	20 Us work Loop	IL SUIDINATIVE ORDER
STATE OF NEW MEXICO	SANTA FE, NEW MEXICO	· · · · · · · · · · · · · · · · · · ·
ENERGY AND MINERALS DEPARTMENT	87501	NFL 63

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 _	Marbo	b Ene	rgy C	orpora	ation	 Well Nam	ne and No.	Old I	Loco Unit V	Well No.	20	
Location:	_Unit_	P	Sec.	32	_Twp1		29-е	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) T	hat the	e well f	for whi	ich a find	ling is so	ught i	s con	pleted in	the	Gray	burg	Jackson		IN-
rbg-SI	A)	Pool	, and t	the standa	ard spacin	g unit	in s	aid pool :	is	40				acres.
(4) T	hat a _	40			proration		compr	ising the	5	E/4 S	E/4			
of Sec			rp	17-S	Rng. 29-1	E	, is	currently	dedi	cated	to th	e Old	Loco	Unit
Well	no. 16	<u></u>		loca	ated in Un	it P		of said	d sec	tion.	•			

(5) That this proration unit is (X) 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 $2$	Ath day of, 19,
•	
	he tames
	DIVISION DIRECTOR EXAMINER

Received: 7/19/82
OIL CONSERVATION DIVISION Surface Parte: Today
P. O. Box 2088 ADMINISTRATIVE ORDER
STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT SANTA FE, NEW MEXICO 87501
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
이 같은 것은 것은 것은 것은 것은 것은 것은 것을 가지 않는 것을 하는 것은 것을 가지 않는 것을 수 있다.
Operator Marbob Energy Corporation Well Name and No. Old Low Unit Well No. 20
Location: Unit <u>P</u> Sec. <u>32</u> Twp. <u>175</u> Rng. <u>29E</u> Cty. <u>Eddy</u>
한번 사람은 물건을 통한 것 같은 것 같은 것 같은 것 같은 것을 물건을 하는 것을 가능하는 것을 것 같다.
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 Gravburg Jackson (SR-Qn
(rrbg - 5A) Pool, and the standard spacing unit in said pool is 40 acres.
(4) That a <u>40</u> -acre protation unit comprising the $5E/4$ $5E/4$
of Sec. 32, Twp. 325-5, Rng. 29E, is currently dedicated to the Old Loco Unit
Well No. 16 located in Unit of said section.
(5) That this proration unit is (X) 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 <u>3,5608</u> 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 thisday of, 19
CC-OLD Artena NMOTFEC Holls DIVISION DIRECTOR EXAMINER
NMOTEC Holls DIVISION DIRECTOR EXAMINER

Request for Infill Finding on

Old Loco Unit #20

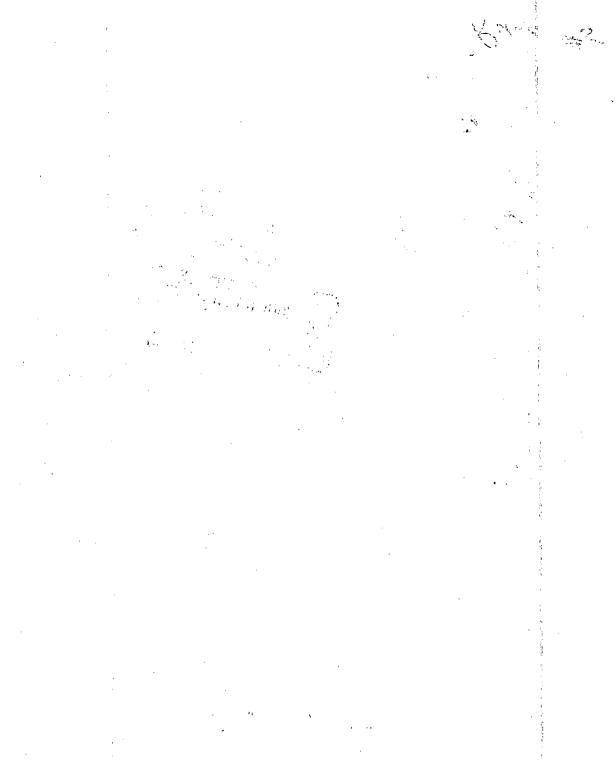
49 T

in accordance with Administrative Procedures amended February 8, 1980

P- 32-175-29E Eddy Co.

						۵.		
····								
NO. UP COPIES ACCEIVED							3010	15-23176
ÉISTRIBUTION	- <b> </b>	NEW	MEXICO OIL CON	SERVATION CO	MMISSION	,	Form C - 101	
SANTA FE	<u> </u>			HECEIV	ビレ		Revised 1-1-f	+
FILE	+1						SA. In licote	VI Collogue
U.S.G.S.	- <b>}</b> {			FEB 81	980			
		•						6 Gis Leise Do.
OPERATOR L				O. C. D	).		τττττττ	084 ******
	N 500 05	0.417 70	DRILL, DEEPEN	ABIESIA	100			
APPLICATION	NFURPE	RMIT TU	DRILL, DEEPEN	I, UR PLUG B			7. Grat Age	IIIIIIIIIIIII
	••		<b>C</b> -1			_		co Unit
b. Type of Well			DEEPEN		PLUG B	аск []]	8. Fum or L	
011 8 649 0		•		AINGLE X	MUL 1			oco Unit
A Line of Crepter	0./HI			toxt LA		tour Lad	9. 4 eli 1.c.	
Marbob Energy	Corp.						20	
J. Aditets of Operator								ttecherGrbgt SA
P.O. Box 304,	Artesia	, N.M.	88210				Grbg Jac	kson SR Queen
				-	South		TIT III	, minning
						LINE		MMMM
AND 990	East	LIN	<u>, or stc.</u> 32	TWP 175		E		MMMM////////
	TIMM.	IIIIII.		MUUUU	IIIII	TIIIII	12. County	, <i>:111111</i>
	<u>UIIIII</u>	<u>111111</u>	MMMM		IIII	IIIII	Eddy	
	IIIIIII				HHHH	HHHH		illillillilli
	ΤΗΠΠ	TITT	WWWWW	لللللللل	IIII	111111	IIIII	<u>illlillill</u>
				12. Frequencial De	·ru: [1	Grayburg	ີ&	LL P ANY OF C.T.
al. Lievationa ishou a hother DF.	ППП	ريبيبين	mmm	2850'	1	Lovingto	<u>n</u>	Rotary
3561.5' GR	n I, (IC.)		& Stortum Flug, Bond Lde Active	218. Drilling Co Alta-West				u Date Work will Afort - 1/80
23.				1 million webt				
•••		P	ROPOSED CASING A	ND CEMENT PRO	GRAM			
SIZE OF HOLE	SIZE OF	CASING	WEIGHT PER FO	DT SETTING	DEPTH	SACKS OF	CEMENT	EST. TOP
11"	8 5		20#	250'		Circ		
7 7/8"	41		10.50#	2850'		225		
		· · · · · · · · · · · · · · · · · · ·						
	ł		l	ł		l		ł
forma	ations.	We do n	to approximation not anticipate program at t	e gas at th				
			<b>JUL 19 198</b>	2			FOR 90	DVAL VILLO DAYS UNLESS COMMEN <b>UED</b> ,
· · ·						FY	HEFS 5-	-11-80
IN ABOVE SPACE DESCRIBE PF	ROPOSED PR	OGRAM: 1F	PROPOSAL IS TO DEEPE	N 69 PLUG BACK, 6	INE DATA ON	PRESENT PR	DOUCTIVE ION	
TIVE ZONE. GIVE BLOWOUT PREVENT	ER PROGRAM,	IF ANY.				·	·····	
I hereby certify that the informati	on above is t	rue and com	plete to the Le <b>nt of m</b>	y knowledge and b	ellef.			
Signed Carolyn	Ani	6	Tiele	Secretary			Date	2/8/80
(This space for	State Use)							CD 1 1 4000
1.50	Sin-	117	SUI	PERVISOR, DL	STRICT	ÎI	; r1	EB 111980
APPROVED BY			_ TITLE				う!"	#1
CONDITIONS OF APPROVAL, I	PANVI					K	TULE	<u>"S</u>

ġ.



}

. (

# WELL LOCATION AND ACREAGE DEDICATION PLAT

nator MARBOB ELERC	GY CORPORATION		LD LOCO UNIT	· · · · · · · · · · · · · · · · · · ·	20
Letter         Letter           P         Interface           Int Forderic Locations         Interface	32 1 Wells	7 South 2	9 East	Eddy	
3561.5		ngton Grbg Ja	3	Grbg SA	40
2. If more than on	ar lease is dedicated	e şubject well by colo 1 to the well, outline e	ach and identify the	geografic there of	
	· .	wnership is dedicated t i, force paoling, etc?	• •		where been consul
[_] Yes [_] ]	No — If answer is '	type of consolida		:	· · · · · · · · · · · · · · · · · · ·
this form if need No allowable will	rssary.) Il bé assigned to the y	ad tract descriptions wh well until all interests mon-standard unit. Telin	have been consolida	ted (by communi	ization, metization
				CFR	treat a taten
•	<b>}</b>				Not the internation co than and complete to th
4 4 y 1 4	, , ,				ieitge and belief.
· · · · · · · · · · · · · · · · · · ·	1 1 1 <del>1</del> <del>1</del> 1		·		
	, , , ,,,,,, _		• • • • • • • • • • • • • • • • • • •		n Orio
· · · · · · · · · · · · · · · · · · ·			•	Currely Secretary Marbob Ener	n Orio
· · · · · · · · · · · · · · · · · · ·	1 14	19 1982	•	Currale, Secretary Marbob Ener	regy Corp.
	1 14	19 1982		Marbob Ener 2/8/80	regy Corp.
	1 14	TILLIN DIVISION	0990	Marbob Ener 2/8/80	rgy Corp.



( المراج ) المراج المراج ( الم المراج ( الم

2

ξ,

215 Media. nto charleso Acres 14

NO. UP COPIES PECEIVED			30-0:5-23176
<b>DISTRIBUTION</b>	NEW MEXICO OIL CONSERV	VATION COMMISSION	Form C-101
SANTA FE	NEW MEXICO OIL CONSERV	RECEIVED	Revined 1-1-65
FILE		Ì	SA. In lichte Type of Lone
U.S.G.S.	, i	EB 8 1980	BTATE X FEE
LAND OFFICE	,		5. State Cill & Gas Loans Ho.
OPEHATOR		O. C. D.	B-5084
APPLICATION FOR P	ERMIT TO DRILL, DEEPEN, O	R PĽÚG BÁCK	
In. Type of Work			7. Unit A pre-ment llang
DRILL	DEEPEN	PLUG BACK	Old Loco Unit
b. Type of Well	· · ·		8. Furns or the use thane
	-HCR 81		Old Loco Unit
To Marie of Cpreator			9. Well Re.
Marbob Energy Corp.			20
3. Addiese of Operator			10. Field on t Feel, or Grbg" SA
P.O. Box 304, Artes	ia, N.M. 88210		Grbg Jackson SR Queen
4. Location of Well UNIT LETTER P	LOCATES 990 FEE	T FROM THE South LINE	. internet and the second s
990 East	t Lintorsic. 32 . two	175 29E	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		12. County Aller
			Eddy
	<u>, ((((((((((((())))))))))))))))))))))))</u>	Frojesed Depth ISA. Fernation Grayburg	E LANDERY OF CATA
		2850' Lovingto	
21. Elevations (Show whether DE, KI, etc.)	• •	B. Drilling Contractor	22. Approx. Date Work will start
3561.5' GR	Statewide Active A	lta-West Drilling Co.	2/11/80
23.	PROPOSED CASING AND C	CEMENT PROGRAM	,
SIZE OF HOLE SIZE OF	F CASING WEIGHT PER FOOT	SETTING DEPTH SACKS OF	CEMENT EST. TOP

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	
	· ·			1	

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.

41 JUL 19 1982 SANTA FE

APPROVAL VIND FOR 90 DAYS UNLESS DRILLING COMMENCED,

EXPIRES 5-11-90

PACE DESCRIBE PROPOSED PROGRAM 0.

l hereby a	entity that the information	above is true and c	omplete to the l	boot of my knowledge and bollof.		
Signed	Carolyn	Oris_	Title	Secretary	Date	2/8/80
	(This space for St	ate Use)		i an	and the second secon	<b>α. <u>α</u> τη γοραγική τη παραγοριατητή το παραβολια τα παραγοριατητή το π Γ</b>
	an IN.a.	Succet		SUPERVISOR, DISTRICT II	DATE	FEB 111980
	ONS OF APPROVAL, IF				R	468 #5

r st

C, '

WELL LOCATION AND ACREAGE DEDICATION PLAT

... · 2

. ÷

Brances (1997) Supersedes (1912) Etter avec 1466

9

5 1

,

MARBOB     ENERGY     CORPORATION     OLD     LOCO     UNIT     20       Init Letter     Desite			All distances quart b	e from the soler book	uteries of the Se	. tron	
P       32       17 South       29 Sast       3ddy         P90       model investment Facult       390 th       990       16355         3561.5       Graphyners & Lowington       Grbg Jackson SR Queen Grog SA       40         1. Outline the arrays dedicated to the action of the state of the investment of the investment of the state of the investment of the inve		a an an an an an a sa s	••••••••••••••••••••••••••••••••••••••	OLD	· •,		
990 means 39th 990 that a serie of the series of the serie	Р	32	j –	29 :	1		• • • • • • • • • • • • • • • • • • •
I. Outline the average dedicated to the subject well by cohord proof of CECEIVED to on the plat below. 2. If more than one lense is dedicated to the well, nutline each out related to the second black as to working FEB 8 1980. 3. If more than one lense of different concersing is dedicated to the well. O. C. D. Decests of all concers here consult deted by communication, matrix time, the decemptions where here a that is here consulted at the concersion of the consult deted by communication. There points, where here a that is here consulted at the consult of the communication of the consult deted by communication. There is a set of the consult deted is communication, and the decemptions where here a that is here consulted at the consult of the communication. There is a set of the consult determines the consult of the communication of the communication. There is a set of the communication of the communication of the communication of the communication. There is a non-stacked multi eliminating set is the average of the Communication. There is a set of the communication of the communication of the communication of the communication. There is a set of the communication of the communication of the communication. There is a set of the communication of the communication of the communication. There is a set of the communication of the communication. There is a set of the communication of the communication of the communication of the communication of the communication. There is a set of the communication of the communication of the communication. There is a set of the communication of the communication of the communication. The communication of the communication of the communication of the communication. The communication of the communication. The communication of the communication. The communication		teer mention So		990	teret te o	East	an an an tha an
<ul> <li>If more than one lease is dedicated to the well online each and identify the setting there of that as to working FEB 81880</li> <li>If more than one lease of different associating is dedicated to the well. O. G. D. to rest of all cances here consult dated by communitization, antization, face pooling en ?</li> <li>[] Yes [] No If answer is "res," type of consolidation.</li> <li>If answer is "no," list the waver and that descriptions which have at thath, here consolidated the concombination in face support.</li> <li>No allowable will be assigned to the well only all attents have been consolidated the concombination.</li> <li>If are deposition of the rest of the answer is "no," list the waver submit all attents have been consolidated the communitization, motization, face opposed to the well only all attents have been consolidated the communitization, motization, face opposed to the well only all attents have been consolidated the communitization, motization, face opposed to the well only all attends when have a standard of the communitization, motization, face opposed to the well only all attends are the interest, have been consolidated the communitization, motization, face opposed to the well only all attends to the communitization of the face of a the communitization.</li> <li>Charles and the communitization of the least of the based of the communitization of the face of the face of the based o</li></ul>					••••		مستشبه الاستيناد والمراجع
interest and royalty).       FEB 8 1980         3. If more than one leave of different asserts point define and the new setting of C. C. D.							
ARTESIA, OFFICE  ARTESIA, OFFICE ARTESIA, OF			dedicated to the w	ct), outline each			eal that, as to working
H unswer is "mu" list the owners and that best options which have a that here consolidated of the reverse side of this form if necessary. No allowable will be assigned to the well unit all interests have been a modulated the communication, motivation, increasing, or interests or interests have been a modulated the communication, motivation, increasing, or interests or interests have been a modulated the communication on interests in a non-standard unit, eliminating such interests, has been approved by the Commission, or interests in a monestanded unit, eliminating such interests, has been approved by the Commission, or interests in a start of a more than the term of the more implete in the best of as business of more the interest of a more transmitting on the term of term of the term of			-		· ·		Il owners been consuli-
No allocable will be assigned to the well and interests have been consolidated by communication, metization, for edepoiding, or adversise) or not a non-standard unit, eliminating such interests, has been approved by the Commission sink. CENTRE above CENTRE above CE	[] Yes [	No If an	iswer is "vest" type	of consolidation	·	: 	·
No allowable will be assigned to the well anti-all interests have been consolidated thy communication, notization, forced-pooling, or inherevise) or not 1 a non-standard unit, eliminating such interests, has been approved by the Commission.  CERTELLATOR  Literation of the second complete in the best of as boas being or the feel.  Catalant and been as the out complete in the best of as boas being or the feel.  Literation of the second complete in the best of as boas being or the best of an and the best of an as a boas being or the best of an as a boas being or the best of an as a boas being or the best of an as a boas being or the best of any been able to a best of any boas being or the best of any boas boas best of any boas best of any boas best of any boas			owners and tract de	scriptions which	have actuall	a heen consumptite	d at a nexuse side of
CENTRE RATER CENTRE RATER CENTRE of the the marked of the the best of as boost cities and complete to the complete cities and complete to the best of as boost cities and complete plic curves and complete to the best of an plic curves and complete cities and complete plic curves and complete cities and complete cities and complete cities and complete plic curves and complete cities and	No allowahl forced-pooli	e will be assign	ed to the well notify or until a non-stand.	d) interests hav and unit, elimina	cheen conso tog such inte	lidated thy commu rests, has been ap	nitization, multization, proved by the Commis-
Like of the set of the		i	·····				ERIVER ALION
Currelyn Orno Secretary Marbob Energy Corp. 2/8/80 JUL 19 1982 JUL 19 1982 DIL UNDUNVATION DIVISION OIL UNDUNVATION DIVISION OF 990 Fobruary 6, 1990 While Rube HTS OF 990 Mile Difference of the left of the left of the left of the Santa FE				1		tained herein	is the and complete to the
Secretary Marbob Energy Corp. 2/8/80 JUL 19 1982 JUL 19 1982 OL UNDERVISION OL OL UNDERVISION OL OL OL UNDERVISION OL OL O	1 	1     +		• • •		- Contract and the	Λ
Marbob Energy Corp. 2/8/80 JUL 19 1982 JUL 19 1982 DIL UUNDUNVITION UIVISION DIL UUNDUNVITION UIVISION DIL UUNDUNVITION UIVISION C - 990 Fobruary 6, 1990 Fobruary 6, 1990						Secretar	
$\begin{array}{c} \begin{array}{c} \hline \\ \hline $		.		· ·			nergy Corp.
JUL 19 1982 JUL 19 1982 DIL UUNDLINVATION UIVISION DIL UUNDLINVATION UIVISION OIL UUNDLINVATION UIVISION OIL UUNDLINVATION UIVISION OIL UUNDLINVATION UIVISION OIL UNDLINVATION		1		. 1		2/8/80	· · · · · · · · · · · · · · · · · · ·
O-990 Fabruary 6, 1990 Fabruary 6, 1990 Fabruary 6, 1990 Hills Hill		前面低出				I merting and	and the second second
OIL UUNDLINVATION UIVISION OIL UUNDLINVATION UIVISION OIL UUNDLINVATION UIVISION SANTA FE O990 Fobruary 6, 1990 Fobruary 6, 1990 Hills O HILLS C HILLS		JUL	19 1982				
Population of the second secon		241	UIVISION	- i i			
Fobruary 6, 1990 Fobruary 6,						hurne ledge up	Rube
of the Okn W. Shean		-     	· · · · · · · · · · · · · · · · · · ·				
Den W. Shearn		i i ··· ·			P H		y 6, 1980 <u></u> Receive a server Avec a
1559		8				John U	. Shear
	6 330 605 V			· · · · · · · · · · · · · · · · · · ·			1559

**`**.

and and a description of the second s

Rule 6:

Old Loco Unit #20

Pool: Grayburg Jackson Seven Rivers Queen Grayburg San Andres Standard spacing unit: 40 acres

Rule 7:

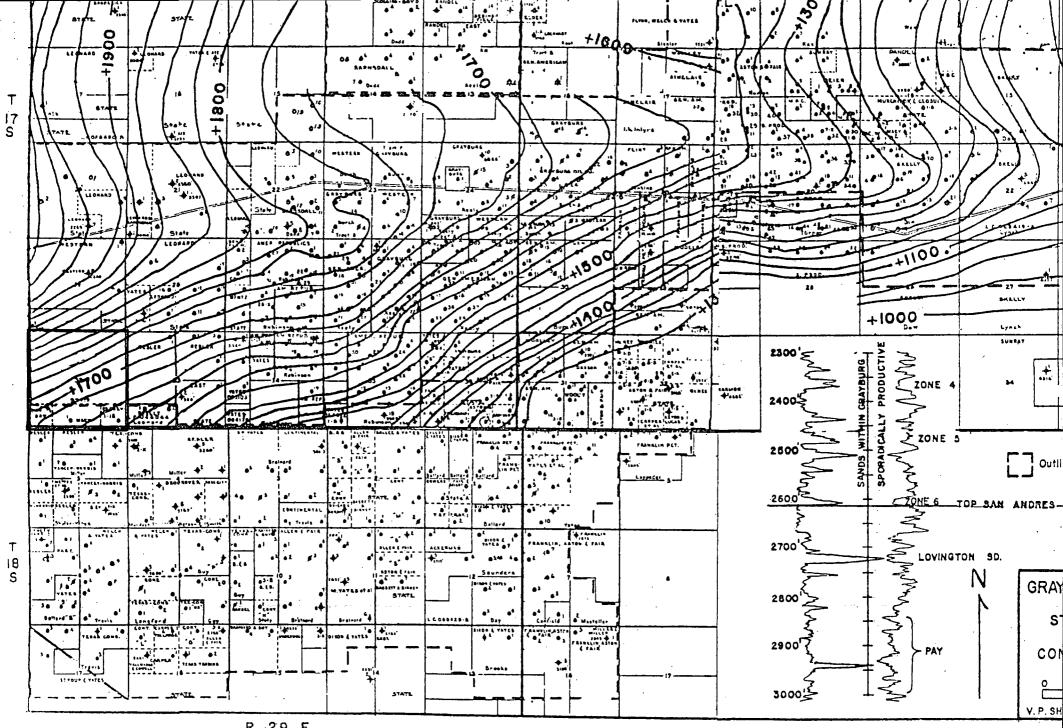
NA

Sec. 1. National Action

### 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.



R 29 E R46E # 9-A

.

100 mm

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.

111 1 9 1982 SANIA 1

Paul G. White

Petroleum Engineer

7-15-82

RULE # 9-B

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

5

19 - 19 **1** 

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

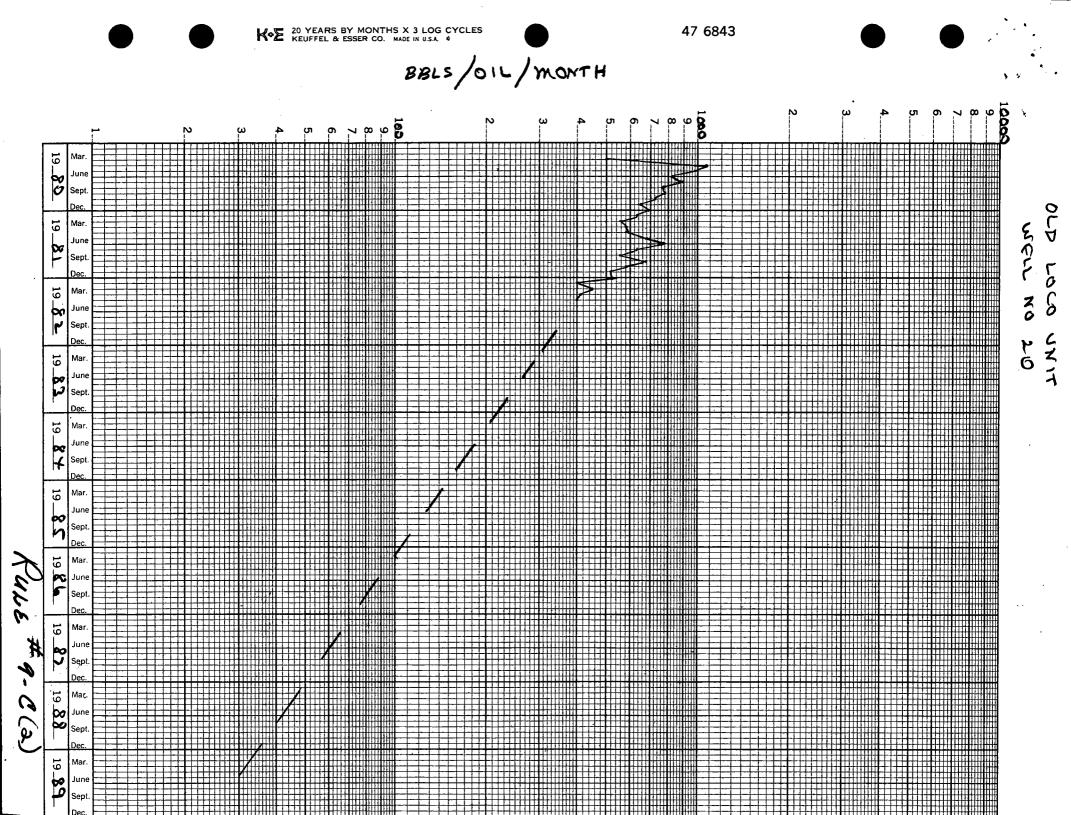
And Andrews

Year		Gross monthly Oil - bbls.	Gross Yearly Oil - bbls.
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	360
	Total oil	remaining:	11,694
	Cumulative	e to 1/1/82	15,207
۱	Total ult:	imate reserves:	26,901

Gas-oil ratio average - 300 to 1

Remaining gas reserves - 3,508 mcf.

Rule #9-B



### Rule ll:

Notice of this infill request has been sent to Anādarko 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.



Request for Infill Finding on

Old Loco Unit #20

JUL 19 1982

in accordance with Administrative Procedures amended February 8, 1980

à 

•

م میک<sup>ور</sup> دو میرد. در سال شکته در بار در میل در ایر و باری در و و باری در و

۲.

	0		•	
0. UF CODES BICSING DISTRIBUTION	NEW MEXICO OIL CONS	ERVATION COMMISSI	ON TO	30-015-23176 Sim C-101 evined 1-1-1-1
AND OFFICE		FEB 8 1980 O. C. D		A. In licitin Type of Lottin arare X rec
APPLICATION FC	R PERMIT TO DRILL, DEEPEN	101500	,	A Unit A general Since
Type of Well Ort. Z ars Ort. C ars				Old Loco Unit . Furnist Le me finne Old Loco Unit . Aeii fic.
Marbob Energy Co Harbob Cheritar P.O. Box 304, Ar pocation of Well	tesia, N.M. 88210		G	20 D. Field and Loci, of Grög' SA rbg Jackson SR Queen
990			29E	
				Eddy
Llovationu (Skow & Arther Hr, K), c 3561.5' GR	(c.) 21A. Rind & Status Flug. Bond Statewide Active	2850 <sup>1</sup> 2850 <sup>1</sup> 21H. Drilling Contracto Alta-West Dri		

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
8 5/8"	20#	250'	Circ.	
4 1/2"	10.500	2850'	225	
	8 5/8"	<b>8 5/8''</b> 20 <b>#</b>	<u>8 5/8"</u> 20 <b>#</b> 250'	

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.

JUL 19 1982

EOR 90 DAYS UNLESS ; DRILLING COMMENDED,

EXPIRES 5-11-90

y certify that the information above is true and	l complete to the L	ere of my hypelage and bellef.	
Carolyn Oris	Title	Secretary	Date 2/8/80
(This space for State Use)	<u>i ta anti area e a area i</u>		
AVED BY W. a. Susce		SUPERVISOR, DISTRICT II	FEB 1 1 1380

NĚŤ	A NEXICO OIL	<b>CONSERVAT</b>	TON COMMISS.	.14
WELL	LOCATION A	ND ACREAGE	DEDICATION	PLA

q

.

MARING LIFERY CORPORTING     OLD LOCO UNIT     20       P     32     17 South     29 Sast     Eddy       P00     South     990     Law     40       P01     To south     Greghurg & Lovington     Greg Backson SR Queen Grbg SL     40       P01     Increase dedicated to the well online calls and the test on the CECE/VED to so the path factor that a to southing factor to southing factor to southing factor to southing for the path factor to southing factor to so		,					· ,	
MARTON INTERCY CORPORATION     OLD LOCO UNIT     20       Particles     32     17 South     29 Sast     3ddy       923     and the set of th							AT	Supervidex 1+128
MARING LIFERY CORPORTING     OLD LOCO UNIT     20       International and the second			All distances qualities	roughe sate	ng fisistasstangan is i di da mananan mananan sa	he Section	** ** *****	
Image: Provide and the second of the seco	Operator MARBOB	ENERGY CORPOR	LATION	<i></i> . 	OLD LOCO U:	XIT	A+-	
920       Event with 300 the second of the sec	lifeist 1,ettere		• • • • • • • •	1	·· · · · ·			•••
903 and a set of the s		la inclusión de la company com o	17 South		29 East		Eddy	
			with	990			Las	
1. Outline the average dedicated to the well, outline each and planch to measure the that have a considered interest and cognitable. 2. If more than one leave is dedicated to the well, outline each and planch to measure that as to consider that as to consider the more than one leave of different concersing is deducated to the well. Or C. Directs of all concersion of all concersions and the decomposition of the community and the measure and the decomposition of the community and the well as its the wents and the decomposition of the community and the well as its the wents and the decomposition of the community and the well well as its the wents and the decomposition of the community and the well well as the excitation of the community and the well well at the rest have been consolidated. The community and the community and the community of the	Ground Lyvel Ellev.	Parished to p. E. a	n ann ann an ann ann ann ann ann ann an	1 · · · ·				an a
<ul> <li>If more than one lense is definited to the well, online can be and pletch the complexity there of that, as to eaching FEB 8 1980</li> <li>If more than one lense of different assership is deducated to the well. O. C. D. treases of all encode there include dated by communitization, unitization, for experiments? The encoded to the well. O. C. D. treases of all encodes the include the term unsulfated by communitization, unitization, for experiments? The encoded to the well. O. C. D. treases of all encodes the encoded dated by communitization, unitization, for experiments? The encoded term well. O. C. D. treases of all encodes the encoded dated by communitization, unitization, for experiments and that the encoded term and the term at the term and the term at term at the term at term at the term</li></ul>	and the second							A spect
Interest and royalty).       FEB 8 1980         1. If more than one leave of different moments in is dedicated to the well. O. G. D.	1. Outline th	e acreage dedica	ited to the subject w	ell by col	ored pencil or	<b>GECEIV</b>	ED keep the plat be	198.
dated by communitization, unitization, force pooling, etc?       ARTESIA, OFFICE         [] Yes [] No If mover is "vest" type of consolidation         If mayer is "into" list the conners and that descriptions which have aroundidated the communitization, andization, forcedpooling, or otherwise or unit a non-stacked unit, eliminating such interests, have been consolidated the communitization, andization, forcedpooling, or otherwise or unit a non-stacked unit, eliminating such interests, have been consolidated the communitization, andization, forcedpooling, or otherwise or unit a non-stacked unit, eliminating such interests, have been consolidated the communitization, andization, forcedpooling, or otherwise or unit a non-stacked unit, eliminating such interests, have been consolidated the communitization, andization, forcedpooling, or otherwise or unit a non-stacked unit, eliminating such interests, have been consolidated the communitization, andization, forcedpooling, or otherwise or unit a non-stacked unit, eliminating such interests, have been consolidated the communitization, and the commission of the communitization of the communitis of the communitis of the communitization of the communitization			dedicated to the wei	t, nutline			980 Borship theory of the	th as to working
[] Yes       [] Nu       If unswer is "test" type of consolidation         If answer is "too," list the insures and too to descriptions which have around to the consolidated of a conserve side of this form if necessary)         No allocatile will be assigned to the well write and all alterests have been consolidated the communication, motivation, for eveloping, or interests for until all networks have been consolidated the communication, motivation, for eveloping, or interests for until all networks have been consolidated the communication, motivation, for eveloping, or interests for until a nonestandard unit, eliminating such interests, have been consolidated the communication, and the too manifestion.         (1) Motion allocation will be assigned to the well write all interests to a consolidated of the interests of the description of the description of the description of the description.         (2) Motion allocation will be assigned to the well write of the description of the description of the description of the description.         (2) Motion allocation will be assigned to the well write of the description of the description of the description.         (2) Motion allocation will be assigned to the well write of the description of the description of the description of the description.         (2) Motion allocation will be assigned to the second complete to the description of the description of the description of the description.         (2) Motion allocation will be assigned to the second complete to the description of the description of the description of the description.         (2) Motion allocation will be assigned to the description of the description of the description of the description.								rs been consult
H unswer is "mod" list the owners and that to be approach which have a standh have a canadidated the communication metization, for every interview or and a non-standard unit, eliminating such interview, have been approach by the Commission of the								
No allocate will be assigned to the well unit all interests have been consolidated the communication, metization, for endowing or otherwise for unit a non-standard unit, eliminating such interests, has been approved by the Commission.  (All the standard provides the formation commission in the formation of the formation communication communication of the formation communication of the formation communication commun	[_] Yes	∐ No If a	nswer is "ves" type i	fronsolio	lation		) 	·
No allosable will be assigned to the well until all entrests have been consolidated the communication, metization, for endowing or otherwise for until a non-standard unit, eliminating such interests, have been approved to the Commissation, and the communication of the communication					shieh have avi	mally tax	n consofidated. (Us)	a verse side of
Alon. (1) Normal Alon Levely, certify that the indianation family and berger as the indianation family level of a summer of provided in any first Cattery Corp. 2/8/80 Stating Stating Stating ()990 1 Company 6, 1970 February 6, 1970 1 Company 6, 1970 1 Stating St	No allowat	de will be assign	ed to the well until al	lasterests	have here is	onsolidat	ed the communitizat	pon, matization,
Constraints of the second seco	forced-poo	ling, or otherwise	) or until a non-standar	d unit, 'eli	iminating such	cinterest	-, has been approved	by the Commis-
Literative center that the indicated complete the the literative of any transition complete the transition complete th	N 10n.		<u> </u>		·····		· · · · · · · · · · · ·	
JUL 19 1982 SANTE CALLED CALLED CALLED JUL 19 1982 SANTE CALLED	1	1					CENTRE .	LA FIGH
JUL 19 1982 SANTE CALLED CALLED CALLED JUL 19 1982 SANTE CALLED		1	1	,	,		i i hava ha a sa su fa shu h	the value we time come
Curaly and Secretary Marbob Energy Corp. 2/8/80 JUL 19 1982 SAMTE C990 C990 C990 Fobruary 4, 1990 C990 C990 C990 C		1		1				
Marbob Energy Corp. 2/8/80 JUL 19 1982 SANTZ SANTZ CS90 T Fobruary 6, 1990 Fobruary 6, 1990 SANTZ T SANTZ S		l I		. 1			lingt of my know in fige	and belief.
Marbob Energy Corp. 2/8/80 JUL 19 1982 SANTZ SANTZ DUNIE SANTZ SANTZ DUNIE SANTZ SA				1				
Marbob Energy Corp. 2/8/80 JUL 19 1982 SANTZ SANTZ CS90 T Fobruary 6, 1990 Fobruary 6, 1990 SANTZ T SANTZ S		• 		:	•		· (V )	A.
Marbob Energy Corp. 2/8/80 JUL 19 1982 SANTZ SANTZ DUNIE SANTZ SANTZ DUNIE SANTZ SA		1		;			analyn	Ono.
$\frac{2/8}{80}$ $\frac{JUL 19 1982}{SA_{MTz}}$ $\frac{G}{9}$ Fobruary 6, 19.00 Fobruary 6, 19.		ł		., :			Secretary	·
$\frac{2/8}{80}$ $\frac{JUL 19 1982}{SA_{MTz}}$ $\frac{G}{9}$ Fobruary 6, 19.00 Fobruary 6, 19.		l		; ,			Marbob Energy	Corp.
$JUL 19 1982$ $SAAVT2 $ $G = 990^{-1}$ Fobruary 6, 1990 $Ruibb Rt $ $T = 0$ $G = 16$ $Mult Mathematical and the last of any the second second$		1			•		1	
SANTA SANTA O990 Fobruary 6, 1990 O O O O O O O O O O O O O O O O O O					l. •.	1	2/8/80	ليان محمد مستقدم ويوم مارينان المحمد المحمد ويوم مارينان
SANTA SANTA O990 Fobruary 6, 1990 O O O O O O O O O O O O O O O O O O					ι <u>.</u> · ·		l E	
SANTA SANTA O990 Fobruary 6, 1990 O O O O O O O O O O O O O O O O O O			The Trans			1	a may be a second and	a cat to some
SANTA SANTA O990 Fobruary 6, 1990 O O O O O O O O O O O O O O O O O O		LIK JUL	10 10 3///				a sana a san ann ann a' san a' sa	and the second sec
SAMTE SA		AL LUUN	9 1982		11		and the second	n gin ann an Eir ann an Anna I I ann ann Anna Anna Anna
O990 Fobruary 6, 1990 O #16 O #16 O W. Dhean 1559					I		ng ange part namme t	in the first of my l
Fobruary 6, 1990 P Fobruary 6, 1990 D Fobruary 6, 1990 D Fobruary 6, 1990 D Fobruary 6, 1990 1559		1	<b>Z</b>				are a fort of and holder	PULL
Fobruary 6, 1990			······································		• •			#5
Den W. Shear		1	Į.		Q99	0	· · · · · · · · · · · · · · · · · · ·	t i sa anna an anna an anna an anna an an an
Den W. Shear		I	-				Fobruary 6,	1980
then W. Shear		l			00	ال تلد		
1559		i -			() ()	716	D. 111 /	There
1559	: ] ;		<b>_</b>	*****			you ve. p	
	1 333 66.		And 2.1.1. 20.41 20.41	n (406	• ; •		15	59

e 1990 - Marine Santa 1990 - Santa Santa Santa 1990 - Santa Santa Santa Santa Santa Santa Santa 1990 - Santa 1990 - Santa 1990 - Santa Santa

	0			· · · ·
OISTŘIBUTION	NEW MEXICO OIL CONS	ERVATION COMMISSIC HELEIVEL	DN T	30-0:5-23176 bim C-101 levient 1-11
AND OFFICE		FEB 8 1980		54. In ficule Type of Longer avary [X] rec [] 5: Stand Cill & Can Louise 120. B-5084
	MIT TO DRILL, DEEPEN	O. C. D. OR PLUG BACK		
Type of Well OIL A SAS AFLL A MELL O HE	DEEPEN 🗌			Old Loco Unit a. Firm of Lense Mane Old Loco Unit
Marbob Energy Corp.	, N.M. 88210			20 10. Field on the cluer Grby' SA Grby Jackson SR Queen
990 Participant P	1064110 <u>990</u>	reer room the <u>Sout</u>	huwr 9E	
				Eddy
	21A. Eind & Statys Flug. Bond Statewide Active	2850' 2850' 218. Drilling Contractor Alta-West Dril		Rotary           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	
	l l	ł		5	

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.

JUL 19 OIL CONSERVATION DIVISION SANTA FE

APPROVAL MAUD FOR 90 DAYS UNLESS (DRILLING COMMENCED,

5-11-80 EXPIRES .

_ and anis	Title	Secretary	Pate 2/8/80
(This space for State Use)	/		FEB 1 1 1980
OVED BY W.a. Succet	TITLE	SUPERVISOR, DISTRICT II	ILD II IJBU

· · · · ·

.



	WELL LOCATI	ON AND ACREAC	CION COMMISSION DEDICATION PL	AT.	To in a spin Supervedes (142) The two these
Guerator	Ali distinen (). 	unt be from the obter f	heldslift for a sil time for stand		A+1;;;;
MARBOB ENER	GY CORPORATION	OI	D LOCO UNIT		20
But Letter States		A la De	+ - a.t.		
P Actual Footer in Lonate of a	32 . 17 Sou	ith [, 25	East	Eddy	· · · · · · · · · · · · · · · · · · ·
	ment the South	···· <b>990</b>	and the second	Last	
Bround Lyvel Flev.	The by Eq. Carriers	i i i i i i i i i i i i i i i i i i i			na an a
3561.5	Grayburg & Lovington	Grbg Jac	kson SR Queen G	rbg SA	40 Arrest
1. Outline the acr	eage dedicated to the subj	ect well by color	a have a reveal	ED:ke of the pl	at he base
interest and ray			FEB 8	1980	
	e lease of different ownersh mitization, unitization, force		ARTESIA, OF		sooners been consulie s
[] Yes [_]	No	type of consolidat	1016		
	o." list the owners and trac	t descriptions wh	ch have actually he	en considuted	at som verse side of
	usery.) If he assigned to the well us a otherwise) or until a non-s				
A Chattan Ph	1				HINTICATION
	1	:			
		*	· · · ·	i hereby ceruit	r that the internation can
;		i.			s from and complete to the
· · · ·		· 4 1		tiest of my kno	when fight and the firm
	1 1 1 1	, , , , , , ,		Caral	m Orio
				Secretary	
	1	:		tina na trans Tanàna amin'ny tanàna mandritra dia mampika mandritra dia kaominina dia kaominina dia kaominina dia kaominina di	
		•		Marbob En	ergy Corp.
		1		2/8/80	* .
		· · · · · · ·			
	DIENISTER	· · · ·		ŕ	
	I STOREST SIV	2856		فالمراجع والمحموم فالمحمو	
	JUL 1 9 1982			and an and a star to a	general and general tensor for the figure
	24 91982	2		م روند و الم	reneration and there the series
	OIL CONSERVATION DI SANTA FE				and a star point of my
	SANTA FE	VISION	 •	and a feel ge and	Auto
		Γ	•	:	K#5
			0990		· · · · · · · · · · ·
	1			Fobruar	6, 1980
	1	•	0		12 17 1 12 12 12 1 1 12 1 1 12 1 12 1 1
and the second second			6 #16	Den W	Shear
6	<u> </u>			7	

1957) ees de 1920 ford salai avit andi aritan andre aritan faith and aritan aritan aritan aritan aritan aritan

CIT COMPANY (MALE DESCRIPTION a: ē, ŝ

. . . .

## 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:

а.	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
с.	#16 - 1/26/53 #20 - 3/15/80
	None
е.	#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

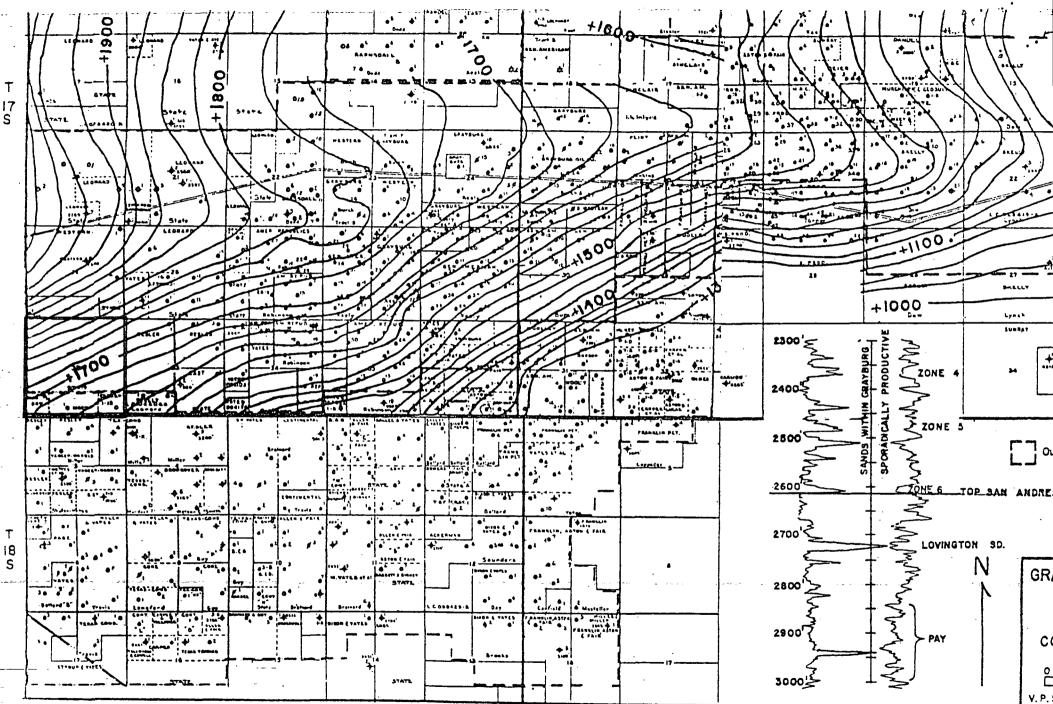
reservoir condition type production rates on the new well make the drilling of a new well necessary to drain the reservoir.

46.0

.

.

. .



R 29:E R4LE # 9-A

17 S

?

• • • · · · · · · · · · · · ·

· .

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.

JUL 19 1982 OIL CONSERVATION SANTA FE UNISION

Paul G. White

Petroleum Engineer

7-15-82

Date

RULE #9-B

. .

3

astrono e contrata de la contrata de secondo de secondo de secondo de secondo de secondo de secondo de secondo

.

.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: 12.1 •1.

1.5

			1
Vorn		Gross monthly	Gross Yearly
Year		<u>Oil - bbls.</u>	<u>Oil - bbls.</u>
1982 (	6 mos.	245	
•	•	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	360
	•		, ; - (;
	Total oil :	remaining:	11,694
	Cumulative	to 1/1/82	15,207
1	Total ultin	nate reserves:	26,901

Gas-oil ratio average - 300 to 1 Remaining gas reserves - 3,508 mcf.

RULE #9-B

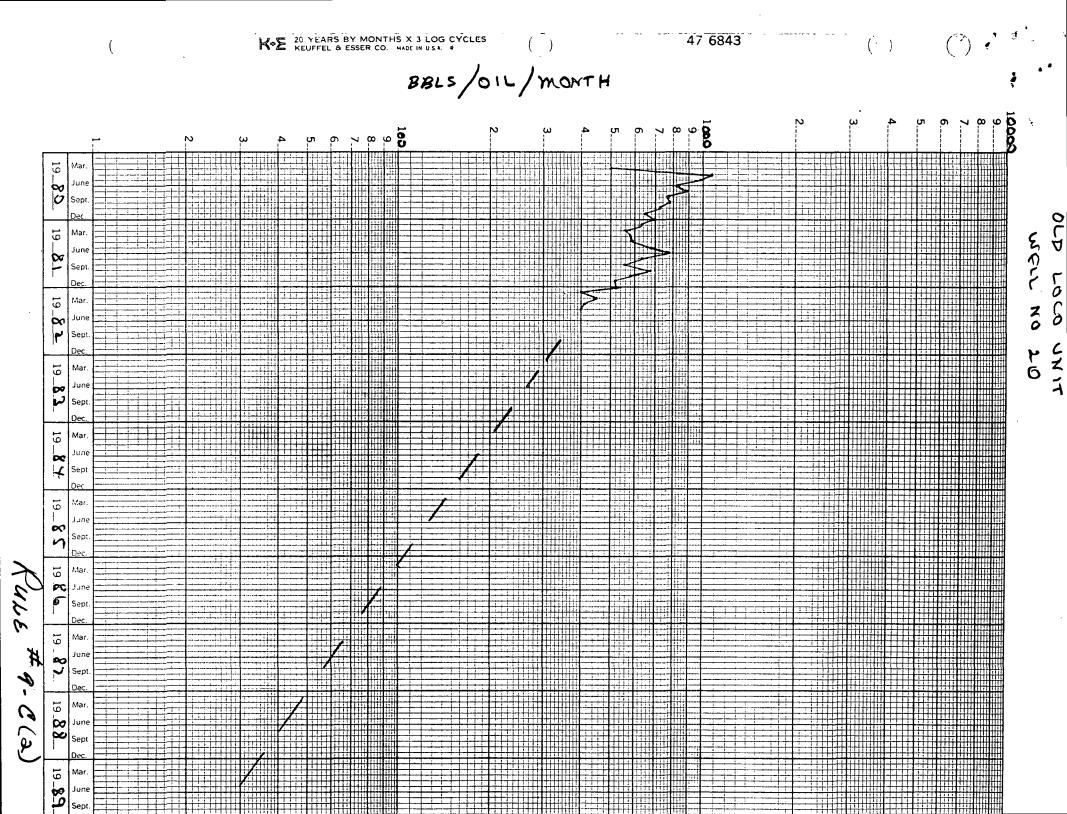
•

• • • • . 

۰ <sup>۲</sup> ۲۰ -

· .`

4 4 1811 T



· · · · ·

•

Rule 11:

. . .

Notice of this infill request has been sent to Anādarko 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.

a esta en el servició de la construcción de la construcción de la construcción de la construcción de la constru La construcción de la construcción d 1.000 H.C.9.00

÷

-