

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

ADMINISTRATIVE ORDER
NFL 92

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 Marbob Energy Corporation Well Name and No. NG Phillips State Well #32
Location: Unit P Sec. 27 Twp. 17S Rng. 28E Cty. Eddy

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 Artesia Queen Grayburg San Andres Pool, and the standard spacing unit in said pool is 40 acres.
- (4) That a 40-acre proration unit comprising the SE/4 SE/4 of Sec. 27, Twp. 17S, Rng. 28E, is currently dedicated to the NG Phillips State Well No. 3 located in Unit P 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 70,400 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 13 day of September, 19 84.

Michael T. Stogner
DIVISION DIRECTOR _____ EXAMINER ✓

Received July 7, 1983

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

ADMINISTRATIVE ORDER

NFL

92

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 Marbach Energy Corporation Well Name and No. N6 Phillips State Well No. 32
Location: Unit P Sec. 27 Twp. 17 South Rng. 28 East Cty. Eddy

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 Artesia Queen Grayburg San Andres Pool, and the standard spacing unit in said pool is 40 acres.
- (4) That a 40-acre proration unit comprising the SE/4 SE/4 ^{was at the time drilling began} of Sec. 27, Twp. 17 South, Rng. 28 East, is currently dedicated to the N6 Phillips State Well No. 3 located in Unit P 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 70,400 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 _____ day of _____, 19____.

cc - OCP Artesia
Well file

DIVISION DIRECTOR _____

EXAMINER ✓

REQUEST FOR INFILL FINDING ON

NG PHILLIPS STATE #32

in accordance with Administrative

Procedures Amended February 8, 1980

STATE OF NEW MEXICO
OIL AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

RECEIVED

MAY 04 1983

O. C. D.

ARTESIA OFFICE

Form C-101
Revised 10-1-78

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SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Type of Work

Type of Well

DRILL ☒DEEPEN ☐PLUG BACK ☐

Casing

CAS WELL ☐

OTHER

Name of Operator

Marbob Energy Corporation

Address of Operator

P.O. Drawer 217, Artesia, N.M. 88210

Location of Well

UNIT LETTER

P

LOCATED

440

OIL CONSERVATION DIVISION

SANTA FE

979

FEET FROM THE

East

LINE OF SEC.

27

TWP.

17S

NCE

28E

5A. Indicate Type of Lease

STATE ☒FEC ☐

5. State Oil & Gas Lease No.

B-2071

7. Unit Agreement Name

8. Farm or Lease Name

NG Phillips St.

9. Well No.

32

10. Field and Pool, or Wildcat

Artesia On Grbg SA

17. County

Eddy

19. Proposed Depth

3750'

19A. Formation

San Andres

20. Rotary or C.T.

Rotary

21A. Kind & Status Plug. bond

3665.5' GL

Statewide active

21B. Drilling Contractor

Unknown

22. Approx. Date Work will start

5/16/83

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"	24#	550'	350	Circulate
7 7/8"	5 1/2"	15.50# 17#	3750'	700	Attempt to circ.

We propose to drill a 12 1/4" hole to 550', run 8 5/8" 24# new casing, cement, circulate to surface, reduce hole to 7 7/8" and drill on to 3750' to test the San Andres formation, run 5 1/2" 15.50# casing, cement and attempt to circulate.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 11-6-83
UNLESS DRILLING UNDERWAY

NOTE: SPACE DESCRIBE PROPOSED PROGRAM IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION. 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.

Carolyn Chris

Title Production Clerk

Date 5/2/83

(This space for State Use)

APPROVED BY

Mike Williams

TITLE OIL AND GAS INSPECTOR

DATE MAY 06 1983

CONDITIONS OF APPROVAL, IF ANY:

Rule #5

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 MARBOB ENERGY CORP.		County N.M. PHILLIPS ST.		Section 32
Unit Letter P	Section 27	Township 17 SOUTH	Range 28 EAST	EDDY
Actual Footage Location of Well: 440 feet from the SOUTH line and 979 feet from the EAST line.				
Ground Level Elev. 3665.5	Producing Formation San Andres	Artesia On Grbg SA		Feet from Acreage 40

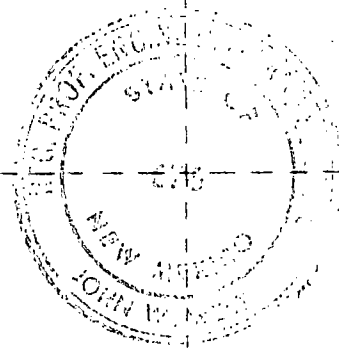
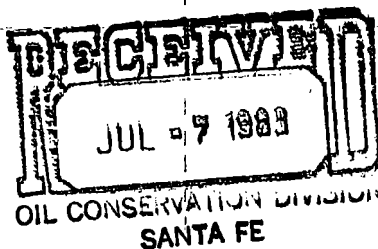
- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated 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.

#13 WELL - OPERATIONS SUSPENDED @ 920'
#20 WELL - SEVEN RIVERS COMPLETION.
#22 - WELL - P & A
#3 - SPUD 8-24-60, TD 2138', PERF 2082-42'



13 20
22 23

Rule #5

John West

Certificate No
JOHN W. WEST NO. 676

CERTIFICATION

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

Carolyn Orris

Carolyn Orris

Production Clerk

Marbob Energy Corporation

5/2/83

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.

4-26-83

Registered Professional Engineer and Land Surveyor

Certificate No

Rule 6:

NG Phillips State #32

Pool: Artesia Queen Grayburg San Andres

Standard spacing unit - 40 acres

Rule 7:

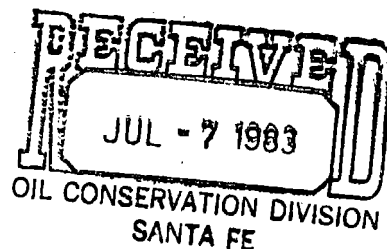
NA

Rule 8:

- a. NG Phillips St. #3, 330 FSL 330 FEL Sec. 27-T17S-R28E
NG Phillips St. #32, 440 FSL 979 FEL Sec. 27-T17S-R28E
- b. #3 - 8/24/60
#32 - 5/24/83
- c. #3 - 10/3/60
#32 - 7/1/83
- d. None
- e. #3 - 3/4 bbl./day, no gas
#32 - 14 bbl. oil, 60 mcf gas/day
- f. NA
- g. Well #3 has not produced any gas since March 1977. The new well was drilled deeper and opened in a different formation as well as the formation in which #3 was completed. Since #3 will not currently produce any gas although it does still produce some oil, the new well was drilled to drain this reservoir.

Paul G. White Engineering

OIL AND NATURAL GAS



June 20, 1983

Marbob Energy Corporation
Artesia Queen Grayburg San Andres
NG Phillips State Lease
Well No. 32

Pertinent Engineering Data and Conclusions

Well No. 32 has been completed in the Artesia Queen Grayburg pool as of June 20, 1983. The well is an in-fill well located as per the attached plat.

Effective June 20, 1983, oil reserves recoverable will be 8800 barrels and gas reserves recoverable will be 70400 mcf. Oil reserves were calculated from a log study on the well plus an analogous comparison of like wells in the field with similar log characteristics. The gas reserves were estimated using a study of the gas oil ratio performance in the pool.

My study reveals that as early as 1964 the producing well rate was 3.6 barrels of oil per day per well. The wells in the pool have remained on 40 acre spacing up until the past two years.

From infill well performance it is obvious that well density in this pool has to be increased to recover remaining reserves. The low permeability and low quality solution gas recovery mechanism will require reduced spacing to efficiently produce the reserves.

The daily producing rate for Well No. 32 was 15.0 BOPD in June, 1983. This, of course, indicates that no interference has as yet been experienced from offset wells.

In my opinion the infill wells which increase the density of pattern will produce an amount of oil and gas reserves equal to the older wells in the field.

Therefore, it is my recommendation that well density be increased and it is my conclusion that infill wells will experience new reservoir conditions.

A handwritten signature in cursive script that reads "Paul G. White".

Paul G. White
Petroleum Engineer

6-20-83

Date

PGW/r1m

Attachment

Rule 9-b

Marbob Energy Corporation
NG Phillips State #32
440 FSL 979 FEL Sec. 27-T17S-R28E
Eddy County, NM

<u>Gross Monthly Oil - bbls.</u>	<u>Gross Yearly Oil - bbls.</u>
Total Oil Remaining:	8,800
Cumulative to 6/20/83	<u>310</u>
Total Ultimate Reserves	9,110

Gas-Oil Ratio Average - 8,000 to 1

Remaining Gas Reserves - 70,400 MCF

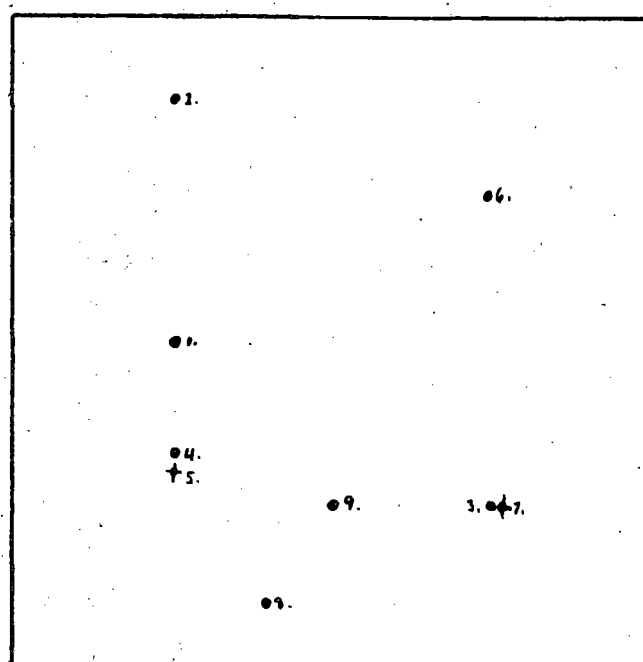
Oil reserves calculated using log study plus analogous comparison to older well performance.

Rule 9-b.

Rule 11:

Notice of this infill request has been sent to Amoco Production Co., P.O. Box 3092, Houston, Texas 77001; Depco, Inc., 1000 Petroleum Bldg., Denver, Colorado 80202; and Samedan Oil Corp., 900 Wall Towers East, Midland, Texas 79701.

Unit P, Section 27, Township 17 South, Range 28 East, NMPN, Eddy County,
New Mexico.



Scale: 1 inch = 400 feet

1. Marbob Energy Corporation
 NG Phillips State Well No. 13
 965.2' FSL - 978.7' FEL
 Spud: 12/13/80
 East Empire Vates Seven Rivers completion

2. Marbob Energy Corporation
 NG Phillips State Well No. 37
 1165' FSL - 978' FEL
 Spud: 5/13/84
 * - Artesia Queen Grayburg San Andres completion

3. Marbob Energy Corporation
 NG Phillips State Well No. 36
 335' FSL - 330' FEL
 Spud: 2/16/84
 * - Artesia Queen Grayburg San Andres completion

4. Marbob Energy Corporation
 NG Phillips State Well No. 32
 440' FSL - 979' FEL
 Spud: 5/24/83
 * - Artesia Queen Grayburg San Andres completion
 Cumulative production as of 12/31/83
 Gas - 10512 MCF
 Oil - 3627 B.O.

5. Marbob Energy Corporation
 NG Phillips State Well No. 23
 390' FSL - 978.7' FEL
 Spud: 6/29/79
 O&A'd: 11/13/79

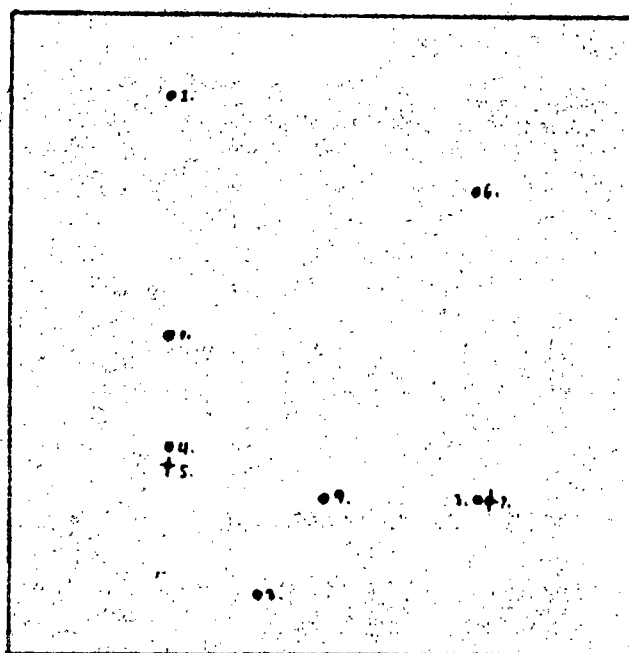
6. Maribol Energy Corporation
 NE Phillips State Well No. 20
 965.2' FSL - 330' FEL
 Spud: 6/15/76
 East Empire Yates River completion

7. Maribol Energy Corporation
 NE Phillips State Well No. 3
 330' FSL + EL
 Spud: 8/24/60
 Artesia Queen Grayburg San Andres completion
 P.D. 11/12/84
 * - Cumulative production
 Gas - 56732 MCF
 O.I. - 62831 B.O.

8. ARCO O.I. & Gas Company
 Empire No. Unit D Well No. 361
 136' FSL - 300' FEL
 Spud: 2/12/79
 Empire No. completion

9. ARCO O.I. & Gas Company
 Empire No. Unit "D" Well No. 36
 330' FSL - 660' FEL
 Spud: 7/3/60
 Empire No. completion

Unit P, Section 27, Township 17 South, Range 28 East, N.M.P.M., Eddy County,
New Mexico.



Scale: 1 inch = 400 feet

1. Markob Energy Corporation
NE Phillips State Well No. 13
965.2' FSL - 978.7' FEL
Spud: 12/12/80
East Empire Vides. Seven Rivers completion

2. Markob Energy Corporation
NE Phillips State Well No. 37
1165' FSL - 978' FEL
Spud: 5/13/84
* - Artesia Queen Grayburg San Andres completion

3. Markob Energy Corporation
NE Phillips State Well No. 36
335' FSL - 330' FEL
Spud: 2/16/84
* - Artesia Queen Grayburg San Andres completion

4. Markob Energy Corporation
NE Phillips State Well No. 32
440' FSL - 979' FEL
Spud: 5/24/83
* - Artesia Queen Grayburg San Andres completion
Cumulative production as of 12/31/83
Gas - 10517 MCF
Oil - 3627 B.O.

5. Markob Energy Corporation
NE Phillips State Well No. 22
340' FSL - 978.7' FEL
Spud: 6/23/79
Drilled: 11/13/79

7. ARCO O.I. & Gas Company
 Empire Abo Unit "D" Well No. 32
 320' FSL - 650' FGL
 Spud: 7/13/60
 Empire Abo Completion

8. ARCO O.I. & Gas Company
 Empire Abo Unit "D" Well No. 361
 186' FSL - 300' FGL
 Spud: 2/12/59
 Empire Abo Completion

9. Algonquin Energy Corporation
 NE Phillips State Well No. 3
 330' FSL - 330' FGL
 Spud: 9/24/60
 Algonquin Energy Corporation San Andres completion
 Prod: 1/12/64
 # - Cumulative production
 Gas - 56732 MCF
 O.I. - 62831 B.O.

6. Algonquin Energy Corporation
 NE Phillips State Well No. 20
 955.2' FSL - 330' FGL
 Spud: 6/15/76
 East Empire Water Sewer Rivers completion

REQUEST FOR INFILL FINDING ON
NG PHILLIPS STATE #32
in accordance with Administrative
Procedures Amended February 8, 1980

STATE OF NEW MEXICO
OIL AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

RECEIVED

Form C-101
Revised 10-1-78

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OPERATOR	<input checked="" type="checkbox"/>

MAY 04 1983

O. C. D.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Type of Work

Type of Well

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

Oil Well ☒

Gas Well ☐

Other ☐

Name of Operator

Marbob Energy Corporation

Address of Operator

P.O. Drawer 217, Artesia, N.M. 88210

Location of Well

UNIT LETTER

P

LOCATED

440

SANTA FE

South

979

FEET FROM THE

East

LINE OF SEC.

27

TWP.

17S

RANGE

28E

19. Depth of hole

3750'

20. Formation

San Andres

21. History of C.T.

Rotary

22. Approx. Date Work will start

5/16/83

Revisions (State whether Dr., E.I., etc.)

3665.5' GL

23. Kind of casing (log, hole)

Statewide active

24. Drilling Company

Unknown

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	BACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	550'	350	Circulate
7 7/8"	5 1/2"	15.50# 17#	3750'	700	Attempt to circ

We propose to drill a 12 1/4" hole to 550', run 8 5/8" 24# new casing, cement, circulate to surface, reduce hole to 7 7/8" and drill on to 3750' to test the San Andres formation, run 5 1/2" 15.50# casing, cement and attempt to circulate.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 11-6-83
UNLESS DRILLING UNDERWAY

BELOW SPACE DESCRIBE PROPOSED PROGRAM IF PROPOSAL IS TO DEEPEN OR PLUG BACK. GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION. 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.

Carolyn Chris

Title Production Clerk

Date 5/2/83

(This space for State Use)

APPROVED BY *Mike Phillips*

TITLE OIL AND GAS INSPECTOR

DATE MAY 06 1983

CONDITIONS OF APPROVAL, IF ANY:

Rule #5

N E W M E X I C O C O N S E R V A T I O N C O M M I S S I O N
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-124
Effective 1-1-65

Actual location must be from the outer boundaries of the Section.

Operator MARBOB ENERGY CORP.		Locality N.E. PHILLIPS ST.		Section 32
East Letter P	Section 27	Range 17 SOUTH	Range 28 EAST	EDDY
Actual Forage Location 440		SOUTH		979 EAST
Ground Level Elev 3665.5	Elevating Location San Andres		Artesia On Grbg SA 40	

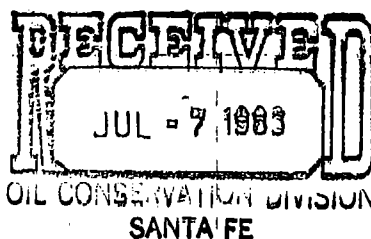
1. Outline the acreage dedicated to the subject well by colored pen or by color marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated 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.

#13 WELL - OPERATIONS SUSPENDED @ 920'
#20 WELL - SEVEN RIVERS COMPLETION.
#22 - WELL - P+A
#3 - SPUD 8-24-60, TD 2138', PERF 2082-92'



CERTIFICATION

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

Carolyn Orris

Carolyn Orris

Production Clerk

Marbob Energy Corporation

5/2/83

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.

Rule #5
4-26-83

Exhibit 11 for longer if I cannot
make it all at once

John W. West

Certificate No

JOHN W. WEST NO. 676

330 680 1000 1320 1680 2000 2320 2680 3000 3320 3680 4000 4320 4680 5000 5320 5680 6000 6320 6680 7000 7320 7680 8000 8320 8680 9000 9320 9680 10000

Rule 6:

NG Phillips State #32

Pool: Artesia Queen Grayburg San Andres

Standard spacing unit - 40 acres

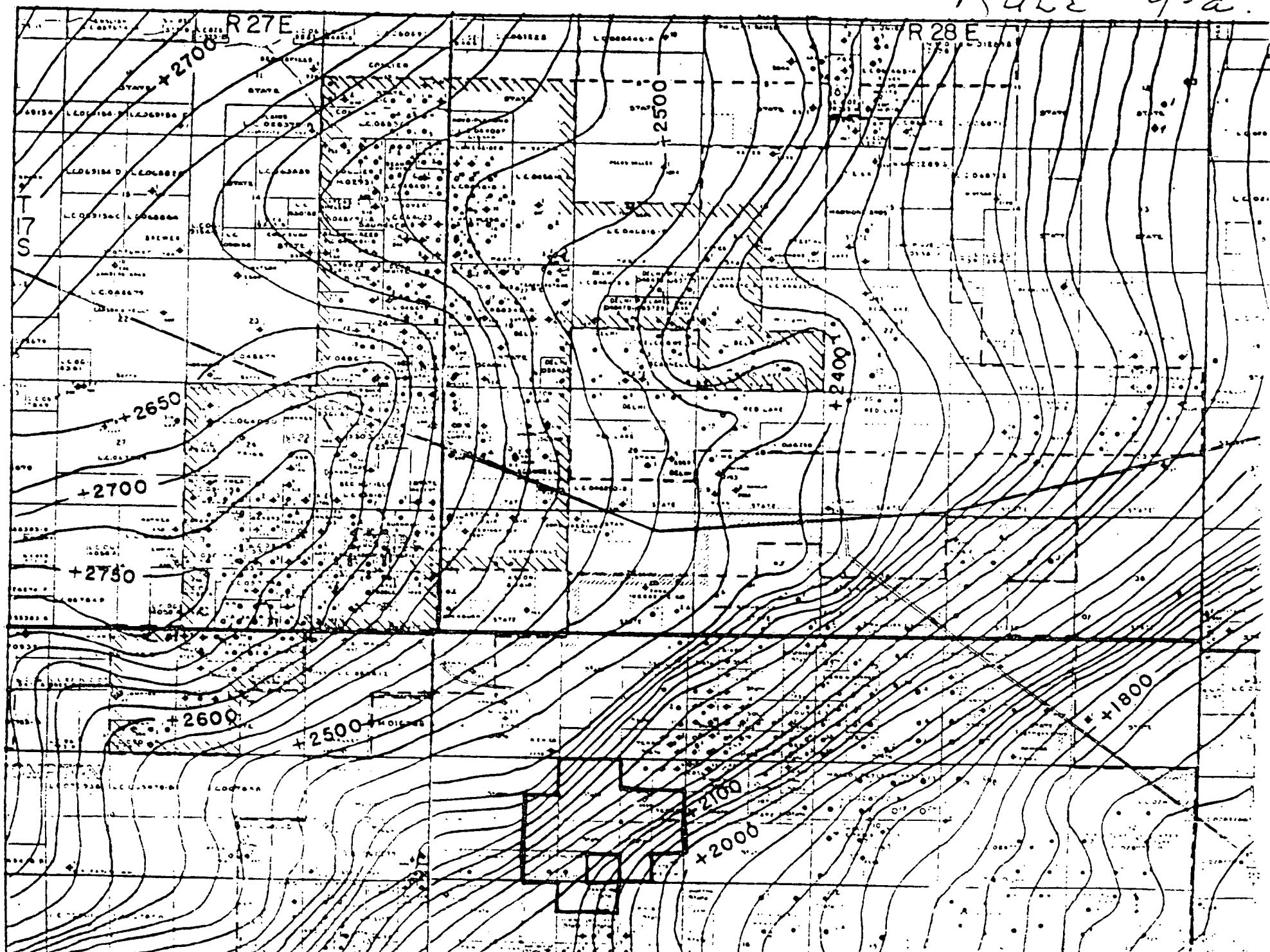
Rule 7:

NA

Rule 8:

- a. NG Phillips St. #3, 330 FSL 330 FEL Sec. 27-T17S-R28E
NG Phillips St. #32, 440 FSL 979 FEL Sec. 27-T17S-R28E
- b. #3 - 8/24/60
#32 - 5/24/83
- c. #3 - 10/3/60
#32 - 7/1/83
- d. None
- e. #3 - 3/4 bbl./day, no gas
#32 - 14 bbl. oil, 60 mcf gas/day
- f. NA
- g. Well #3 has not produced any gas since March 1977. The new well was drilled deeper and opened in a different formation as well as the formation in which # was completed. Since #3 will not currently produce any gas although it does still produce some oil, the new well was drilled to drain this reservoir.

RULE 9-a.



Paul G. White Engineering

OIL AND NATURAL GAS

June 20, 1983

Marbob Energy Corporation
Artesia Queen Grayburg San Andres
NG Phillips State Lease
Well No. 32

Pertinent Engineering Data and Conclusions

Well No. 32 has been completed in the Artesia Queen Grayburg pool as of June 20, 1983. The well is an in-fill well located as per the attached plat.

Effective June 20, 1983, oil reserves recoverable will be 8800 barrels and gas reserves recoverable will be 70400 mcf. Oil reserves were calculated from a log study on the well plus an analogous comparison of like wells in the field with similar log characteristics. The gas reserves were estimated using a study of the gas oil ratio performance in the pool.


My study reveals that as early as 1964 the producing well rate was 3.6 barrels of oil per day per well. The wells in the pool have remained on 40 acre spacing up until the past two years.

From infill well performance it is obvious that well density in this pool has to be increased to recover remaining reserves. The low permeability and low quality solution gas recovery mechanism will require reduced spacing to efficiently produce the reserves.

The daily producing rate for Well No. 32 was 15.0 BOPD in June, 1983. This, of course, indicates that no interference has as yet been experienced from offset wells.

In my opinion the infill wells which increase the density of pattern will produce an amount of oil and gas reserves equal to the older wells in the field.

Therefore, it is my recommendation that well density be increased and it is my conclusion that infill wells will experience new reservoir conditions.



Paul G. White
Petroleum Engineer

6-20-83

Date

PGW/r1m

Attachment

Rule 9-b

Marbob Energy Corporation
NG Phillips State #32
440 FSL 979 FEL Sec. 27-T17S-R28E
Eddy County, NM

<u>Gross Monthly Oil - bbls.</u>	<u>Gross Yearly Oil - bbls.</u>
Total Oil Remaining:	8,800
Cumulative to 6/20/83	<u>310</u>
Total Ultimate Reserves	9,110

Gas-Oil Ratio Average - 8,000 to 1

Remaining Gas Reserves - 70,400 MCF

Oil reserves calculated using log study plus analogous comparison to older well performance.

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Rule 11:

Notice of this infill request has been sent to Amoco Production Co., P.O. Box 3092, Houston, Texas 77001; Depco, Inc., 1000 Petroleum Bldg., Denver, Colorado 80202; and Samedan Oil Corp., 900 Wall Towers East, Midland, Texas 79701.