STATE OF NEW MEXICO



ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION February 19. 1987

GARREY CARRUTHERS
GOVERNOR

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

Marbob Energy Corporation P. O. Drawer 217 Artesia, New Mexico 88210

Attention: Carolyn Purcella

Re: Administrative Order NFL-153

Dear Ms. Purcella:

Reference is made to your application for an Infill Well Finding 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 for the following described well:

Flemming State Well No. 2 located 355 feet from the North line and 1910 feet from the East line (Unit B) of Section 34, Township 17 South, Range 28 East, NMPM, Artesia Queen Grayburg San Andres Pool, Eddy County, New Mexico.

THE DIVISION FINDS THAT:

- (1) 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 in 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 waver of existing well-spacing requirements.
- (2) By Division 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) 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) A standard 40-acre oil proration unit comprising the NW/4 NE/4 (Unit B) of Section 34, Township 17 South, Range 28 East, is currently dedicated to the applicant's Amoco State "C" Well No. 1 located in 344 feet from the North line and 1650 feet from the East line of said Section 34.
- (5) Said unit is <u>not</u> being effectively and efficiently drained by the existing well on the unit.
- (6) The drilling and completion of the well for which a finding is sought should result in the production of an additional 76,278 MCF of gas from the proration unit which would not otherwise be recovered.
- (7) All the requirements of Division Order No. R-6013 have been complied with, and 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.
- (8) 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 THAT:

- (1) The applicant is hereby authorized to drill the Flemming State Well No. 2 as described above, as an infill well on the existing 40-acre standard oil proration unit comprising the NW/4 NE/4 (Unit B) of Section 34, Township 17 South, Range 28 East, NMPM, Artesia Queen Grayburg San Andres Pool, Eddy County, New Mexico. 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) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Michael E. Stogner

Examiner

N.M.O.C.D. - Artesia



ENERGY AND MINERALS DEPARTMENT

Oil CONSERVATION DIVISION February 19, 1987

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2068 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 927-5800

Marbob Energy Corporation P. O. Drawer 217 Artesia, New Mexico 88210

Attention: Carolyn Purcella

Re: Administrative Order NFL-153

Dear Ms. Purcella:

Reference is made to your application for an Infill Well Finding 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 for the following described well:

Flemming State Well No. 2 located 355 feet from the North line and 1910 feet from the East line (Unit B) of Section 34, Township 17 South, Range 28 East, NMPM, Artesia Queen Grayburg San Andres Pool, Eddy County, New Mexico.

THE DIVISION FINDS THAT:

- (1) 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 in 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 waver of existing well-spacing requirements.
- (2) By Division 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) 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) A standard 40-acre oil proration unit comprising the NW/4 NE/4 (Unit B) of Section 34. Township 17 South. Range 28 East, is currently dedicated to the applicant's Amoco State "C" Well No. 1 located in 344 feet from the North line and 1650 feet from the East line of said Section 34.
- (5) Said unit is <u>not</u> being effectively and efficiently drained by the existing well on the unit.
- (6) The drilling and completion of the well for which a finding is sought should result in the production of an additional 76,278 MCF of gas from the proration unit which would not otherwise be recovered.
- (7) All the requirements of Division Order No. R-6013 have been complied with, and 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.
- (8) 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 THAT:

- (1) The applicant is hereby authorized to drill the Flemming State Well No. 2 as described above, as an infill well on the existing 40-acre standard oil proration unit comprising the NW/4 NE/4 (Unit B) of Section 34, Township 17 South, Range 28 East, NMPM, Artesia Queen Grayburg San Andres Pool, Eddy County, New Mexico. 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) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely

Michael E. Stogner

Examiner

Request for Infill Finding on

Flemming State #2

in accordance with Administrative

Procedures amended February 8, 1980

-	SANTAFE FILE U.S.G.S. LAND OFFICE OFLHATON APPLICATION In. Type of Work	DN FOR PE	SA	NTA HI.	" 'RECE! HEW MI JUN 3	(x100 87501) 0 1986 C. D.				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
3	DRILL X b. Type of Well on X on X	rporatio Artesia	n , New Me		3210	PINGLE X ZONG X LET FROM THE N	MUL1	ACK	8. Iwin or L F1em 9. Well No. 2	
TINITINI I	1. Lievations (show whether DF 3673.3' GR	rne Ea	St LIN	6 Status Plus	34 ,,	9. Proposed Depth 3030 1B. Drilling Control LaRue Drill.	. 28	A. Formation	12. County Eddy ees	20, Roley or C.T. Rotary Date Work will ster:
2	3,		 		·····	CEMENT PROGRA			6/13/	
	SIZE OF HOLE 12 1/4" 7 7/8" We propose to dr	SIZE OF 8 5/. 5 1/.	8 ¹¹ 2 ¹¹	WEIGHT P 24# 15.50)#	500' 3030'		SACKS OF 300 600		EST. TOP Circulate Attempt to ci.
	drill to 3030' to put well on prod	o test ti	he San A	ndres fo	rmation	, run and ce	APPRO	OVAL VAL	ing, !D FOR↓	
	UNLESS DRILLING UNDERWAY IN ALLOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW IN-									
Signment of the co	Thereby certify that the information above is true and complete to the best of my knowledge and bestef. Signed 1: [C. Title Production Clerk Date 6/26/86 (This space for State User) Original Signed By Mike Williams CONDITIONS OF APPROVAL, IF ANY 1 ANY 1 DATE D									

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer houndaries of the Section Markob Energy Corp. FLEMMING Sertion To wriship - 34 17 South 28 Edst Eddin Actual Fortage Location of Well: 355 North feet from the line and East Ground Level Elev. San Andres 3673.3' Artasia Ça Grbg SA 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation _ If answer is "no," list the owners and tract descriptions which have actually been consolidated. (I se reverse side of No allowable will be assigned to the well until all interests have been consolidated fby communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION 1910 I hereby certify that the information contained herein is true and complete to the knowledge and belief. Anuco ST. Carolyn Purcella Fostt:on Production Clerk Marbob Energy Corporation Cate 6/26/86

Rule 6:

Flemming State #2

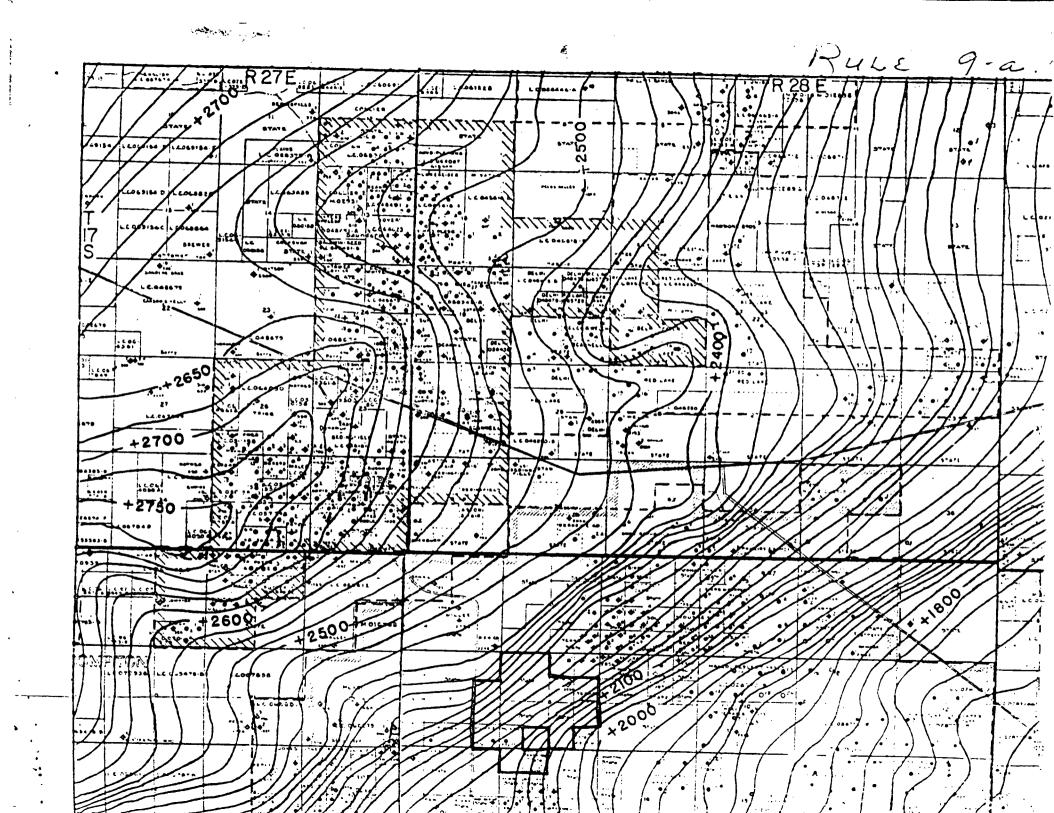
Pool: Artesia Queen Grayburg San Andres
Standard spacing unit: 40 acres

Rule 7:

NA

Rule 8:

- a. Flemming St. #2 355 FNL 1910 FEL Sec. 34-T17S-R28E Amoco St. C #1 - 344 FNL 1650 FEL Sec. 34-T17S-R28E
- b. Flemming St. #2 9/22/86 Amoco St. C #1 - 1/1/62
- c. Flemming St. #2 10/14/86 Amoco St. C #1 - 1/30/62
- d. None
- e. Flemming St. #2 80 bbl oil, 70 mcf gas/day Amoco St. C #1 - No production, well shut in
- f. NA
- g. The Flemming State #2 was drilled to new reserves in a deeper zone than were reached in the old wells. Since it was not feasible to drill the old well deeper it was necessary to drill the new well.



Marbob Energy Corporation

P. O. DRAWER 217 ARTESIA. NEW MEXICO 88210

-- OFFICE PHONE --(505) 748-3303 (505) 746-2422

- NIGHT PHONES -(505) 746-6197 (505) 746-6500

Pertinent Engineering Data and Conclusions:

Re: Flemming State #2
Artesia Queen Grayburg San Andres

The Flemming State #2 was completed in the Artesia Queen Grayburg pool in October 1986. This is an infill well located as per the attached plat.

Effective November 1986, oil reserves recoverable will be 30,230 barrels oil and 76278 mcf gas.

Oil reserves were calculated from similar offsetting wells which have been completed in the same horizons.

The existing well in the proration unit was completed with $5\frac{1}{2}$ " production casing. Total depth of the well did not exceed 2207'. The Flemming State #2 was completed from 2448-2791'. The well was fraced with 220,000 gallons of gel water and 400,000# sand. The old well could not have been deeped to those depths and this frac technique used because of the size of the drilling tools that could be used inside the existing well's production casing. The largest bit that could have been used is 4 3/4" with the completion then being done in open hole or inside 2 7/8" casing. This would probably result in a much less effective completion, and less recoverable reserves.

In my opinion the infill well will more effectively drain the deeper horizons than could be accomplished by deepening an existing well.

Therefore, it is my recommendation that the well be approved as an infill well to effectively drain the reservoir.

MARBOB ENERGY CORPORATION

Raye Miller

Secretary-Treasurer

10 | 50 |

Date

PULE 9-B

Rule 11:

There are no offset operators

N MEXICO OIL CONSERVATION COMMISS WELL-LOCATION AND ACREAGE DEDICATION PLAT

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

<u>/</u>		All distances must b	e from the or	ster boundaries of	the Section					
Operator Marbo	b Energy Co	orp.	Lease F	LEMMING	State		Well No. 2			
Unit Letter	Section	Township	Rom	ige	County		,			
В	34	17 South	2	8 East	l	Eddy		- 1		
Actual Footage Loca	tion of Well:	North line on	d 15	910 (ee	t from the	East	line			
Ground Level Elev.	Producing For		Pool				Dedicated America			
3673.3'	San An	ndres	Arta	sia On Urbg	SA		40 a.			
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).										
dated by co	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 No allowab	necessary.) le will be assign	ed to the well until s	Ill interes	ts have been c	onsolidat	ed (by comi	nunitization, unitization approved by the Comm	- on,		
	AREO 0.116 Empire Abo 6 World Ab 3 610 FAVE - 26 Sp. 1: 5/4, Empire Abo AREO 0.1 + 64 Empire Abo	Mair E" (S) (C) 'FEL (T) (E) yellion		Market Energy 6 Americ State "C 344 FM - 1850 F	" 1011 No.V	toined her being of my Carolyn	ertify that the information come in is true and complete to the knowledge and belief. Purcella ion Clerk	the		
	869.21 For- 369.21 For- Sport 1/18/ Emproc Ale	35 PLP, 24 FEL C	:	Sp. 1: 1/2/12 Betesin Green 6 Son Proless Completion Commodated 1 as c\$ 12/1 605 193	Coloration 1185	Company	Energy Corporatio	on .		
				0.11-451 50.70 50.70 150 150 160 160 160 160 160 160 160 160 160 16		shown on to notes of a under my s is frue ar knowledge	certify that the well location is plat was plotted from five sectual surveys made by me supervision, and that the solud carrect to the best of and belief.	or me		
			OH II	W. Villian			refessional Engineer Surveyor Mulled	576		

Request for Infill Finding on

Flemming State #2

in accordance with Administrative

Procedures amended February 8, 1980

· .	•	O		1101.102004			
A management	i	- **	I' '' 'RE	CEIVED BY		Fertiet in Fra	
304141		;•A	3	MUXICO BY501		5A. 1-11 (**	tilgertik vd
# 11.1, #			JU	N 3 0 1986		1	Z. Gas Lama
LANGUARICE			Ì	0.00		E-7	
regarded to the second construction of the secon	7			O. C. D.		Willing	11/1/2 C
APPLICAL	ION FOR PE	RMIT TO	DRILL CELM	H, BRILLIA TINCI			i tirillili
n. Type of Work		·				7. Unit Age	rement lanes
DRILL [X		DEEPEH 🔲	Fi	LUG BACK		
b. Type of Well OIL X WELL X	-			BINELS []		8. Turn or 1	
Writ X CAS Write . Hune of Operator		·CR	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	DINGE X	MULTIPLE D	9. Well No.	ming State
Marbob Energy C	orporatio	n				* 2	
. Address of Operator							nd Pool, or Wilde
P.O. Drawer 217	, Artesia	, New Me	exico 88210		•	1	a Qn Grbg
				FEET FROM THE NO	orth line	TITIT	iimm
•					2 517		
NO 1910 PECT PRO	M THE Ea	st u	ne or see. 34	1WP. 175 PGC.	28E NUPL		
						12. County	
		77777	4444444		7777/777	Eddy	iller
********	44444	HHH	મામામામાં	19. Proposed Depth	19A. Formatio	innn.	120. Retay or (
				3030'	Şan And	-	1
1. Elevations (show whether L	oF, KT, etc.)	21A. Kind	6 Status Plug. Bond	· · · · · · · · · · · · · · · · · · ·			Rotary
3673.3' GR		State	vide active	LaRue Drill		8/15	
),		P	ROPOSED CASING	AND CEMENT PROGRA	M	•	
SIZE OF HOLE	SIZE OF	CASING	WEIGHT PER FO	OOT SETTING DEF	TH SACKS O	F CEMENT	EST. T
12 1/4"	<u> </u>	8"	24#	500'	300		Circulate
7 7/8"	5 1/		15.50#	3030'	600		Attempt t
							ł
	i	;	i		1		1
			•		•		
We propose to d drill to 3030' put well on pro	to test ti	500', ru he San A	in and cement indres format	8 5/8" casing, ion, run and ce	reduce hol ment 5 <u>‡</u> " ca	e and sing,	
					manolii ii	UD FOO	DA DA VO
				F_{γ}	PPROVAL VA	TID FOR A	ASL DAYS
				r	JENIME EVOID	cc	_ 9 2
			·	Ş	PERMIT EXPIR		
				Ş	PERMIT EXPIR UNLEGS DRIL		
				Ş			
AUGUE SEASE DESCRIPE	новолего вид	168 4 411	-MOPOSAL IS TO DIFFE	Ş	U. (LEGS DRIL	LING UNE	DERWAY

Original Signed By

Mike Williams

Output time of Appropriate of A

getatina j					•
Mart 1 & 17	Jamergy A	11:4.	FLEMMING		3
100 , 100 S	p: t _i c t	wr.ship	And the second of the second o		. d-
	34	17 36 ati.	. m. 10 a. m.		
A FIRE Chapter Commis	in of Well:	•	3 (* * 7		
355 (Ground Level Elev.	feet from the	NOTE: the and	1310 - 5. Theel	eet te e en Establis	The triates Also age
3673.3'	San Ar		Artesia Ça Grb	oa SA	40
			ell by colored pencil		
	one lease is	·	•		thereof (both as to working
	nmunitization,	unitization, force-pool			of all owners been consoli-
this form if n No allowable	ecessary.) will be assign	ed to the well until a	ll interests have been	consolidated ∫by co	mmunitization, unitization, n approved by the Commis-
	1	io			CERTIFICATION
		Anoca Mari	ST. (C#)	to ned to	r certify that the information con- perein is true and complete to the my knowledge and belief.
]	i		·	Position	n Purcella
	į.		. 1	Produc	ction Clerk
1	1		1	Year my	_
	1		1	 	Energy Corporation
1	1			6/26/8	36
ŀ	i		1		
	1			shown of notes in uniter miles from	y certify that the well-location in this plat was plotted from field. Cartual surveys made to me to expension and that the silver and correct to the best for my ge and belief
	1				Duly Ruly

Pule 7.

spacing unit.

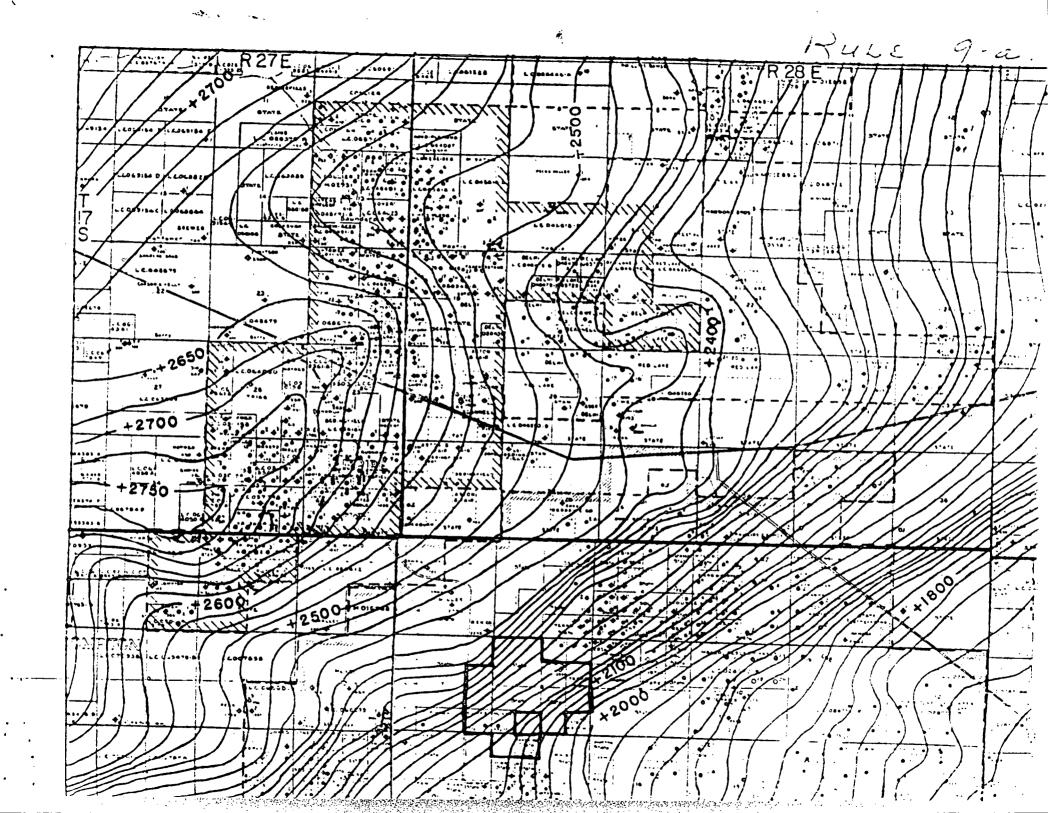
40 acres

Andres

 N_A

Rule 8:

- a. Flemming St. #2 355 FNL 1910 FEL Sec. 34-T17S-R28E Amoco St. C #1 - 344 FNL 1650 FEL Sec. 34-T17S-R28E
- b. Flemming St. #2 9/22/86 Amoco St. C #1 - 1/1/62
- c. Flemming St. #2 10/14/86
 Amoco St. C #1 1/30/62
- d. None
- e. Flemming St. #2 80 bbl oil, 70 mcf gas/day Amoco St. C #1 - No production, well shut in
- f. NA
- g. The Flemming State #2 was drilled to new reserves in a deeper zone than were reached in the old wells. Since it was not feasible to drill the old well deeper it was necessary to drill the new well.



Marbob Energy Corporation

P. O. DRAWER 217 ARTESIA, NEW MEXICO 88210

-- OFFICE PHONE --(505) 748-3303 (505) 746-2422

NIGHT PHONES — (505) 746-6197 (505) 746-6500

Pertinent Engineering Data and Conclusions:

在上午的人的时候的时候,可是不是有的人的,我们是我们的时候是我们的一个人的,我们也不是一个人的,我们也是一个人的人的,我们是一个人的人的,我们是一个人的人的人的

Re: Flemming State #2
Artesia Queen Grayburg San Andres

The Flemming State #2 was completed in the Artesia Queen Grayburg pool in October 1986. This is an infill well located as per the attached plat.

Effective November 1986, oil reserves recoverable will be 30,230 barrels oil and 76278 mcf gas.

Oil reserves were calculated from similar offsetting wells which have been completed in the same horizons.

The existing well in the proration unit was completed, with 5½" production casing. Total depth of the well did not exceed 2207'. The Flemming State #2 was completed from 2448-2791'. The well was fraced with 220,000 gallons of gel water and 400,000# sand. The old well could not have been deeped to those depths and this frac technique used because of the size of the drilling tools that could be used inside the existing well's production casing. The largest bit that could have been used is 4 3/4" with the completion then being done in open hole or inside 2 7/8" casing. This would probably result in a much less effective completion, and less recoverable reserves.

In my opinion the infill well will more effectively drain the deeper horizons than could be accomplished by deepening an existing well.

Therefore, it is my recommendation that the well be approved as an infill well to effectively drain the reservoir.

MARBOB ENERGY CORPORATION

Raye Miller

Secretary-Treasurer

Date

PULE 9-6

Rule 11:

There are no offset operators

N MEXICO OIL CONSERVATION COMMISS WELL LOCATION AND ACREAGE DEDICATION PLAT

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

PONALD J EIDSON.

All distances must be from the outer boundaries of the Section Cherator Well the. Marbob Energy Corp. FLEMMING State Township 'nit Letter Range 17 South 28 East Eddy Actual Footage Location of Well: 355 1910 feet from the North East line and feet from the line Ground Level Elev. Producing Formation Delbrated Amenge: Artasia. Qn Urbg SA 3673.3**'** San Andres 40 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consoli. dated by communitization, unitization, force-pooling, etc? No If answer is "ves." type of consolidation _ Yes If answer is "no," list the owners and tract descriptions which have actually been consolidated. (I se 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 Commis-CERTIFICATION DRCO CITTONS la Empire the Wait "E" 1910 Will At. 351 . I hereby certify that the information con-610'FN= - 2601'FEL tained herein is true and complete to the 57.1: 5/4/78 knowledge and ballet. Empire Abo Campbelia Market Energy G. J. Carolyn Purcella Ana. State "C" will Ab. BREOCITEGO Co. 344 FAL - 1650 FEL Empire Ab. Unit "E Production Clerk 1: 1/2/12 Well N. 35 Artesia Goven brighors 169.27 FN: - 1967.24 FEL Sen Podles Marbob Energy Corporation Sp.d: 7/18/60 Completies Empire Abo Completion Commutative Productie. 6/26/86 as of 12/31/85 605 19303.4cF 0.1-45/58 1.0. I hemby certify that the well location shown on this plat was platted from field is true and correct to the best of my knowledge and belief Date Surveyed May 23, 1986 Registored Emfessional Engineer 676

2000

1500

1000

1320 1680

1960 2310

330

660

.00