APPROVED BY \_

0+5-USGS, A

CONDITIONS OF APPROVAL, IF ANY;

1-Hou

# DEPART

(Other instructions reverse side)

Form approved. Budget Bureau No. 42-R1425. 0-015-23311

IMENI	OF	IHE	INI	FRIOR		
GEOLOGICAL SURVEY						

5. LEASE DESIGNATION AND SERIAL NO.

DATE\_

RECEIVED

							<u>                                      </u>	t	***************************************
APPLICATIO	N FOR PERMIT	TO DRILL,	DEEPE	N, OR PLU	G BAC	CK	6. IF INDIAN,	ALLOTTE	E OR TRIBE NAME
1a. TYPE OF WORK			F				-		MAY - 5 198
	ILL 🖾	DEEPEN		PLUG	BACK	Д :	7. UNIT AGRE	EMENT N	DCI G ITMEN
b. Type of well	AS [		SIN	NGLE 5.7 M	(ULTIPLE				ме О. С. D.
WELL XX W	VELL OTHER		zoi		ONE	₽_			
2. NAME OF OPERATOR				1 marie			<u>Federal</u>	AX	ARTESIA, OFFICE
	ction Company			****	154-7		9. WELL NO.		
3. ADDRESS OF OPERATOR					THE WAY		1		
P. O. Box 68 4. Location of Well (R	B Hobbs, NM	88240		600 0			10. FIELD AND	POOL, O	R WILDCAT
At surface					7 1990		Brushy Dr	aw_De	elaware
66	50' FSL & 560'	•	8	U. S. GEOLUGI ARTESIA, NE	1000	[ ]	11. SEC., T., R. AND SURVI		
At proposed prod. zor	e (Unit M,	SM/4, $SW/4$ )		ARTESIA	CAL SUD		UL-M		
	. <u>-</u>			ARTESIA, NE	N MEYLA	EX	<u> 18-26-3</u>		
14. DISTANCE IN MILES				•	<del>-</del> - 10(	Į	12. COUNTY OF	PARISH	13. STATE
	<u>ith - southeast</u>	of Malaga,					Eddy		l NM
15. DISTANCE FROM PROPO LOCATION TO NEARES	T		16. NO.	OF ACRES IN LEA	SE   17.		F ACRES ASSIGN	ED	
PROPERTY OR LEASE I (Also to nearest drl;	LINE, FT. g. unit line, if any)						40		
18. DISTANCE FROM PROF TO NEAREST WELL, D	POSED LOCATION*		19. PRO	POSED DEPTH	20.	ROTAL	RY OR CABLE TO	ors	<del></del>
OR APPLIED FOR, ON TH	IS LEASE, FT.		3	3500 <b>'</b>		Rot	ary		
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)				<u> </u>	1	22. APPROX.	DATE WO	RK WILL START*
3053.1 GR									
23.		PROPOSED CASH	NG AND	CEMENTING PR	OGRAM		·	**	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	оот	SETTING DEPTH	,	ļ	QUANTITY (	OF C :MEN	
	9-5/8"	40#	-			2:			
12-1/4" 8-3/4"	7"	_   : • "	264	600'			to surf.		
0-3/ 4		20#, 23#,	3r 20t	# 3500 <b>'</b>	'	JITC	to surf.		
			1						
run and eval	rill and equip uated; perfora	well in the te and/or s	e Dela timula	ware zone. ite as nece	After ssary	rea	aching TD ttempting	logs comm	will be ercial
production.									
M ( D	01.6001								
Mud Program:		Native mud a						_	
		Commercial r conditions.	nud an	id brine wi	th min	imum	properti	es fo	r safe hole
POD Duoguam	attached								
BOP Program		-1							
Archaeorogic	al survey atta	cnea							
									•
IN ABOVE SPACE DESCRIBE zone. If proposal is to									
preventer program, if any		-e, give partition			and me		ruc vertic	a. septa	
24.		`							
Broken Br	Mrx lain	_	لم ۸	in. Analysi	<del> </del>			4-10	s on
SIGNED		TIT	LE AOM	111* vmar A2	L		DATE	<del></del>	U=0U
(This space for Fede.	ral or State office use)								
PERMIT NO.				PPROVAL DATE	1-28-	180	)		

\*See Instructions On Reverse Side

1-BD

1-Susp

All distances must be from the outer boundaries of the Section.

AMOCO Production Co			Federal AX		Weil No.
Unit Letter	Section 18	Township 26 South	Range 30 East	County	
Actual Footage Loc 560	feet from the W	est line and		st from the South	line
Ground! evet Elev. 3053.1	Producing Form		P∞1 Und Brushy Draw D	· · · · · · · · · · · · · · · · · · ·	40,// Acres
1. Outline the finterest and attention of the finterest and a	han one lease is nd royalty).  an one lease of dicommunitization, u	dedicated to the well ifferent ownership is on nitization, force-pooling wer is "yes," type o	ell by colored pencil of the colored pencil of the colored pencil of the well, ng. etc?	or hachure mark RECEIVEL entify the ownership there MAY - 5 198 have the interestate of DIL ARTESIA, OFFICE estually been consolidated	of (both as to working 30 owners been consoli-
No allowa	ble will be assigne			consolidated (by community interests, has been app	
	APR 2	EN MEXICO	A. ROMENTO OF THE STREET LAND SUITE	I hereby certify tained herein i best of my know Name Admin. Al	RTIFICATION  y that the information con- s true and complete to the wlesse and belief,  May A  nalyst:  duction Company
	9			shown on this parties of actual under my super is true and continued and continued and bate Surveyed.	
-560'@			i	Peglatered Frotes and or Land Survey August Certificate No. J.	- 1

#### ATTACHMENT "B" NOTES

- 1. Blow-out preventers and master valve to be fluid operated and oil fittings must be in good condition, 3,000# W.P. (6,000 p.s.i. test), minimum.
- Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
- Niople above blow-out preventer shall be same size as casing being drilled

4 Kelly cock required, 3,000# W.P. (6,000 p.s.i. test) minimum.

- ${\tt OMSCO}$  or comparable safety valve must be available on rig floor at all times with proper connection or sub, 3,000# W.P. (6,000 p.s.i. test),
- 6. Blow-out preventers and master valve while drilling intermediate hole to 6000' may be 2,000° W.P. (4,000 p.s.i. test), minimum.
- 7. Choke assembly, beyond second valve from cross, may be positioned (Optional) outside of derrick foundation.
- 8. Spool or cross may be climinated if connections are available in the lower part of the blow-out preventer body.
- Plug valves gate valves are optional. Valves shown as 2" are minimum size.
- 10. Casing head and casing head spool, including attached valves, to be furnished by Amoco.
- 11. Rams in preventers will be installed as follows:

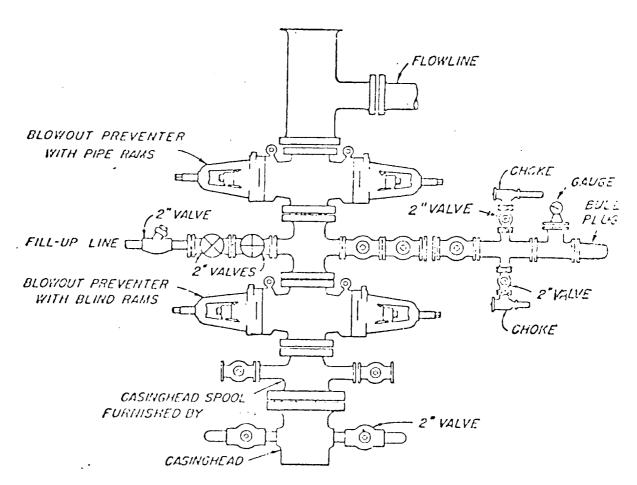
When drilling, use: Top Preventer - Drill pipe rams Bottom Preventer - Blind rams or

master valve

When running casing, use:

Top Preventer - Casing raπs Bottom Preventer - Blind rams or

master valve



### BLOWOUT PREVENTER HOOK-UP

ZMOCO PRO MINISM COM LA

#### EXHIBIT D-I MODIFIED



### United States Department of the Interior

MAY - 5 1980

GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, New Mexico 88210

O. C. D.

April 28, 1980

Amoco Production Company P. O. Box 68 Hobbs, New Mexico 88240

Gentlemen:

AMOCO PRODUCTION COMPANY
Fed "AX" No. 1
660 FSL 560 FWL Sec. 18 T.26S R.30E
Eddy County Lease No. NM-16814

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 3,500 feet to test the Delaware formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the SURFACE USE PLAN and this approval including the GENERAL REQUIREMENTS.
- 3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
- 4. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
- 5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318), or Amoco's standard gray.
- 6. Notify the Survey by telephone 24 hours prior to spudding well.
- 7. Cement behind the 9-5/8" casing must be circulated.

- 8. Special Stipulations:
  - a. Prior to construction, fence will be constructed around south and east sides of well pad.
  - b. Carlsbad Area Archaeologist (BLM) must be contacted at least 24 hours prior to construction.
- 9. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

George H. Stewart Acting District Engineer

#### Attachment to "Application for Permit to Drill", Form 9-331 C

Federal AX #1
660' FSL & 560' FWL, Sec., 18, T-26-S R-30-E
Eddy County, New Mexico

1. Location

See attached Form C-102

2. Elevation

See attached Form C-102

3. Geologic name of surface formation.

Permian

4. Type of drilling tools and associated equipment to be utilized.

See Form 9-331 C

5. Proposed drilling depth.

See Form 9-331 C

6. Estimated tops of important geologic markers.

Anhydrite 900' Delaware Lime 3310' Delaware Sand 3370'

7. Estimated depths at which anticipated water, oil, gas or other mineral-bearing formations are expected to be encountered.

Delaware Sand 3370'

8. Proposed casing program, including size, grade, and weight of each string and whether it is new or used.

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	New or Used
660'	9-5/8"	40#	K-55	New
3500 <b>'</b>	7"	20#, 23#, or	26# K <b>-</b> 55	. New

9. Proposed cementing program.

9-5/8" - Circulate to surface 7" - Circulate to surface

- 10. Blowout Preventer Program is attached.
- 11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling, and the quantities and types of mud and weighting material to be maintained.

0-600' - Native mud and fresh water.
600'-3500' - Commercial mud and brine with minimum properties for safe hole conditions

12. Testing, logging and coring programs to be followed with provisions made for required flexibility.

Compensated Neutron Formation Density Dual Laterolog w/Micro SFL

13. Any anticipated abnormal pressure or temperatures expected to be encountered or potential hazards, such as hydrogen sulfide gas, along with plans for mitigating such hazards.

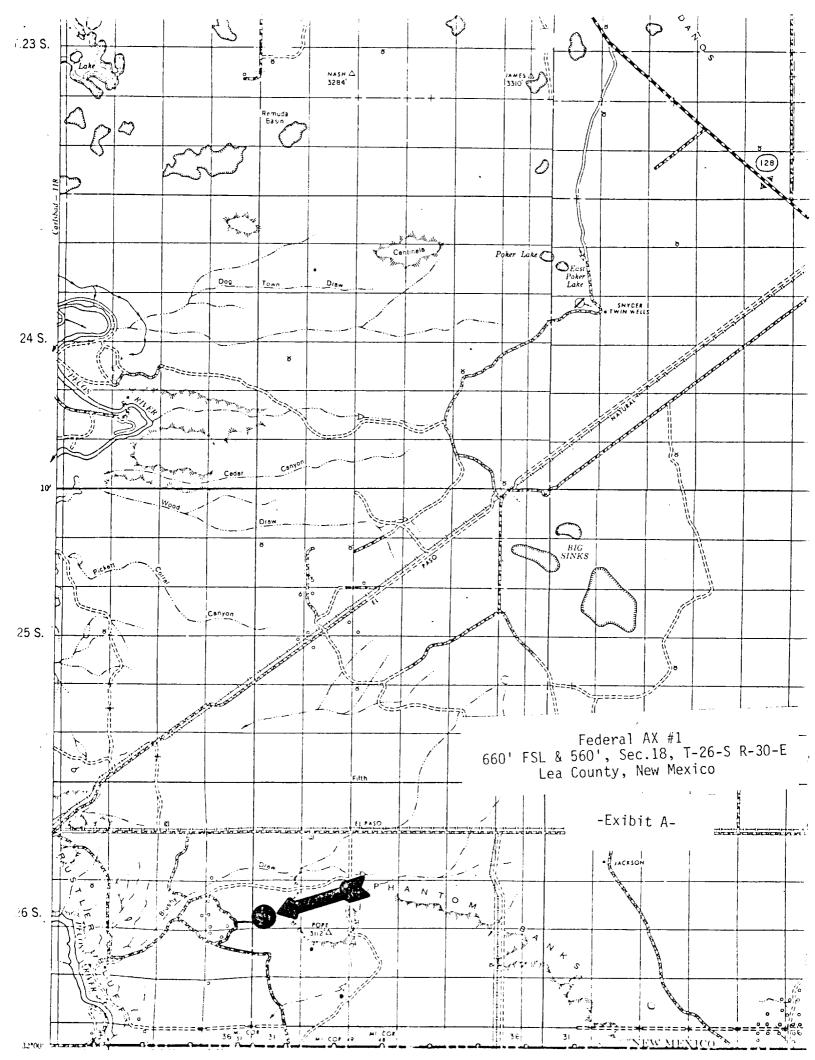
None anticipated

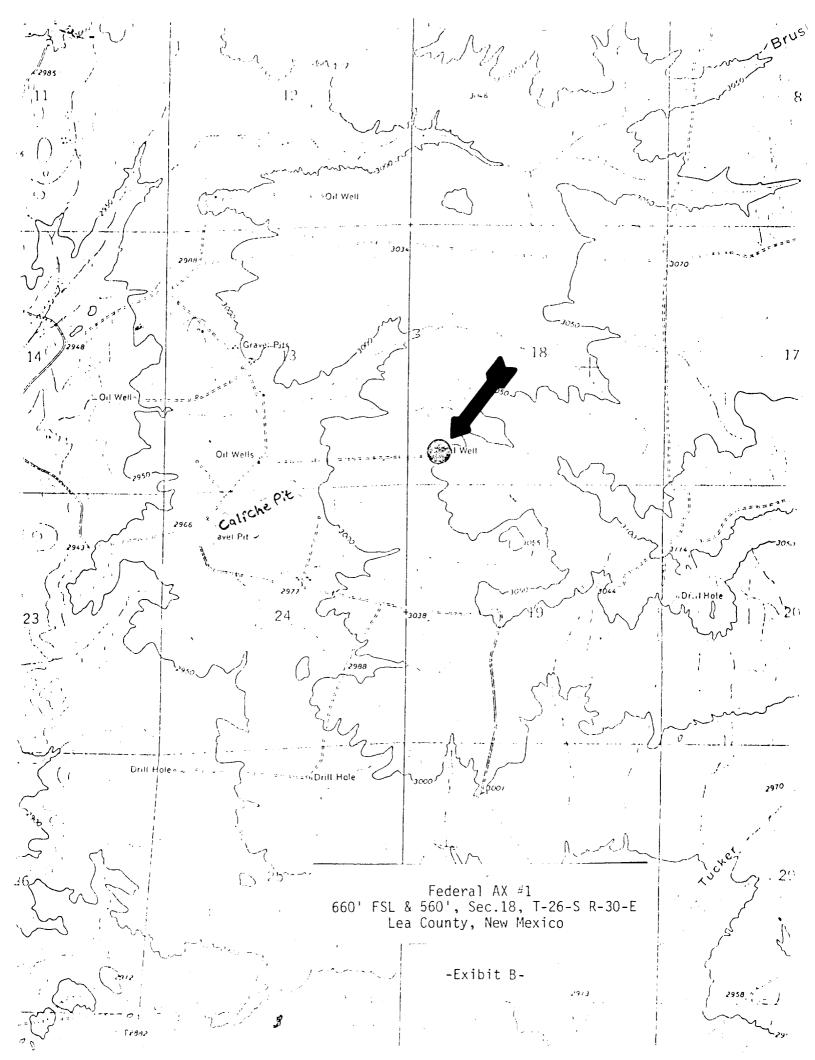
14. Anticipated starting date and duration of operation.

5-1-80 5-25-80

15. Other facets of the proposed operation operator wishes to point out for the Geological Survey's consideration of the application.

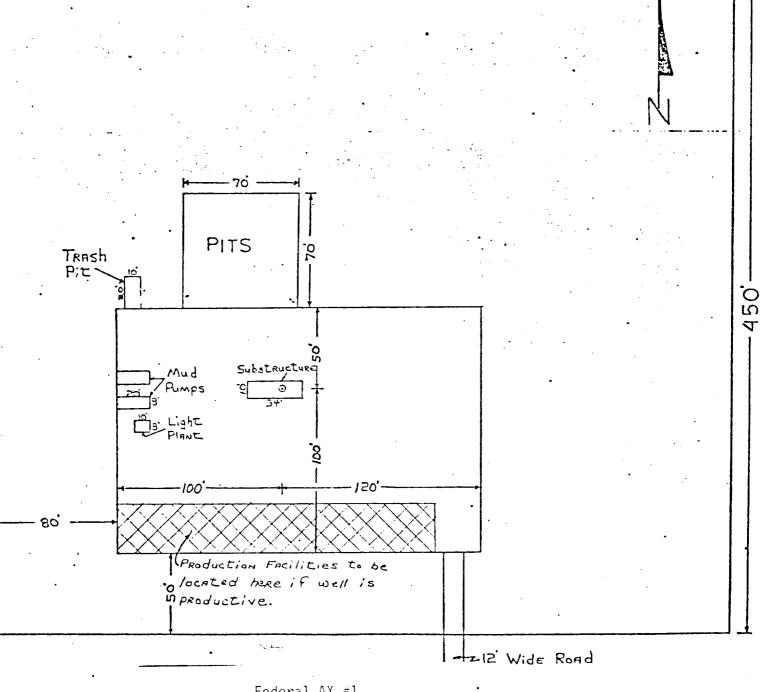
Request exemptions from the painting stipulations of Sec. 102 (a) (8) of the "Federal Land Policy and Management Act of 1976" to paint any tanks, separators, and treaters required for the production of this well, Amoco's standard gray color. If a pumping unit is required for the continued production of this well, it will be painted black with orange safety color coding which conforms with your current painting quidelines.





## DRILL SITE DIMENSIONS

LESS THAN 8,000'



Federal AX #1 660' FSL & 560', Sec.18, T-26-S R-30-E Lea County, New Mexico