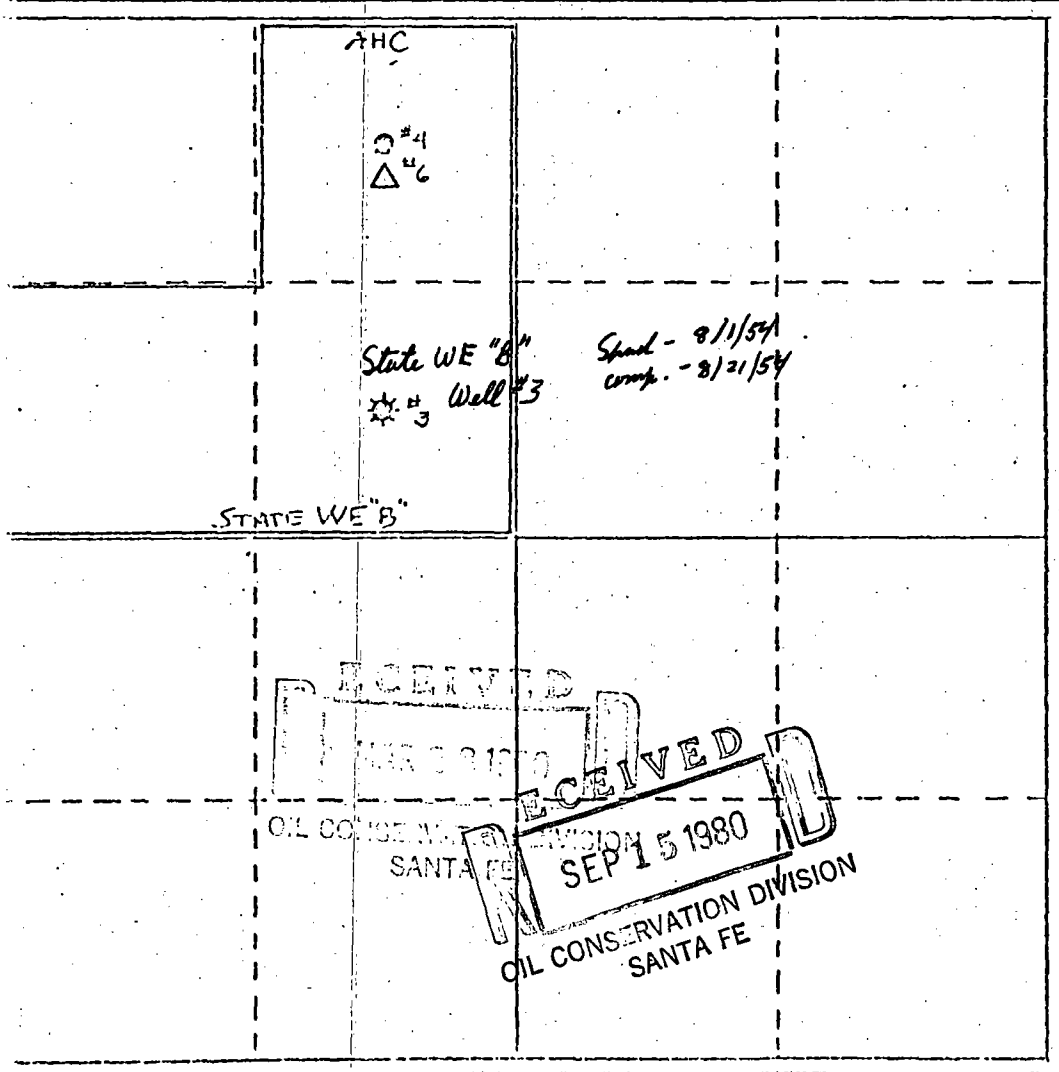
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

Position
District Engineer

Company
Amerada Hess Corporation

Date
November 29, 1979

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.

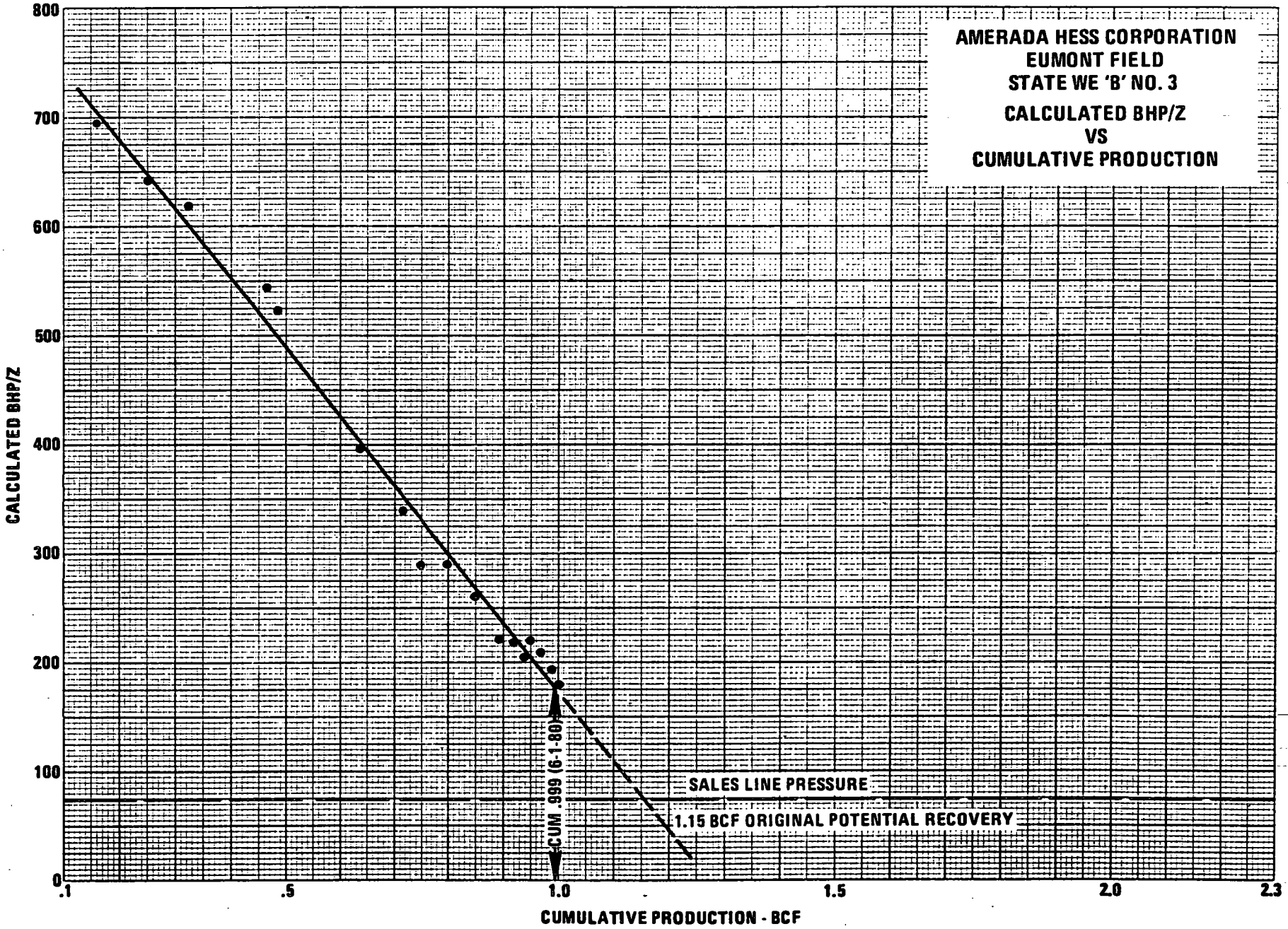
Date Surveyed

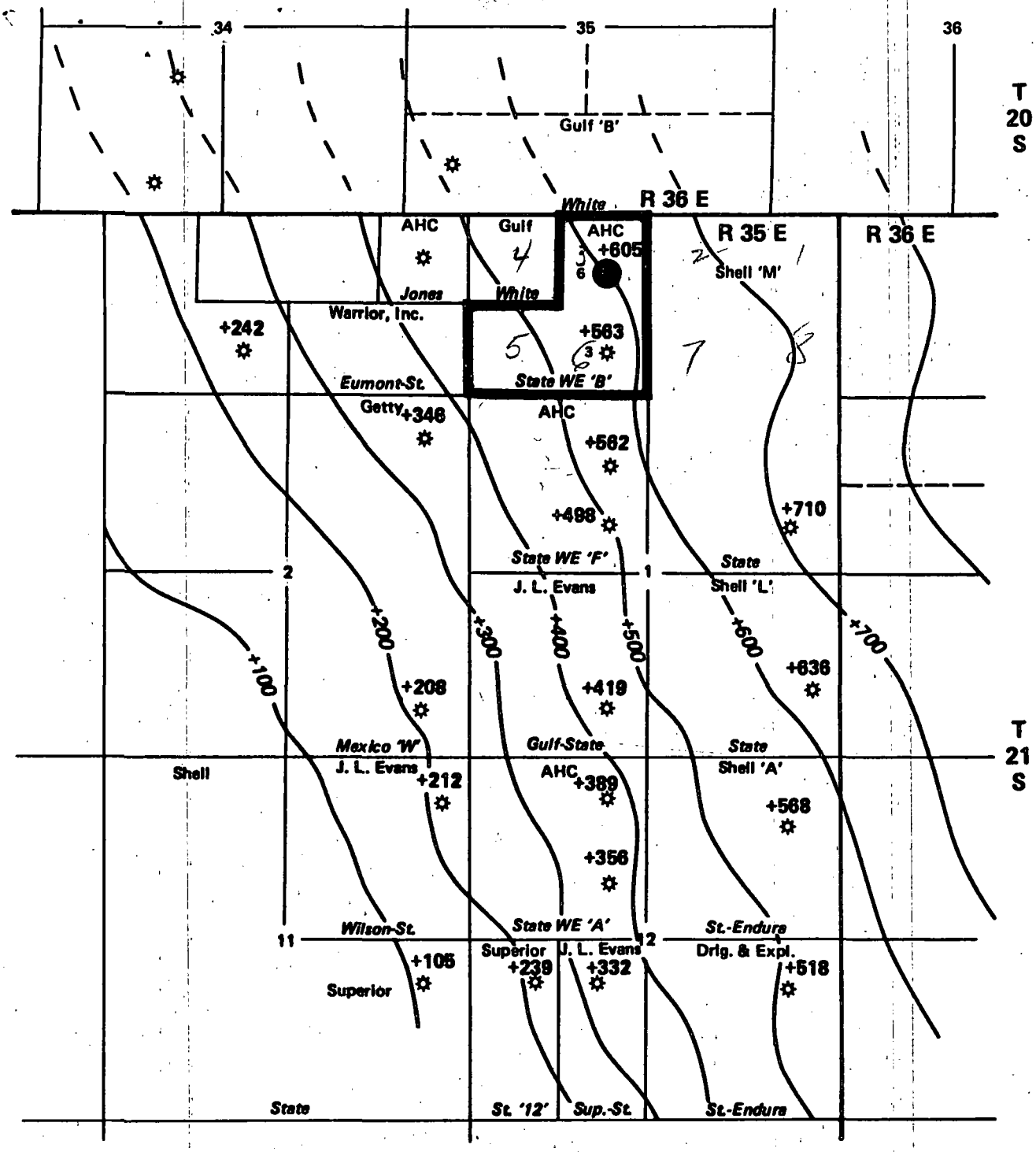
Registered Professional Engineer and/or Land Surveyor

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

xc: M Lennon 9-10-80


AMERADA HESS CORPORATION
EUMONT FIELD
STATE WE 'B' NO. 3
CALCULATED BHP/Z
VS
CUMULATIVE PRODUCTION
CALCULATED BHP/Z
800
700
600
500
400
300
200
100
0
.1
.5
1.0
1.5
2.0
2.3
CUMULATIVE PRODUCTION - BCF
CUM. 999 (6-1-80)
SALES LINE PRESSURE
1.15 BCF ORIGINAL POTENTIAL RECOVERY



Infill Gas Well

Lease Outline

0 1

Scale in Miles

SOUTHWEST PRODUCTION REGION
EUMONT GAS FIELD
STATE WE 'B' LEASE
Lea County, New Mexico

STRUCTURE
TOP/ YATES
Contour Interval = 100'
Geology by P. E. Nelson 8/1/80

ADDRESSES OF OFFSET OPERATORS
STATE WE"B"

Gulf Exploration and Production Co.
Box 670
Hobbs, New Mexico 88240

Getty Oil Co.
Box 730
Hobbs, New Mexico 88240

Shell Oil Co.
Box 1509
Midland, Texas 79702

Warrior, Inc.
Box 17479
Ft. Worth, Texas 76102