APPROVED BY _

M. Series

CONDITIONS OF APPROVAL, IF ANY:

SUBMIT IN TRIPLICATE*

Form approved. Budget Bureau No. 42-R1425.

(May 1963)	UNIT	ED STATES	5	(Other instruct reverse sid		20 1111	クカラで、		
	DEPARTMENT			IOR		5. LEASE DESIGNATION	AND SERIAL NO.		
GEOLOGICAL SU					им/3999				
				N OP PILIG R	ΔCK	6. IF INDIAN, ALLOTTE	OR TRIBE NAME		
APPLICATIO	N FOR PERMIT TO	O DRILL, L	JEEFE	N, OR FLOO D	ACK_	£			
1a. TYPE OF WORK	RILL 🖾	:K 🗆	7. UNIT AGREEMENT N	AME					
b. TYPE OF WELL	GAS [3]			NGLE X MULTIPL	LE	8. FARM OR LEASE NA	M E		
	WELL X OTHER		ZO	NE A ZONE		Grambling	ſ		
2. NAME OF OPERATOR	Natural Gas Co	mnany				9. WELL NO.			
EI PASO 3. ADDRESS OF OPERATO		mpany				2A			
	90, Farmington	. NM 87	401			10. FIELD AND POOL, OR WILDCAT			
PU BOX 3	(Report location clearly and	in accordance wi	th any S	tate requirements.*)		Blanco Me	esa Verde		
At surface	790'S, 183					1	BLK. REA 29-N, R-9-W		
At proposed prod. z						NMPM			
14. DISTANCE IN MILE	S AND DIRECTION FROM NEAR	EST TOWN OR POS	T OFFICE			12. COUNTY OR PARISE	1		
						San Juan	NM		
15. DISTANCE FROM PRO LOCATION TO NEAR PROPERTY OR LEAS	EST & LINE, FT.		16. NO	OF ACRES IN LEASE		OF ACRES ASSIGNED THIS WELL	320.00		
18 DISTANCE FROM PE	, DRILLING, COMPLETED,		19. PR	19. PROPOSED DEPTH 4750 '		O. ROTARY OR CABLE TOOLS ROtary			
	whether DF, RT, GR, etc.)		•		· -	22. APPROX. DATE W	ORK WILL START*		
23.		POPOSED CASI	NG ANI	CEMENTING PROGRA	AM		· · · · · · · · · · · · · · · · · · ·		
						QUANTITY OF CEMI	ENT		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER	F00 T	SETTING BEPTH	224	cu.ft. to c			
13 3/4"	9 5/8"	32.3#		200' 3365'			ver Ojo Alam		
8 3/4"	7"	20.0#		3215-4750'	267		11 to 3215'		
6 1/4"	4 1/2"line	r 10.5#		3213 4730			•		
	•				*				
6 3 L'-	vely perforate	and cand	31.72+c	r fracture t	he Me	esa Verde fo	rmation.		
Selectiv	vely periorate	and Sand		er rracture c	3				
A 3000 p blind a	osi WP and 600 nd pipe rams w	O psi tes ill be us	st do sed f	ouble gate pr For blow out	revent preve	ter equipped ention on th	with		
This ga:	s is dedicated	•			••				
The E/2	of Section 27	is dedi	cate	d to this we	11.	1011			
IN ABOVE SPACE DESC sone. If proposal is preventer program, it	RIBE PROPOSED PROGRAM: If to drill or deepen direction f any.	proposal is to deally, give pertine	eepen or ent data	plug back, give data on subsurface locations a	present pr and measu	oductive zone and propored and true vertical de	sed new productive oths. Give blowout		
BIGNED .	y. Busis		TITLE	Drilling	g Cle	rk date Se	pt.20, 1977		
(This space for	Federal or State office use)								
PERMIT NO.		, 		APPROVAL DATE					

KECEIVEU

SEP 22 1977

TITLE

All distances must be from the outer boundaries of the Section

Operator				Lease	1 pomidaties of		Well No.
		SO NATURAL GA		GRAMB		(NM-3999)	2A
Unit Lette		Section 27	Township 29-N	Range	9-W	County SAN JUA	N
Actual Fo	•	tion of Well:	SOUTH line or	nd 183	O feel	from the EAST	line
	evel Elev. 18	Producing For MES		Pool	BLANCO MES		Dedicated Acreage: 320.00 Acres
1. Oı	utline the	e acreage dedica	ted to the subject	well by cold	ored pencil o	r hachure marks on t	
		an one lease is d royalty).	dedicated to the w	vell, outline	each and ide	ntify the ownership (hereof (both as to working
			ifferent ownership i mitization, force-po		to the well, l	have the interests o	f all owners been consoli-
	Yes	☐ No If an	swer is "yes," type	e of consolid	lation		
			owners and tract de	escriptions w	hich have ac	tually been consolid	ated. (Use reverse side of
No	o allowab						nmunitization, unitization,
	rced-pool on.	ing, or otherwise)	or until a non-stand	lard unit, eli	minating suc	h interests, has been	approved by the Commis-
			1			N	CERTIFICATION
		'		i		1 hereby	certify that the information con-
		1				L1	erein is true and complete to the my knowledge and belief.
	•	1.	. 3	i			Original Signed by
		+	🕽			Name	9. 0. Brisco ng Clerk
		. t		# 2 0	·	Position	
				;] [Company	Natural Gas Co.
				 [•	Date	per 20, 1977
			SECTION 27	!		N	
	•		- 3 N	! !		N I hereby	certify that the well location
			/ / 8	yn.r 	: (2000	shown o	n this plat was plotted from field
		W. Commission		1 1 1	∴3999 	under my	actual surveys made by me or supervision, and that the same
			Ŋ	į		NI NI	and correct to the best of my
		+			· · ·		
		i		0	1830'	Date Surve	yed UGUST 28, 1977
		! !	Ŋ	30,		Registered	Professional Engineer
		1		2,2		'N	10/1/100
BERT TEXT			- 17/1/	77.77		Certificate	No. 1760
0 330	660	90 1320 1650 198	30 2310 2840 2	000 1500	1000 5	00 0	



P. O. BOX 990 FARMINGTON, NEW MEXICO 87401 PHONE: 505-325-2841

Multi-Point Surface Use Plan Grambling #2A

- 1. Existing Road Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map.

 All existing and new roads will be properly maintained during the duration of this project.
- 2. Planned Access Roads Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
- 3. Location of Existing Wells Please refer to Map No. 2
- 4. Location of Tank Batteries, Production Facilities, and Production
 Gathering and Service Lines Please refer to Maps No. 1 and No. 2.

 Map No. 2 shows the existing gas gathering
 lines. Map No. 1 shows the existing roads and
 new proposed access roads. All known production
 facilities are shown on these two maps.
- 5. Location and Type of Water Supply Water for the proposed project will be obtained from a water hole located at the Ten Mile Water Hole.
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

- 7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1 will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
- 8. Ancillary Facilities No camps or airstrips will be associated with this project.
- 9. Wellsite Layout Please refer to the attached Plat No. 1.
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed Mixture #2 will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted brown (Federa. Standard #595 30318).
- 11. Other Information The terrain is a sandy wash bottom covered with salt cedars. Cattle graze the proposed project site.

- 12. Operator's Representative W. D. Dawson, Post Office Box 990, Farmington, New Mexico 87401
- 13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

September 20, 1977

D. R. Read

Chief Division Drilling Engineer

DRR:pb

Operations Plan Grambling #2A

I. Location: 790'S, 1830'E, Section 27, T-29-N, R-9-W, San Juan County, NM

Field: Blanco Mesa Verde Elevation: 5618'GR

II. Geology:

A.	Formation Tops:	Surface Ojo Alamo Kirtland Fruitland Pic.Cliffs	1060' 1730'	Lewis Mesa Verde Menefee Point Lookout Total Depth	3165' 3685' 3780' 4299' 4750'
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- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 3675', 3770', 4290' and at Total Depth. Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3365'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program:	$\frac{\text{Hole Size}}{13 \ 3/4"}$	Depth 200'	Casing Size	Wt.&Grade
		8 3/4"	3365'	9 5/8" 7"	32.3# H-40 20.0# K-55
		6 1/4"	3215-4750'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" liner 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 'M&F).
- C. Tubing: 4750' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.
- D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

Operations Plan - Grambling #2A, cont'd.

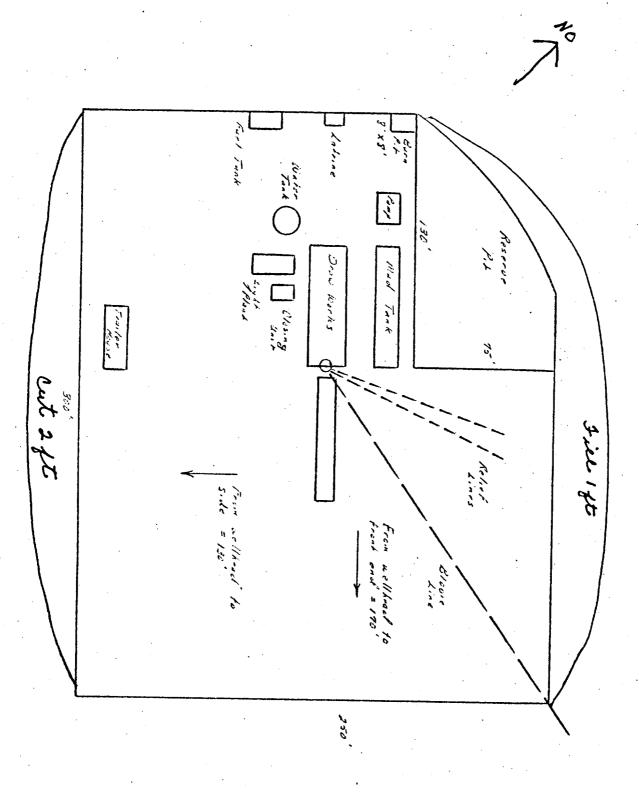
V. <u>Cementing</u>:

9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

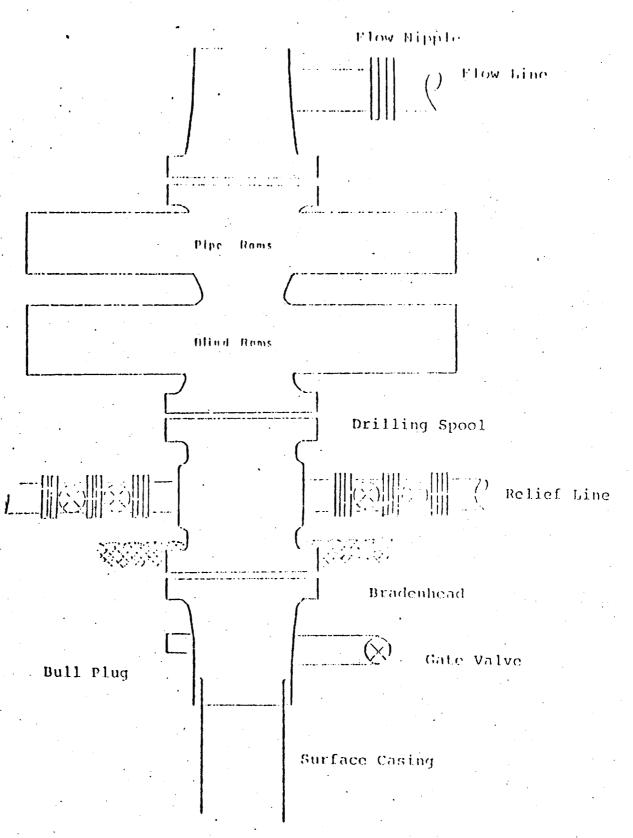
7" intermediate casing - use 161 sks. of 65/35 Class "B" Poz with 12% gel (15.52 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (542 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 148 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (267 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

DRR:pb

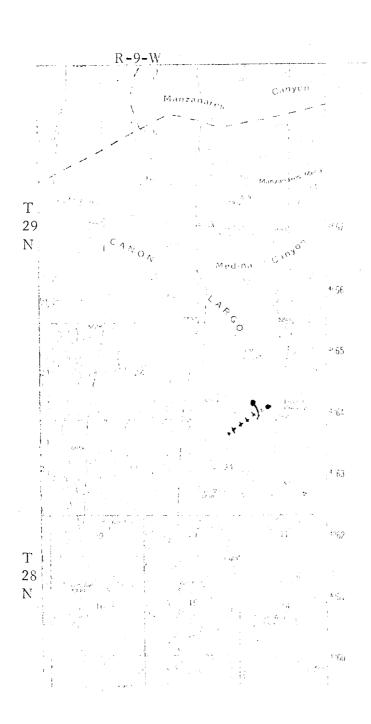


Typical Location Plat for Musa Verde and Watota W



Series 900 Double Gate BOP, rated at 3000 psi Working Pressure When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line

EL PASO NATUR 41. CAS COMPANY Grambling #2A SWSE 27-29-9

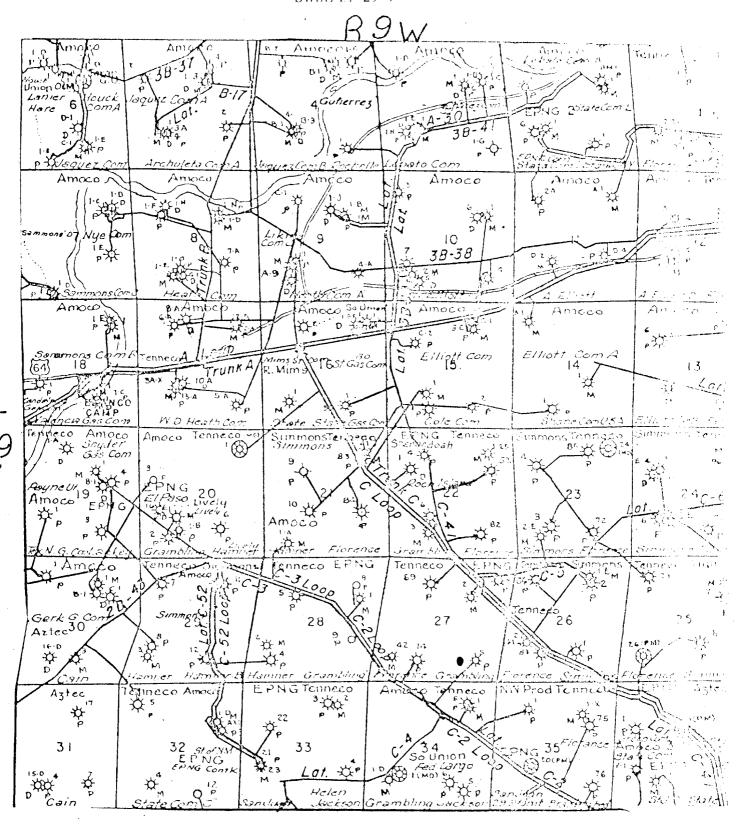


MAP #1

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TROPOSED	The state of the state of	-			

EL PASO NATURAL GAS COMPANY. Grambling #2A SWSE 27-29-9



MAP #2