STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

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

ADMINISTRATIVE	ORDER
NFL -67	

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

Operato:	<u> </u>	arbob I	nergy	Corpor	ration	w	ell Name	and No.	ملــــــــــــــــــــــــــــــــــــ	oco Unit Well No.	
Location	ı: U	nit <u>N</u>	Sec.	32	_Twp	17S	Rng	29E	Cty	Eddy	
II.											
THE DIV	SION	FINDS:							•		
pursuant as a nev infill v	t to ons vell	the Nat hore pr is nece	ural Ga oductions ssary t	ns Poli on well on effe	icy Act's L under ectively	of 197 Sectio and e	8 provid n 103 of fficient	es that, said Ac	in ordert, the D	sion Regulations proper for an infill we division must find ton of the reservoid within that unit.	ell to qualify that the r covered
procedu	ce wh	ereby t	he Divi	sion I		and t	he Divis			n established an ad ce empowered to act	
(3) The	at th	e well	for whi	ich a f	inding	is sou	ght is c	ompleted	in the	Grayburg Jackson-	Seven Rivers,
Oueen G	rayb	urg Pcol	, and t	the sta	undard s	pacing	unit in	said po	ol is _	40	acres.
(4) The	it a		0	ac	re pror	ation	unit com	prising	the	SE/4 SW/4	· · · · · · · · · · · · · · · · · · ·
					_					cated to the 0	d Loco Unit
									said sec		
(5) The approved	at th i by	is pror Order N	ration w	mit is	; (₍₍₎) st •	andard	() nor	standard	l; if non	nstandard, said uni	t was previous
	at sa	id pror	ation v			ing ef	fectivel	y and ei	ficientl	y drained by the e	xisting
(7) Tha	at th	e drill	ing and	compl	letion o	f the	well for	which a	finding	is sought should	result in
the production	lucti se be	on of a	n addit red.	ional	4.22	2	MCP	of gas f	rom the	proration unit whi	ch would not
for which	ch a	finding	is sou	ight is	necess	ary to	effecti	vely and	efficie	ed with, and that ently drain a porti by any existing wel	on of the
(9) Tha					ective	and ef	ficient	drainage	of said	proration unit, t	he subject
IT IS T	EREF	ORE ORD	ERED:		٠.			•			·
(1) The infill v	et the	e appli on the drilling	cant is existing grante	g prosed by to prorate	ration u	nit de er is	scribed necessar	in Secti y to per	on II(4) mit the	bed in Section I a above. The autho drainage of a port and efficiently dr	rization ion of the
(2) The Division					cause is	retai	_			ch further orders a	s the
DONE at			lew Mexi	ico, or	this		Ja	Decer	Man	19_82 EXAMINER	•
		rtesia EC Hobb	s .			.6				•	•

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

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

Received Int	17,1982
Surpence	12/15/82
ADMINIS:	RATIVE ORDER
NFL	67

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

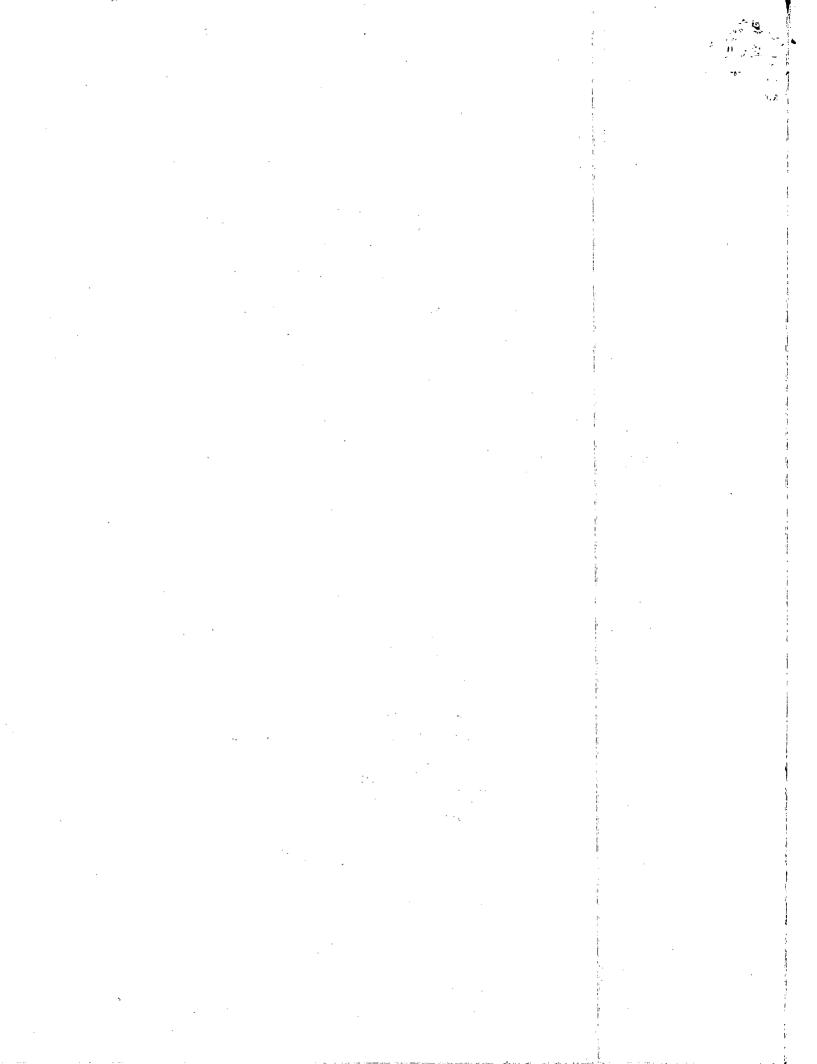
Operator Markoh Energy Corporation Well Name and No. Old Loco Unit Well No. 18
Location: Unit N Sec. 32 Twp. 175 Rng. 29E Cty. Eddy
II. THE DIVISION FINDS:
(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualifies 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-Seven River
Average San Pool, and the standard spacing unit in said pool is (4) That a Andres 40 -acre provation unit comprising the SE/4 SSW/4 of Sec. 32, Twp. 175, Rng. 29E, is currently dedicated to the Old Local Unit
of Sec. 32, Twp. 175, Rng. 29E, is currently dedicated to the Old Loco Unit Well No. 14 located in Unit N of said section.
(5) That this proration unit is (X) standard () nonstandard; if nonstandard, said unit was previous proved by Order No. N/R
(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 422 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
ce-ocp hteria
NAMO + 6 EC-Holles DIVISION DIRECTOR EXAMINER

Request for Infill Finding on

Old Loco Unit #18

in accordance with Administrative

Procedures amended February 8, 1980



-0. UP COPIES SECTION		C.	RECE	1 V :=	17	in c	WW 23043
DISTRIBUTION	T-I NE	W MEXICO OIL CONS		-		Ibrm C-101	, , , , , = = , , = ;
INTA FE	1					Hovined 1-1-6	5
il C	-		007 22	1975	ĺ	SA, Indicate	Type of Loane
.5.6.5.							<u> </u>
AND OFFICE			口. 心.	C.		5, State OII	6 Gis Letes No.
PERATOR			ARTEBIA, [OFF HIS		B-49	918
	ander commend					TIIIII	
API'LICATIO	N FOR PERMIT T	O DRILL, DEEPEN	OR PLUG B	ACK			
ther of Rush						7. Unit Aure	
[- n - n - n - m				1011	a to the following
Type of Well DRILL X		DETPEH		PLUG B	ACK []	8. larm or L	
and X	ОЛИКЯ		100E	MULT		014 1	Loco Unit
dane of Operator	0,111	,	7041 12.7			9. Well No.	
Mar	bob Energy Co	rporation					18
Address of Operator						10, l'ield an	d Poel, or William SA
P. 0	. Box 304, Ar	tesia. N.M. 882	210				ckson Queen Grb
	. N		FEET FROM THE _	South		minn	mmmmm.
UNIT LITTE		.0(41(0	FEET FROM THE _	Douch	CINC		
2310 ,,,,,,,,	West	LINE OF 11C. 32	·m. 175	·cc. 29	E mare		
THE THE THE THE	viriniiii	mmillini	rinnin	min	Tim	12. County	millitti.
						Eddy	
4444444	+++++++	++++++++	+++++	4444	4444	iiiii	m Allthir
44444444	444444	<i>HHHHHHH</i>	12. etapasea De	777777	A. Lamatto		23. In tary or C.T.
			28501	1 (A. Lamation	3 &	1
Linvations (alone whether DI)	77777777777777	na & Chita, chap Bond	2111, Frilling Co		Lovingt		Rotary
3590 GL	ľ	ewide Active	Alta-West		ne Co	4	/27/79
3370 00		EWIGE ACTIVE	AICA-WEST	DITTI	iig co.	1	121117
		PROPOSED CASING A	ND CEMENT PRO	OGRAM			
SIZE OF HOLE	SIZE OF CASIN	C WEIGHT DED FOO	T CETTING	DEBELL	CACKEO	: CD/CNT	Est TOD
11"	8 5/8"	WEIGHT PER FOO	SETTING 250			CEMENT	EST. TOP
	↓				Circ		
7 7/8"	4 1/2"	10.50#	2850	· 	22	<u> </u>	
					Í		
	•	•	•		•	1	
We propo	se to drill t	o approximately	2850' to 1	test Gr	ayburg a	and Lovi	ngton
formatio	ns. We do no	t anticipate ga	s at these	depths	& will	not set	up a
blowout	preventer pro	gram at this ti	me.			t.	
•		-					
						7	
	[• Sale— Alaba (Lara La Cara Cara Cara Cara Cara Cara Ca	· · · · · · · · · · · · · · · · · · ·			À	PROVIDE MALTO
\sim	4		וחלצני				90 DAYS THEESS
•		117	· - (
		not a to to	9				NO COMMENCED,
		JUL 19 198	2				1-23-80
	בַּ	12	رستار			EXPIRES	
	. 0	IL CONSERVATION	DIVISION				
,		SANTA FE	•				
			•				
						-	
HOVE SPACE DESCRIBE PE	ROPOSED PHOGHAMI TER PROGRAM, IF ANY.	IF PROPOSAL IS TO DEEPER	. OM PLÚS BACK, S	IVE DATA ON	PRESENT PR	· · · · · · · · · · · · · · · · · · ·	E AND PROPOSED NEW PRODU
chy certify that the informati	on above to true and o	umplete to the best of me	haveledge and b	ellef.		<u></u>	
17	()	Superior to the ores of the top	madiminanda ana g				
ed (Brake.	n (VARe	Title Sec	retary			Pate1	0/22/19
	manuscriptor and the second					***	
(This space for	State Gae)						
11/1	£1 -	A 1700	rvisor, dist	RICT II		9 0	CT 2 3 1979
HOVED BY (NC)	Alvaset.	TITLE				DATE	13/3
OFTIONS OF APPROVAC, I	FANTI				_	11115	<i>#5</i>

٤.

OH CO. Senta FE

Home 1-16h Supersedes (1-12h Effective 1-1-65

WELL LOCATION AND ACREAGE DEDICATION PLAT

MARBOB ENERGY CORPORATION OLD LOCO UNIT 18 18 18 19 10 testion N 32 17 South 29 East EDDY 10 testion to South the South testion to South testion testion to South testion	perator		All distances must be	from it e outer busideries	of the Section	tion die mei de deutsche verschap eine Comment aus eine Auflich deutsche meiste deutsche meiste des
South 17 South 29 East EDDX		ERGY CORPOR	RATION	ord roc	O UNIT	Well (16), 18
990 per new South means 2310 per new Most min 2310 per new Most per new New Most per new Most pe			1			and the second s
3590 Grayburg & Lovington Grbg. Jackson Queen Grbg. SA 40 An 3590 Grayburg & Lovington Grbg. Jackson Queen Grbg. SA 40 An 3590	ctual Footage Locatio		يم بالمناب المناب المناب المناب المناب المناب المناب			manufacture of the property of the contract of
2310 Crayburg & Lovington Grays, Jackson Queen Grbg. SA 40 6. 49 1. Outline the accordinated to the subject well by subtred pencil of backness make on the plat below. 2. If more than one leave is dedicated to the well, outline each and identify the ownership thereof floth as to work interest and royalty). 3. If more than one leave is dedicated to the well, outline each and identify the ownership thereof floth as to work interest and royalty. 3. If more than one leave is different ownership is dedicated to the well, have the interests of all owners been consorted dated by communitization, unitization, force produng etc? [7] Yes	990 ,	eet tran the	South time start	2310	rest form tree West	t was the
1. Outline the accease dedicated to the subject well by enforced period of hachare marks on the plat below. 2. If more than one lease is dedicated to the well, nuttine each and identify the ownership thereof that as to work interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consordated by communitivation, nutrivation, face produce, etc? [1] Yes [1] No. If answer is "yes," type of consolidation. If answer is "no." list the owners and trait descriptions which have actually been consolidated if we reverse softentials from if next essary.) No allowable will be assigned by the well until all interests have been consolidated the communitivation for end-quoting, or otherwise for until a monest rodard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION Secretary Harbob Energy Corp. 10/22/79 10/22/79 10/22/79 10/22/79 Ottober 9, 1979	round Level 1 lev.		•	1 (= 1		
2. If more than one lease is dedicated to the well, outline each and identify the connectship thereof (Loth as to work interest and toyalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consordated by communitization, unitization, force product, etc? [1] Yes			Andrew Commercial Comm			للتهيفتين ويتريد والمستحاث المستحان المستحان
3. If more than one lense of different ownership is dedicated to the well, have the interests of all owners been consordated by communitization, unitization, force produce, etc? [INO] It answer is "no." list the owners and tract descriptions which have actually been consordatated. If we reverse side this form if necessary. No allowable will be assigned to the well until all interests have been consolidated the communitization until zation forced-pooling, or otherwise or until a non-standard unit, eliminating such interests, has been approved by the Cummission. CIRTICOLORY I have been a provided by the formation and complete by been any of the provided and complete by the cummission. CIRTICOLORY I have been a provided by the formation to be a complete by the content of the provided and to the angular and terief. Secretary Marbob Energy Corp. 10/22/79 Library operation with plan we planted from the second marks at actual variety made by necessary of the formation of the first plant with relation of the plant with the information of the plant with the information of the plant with the continuant of the plant with the plant with plant we planted from the second marks at actual variety and the first second of the plant with the continuant of the plant with the c	1. Outline the a	acreage dedic	ated to the subject v	self by colored penci	For hachure marks .	in the plat below,
duted by communitization, unitization force produce etc? [] Yes [] No [] Hanswer is "ves," type of consolidation Hanswer is "no," list the owners and tract descriptions which have actually been consolidated fit so reverse side this form if necessary). No allowable will be assigned to the well until all interests have been consolidated the communitization, unitization forced-produing, or otherwise or until a nonest industry unit, eliminating such interests has been appeared in the Cumin sim. CINITIZETY (WIE) Secretary Marbob Energy Corp. 10/22/79 I hereby centry that the additional to the second of the complete to be a complete to the second of the complete to the complete to the second of the complete to	2. If more than interest and	one lease is royalty).	s dedicated to the we	lt, outline each and	identify the awnersh	ip thereof (Loth as to workin
If answer is "no." list the owners and tract descriptions which have actually been consordated (it see reverse side this form if necessary) No allowable will be assigned to the well until all interests have been consordated (its commutatization, unitization forced-pooling, or otherwise) of until a nonest adard unit, eliminating such interests, has been approved by the Commission. CLERESCATION CLERESCAT					II, have the interest	s of all owners been consol-
No allowable will be assigned to the well until all interests have been consolidated its communitization, unification forced-produing, or otherwise) of until a monest underd unit, eliminating such interests, has been approved by the Commission. CIRILICATION I hereby certify that the information or timed been in two and complete to the stand place in the condition of the stand my knowledge and better Secretary Marbob Energy Corp. 1 hereby certify that the well located stand on the place was placed from the stand on this place was placed from the stand on the place may place the form the stand on the place may place the form the standard on the standard of the condition of the standard of t	[Yes [l No II	mswer is "yes!" type	of consolidation		<u> </u>
No allowable will be assigned to the well until all interests have been consolidated the committation, unitization forced-pooling, or otherwise) of until a nonest induct unit, eliminating such interests, has been approved by the Commission. CLESS CONTROLLED TO THE CONTROLLED TO THE INTEREST OF THE IN	If answer is	"no!" list the	owners and tract des	egiptions which have	actually loon cons-	andated. A so reverse side of
Secretary Secretary Marbob Energy Corp.	No allowable forced-pooling	will be assig	ned to the well until a	A interests have been ed unit, eliminating s	n consolidated the such interests, has	communitization, unitization oven approved by the Commis
Secretary Secretary Marbob Energy Corp. 10/22/79 1 hereby certify that the will locate shame and the life of the shame and						
Secretary I herby certly that the well locate shawn on this plut was platted from the motes at an individual state of the state and surveys made by me under my superstron, and that the second representations unvision SANTA FE October 9, 1979 In the state of the best of the state of the s		! . :		ł !	i i	CERTHECATION
Secretary I herby certly that the well locate shawn on this plut was platted from the motes at an individual state of the state and surveys made by me under my superstron, and that the second representations unvision SANTA FE October 9, 1979 In the state of the best of the state of the s				Î		
Secretary Secretary Marbob Energy Corp. 10/22/79 1 hereby certify that the well location the surveys made by me under my superstrain, and that the ser in true and current to the best of me had belief to the best of me had belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being and belief to the best of me had being to the best of me had been to the bes		t .		i .	1 i .	
Secretary Marbob Energy Corp. 10/22/79 1 hereby, certify that the well location shown on this plan was platted from the under my supervision, and that the sen includes my supervision, and that the sen includes and belief OIL CUINDLIVATION DIVISION SANTA FE October 9, 1979 Institute and continued to the least of minuted from the land of the least of the least of the least of the location of the least of the leas		·r		1		
Secretary Marbob Energy Corp. 10/22/79 I hereby certify that the well location whem an this plan was platted from the motes of a total surveys made by me under my supervision, and that the same in true and currect to the best of a knowledge and belief Oil Counselivation Univision SANTA FE October 9, 1979 Institute the date of the location of		_ 1		l Į		or my rnowreage ma better
Secretary Marbob Energy Corp. 10/22/79 I hereby certify that the well location whem an this plan was platted from the motes of a total surveys made by me under my supervision, and that the same in true and currect to the best of a knowledge and belief Oil Counselivation Univision SANTA FE October 9, 1979 Institute the date of the location of		!	ļ	1		into para tanà ao indrindra na mang ao indrindra ao amin'ny fivondrona ao amin'ny faritr'i Nobel
Secretary Marbob Energy Corp. 10/22/79 I hereby certify that the well location whem an this plan was platted from the motes of a total surveys made by me under my supervision, and that the same in true and currect to the best of a knowledge and belief Oil Counselivation Univision SANTA FE October 9, 1979 Institute the date of the location of		- •			2.00	•
Secretary Marbob Energy Corp. 10/22/79 I hereby certify that the well location whem an this plan was platted from the motes of a total surveys made by me under my supervision, and that the same in true and currect to the best of a knowledge and belief Oil Counselivation Univision SANTA FE October 9, 1979 Institute the date of the location of		L	į	1		
Marbob Energy Corp. 10/22/79 I hereby certify that the well locate shown on this plat was platted from the moles of a road surveys made by me under my superstrain, and that the sar is free and current to the best of a road edge and belief OIL CUINDLITYATION UNISION SANTA FE October 9, 1979 Institute the free for it is in more than the same of the		i	i I	· ·		
Marbob Energy Corp. 10/22/79 I hereby certify that the well locate them on this plat was platted from the share and actual surveys made by me under my superstrom, and that the sor is true and current to the best of a kinda ledge and belief Olk CUNDLIVATION UNISION SANTA FE October 9, 1979 Implicate the free trull be promited. Out the best of a kinda ledge and belief October 9, 1979 Implicate the free trull be promited. Out the best of a kinda ledge and belief October 9, 1979 Implicate the free trull be promited.		!		i I		
JUL 19 1982 OIL CUINDLIVATION UNVISION SANTA FE October 9, 1979 Included the same of t	•	1		1	1 1	
JUL 19 1982 JUL 19 1982 OIL CUINDLIVATION DIVISION SANTA FE October 9, 1979 There are the first in the best of many that the same of the		ì	} 1	1	1 1	
JUL 19 1982 JUL 19 1982 OIL CUINDLIVATION UNVISION SANTA FE October 9, 1979 Internal to the best of the best		i		į į		10/22/79
JUL 19 1982 JUL 19 1982 OIL CUINDLIVATION UNVISION SANTA FE October 9, 1979 Internal to the best of the best						
JUL 19 1982 JUL 19 1982 OIL CUINDLIVATION UNVISION SANTA FE October 9, 1979 Internal to the best of the best		1	*	1		abo and the shift the small location
JUL 19 1962 JUL 19 1962 OIL CUINDLIVATION UNIVISION SANTA FE October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979 Inches of actual surveys made by me under my supervision, and that the san is true and currect to the best of managed and behief October 9, 1979	•			1	11	•
JUL 10 1902 OIL CUINDLIVATION DIVISION SANTA FE October 9, 1979 in the best of the bes		1	P-45 F " 17.			•
JUL 10 1802 OIL CUINSLINGATION UNISION SANTA FE October 9, 1979 International Control of the		i		战化W/喧Ⅲ	unde	my supervision, and that the sai
OIL CUINDLINGATION DIVISION SANTA FE October 9, 1979 Institute to the form of the form			illi	1 1111	100	ve and correct to the best of r
OIL CUINDLINGATION DIVISION SANTA FE October 9, 1979 Inchience of the control		1	IIII JUL	19 1982	hno-	ledge and belief
SANTA FE October 9, 1979 Out of the same		- 	241			Duve
October 9, 1979 Description of the second o	231	o'	OL LUNDEN	VALIDIN HIVISION		#5
M. Their			SA	NTA FE	, ' · · · ·	
De W. Shear		i -		1		والمتحدد فللسيد وينتج والمتحدد
Jan W. Shear		1 '	96	1		soft into a south trapped.
Jan W. Shear		1	9 #14	1		110/1
		1		İ	Xam	10. Hhear
	Section 1	pleases			1.11.17	

Control of the control of the Attack

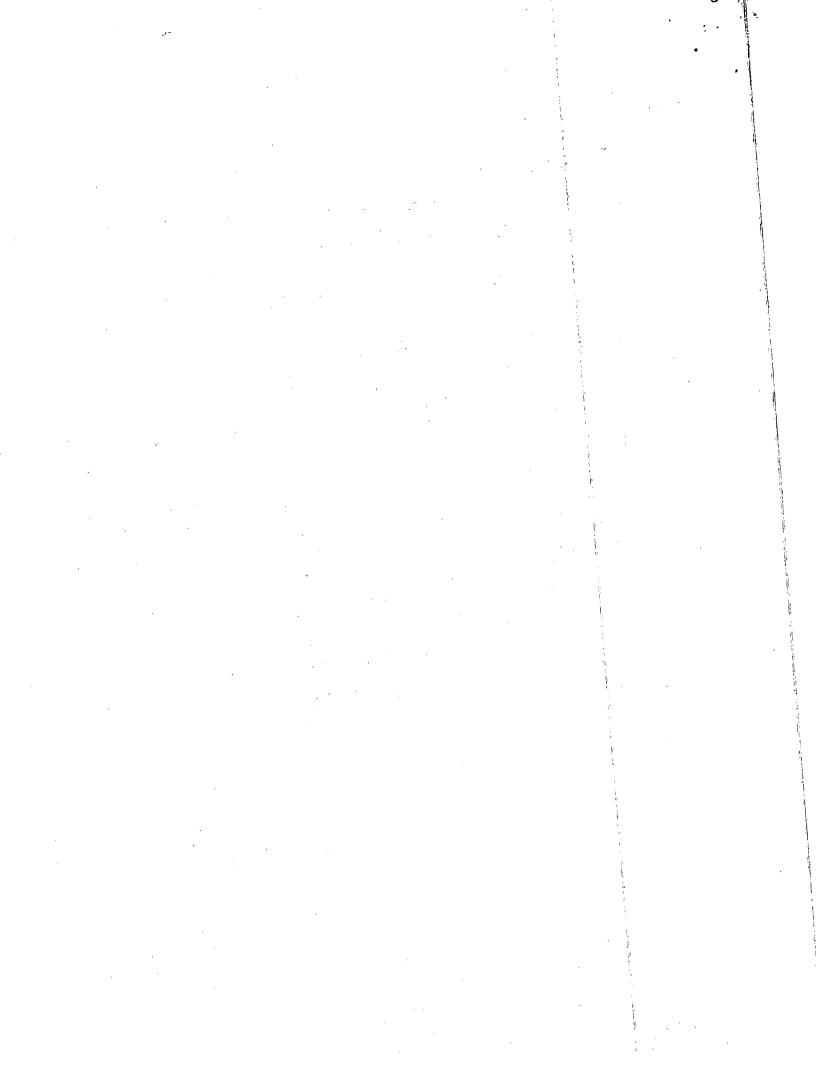
Rule 6:

Old Loco Unit #18

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

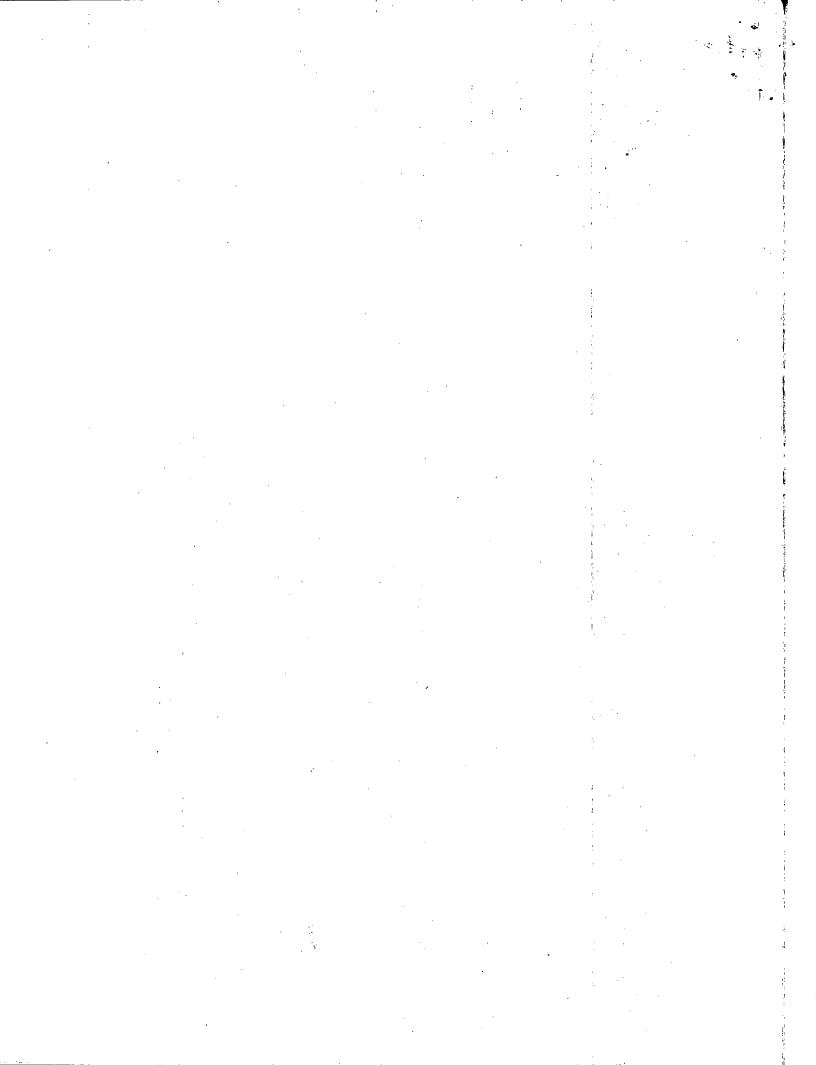
Rule 7:

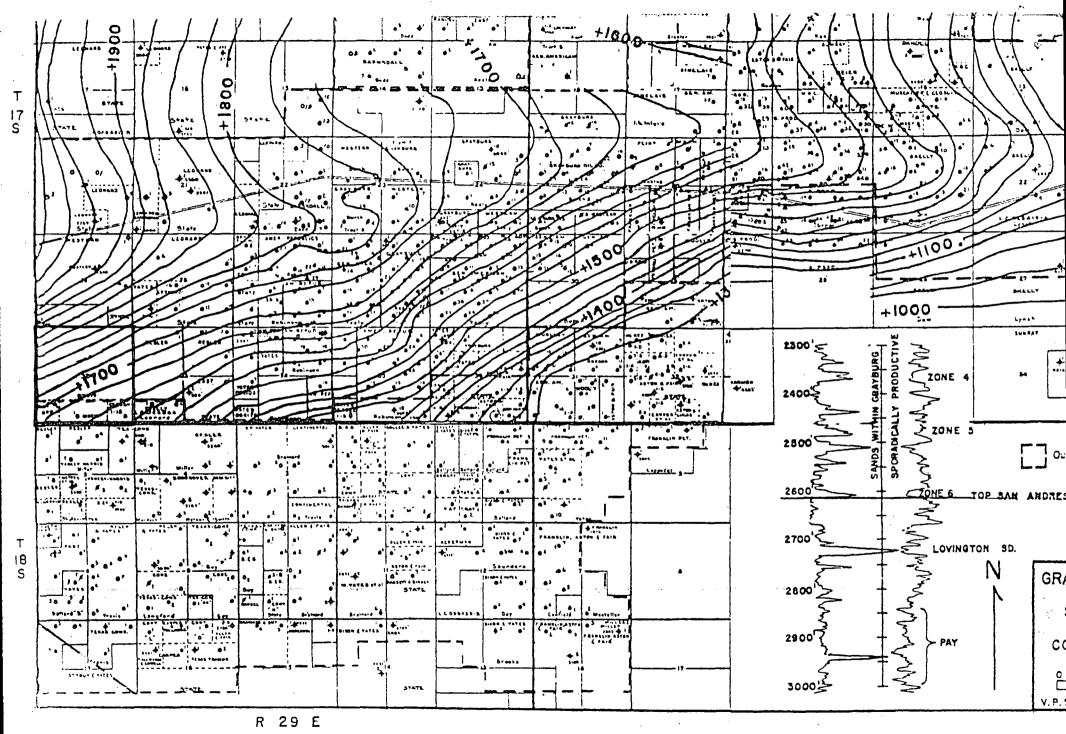
NA



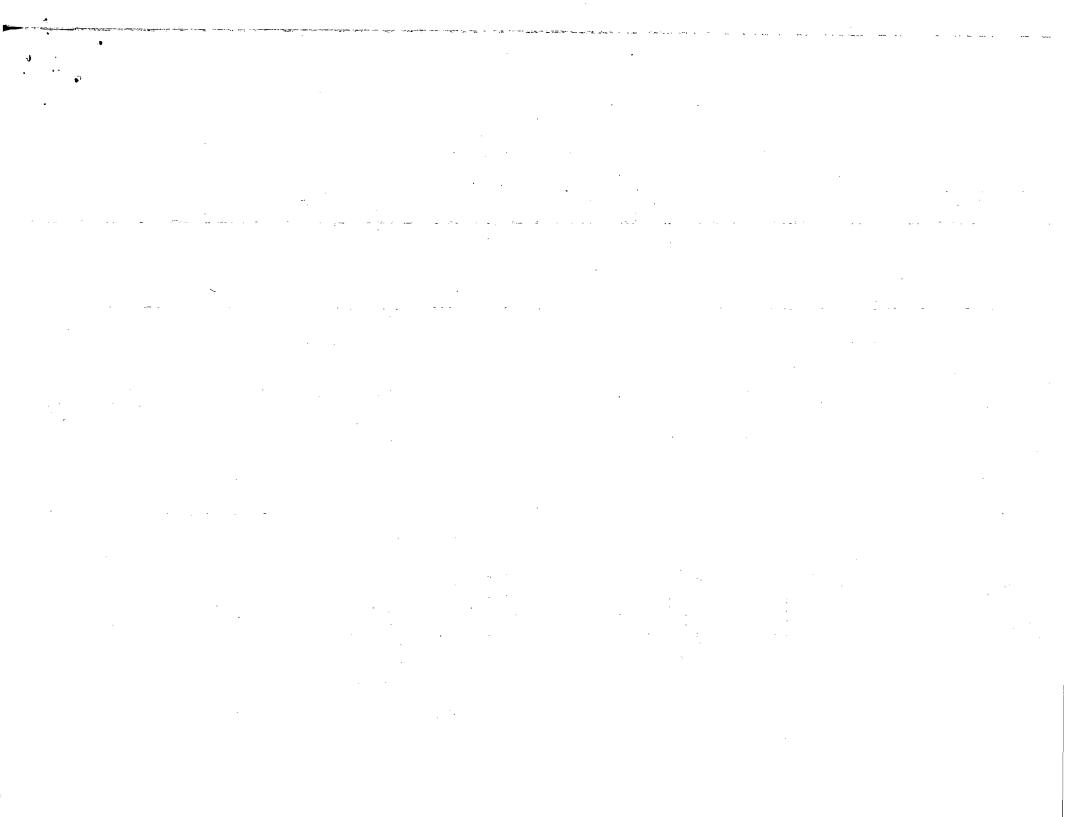
Rule 8:

- a. Old Loco Unit #14 330 FSL 2310 FWL Sec. 32-T17S-R29E Old Loco Unit #18 - 990 FSL 2310 FWL Sec. 32-T17S-R29E
- b. #14 3/4/40 #18 - 11/13/79
- c. #14 4/9/40 #18 - 12/13/79
- d. None
- e. #14 2 bbl. oil, 1/3 mcf gas/day #18 - 9 bbl. oil, 4 mcf gas/day
- f. NA
- 9. Well #14 is producing very little gas. The migration of oil and gas through waterflooding coupled with new reservoir conditions type production rates on the new well make the drilling of a new well necessary to drain the reservoir.





RULE #9-A



Marbob Energy Corporation
Old Loco Unit, Well #18
Grayburg Jackson Seven Rivers Queen
Grayburg San Andres
Eddy County, New Mexico

Pertinent Engineering Data and Conclusions:

Well #18 was completed in the Grayburg Jackson pool in December 1979. This is an infill well located as per the attached plat.

Effective July 1, 1982, oil reserves recoverable will be 8,796 barrels and gas reserves recoverable will be 4,222 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 #18 in May 1982 was 9 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
Petroleum Engineer

Date

RUBE #9-B

All Control

Marbob Energy Corp.
Old Loco Unit, Well #18
330 FSL 2310 FEL Sec. 32-T17S-R29E
Eddy County, N.M.

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

		Gross monthly	Gross Yearly
<u>Year</u>		oil - bbls.	Oil - bbls.
1000	16	0.70	1 (0
1982	(6 mos.)	270	1,620
1983		195	2,340
1984	, j	140 .	1,680
1985		100	1,200
1986		7 3	876
1987		5 2	624
1988		38	456
		•	-
	Total	oil remaining:	8,796
	Cumul	ative to 1/1/82	14,360
	Cumui	active to 1/1/02	14,300
	Total	ultimate reserves:	23,156
	IUCAI	arcimate reserves:	23,130

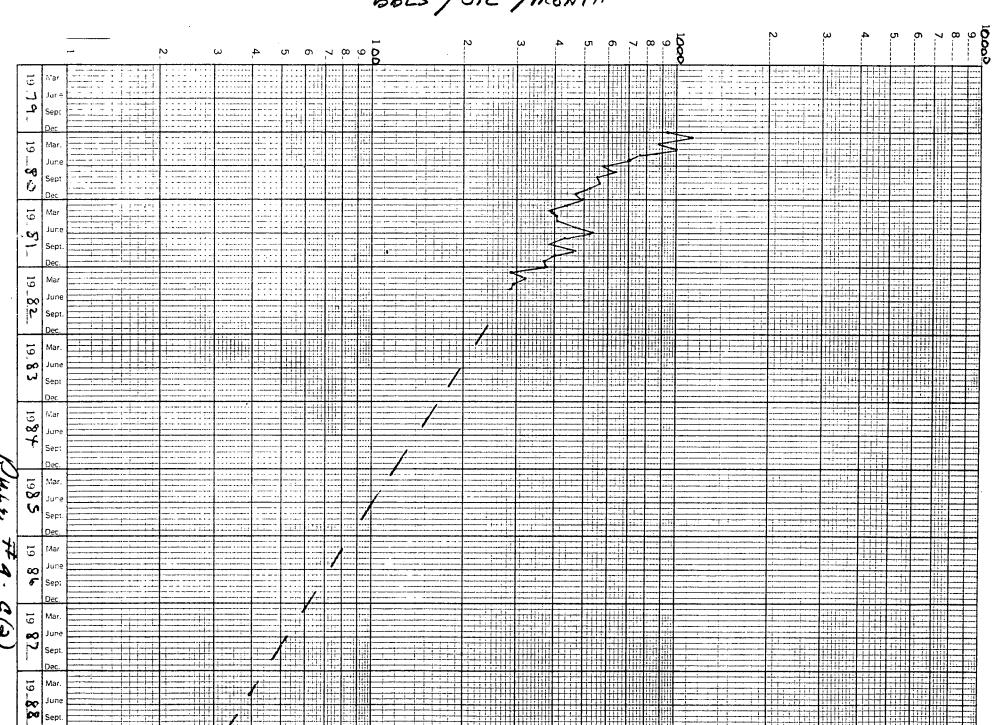
Gas-oil ratio average - 480 to 1
Remaining gas reserves - 4,222 mcf

RULE # 9-B

• • .

MELL NO 18

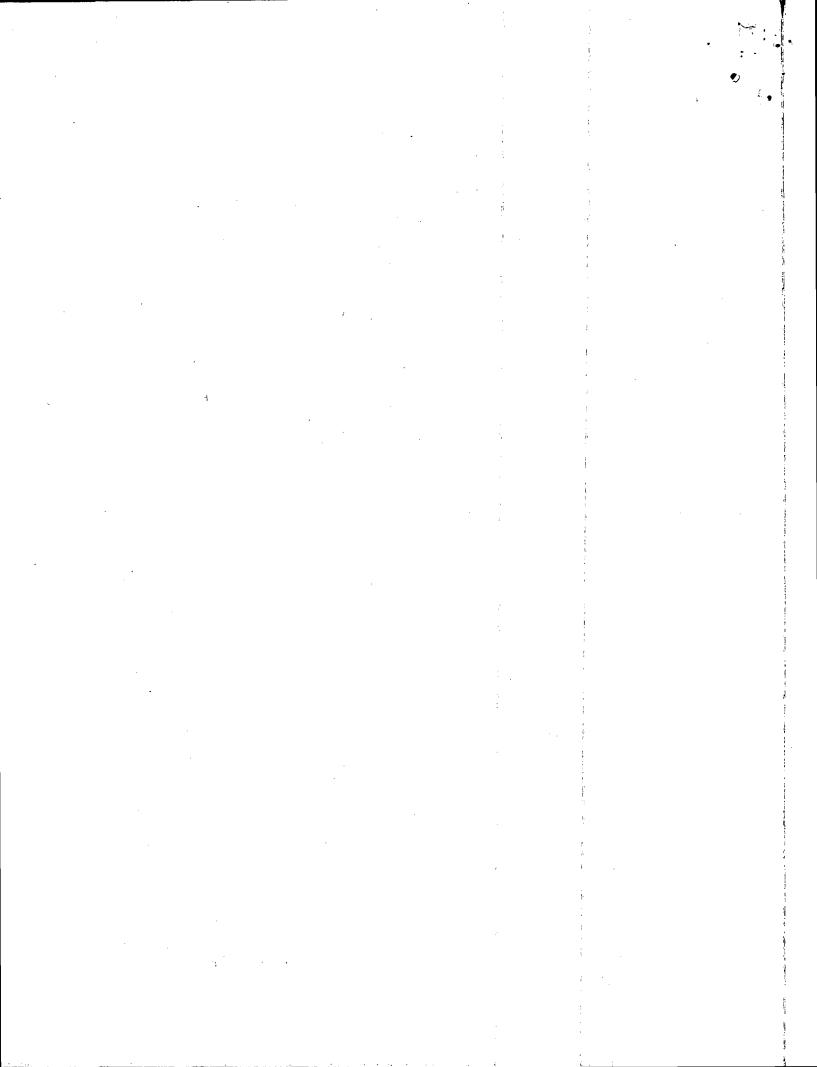
BBLS JOIL MONTH

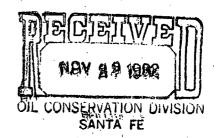


e de la companya de	e menjere ang manggalakkingan titi et ang embangga e menjangan	and the state of t	THE CONTRACTOR STATE OF STATE		The state of the s	Andrew State Control of the Control	CONTRACTOR CONTRACTOR OF THE PARTY OF THE PA	ويها تشبه المراد اليهاد اليميه فاستحي إدرامات	
y .									
· * · · · •									
·									
•									
ි	en en general e la sala a la companya de la companya								
	, , , , , , , , , , , , , , , , , , , ,		rin een waar al al al al	term the solid	ىلىپولە غايا دارايو سى د را	r rains of a size rain.	in also and a	· Territoria	en e en en en en en en en e
			•						
•						•			•
Service restriction of the service o	the total engineering of the company of	en e	entropy of the second of		e e e e e e e e	10 + 51# - 2		in the control of the	and the second of the second
					• *				
	•								
•									
					•				
					. •				
					. •				
		•							
				-					• .
						•			1
		•		•					
									; ;
	•								
									;
•									
									· · · · · · · · · · · · · · · · · · ·

Rule 11:

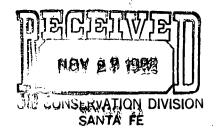
Notice of this infill request has been sent to Depco, Inc., 1000 Petroleum Bldg., Denver, Colorado 80202; and Anadardo Production Co., P.O. Box 2497, Midland, Texas 79702, as the offset operators.





Rule 8:

- a. Old Loco Unit #14 330 FSL 2310 FWL Sec. 32-T17S-R29E Old Loco Unit #18 - 990 FSL 2310 FWL Sec. 32-T17S-R29E Old Loco Unit #19 - 990 FSL 1650 FWL Sec. 32-T17S-R29E
- b. #14 3/4/40 #18 - 11/13/79 #19 - 2/4/80
- c. #14 4/9/40 #18 - 12/13/79 #19 - 3/12/80
- d. None
- e. #14 2 bbl. oil, 1/3 mcf gas/day #18 - 9 bbl. oil, 4 mcf gas/day #19 - 12 bbl. oil, 4 mcf gas/day
- f. NA
- g. Well #14 is producing very little gas. Well #19 was drilled because of the low permeability and low quality solution gas recovery mechanism require reduced spacing to efficiently drain the reservoir. The #18 and 19 wells have experienced new reservoir type conditions.



Rule 8:

- a. Old Loco Unit #14 330 FSL 2310 FWL Sec. 32-T17S-R29E Old Loco Unit #18 - 990 FSL 2310 FWL Sec. 32-T17S-R29E Old Loco Unit #19 - 990 FSL 1650 FWL Sec. 32-T17S-R29E
- b. #14 3/4/40 #18 - 11/13/79 #19 - 2/4/80
- c. #14 4/9/40 #18 - 12/13/79 #19 - 3/12/80
- d. None
- e. #14 2 bbl. oil, 1/3 mcf gas/day #18 - 9 bbl. oil, 4 mcf gas/day #19 - 12 bbl. oil, 4 mcf gas/day
- f. NA
- g. Well #14 is producing very little gas. Well #19 was drilled because of the low permeability and low quality solution gas recovery mechanism require reduced spacing to efficiently drain the reservoir. The #18 and 19 wells have experienced new reservoir type conditions.

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHOE SECRETARY

November 19, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Marbob Energy Corporation P.O. Box 304 Artesia, NM 88210

Re: Application for NGPA Infill Well Findings Under Provisions of Order No. R-6013-A Old Loco

Unit Well No. 18, Unit N, Sec.

32, Township 17 South, Range 29

East, Eddy County, NM

Gentlemen:

We may not process the subject application for infill findings until the required information, forms, or plats checked on the reverse side of this letter are submitted.

Sincerely,

Michael E. Stogner,

Petroleum Engineer

MES/dp

	1 A conv. of Four C 101 must be submitted
_ 	A copy of Form C-101 must be submitted.
L	A copy of Form C-102 must be submitted.
[The pool name must be shown.
] The standard spacing unit size for the pool must be shown.
	Give the Division Order No. which granted the non-standard proration unit.
	Please state whether or not the well has been spudded and give the spud date, if any.
	Information relative to other wells on the proration unit is incomplete. Please submit data on the Old Loco Unit Well No. 19
	(Rule 8)
] The geologic and reservoir data is incomplete or insufficient.
] Other:

: .



STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHOE

الأنطيا

November 19, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Marbob Energy Corporation P.O. Box 304 Artesia, NM 88210

Re: Application for NGPA Infill Well Findings Under Provisions of Order No. R-6013-A Old Loco

Unit Well No. 18, Unit N, Sec.

32, Township 17 South, Range 29

East, Eddy County, NM

Gentlemen:

We may not process the subject application for infill findings until the required information, forms, or plats checked on the reverse side of this letter are submitted.

Sincerely,

Michael E. Stogner, Petroleum Engineer

MES/dp

	A copy of Form C-101 must be submitted.
	A copy of Form C-102 must be submitted.
	The pool name must be shown.
	The standard spacing unit size for the pool must be shown.
	Give the Division Order No. which granted the non-standard proration unit.
	Please state whether or not the well has been spudded and give the spud date, if any.
X	Information relative to other wells on the proration unit is incomplete. Please submit data on the Old Loco Unit Well No. 19 (Rule 8)
	The geologic and reservoir data is incomplete or insufficient.
	<u> </u>
	Other:
. : .	•

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHOE SECRETARY

November 19, 1982

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Marbob Energy Corporation P.O. Box 304 Artesia, NM 88210

Re: Application for NGPA Infill Well Findings Under Provisions of Order No. R-6013-A Old Loco

Unit Well No. 18, Unit N, Sec.

32, Township 17 South, Range 29

East, Eddy County, NM

Gentlemen:

We may not process the subject application for infill findings until the required information, forms, or plats checked on the reverse side of this letter are submitted.

Sincerely,

Michael E. Stogner, Petroleum Engineer

MES/dp

A co	py of Form C-101 must be submitted.
A cc	py of Form C-102 must be submitted.
The	pool name must be shown.
The	standard spacing unit size for the pool must be shown.
Give unit	the Division Order No. which granted the non-standard pr
	se state whether or not the well has been spudded and giv date, if any.
Info	rmation relative to other wells on the proration unit is
inco	mplete. Please submit data on the Old Loco Unit Well No.
inco	mplete. Please submit data on the Old Loco Unit Well No.
inco (Rul	mplete. Please submit data on the Old Loco Unit Well No.
inco (Rul	mplete. Please submit data on the Old Loco Unit Well No. e 8)
inco (Rul	mplete. Please submit data on the Old Loco Unit Well No. e 8)
inco (Rul	mplete. Please submit data on the Old Loco Unit Well No. e 8)
inco (Rul	mplete. Please submit data on the Old Loco Unit Well No. e 8) geologic and reservoir data is incomplete or insufficient

••

֥. .

•.

. .

•

*

Request for Infill Finding on Old Loco Unit #18

in accordance with Administrative
Procedures amended February 8, 1980

N- 32-175-29E

FAAJ



HG. OF COPIES RECEIVED				13	ECE	IV =	i)	30 0	015 2309
DISTRIBUTION		NEW	MEXICO OIL CO					10rm C-101	
NATA FE'					OCT 22	14	1	Hevised 1-1-	
S.G.S.	+				00, 22	1010		SA. Indicate	Type of Leane
AND OFFICE		a.c.c.						6 Gas 1,0100 No.	
PERATOR ARTEBIA, DEFINE								B-4	
								TITT	
	ON FOR PE	RMIT TO	DRILL, DEEPI	EN, C	OR PLUG B	ACK			
Type of Work									remind Name
Type of Well DRILL X]		DEEPEN 🔲			PLUG B	ACK		Low lend
oir X 643	1			. 1	BINGLE [T]	MUL 1	10LK []	e, form or l	
Name of Operator	J 67H	<u>ra</u>			PONE		2 ONE	9. Well No.	Loco Unit
•	rbob Ener	RV COID	oration					9, nen .10.	18
Address of Operator		87 Jan						10. Field ar	nd Poet, or William SA
P. 0	D. Box 30	4, Arte	sia, N.M. (382 <u>1</u>	0				ackson Queen Gri
Location of Well	tr N	LOC	ATED 990	70	ET FROM THE _	South	LINC	777777	
0010					_				
2310 ,, , , , , , , , , , , , , , , , ,	89W JHI	C		~~;	175	29	E		mittiti.
								12. County Eddy	
4444444	44444	4444	444444	44	4444	+++++	4444	777777	::{{ {
t et	++++++	444	+++++++	14%	:, i-rojosed !'d	23-11: 1:	in formation Grayburg	7777777	20, he tary or C.T.
				()	28501		Lovingt	ς α. ⊃ n	Rotary
Lievations (Show whether I)	KI, ric.)	1	& Status relug. Bor		IB. Prilling Co	ontractor .		22. Appro-	k. Date Work will start
3590 GL	 	Statew	ide Active	A	lta-West	Drilli	ng Co.	10	/27/79
		Р	ROPOSED CASING	AND	CEMENT PRO	DGRAM			
SIZE OF HOLE	SIZE OF	CASING	WEIGHT PER F	OOT	SETTING	DEPTH	SACKSON	CEMENT	EST. TOP
11"	8 5/8		28#	001	250		Circ		231. 101
7 7/8"	4 1/2		10.50#		2850'		22		
	1		1		1		1		i
We propo	se to dr	111 to	approximate	ly 2	850' to t	test Gr	ayburg a	nd Lovi	ngton
formation	ons. We	do not	anticipate (gas	at these	depths	& will	not set	up a
blowout	prevente	r progr	am at this!	ine					
		,	गिष्टाप्तिष्ठा	, W,					
					7			M.	
			JUL 19	1982	2				PPROVAL VALD
									90 DAYS UNIESS
		OII	L CONSERVATA		INOISION			(DRILLI	ING COMMENCED,
		•	SANTA	rt				EXPIRES	1-23-80
								FV(IVE)	ر و دو و خور _{است} ینیون منگ ^ی و دوره و جود و جود و خود و خود و جود و جود و جود و جود و جود و خود و خود و خود و خ
					•				
					1				
			•						
BOVE SPACE DESCRIBE P	ROPOSED PR	OGRAMI IF	PROPOSAL IS T O DE E	PEN 05	PLUG DACK, G	IVE DATA ON	PREBERT PR		E AND PROPOSED NEW PRODE
eby certify that the informat	ion above is to	the and comi	plete to the be et of	my kn	ywledge and b	ellef.			
11. 1	1),							0 /00 /pc
ed Whele	n (V.	Ruce	Title S	ecre	tary			Date1	0/22/79
(This space for	State Uge)				and the second s				
21/	L,	1	المنا جون	10 D4 F	ISOR, DIST	RICT II		, n	CT 2 3 1070
ROVED BY WU	Los	set	TITLE	DRV	DIG DIG.			DATE	VI ~ J 19/9
DITIONS OF ADDROVAL	# AMVI							VI	#

RULE #5

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section MARBOB ENERGY CORPORATION OLD LOCO UNIT 18 Unit Letter Humaie 'N. 32 17 South 29 East EDDY Actual Footage Location of Well: South 2310 feet from the Ground Level Plev. Producing Formation 3590 Grayburg & Lovington Grbg. Jackson Queen 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. Use reverse side of this form if necessary.), No allowable will be assigned to the well until all interests have been consolidated thy communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, climinating 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. Marbob Energy Corp. JUL 19 1982 10/22/79 OIL CONSERVATION DIVISION SANTA FE I heraby certify that the well location shown on this plat was platted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. October 9, 1979

Author Sharmacauousido

.

1,2.

Rule 6:

Old Loco Unit #18

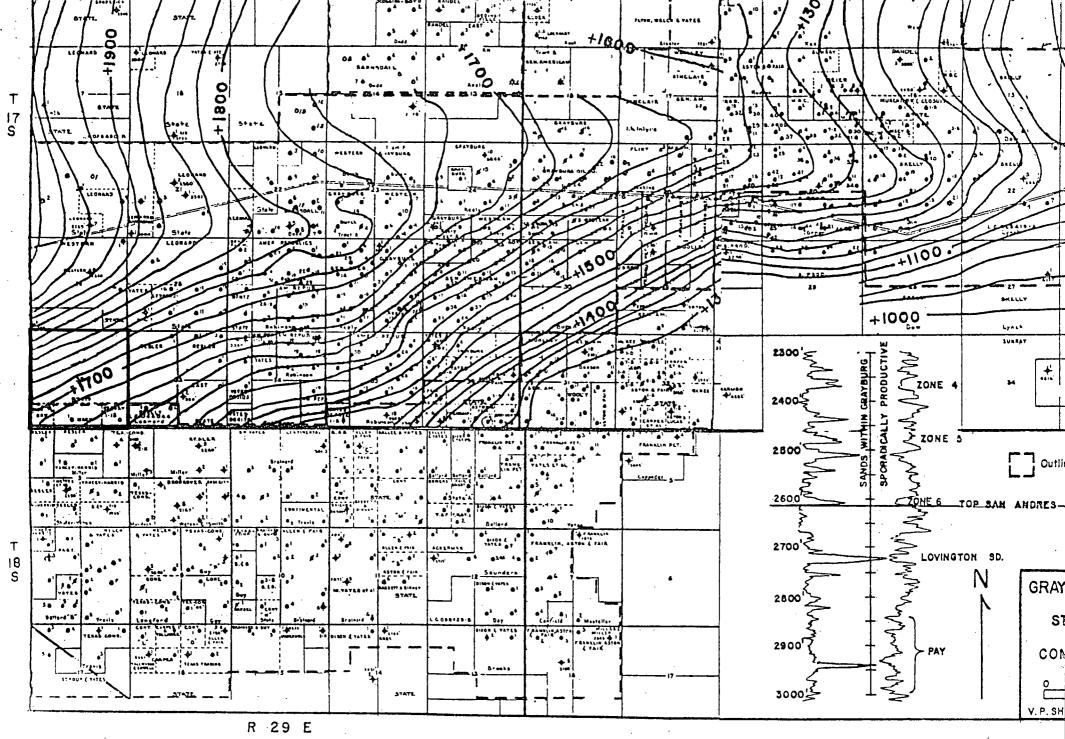
Pool: Grayburg Jackson Seven Rivers Queen Grayburg San Andres
Standard spacing unit: 40 acres

Rule 7:

NA

Rule 8:

- a. Old Loco Unit #14 330 FSL 2310 FWL Sec. 32-T17S-R29E Old Loco Unit #18 - 990 FSL 2310 FWL Sec. 32-T17S-R29E
- b. #14 3/4/40 #18 - 11/13/79
- c. #14 4/9/40 #18 - 12/13/79
- d. None
- e. #14 2 bbl. oil, 1/3 mcf gas/day #18 - 9 bbl. oil, 4 mcf gas/day
- f. NA
- g. Well #14 is producing very little gas. The migration of oil and gas through waterflooding coupled with new reservoir conditions type production rates on the new well make the drilling of a new well necessary to drain the reservoir.



R 29 E RULE #9-A Marbob Energy Corporation Old Loco Unit, Well #18 Grayburg Jackson Seven Rivers Queen Grayburg San Andres Eddy County, New Mexico

Pertinent Engineering Data and Conclusions:

Well #18 was completed in the Grayburg Jackson pool in December 1979. This is an infill well located as per the attached plat.

Effective July 1, 1982, oil reserves recoverable will be 8,796 barrels and gas reserves recoverable will be A,222 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 #18 in May 1982 was 9 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.

OIL CONSCIONAL

Paul G. White Petroleum Engineer

SANTA FE

RUBE #9-B

Marbob Energy Corp.
Old Loco Unit, Well #18
330 FSL 2310 FEL Sec. 32-T17S-R29E
Eddy County, N.M.

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

Year		Gross monthly Oil - bbls.		Gross Yearly Oil - bbls.
	No. of the second secon	·! · · · · · · · · · · · · · · · · · ·		
1982	(6 mos.)	270	•	1,620
1983		195		2,340
1984	. J. 2.	140 33	the second	1,680
1985		100		1,200
1986		73	•	876
1987	•	5 2	*	624
1988	· · ·	38	•	456
	Total o	il remaining:		8,796
	Cumulat	ive to 1/1/82		14,360
. •	Total u	ltimate reserves:		23,156

Gas-oil ratio average - 480 to 1

Remaining gas reserves - 4,222 mcf

Rule 11:

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