

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 Cabot Petroleum Corporation Well Name and No. New Mexico State "U" Well #2

Location: Unit B Sec. 4 Twp. 14S Rng. 33E 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 Baum Upper Pennsylvanian Pool, and the standard spacing unit in said pool is 160 acre
- (4) That a 160-acre proration unit comprising the NE/4 of Sec. 4, Twp. 14S, Rng. 33E, is currently dedicated to the applicant's New Mexico State "U" Well #1 located in Unit G of said section.
- (5) That this proration unit is (X) standard () nonstandard; if nonstandard, said unit was previously approved by Order No. NA.
- (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 150,000 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 11th day of February, 19 86.

Michael E. Stagner
DIVISION DIRECTOR

EXAMINER ✓

cc: OCD Hobbs
NMO&GC Hobbs

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

ADMINISTRATIVE ORDER
NFL 124

Received Jan. 31, 1985
Released Immediately

INFILL DRILLING FINDINGS AND WELL-SPACING WAIVER
MADE 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

I.

Operator Cabot Petroleum Corporation Well Name and No. New Mexico State "U" Well No. 2
Location: Unit B Sec. 4 Twp. 14 South Rng. 33 East Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Interim 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, prior to the commencement of drilling, that the 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, and must grant a waiver of existing well-spacing requirements.

(2) That by Order No. R-6013, dated June 7, 1979, 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 to be completed in the Baum Upper Pennsylvanian Pool, and the standard spacing unit in said pool is 160 acres.

(4) That a 160-acre proration unit comprising the NE 1/4 of Sec. 4, Twp. 14 South, Rng. 33 East, is currently dedicated to the applicant's New Mexico State "U" Well No. 1 located in Unit G of said section.

(5) That this proration unit is (☒) standard () nonstandard; if nonstandard, said unit was previously approved by Order No. NA.

(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 150,000 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013 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 as an exception to the standard well spacing requirements for the pool.

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 an exception to applicable well spacing requirements and 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 _____ day of _____, 19____.

cc. - OGD 1666

NA 10166 - 1666

DIVISION DIRECTOR _____ EXAMINER _____



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

**GOVERNOR
BRUCE KING
CHAIRMAN**

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

**STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR**



CABOT PETROLEUM CORPORATION

OIL AND GAS
DRILLING AND PRODUCTION

806/669-2581

P. O. BOX 5001, PAMPA, TEXAS 79065

January 29, 1985

State of New Mexico
Oil Conservation Division
Mr. Michael E. Stogner
P. O. Box 2088
Santa Fe, New Mexico 87501

Subject: New Mexico State "U" #2
NGPA 103

Gentlemen:

As requested in your letter of January 9, 1985, we are supplying and attaching the supplementary information required for an infill well 103 filing pursuant to Division Order #R-6013-A.

Rule 5 - We have attached Form C-101 and C-102 in duplicate on the subject well.

Rule 6 - This well is located in the Baum Upper Penn Pool with a 160 acre spacing.

Rule 7 - The Baum Upper Penn was approved under Division Order #R-3644-B amended January 20, 1970.

Rule 8 - The New Mexico State "U" #1, 1980' FNL and 1980' FEL Section 4-14S-33E, Lea County, had a spud date of May 4, 1969, and was completed June 7, 1969. The average production from this well is currently 9 BOPD, 17 MCFD and 20 BWPD. The New Mexico State "U" #2, 660' FNL and 1980' FEL Section 4-14S-33E, Lea County, had a spud date of April 15, 1984, and was completed July 1, 1984. The average production from this well is currently 15 BOPD, 32 MCFD and 5 BWPD. As you can see from the cross-section of the two wells, porosity streaks have developed in the "U" #2 that were not in the original completion of the "U" #1. The addition of these porosity streaks and the increased well density in the Baugh "C" enable us to efficiently drain this acreage thus increase the gross reserves by 115 MBO and 150 MMCF.

Rule 9 - We have attached the formation structure map, production curves, area map and compensated neutron logs on the two wells to support our finding for the necessity for an infill well.
As described in the statement of Rule 8, we calculated an increase in gross reserves fo 115 MBO and 150 MMCF.

Rule 11 - We have on this day notified the offset operators by registered mail of our application for Section 103 determination.

Ike Lovelady, Inc.
P. O. Drawer 2666
Midland, Texas 79702

Yates Petroleum Corporation
207 South 4th
Artesia, New Mexico 88210

M W J Producing Company
1804 First National Bank Building
Midland, Texas 79701

If any additional information is required, please let us know.

Sincerely yours,


Ray Wooldridge

LRW:ap

Enclosures

N MEXICO OIL CONSERVATION COMMISS'
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.

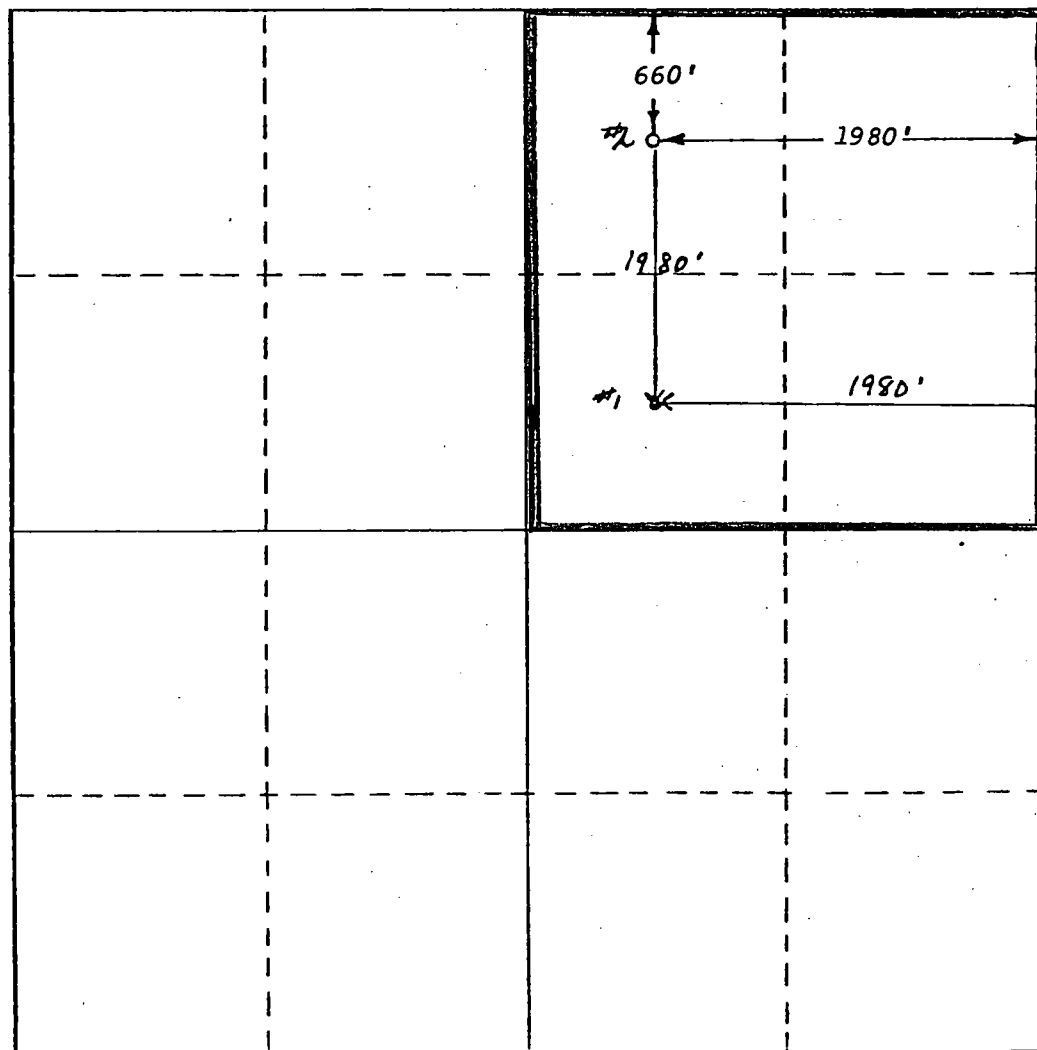
Operator CABOT PETROLEUM CORPORATION			Lease New Mexico State "U"		Well No. 2
Unit Letter	Section 4	Township T-14-S	Range R-33-E	County Lea County, New Mexico	
Actual Footage Location of Well: 660 feet from the North line and 1980 feet from the East line					
Ground Level Elev. 4237'	Producing Formation Permo-Penn		Pool Baum Upper Penn		Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

Paul Andrew

Name
Paul Andrew

Position
Agent

Company
Cabot Petroleum Corp.

Date
2/10/84

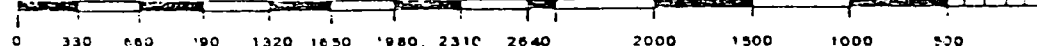
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
Feb. 7, 1984

Registered Professional Engineer and/or Land Surveyor

Gary D. Boswell

Certificate No.
6689



MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
 Supersedes C-128
 Effective 1-4-65

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

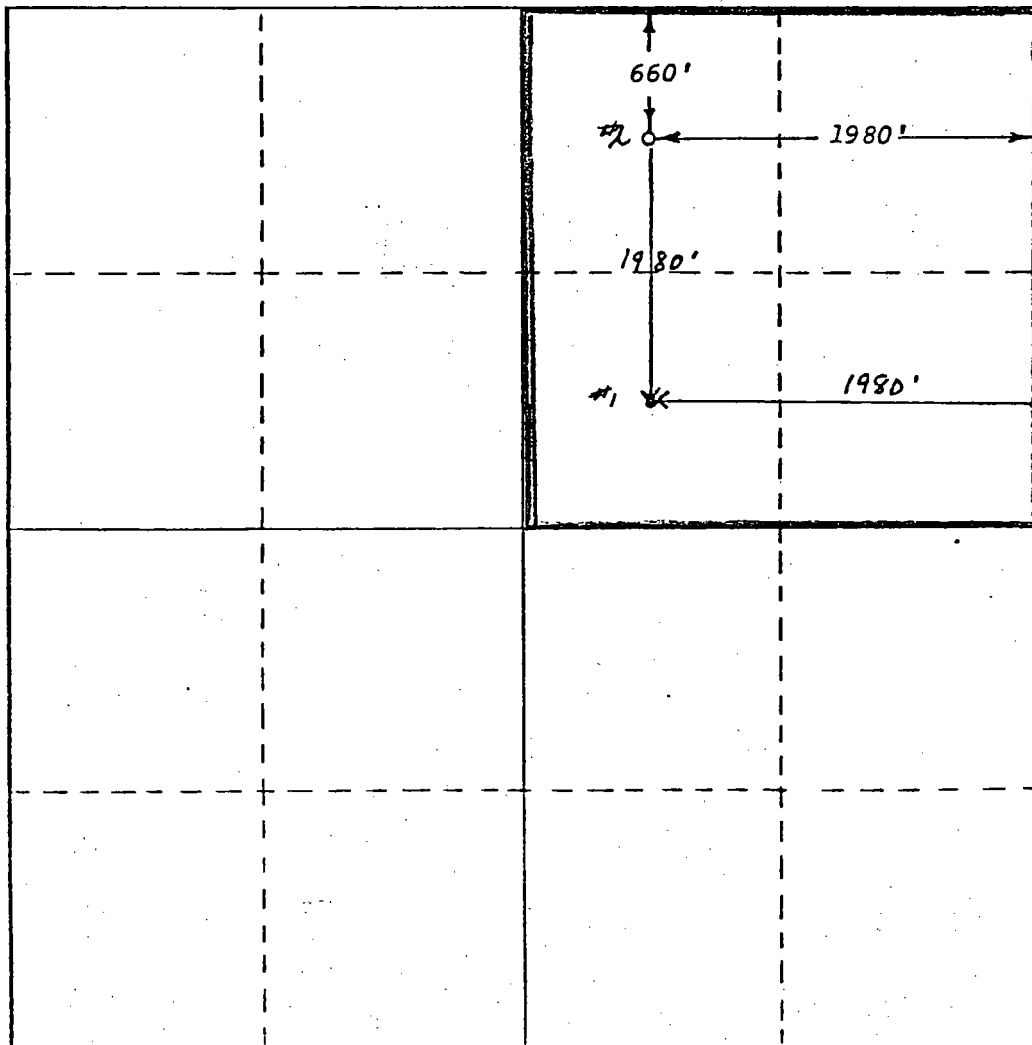
Operator CABOT PETROLEUM CORPORATION			Lease New Mexico State "U"		Well No. 2
Unit Letter	Section 4	Township T-14-S	Range R-33-E	County Lea County, New Mexico	
Actual Footage Location of Well:					
660 feet from the North line and		1980 feet from the East line			
Ground Level Elev. 4237'	Producing Formation Permo-Penn	Pool Baum Upper Penn		Dedicated Acreage: 160 Acres	

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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.

Paul Andrew

Name
Paul Andrew

Position
Agent

Company
Cabot Petroleum Corp.

Date
2/10/84

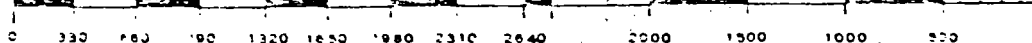
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
Feb. 7, 1984

Registered Professional Engineer and/or Land Surveyor

Larry D. Basswell

Certificate No.
6689



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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease
STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>

5. State Oil & Gas Lease No.
K-3846

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		8. Farm or Lease Name New Mexico 'U' State	
2. Name of Operator Cabot Petroleum Corporation		9. Well No. 2	
3. Address of Operator P. O. Box 5001, Pampa, Texas 79065		10. Field and Pool, or Wildcat Baum Upper Penn	
4. Location of Well UNIT LETTER <u>B</u> LOCATED <u>660</u> FEET FROM THE <u>North</u> LINE AND <u>1980</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>4</u> TWP. <u>14S</u> RGE. <u>33E</u> NMPM		12. County Lea	
19. Proposed Depth 10,300'		19A. Formation Permo-Penn	
20. Rotary or C.T. Rotary		21. Elevations (Show whether DF, RT, etc.) 4237' GR	
21A. Kind & Status Plug. Bond \$50,000 Blanket in force #749971		21B. Drilling Contractor Unknown yet	
22. Approx. Date Work will start Upon Approval			

23. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17 1/2"	13 3/8"	48#	400'	450 sxs	Surface
12 1/4"	8 5/8"	28#	4100'	1925	Surface
7 7/8"	5 1/2"	17# & 20#	10,300'	555	3000'

Blowout Preventer Program: Cameron double hydraulic Type SS, 10" 3000# and Hydril Type GK, 12" 3000# with Koomey-Weise 80 gallon accumulator, 3000# 3 station with Hydrill control valve.

The above or type equivalent.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 8/20/84
UNLESS DRILLING UNDERWAY

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 Paul Anderson Title Agent Date 2/10/84

(This space for State Use)
OFFICIAL NO. 1 JERRY SEXTON
DISTRICT SUPERVISOR

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

FEB 9 1984

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease	
STATE <input checked="" type="checkbox"/>	FEE <input type="checkbox"/>
5. State Oil & Gas Lease No.	
K-3846	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		New Mexico 'U' State	
2. Name of Operator Cabot Petroleum Corporation		9. Well No. 2	
3. Address of Operator P. O. Box 5001, Pampa, Texas 79065		10. Field and Pool, or Wildcat Baum Upper Penn	
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PERMIT EXPIRES 8/20/84
UNLESS DRILLING UNDERWAY

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 Paul Anderson Title Agent Date 2/10/84

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT 1 SUPERVISOR

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

FEB 20 1984

DATE - 1-23-85

NAME - NEW MEXICO STATE U #2

STATE, CO - NEW MEXICO, LEA

LOCATION - 660 FNL + 1980 FEL

SEL 4 T 145 - R33E

FIELD - BAUM

DATUM - 4254 KB

SPUD - 4-15-84

COMPLETED - JUN 1984

TREATMENT

JUN 1984 - TEST CANYON WET

10078-96 SET CIBP @ 10065

PERF 9986-92 ACID 9986-92

W/ 1400 GAL MOD 202 SET CIBP 9970

PERF 9895, 9887-89, 9879-81, 9866-72

9854, 9842, 9837 ACID 9837-9895

W/ 3400 GAL MOD 202

OCT 1984 PERF 9767, 9779, 9763-75, 9753

9747-50 ACID 9747-9787 W/

3000 GAL MOD 202

SET 400' 13 3/8

SET 4100' 8 5/8

CIBP 9970

CIBP 10065

SET 10,300' 8 1/2
TD 10300'

DATE - 1-23-85

NAME - NEW MEXICO STATE U #1

STATE, CO: NEW MEXICO, LEA

LOCATION - 1980 FNL + 1980 FEL

SEL 4 T 145 - R 33E

FIELD - BAUM FIELD

DATUM - 4249 KB

SPUD - MAY 4, 1969

COMPLETED - JUNE 1969

TREATMENT

JUNE 1969 - PERF 9842-50, 9853-55, 9859-61
ACID W/ 200 GAL 7 1/2% ACID

JUNE 1969 - PERF 9887-89, 9894-96, 9900-06
9842-47 ACID 9887-9906 W/
1500 GAL MOD 202 ACID 9842-9861
W/ 4500 GAL MOD 202
PERF 9761-65, 9776-90. UNABLE TO
BREAK DOWN

FEB 1984 - PERF 9761-66, 9780-90 AND 9761-9790
W/ 4000 GAL MOD 202 PERF 9740-48
9679-84, 9653-58 ACID 9653-9740
W/ 4000 GAL MOD 202

389' 13 3/8 CS9

4090' 8 5/8 CS9

9975' 4 1/2 CS9
TD 9975

10 YEARS BY MONTH
1969-1978
N.M. STATE

MONTHLY PRODUCTION - BARRELS

10,000

1,000

100

W/ 1167 9113 1168 (6000) NATURAL GAS (1000) 21660216 BOPD 1.291 MCF/24 Hrs 6.59 (MIL - 2000000)

BAUM (UPPER FENI)

ENTITY NO. & M.P. NM-025-0016-M01
LEASE State of NM "U" WELLS
OPERATOR Cabot
FIELD Baum CODE 30004
RESERVOIR Upper Penn
LOCATION 138-33E
COUNTY Lea STATE NM
W.I. 1.00 N.I. .875
OIL X GAS

1,000

BOPM

100

TOTAL LEASE

NEW MEXICO STATE U

1969

1970

1971

1972

1973

1974

1975

1976

1977

1978

1979

1980

1981

1982

1983

1984

1985

1986

1987

1988