

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 Marbob Energy Corporation Well Name and No. Old Loco Unit Well No. 20
Location: Unit P Sec. 32 Twp. 17-S Rng. 29-E Cty. Eddy

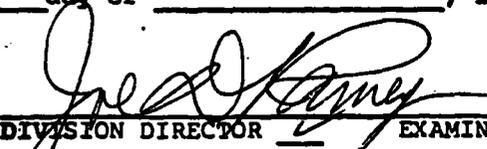
II.
THE DIVISION FINDS:

- (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 Grayburg Jackson (SR-QN-Grayburg-SA) 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. 32, Twp. 17-S, Rng. 29-E, is currently dedicated to the Old Loco Unit Well no. 16 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. N/A.
- (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 3,508 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 24th day of November, 19 82.


DIVISION DIRECTOR EXAMINER

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 Marbob Energy Corporation Well Name and No. Old Love Unit Well No. 20
Location: Unit P Sec. 32 Twp. 17S Rng. 29E 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 Grayburg Jackson (SR - On -
Grba - SA) Pool, and the standard spacing unit in said pool is 40 acres.

(4) That a 40-acre proration unit comprising the SE 1/4 SE 1/4
of Sec. 32, Twp. B25S, Rng. 29E, is currently dedicated to the Old Love Unit
Well No. 16 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. N/A.

(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 3,508 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 - Old Artana
NMD & EEC Hall

DIVISION DIRECTOR _____ EXAMINER _____

Request for Infill Finding on

Old Loco Unit #20

in accordance with Administrative

Procedures amended February 8, 1980

P- 32-175-29E

Eddy Co.

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

NEW MEXICO OIL CONSERVATION COMMISSION
RECEIVED

30-015-23176
Form C-101
Revised 1-1-80

FEB 8 1980

O. C. D.

5A. Indicate Type of Location
STATE FEE
5. State Oil & Gas Lease No.
B-5084

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. Unit Approval Date Old Loco Unit
2. Name of Operator Marbob Energy Corp.		8. Name of Lease Owner Old Loco Unit
3. Address of Operator P.O. Box 304, Artesia, N.M. 88210		9. Well No. 20
4. Location of Well UNIT LETTER <u>P</u> LOCATED <u>990</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>32</u> TWP. <u>17S</u> RGE. <u>29E</u>		10. Field and Loc. of Grbg SA Grbg Jackson SR Queen
11. Proposed Depth 2850'		12. County Eddy
13A. Formation Grayburg & Lovington		13B. Type of C.T. Rotary
21. Elevation (show whether DF, RT, etc.) 3561.5' GR	21A. Kind & Status Plug. Bond Statewide Active	21B. Drilling Contractor Alta-West Drilling Co.
		22. Approx. Date Work will start 2/11/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	20#	250'	Circ.	
7 7/8"	4 1/2"	10.50#	2850'	225	

We propose to drill to approximately 2850' to test Grayburg & Lovington formations. We do not anticipate gas at these depths & will not set up a blowout preventer program at this time.

RECEIVED
JUL 19 1982

APPROVAL VALID FOR 90 DAYS UNLESS DRILLING COMMENCED

EXPIRES 5-11-80

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 Carolyn Orris Title Secretary Date 2/8/80

(This space for State Use)

APPROVED BY W.A. Sussett TITLE SUPERVISOR, DISTRICT II DATE FEB 11 1980

CONDITIONS OF APPROVAL, IF ANY:

RULE #5

577 2

1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900

1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900

1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900

1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900

1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 1-1987
Supersedes 1-1-78
1-1987-11-55

All distances must be from the outer boundaries of the Section

Operator MARBOB ENERGY CORPORATION		OLD LOCO UNIT		Acres 20
Unit Letter P	Section 32	Township 17 South	Range 29 East	County Eddy
Actual Footing Location of Well:				
990	feet from the South	990	feet from the East	
Ground Level Elev. 3561.5	Footing Location Grayburg & Lovington		Grbg Jackson SR Queen Grbg SA	Acres 40

- Outline the acreage dedicated to the subject well by colored pencil or **RECEIVED** (stamped) on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, **O. G. D.** interests of all owners been consolidated by communitization, unitization, force pooling, etc?

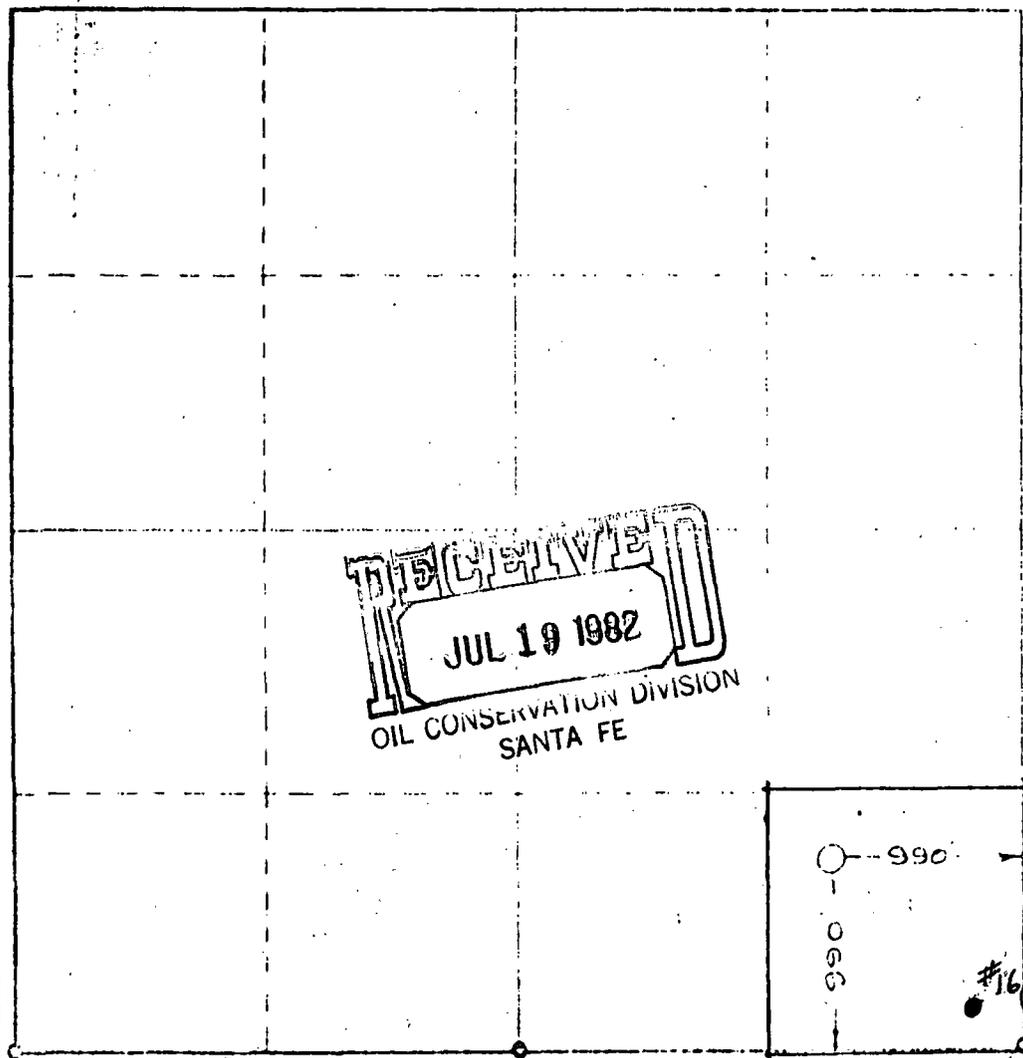
FEB 8 1980

ARTESIA, OFFICE

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.

Carelyn Orris

Secretary

Marbob Energy Corp.

2/8/80

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

Rubb #5

February 6, 1980

W. W. Shearn

212

RECEIVED
FEB 21 1964

OFFICE OF THE
DIRECTOR
FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C.

100-100000-1000

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

NEW MEXICO OIL CONSERVATION COMMISSION
RECEIVED

30-0-15-23176
Form C-101
Revised 1-1-85

FEB 8 1980

O. C. D.

5A. Indicate Type of Location
STATE FEE
5. State Oil & Gas Lease No.
B-5084

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
b. Type of Well DRILL DEEPEN PLUG BACK
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE
2. Name of Operator
Marbob Energy Corp.
3. Address of Operator
P.O. Box 304, Artesia, N.M. 88210
4. Location of Well UNIT LETTER P LOCATED 990 FEET FROM THE South LINE
AND 990 FEET FROM THE East LINE OF SEC. 32 TWP. 17S RGE. 29E
7. Unit Agreement Name
Old Loco Unit
8. Name of Lease Name
Old Loco Unit
9. Well No.
20
10. Field and Foot of Grbg SA
Grbg Jackson SR Queen
17. County
Eddy
19. Proposed Depth
2850'
19A. Formation
Grayburg & Lovington
19B. Rotary or C.T.
Rotary
21. Elevations (Show whether DF, KI, etc.)
3561.5' GR
21A. Kind & Status Plug. Bond
Statewide Active
21B. Drilling Contractor
Alta-West Drilling Co.
22. Approx. Date Work will start
2/11/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	20#	250'	Circ.	
7 7/8"	4 1/2"	10.50#	2850'	225	

We propose to drill to approximately 2850' to test Grayburg & Lovington formations. We do not anticipate gas at these depths & will not set up a blowout preventer program at this time.

RECEIVED
JUL 19 1982
DIVISION
SANTA FE

APPROVAL VALID FOR 90 DAYS UNLESS DRILLING COMMENCED,

EXPIRES 5-11-80

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 Carolyn Aris Title Secretary Date 2/8/80

(This space for State Use)

APPROVED BY W.A. Brasset TITLE SUPERVISOR, DISTRICT II DATE FEB 11 1980

CONDITIONS OF APPROVAL, IF ANY:

RULE #5

Handwritten marks or scribbles in the top left corner.

Handwritten text or scribbles in the lower-left quadrant.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-101
Superseded 4-1-78
Effective 11-65

All distances must be from the outer boundaries of the Section

Operator: MARBOS ENERGY CORPORATION			Section: OLD LOCO UNIT		Acres: 20
Unit Letter: P	Section: 32	Township: 17 South	Range: 29 East	County: Eddy	
Actual Footage Location of Well: 990 feet from the South 990 feet from the East					
Ground Level Elev.: 3561.5	Producing Formation: Grayburg & Lovington		Grbg Jackson SR Queen Grbg SA		40

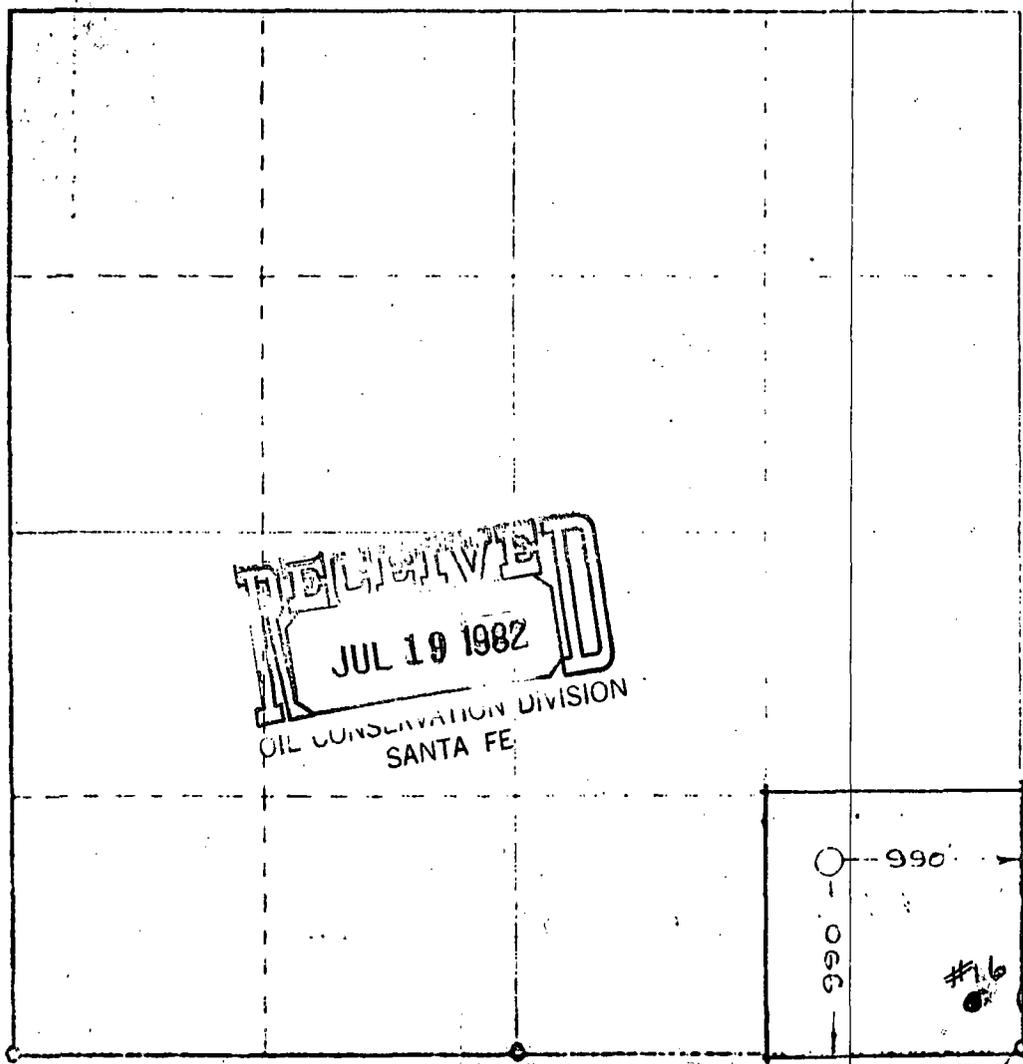
- Outline the acreage dedicated to the subject well by colored pencil or **RECEIVED** on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, **O. C. D.** interests of all owners have 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 (on 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.

RECEIVED
FEB 8 1980
ARTESIA, OFFICE



RECEIVED
JUL 19 1982
OIL CONSERVATION DIVISION
SANTA FE

CERTIFICATION

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

Cecilynn Arris
Secretary

Marbob Energy Corp.

2/8/80

I hereby certify that the information shown on this plat is true and complete to the best of my knowledge and belief.

Rube #5

February 6, 1980

John W. Shearn
1559

Rule 6:

Old Loco Unit #20

Pool: Grayburg Jackson Seven Rivers Queen Grayburg San Andres

Standard spacing unit: 40 acres

Rule 7:

NA

Rule 8:

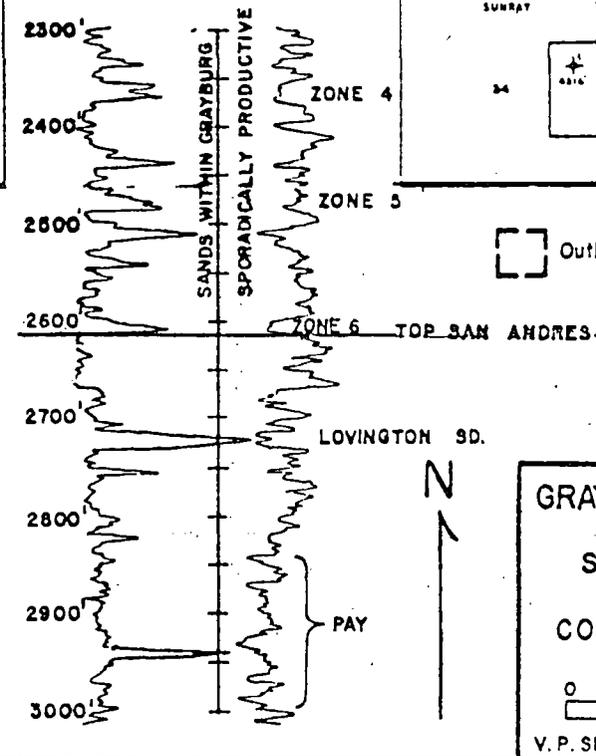
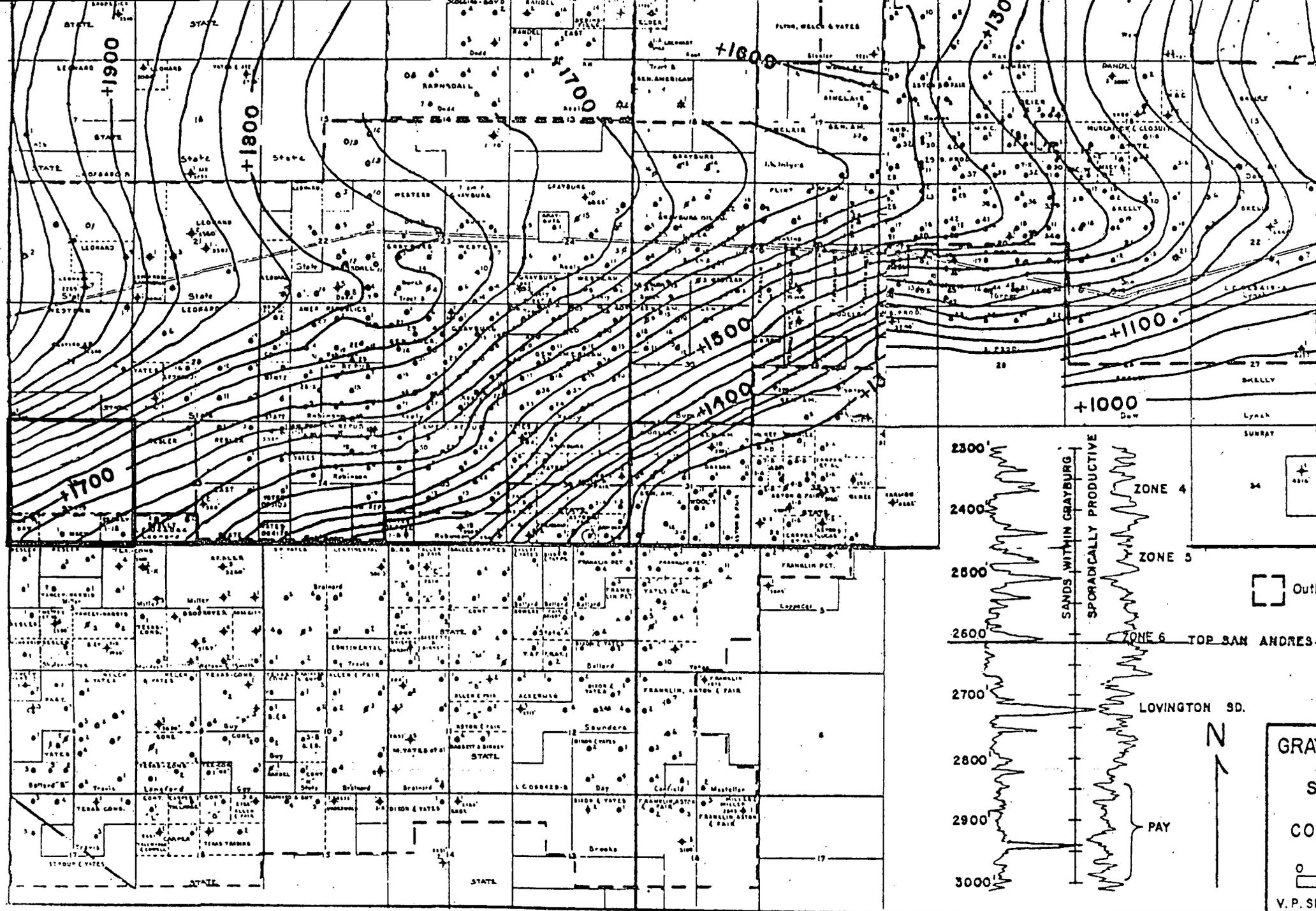
- a. Old Loco Unit #16 - 330 FSL 330 FEL Sec. 32-T17S-R29E
Old Loco Unit #20 - 990 FSL 990 FEL Sec. 32-T17S-R29E
- b. #16 - 10/6/52
#20 - 2/13/80
- c. #16 - 1/26/53
#20 - 3/15/80
- d. None
- e. #16 - 3 bbl. oil, 1/3 mcf gas/day
#20 - 12 bbl. oil, 5 mcf gas/day
- f. NA
- g. Well #16 is producing very little gas. The migration of oil and gas through waterflooding coupled with new reservoir condition type production rates on the new well make the drilling of a new well necessary to drain the reservoir.

T 17 S

T 18 S

R 29 E

RULE # 9-A





Marbob Energy Corporation
Old Loco Unit, Well #20
Grayburg Jackson Seven Rivers Queen
Grayburg San Andres
Eddy County, New Mexico

Pertinent Engineering Data and Conclusions:

Well #20 was completed in the Grayburg Jackson pool in March 1980. This is an infill well located as per the attached plat.

Effective July 1, 1982, oil reserves recoverable will be 11,694 barrels and gas reserves recoverable will be 3,508 mcf.

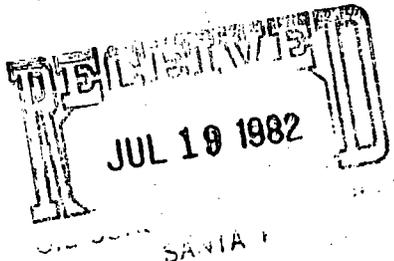
Oil reserves were calculated from the attached time/rate curve to an economic limit of approximately 1 BOPD (see table). Gas reserves were estimated using a study of the gas oil ratio performance not only on the specific well but on the pool history.

From a study of this immediate area in this pool I find per well producing rates in 1970 below what the rates are for the newly drilled infill wells. The daily producing rate of oil for well #20 in May 1982 was 12 BOPD. In 1970 the average daily producing rate per well on this property was 7 BOPD.

Due to extensive waterflooding in the area there has been significant oil migration into areas between injection wells or between injection and producing wells.

It is evident from the rate of production and from oil reserves remaining that pattern density has to be increased to recover additional oil and gas reserves.

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



Paul G. White
Paul G. White
Petroleum Engineer

7-15-82
Date

RULE #9-B

Marbob Energy Corp.
Old Loco Unit, Well #20
990 FSL 990 FEL Sec. 32-T17S-R29E
Eddy County, N.M.

Calculation of oil reserves - refer to rate/time curve:

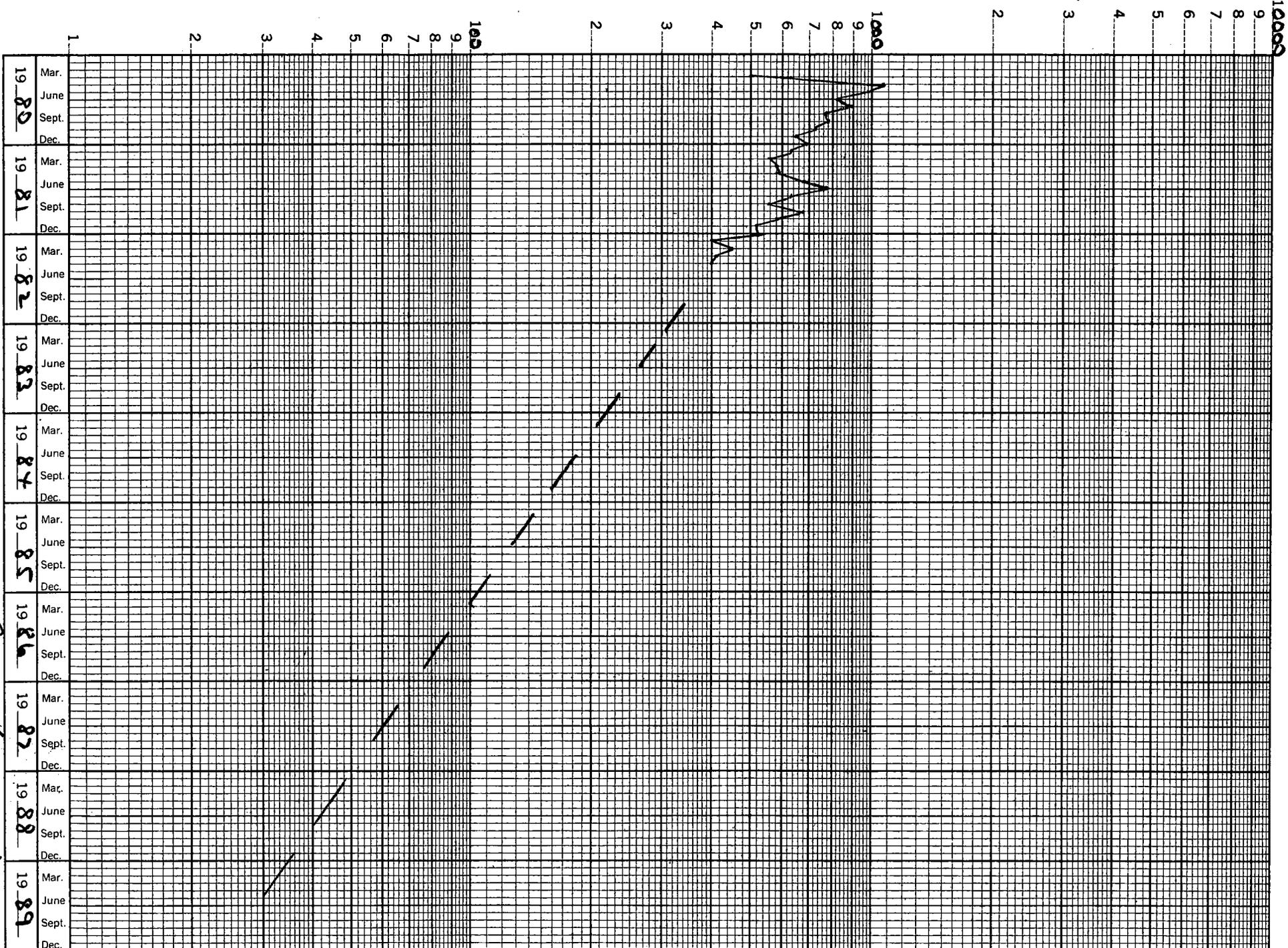
<u>Year</u>	<u>Gross monthly Oil - bbls.</u>	<u>Gross Yearly Oil - bbls.</u>
1982 (6 mos.)	345	2,070
1983	275	3,300
1984	180	2,160
1985	128	1,536
1986	87	1,044
1987	60	720
1988	42	504
1989	30	<u>360</u>
	Total oil remaining:	11,694
	Cumulative to 1/1/82	<u>15,207</u>
	Total ultimate reserves:	26,901

Gas-oil ratio average - 300 to 1

Remaining gas reserves - 3,508 mcf.

Rule #9-B

BBLs / OIL / MONTH



OLD LOCO UNIT
 WELL NO 210

Rule #9-C(2)

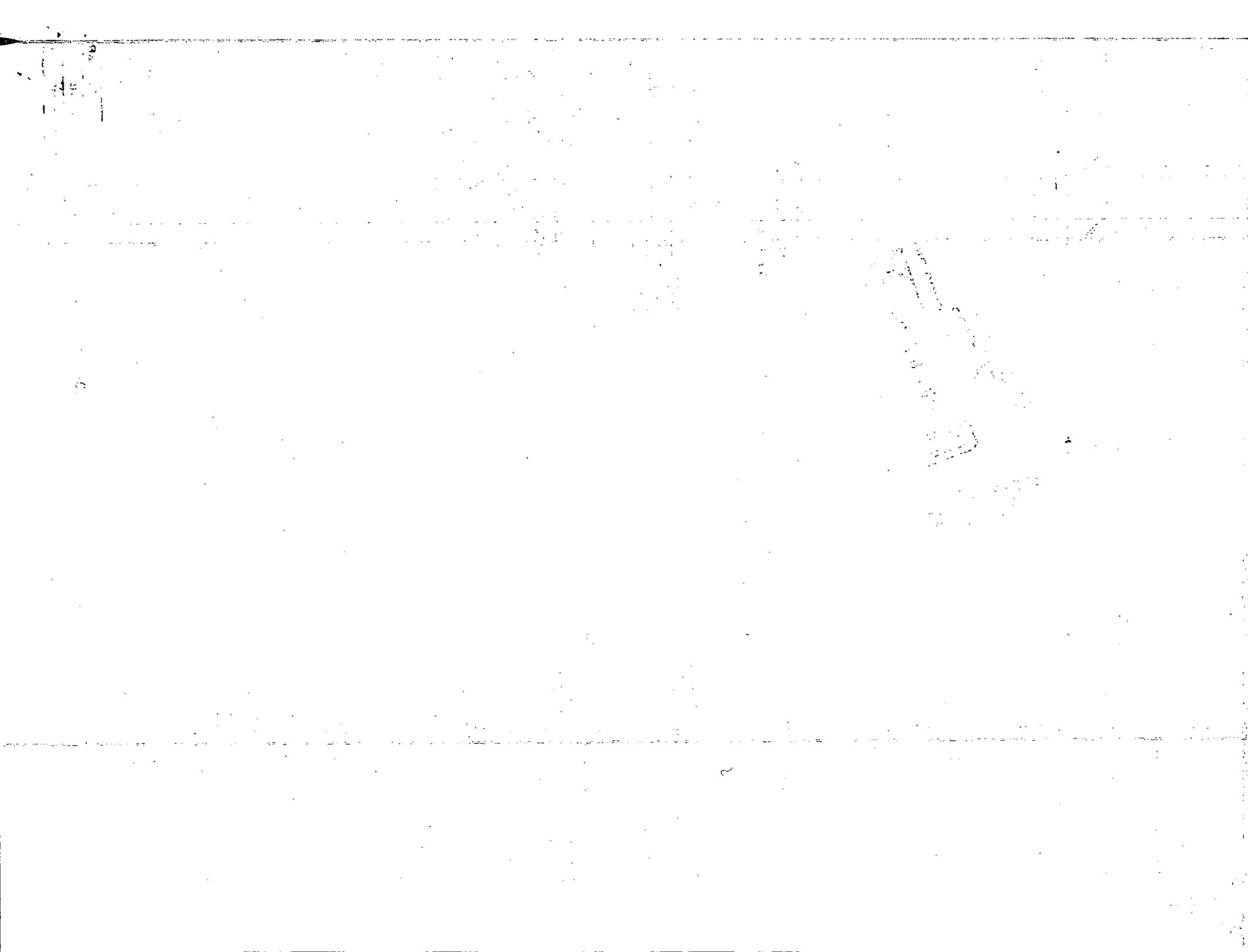
Rule 11:

Notice of this infill request has been sent to Anadarko Production Co., Box 2497, Midland, Texas 79702; Depco, Inc., 1000 Petroleum Bldg., Denver, Colorado 80202; and Amoco Production Co., Box 3092, Houston, Texas 77001, as the offset operators.

RECEIVED
JUL 19 1982

Request for Infill Finding on
Old Loco Unit #20
in accordance with Administrative
Procedures amended February 8, 1980

SECRET
JUL 19 1982
GIL UNION
SANTA



NO. OF COPIES RECEIVED	
DISTRIBUTION	
DATE	
FILE	
S.G.S.	
ADDRESS AND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION
(RECEIVED)

30-015-23176
Form C-101
Revised 1-1-80

FEB 8 1980

O. C. D.

5A. Indicate Type of Location
STATE FEE

5. State Well & Case Number
B-5084

7. Unit Agreement Name
Old Loco Unit

8. Form of Lease Name
Old Loco Unit

9. Well No.
20

10. Field and Loc. or Grbg SA
Grbg Jackson SR Queen

12. County
Eddy

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Type of Work
Type of Well DRILL DEEPEN PLUG BACK
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

Name of Operator
Marbob Energy Corp.

Address of Operator
P.O. Box 304, Artesia, N.M. 88210

Location of Well
UNIT LETTER P LOCATED 990 FEET FROM THE South LINE
990 FEET FROM THE East LINE OF SEC. 32 TWP. 17S RGE. 29E

11. Proposed Depth
2850'

11A. Formation
Grayburg & Lovington

11B. Type of C.T.
Rotary

Elevation (Show whether DT, RL, etc.)
3561.5' GR

21A. Kind & Status Plug. Bond
Statewide Active

21B. Drilling Contractor
Alta-West Drilling Co.

22. Approx. Date Work will start
2/11/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	20#	250'	Circ.	
7 7/8"	4 1/2"	10.50#	2850'	225	

We propose to drill to approximately 2850' to test Grayburg & Lovington formations. We do not anticipate gas at these depths & will not set up a blowout preventer program at this time.

RECEIVED
JUL 19 1982
SANTA FE COUNTY

APPROVAL VALID FOR 90 DAYS UNLESS DRILLING COMMENCED.
EXPIRES 5-11-80

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

Operator certifies that the information above is true and complete to the best of my knowledge and belief.

By Carolyn Oris Title Secretary Date 2/8/80
(This space for State Use)

APPROVED BY W.A. Sussett TITLE SUPERVISOR, DISTRICT II DATE FEB 11 1980
CONDITIONS OF APPROVAL, IF ANY: RULE #5

1947
MAY 15 1947
RECEIVED
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 11-1
Superseded 1-1-78
Effective 11-65

All distances must be from the outer boundaries of the Section

Operator MARBOB ENERGY CORPORATION		Well OLD LOCO UNIT		Acres 20
Unit Letter P	Section 32	Township 17 South	Range 29 East	County Eddy
Actual Location Location of Well:				
990 feet from the South		990 feet from the East		
Ground Level Elev. 3561.5	Tract description Grayburg & Lovington		Section Grbg Jackson SR Queen Grbg SA	Acres 40

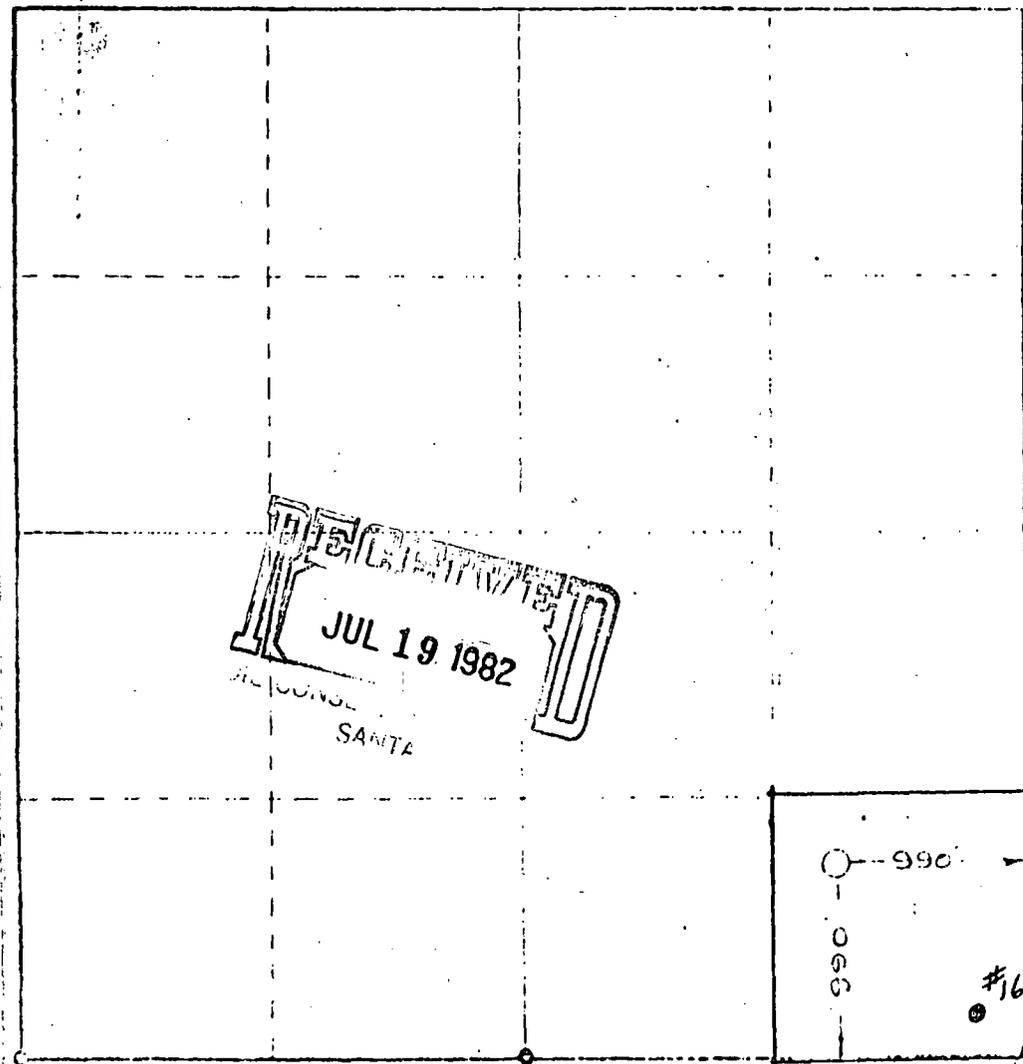
- Outline the acreage dedicated to the subject well by colored pencil or **RECEIVED** (stamps) on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, O. G. D. interests of all owners been consolidated by communitization, unitization, force pooling, etc?

FEB 8 1980

ARTESIA, OFFICE

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-stacked 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.

Cecelia Orris
Secretary

Marbob Energy Corp.

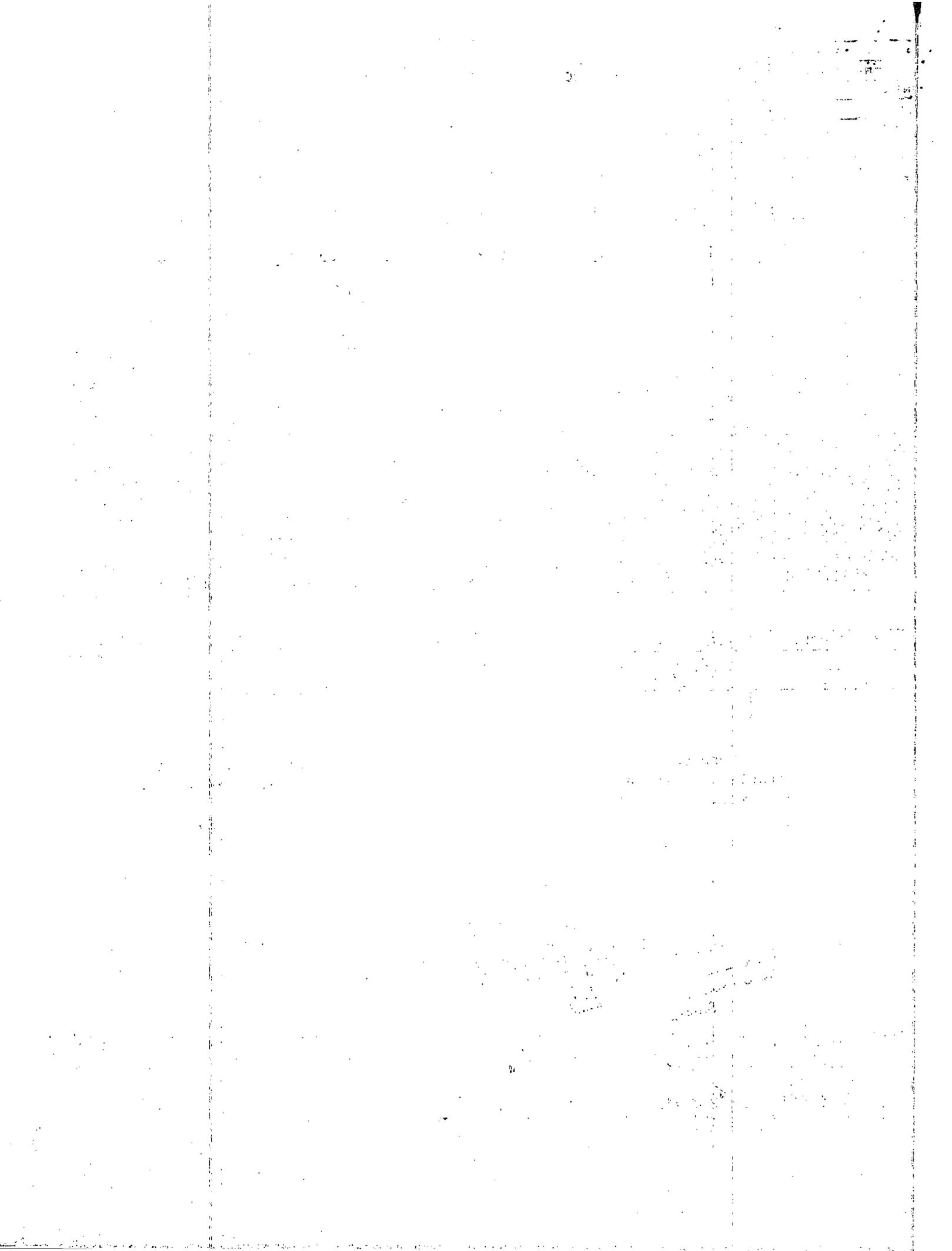
2/8/80

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

Rubb #5

February 6, 1980

John W. Stearn
#16



NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
LE	
S.O.B.	
AND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

NEW MEXICO OIL CONSERVATION COMMISSION
RECEIVED

30-015-23176
Form C-101
Revised 11-75

FEB 8 1980

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 SINGLE TUBE MULTIPLE TUBE

5A. Indicate Type of Lease
STATE FEDERAL

5. State Oil & Gas Lease No.
B-5084

Name of Operator
Marbob Energy Corp.

Address of Operator
P.O. Box 304, Artesia, N.M. 88210

7. Unit Agreement Name
Old Loco Unit

8. Form of Lease Name
Old Loco Unit

Location of Well UNIT LETTER P LOCATED 990 FEET FROM THE South LINE

990 FEET FROM THE East LINE OF SEC. 32 TWP. 17S R. 29E

9. Well No.
20

10. Field Unit Pool, or Grbg SA
Grbg Jackson SR Queen

12. County
Eddy

11. Proposed Depth 2850'	13A. Formation Grayburg & Lovington	13B. Rotary or C.T. Rotary
14. Elevation (show whether D.P., K.I., etc.) 3561.5' GR	21A. Kind & Status Plug. Bond Statewide Active	21B. Drilling Contractor Alta-West Drilling Co.
		22. Approx. Date Work will start 2/11/80

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	20#	250'	Circ.	
7 7/8"	4 1/2"	10.50#	2850'	225	

We propose to drill to approximately 2850' to test Grayburg & Lovington formations. We do not anticipate gas at these depths & will not set up a blowout preventer program at this time.

RECEIVED
JUL 19 1982
OIL CONSERVATION DIVISION
SANTA FE

APPROVAL VALID
FOR 90 DAYS UNLESS
DRILLING COMMENCED,
EXPIRES 5-11-80

ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODU-
TION 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.

by Carolyn Aris Title Secretary Date 2/8/80

(This space for State Use)

APPROVED BY W.A. Sussett TITLE SUPERVISOR, DISTRICT II DATE FEB 11 1980

CONDITIONS OF APPROVAL, IF ANY:

RULE #5

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-190
Supersedes O-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator MARBOB ENERGY CORPORATION		OLD LOCO UNIT		Acres 20
Unit Letter P	Section 32	Township 17 South	Range 29 East	County Eddy

Actual Footage Location of Well:
990 feet from the South 990 feet from the East

Ground Level Elev. 3561.5	Locating Information Grayburg & Lovington	Grbg Jackson SR Queen Grbg SA	40
-------------------------------------	---	--------------------------------------	-----------

RECEIVED

FEB 8 1980

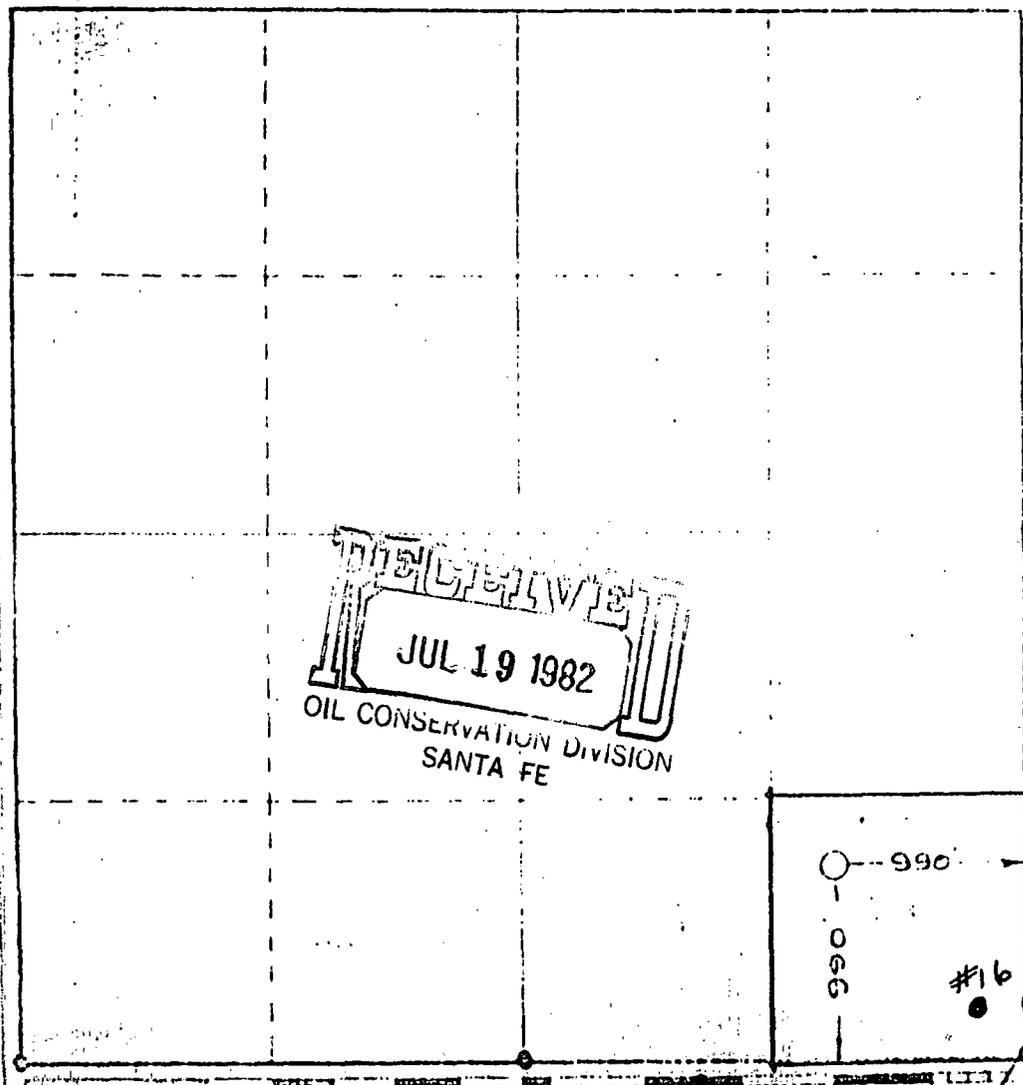
ARTESIA, OFFICE

1. Outline the acreage dedicated to the subject well by colored pencil or ink on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (that is to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, O, C, D, 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 (if so 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.

Carelyn Orris
Secretary

Marbob Energy Corp.

2/8/80

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

Rube #5

February 6, 1980

Allen W. D'Heam

OFFICE OF THE ATTORNEY GENERAL
STATE OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA

Rule 6:

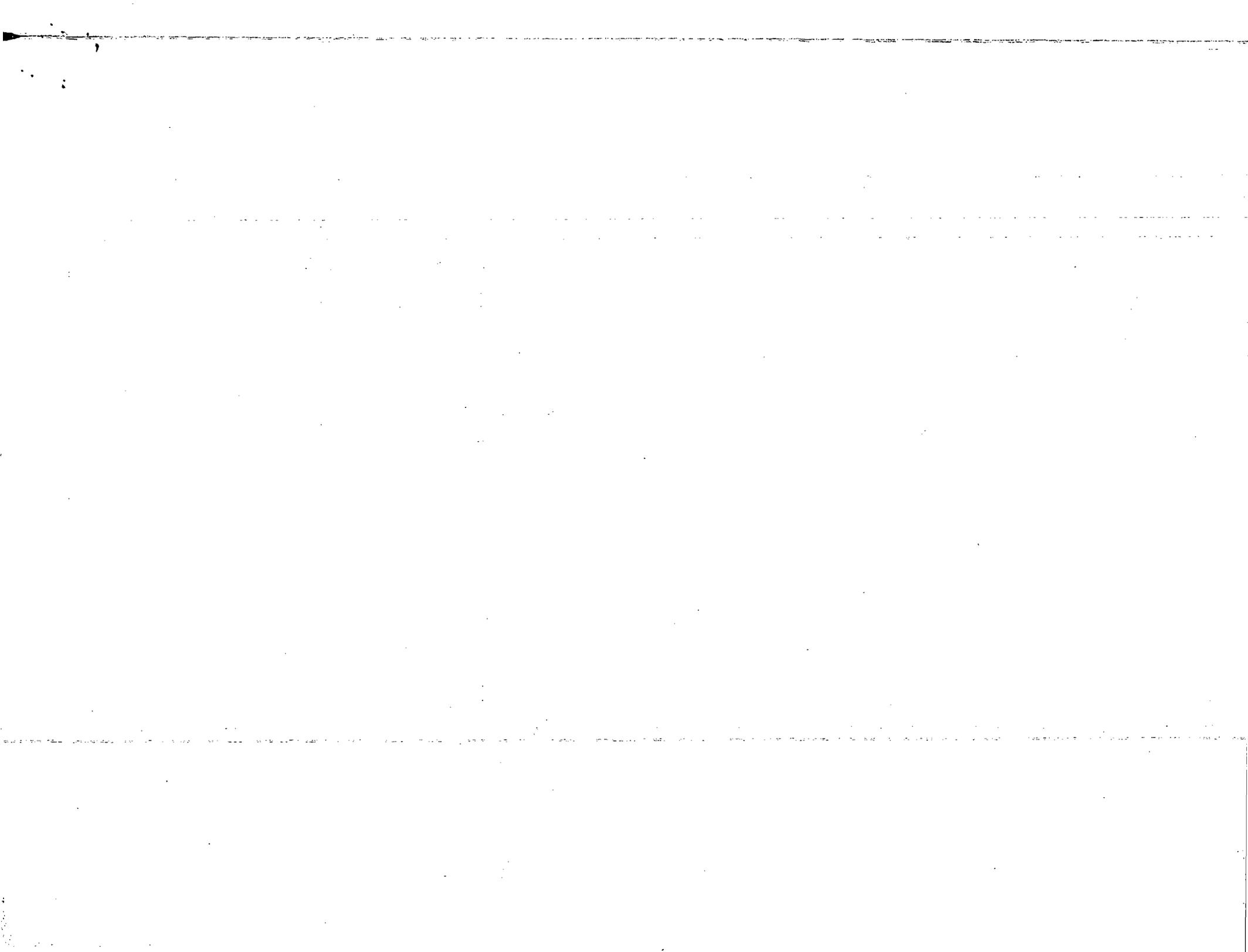
Old Loco Unit #20

Pool: Grayburg Jackson Seven Rivers Queen Grayburg San Andres

Standard spacing unit: 40 acres

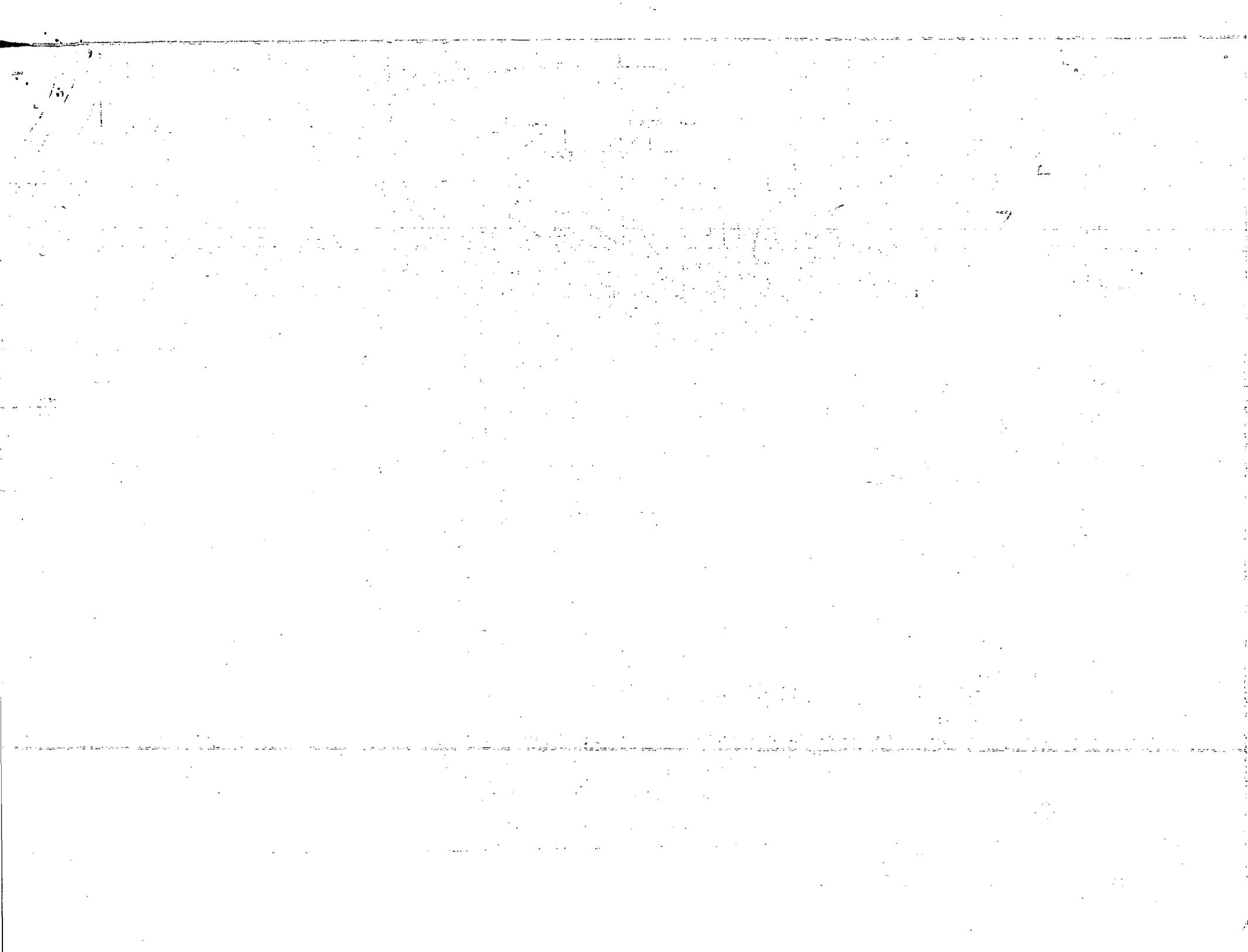
Rule 7:

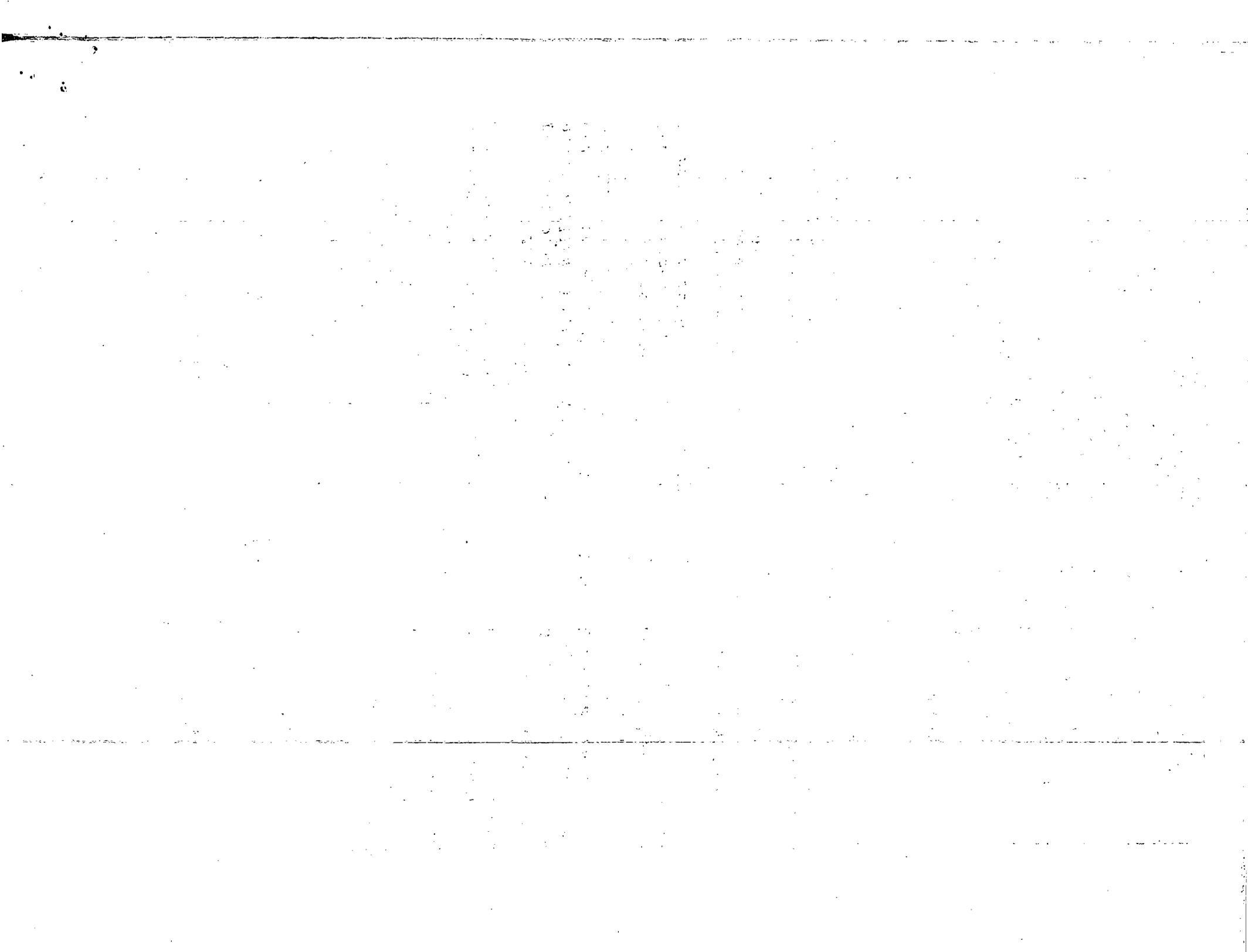
NA



Rule 8:

- a. Old Loco Unit #16 - 330 FSL 330 FEL Sec. 32-T17S-R29E
Old Loco Unit #20 - 990 FSL 990 FEL Sec. 32-T17S-R29E
- b. #16 - 10/6/52
#20 - 2/13/80
- c. #16 - 1/26/53
#20 - 3/15/80
- d. None
- e. #16 - 3 bbl. oil, 1/3 mcf gas/day
#20 - 12 bbl. oil, 5 mcf gas/day
- f. NA
- g. Well #16 is producing very little gas. The migration of oil and gas through waterflooding coupled with new reservoir condition type production rates on the new well make the drilling of a new well necessary to drain the reservoir.





Marbob Energy Corporation
Old Loco Unit, Well #20
Grayburg Jackson Seven Rivers Queen
Grayburg San Andres
Eddy County, New Mexico

Pertinent Engineering Data and Conclusions:

Well #20 was completed in the Grayburg Jackson pool in March 1980. This is an infill well located as per the attached plat.

Effective July 1, 1982, oil reserves recoverable will be 11,694 barrels and gas reserves recoverable will be 3,508 mcf.

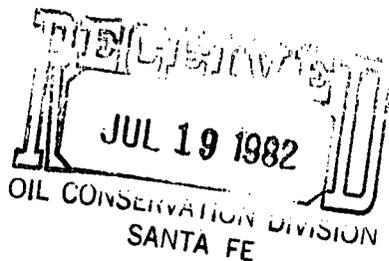
Oil reserves were calculated from the attached time/rate curve to an economic limit of approximately 1 BOPD (see table). Gas reserves were estimated using a study of the gas oil ratio performance not only on the specific well but on the pool history.

From a study of this immediate area in this pool I find per well producing rates in 1970 below what the rates are for the newly drilled infill wells. The daily producing rate of oil for well #20 in May 1982 was 12 BOPD. In 1970 the average daily producing rate per well on this property was 7 BOPD.

Due to extensive waterflooding in the area there has been significant oil migration into areas between injection wells or between injection and producing wells.

It is evident from the rate of production and from oil reserves remaining that pattern density has to be increased to recover additional oil and gas reserves.

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



Paul G. White
Paul G. White
Petroleum Engineer

7-15-82
Date

RULE #9-B

Marbob Energy Corp.
Old Loco Unit, Well #20
990 FSL 990 FEL Sec. 32-T17S-R29E
Eddy County, N.M.

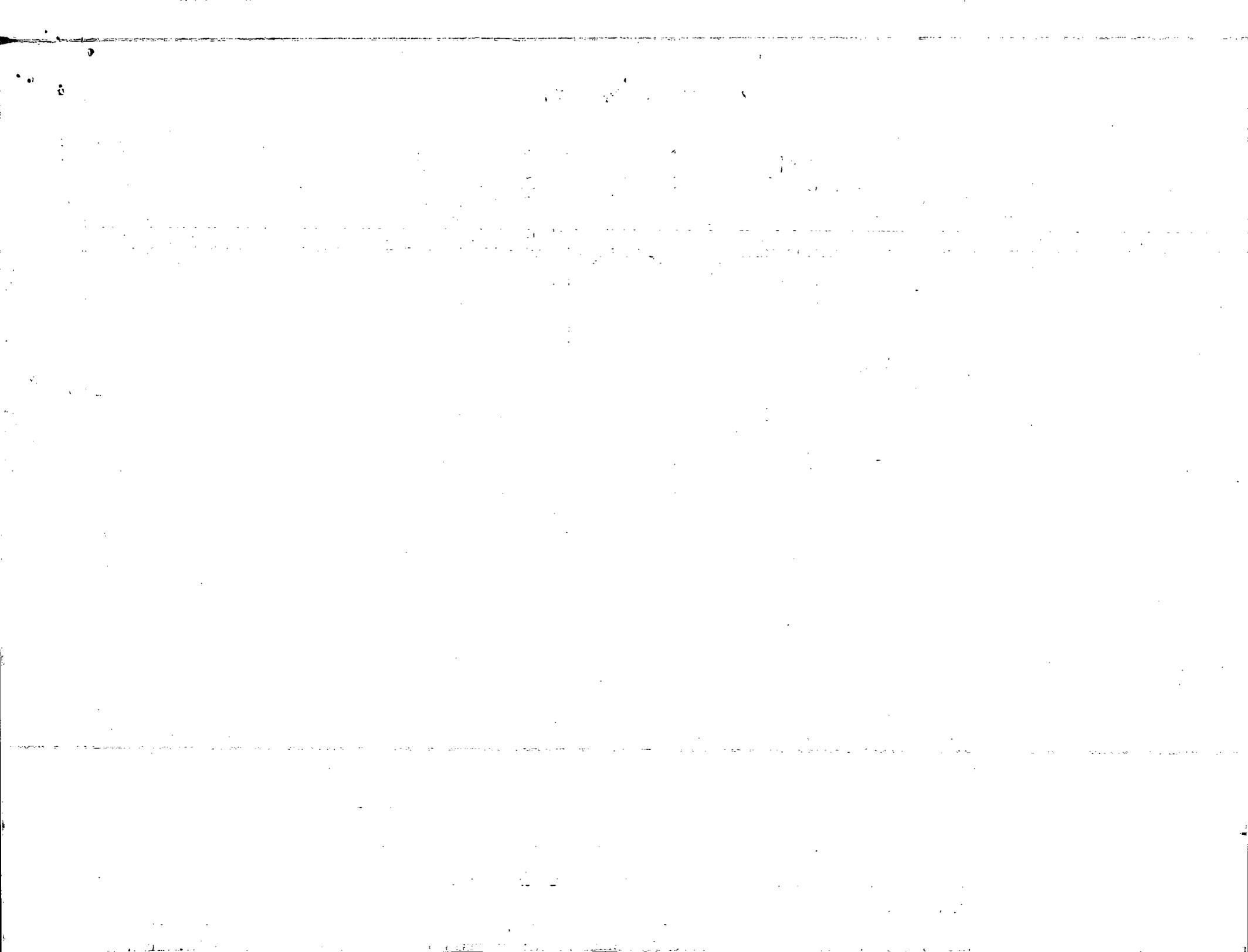
Calculation of oil reserves - refer to rate/time curve:

<u>Year</u>	<u>Gross monthly Oil - bbls.</u>	<u>Gross Yearly Oil - bbls.</u>
1982 (6 mos.)	345	2,070
1983	275	3,300
1984	180	2,160
1985	128	1,536
1986	87	1,044
1987	60	720
1988	42	504
1989	30	<u>360</u>
Total oil remaining:		11,694
Cumulative to 1/1/82		<u>15,207</u>
Total ultimate reserves:		26,901

Gas-oil ratio average - 300 to 1

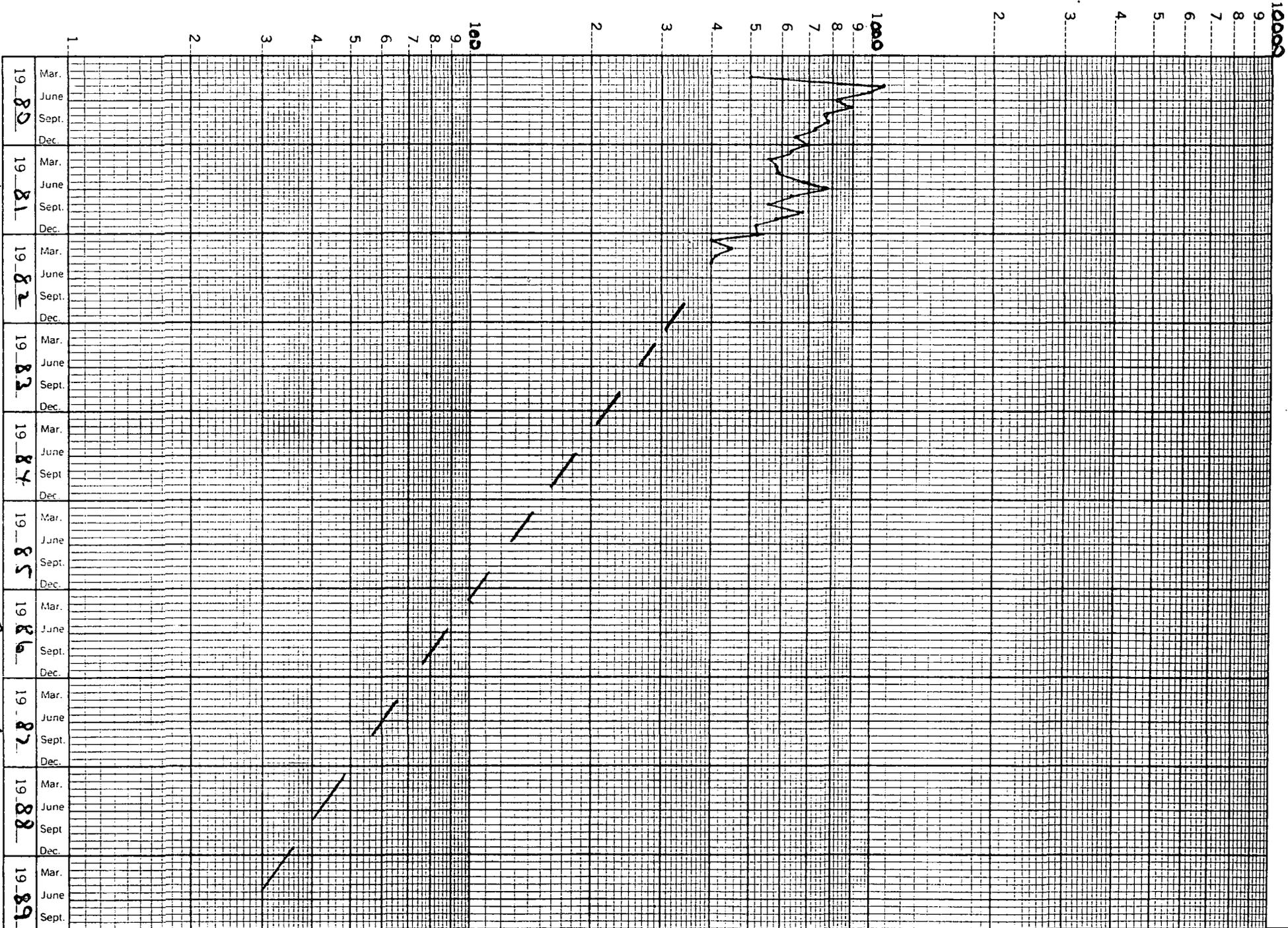
Remaining gas reserves - 3,508 mcf.

Rule #9-B

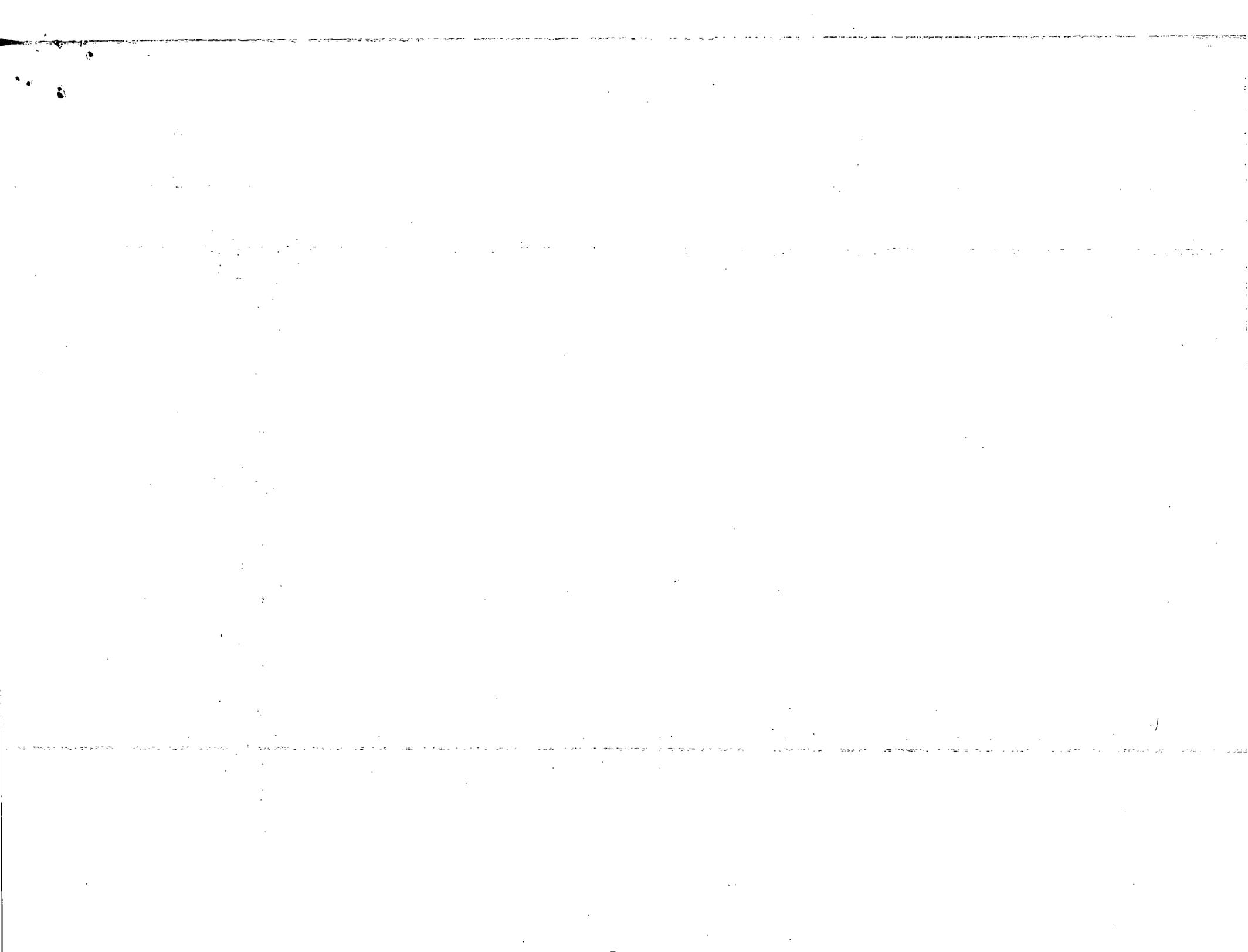


BBLs / OIL / MONTH

OLD LOGO UNIT
WELL NO 210



Rule # 9-C(a)



Rule 11:

Notice of this infill request has been sent to Anadarko Production Co., Box 2497, Midland, Texas 79702; Depco, Inc., 1000 Petroleum Bldg., Denver, Colorado 80202; and Amoco Production Co., Box 3092, Houston, Texas 77001, as the offset operators.

