Form 9-331 C (May 1963)	Drawer Dr	ED <sup>88</sup> STATES	5				■ No. 42-R1425. 4/.3 D	
C/SF	GEOLO	GICAL SURVI	EY			NM-24155	PECEIVED	
APPLICATION	FOR PERMIT	O DRILL, D	DEEPEN	, OR PLU	G BACK	6. IF INDIAN, ALLOTTER	OR TRIBE NAME	
1a. TYPE OF WORK		DEEPEN [			BACK 🗌	7. UNIT AGREEMENT	<del>PR 9 198</del> 2	
b. TYPE OF WELL OIL X GA WELL W			SINGLI Zone			8. FARM OF LEASE NAD		
2. NAME OF OPERATOR						Allen Fede	<b>HESIA, OFFICE</b>	
Exxon Corpora	tion 🗸					9. WELL NO.		
4. LOCATION OF WELL (R At surface	0, Midland, TX eport location clearly and FEL and 860' FN	in accordance wit		requirements.	") <u> </u>	10. FIRLD AND FOOL O Undesig. Ea <u>Oueen Grayb</u> 11. SHC. T. H. M. OE AND SURVEY OR AN	urg	
At proposed prod. zon 660 '	e FEL and 860' FN	L of Sectio	חר		T. W.	Sec. 25, T1	6S, R28E	
	AND DIRECTION FROM NEAR					12. COUNTY OR PARISH	13. STATE	
10 miles NW	from Loco Hills					Eddy	New Mexico	
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE L	sed* 460'			ACRES IN LEA		OF ACRES ASSIGNED THIS WELL		
(Also to nearest drig	g. unit line, if any) 40	0	19. PROPOS		20. BOT	40 20. BOTABY OR CABLE TOOLS		
TO NEAREST WELL, DRILLING, COMPLETED,			300'		Rotary			
21. ELEVATIONS (Show who	ether DF, RT, GR, etc.)					22. APPROX. DATE WORK WILL START*		
GR 3664'					March 20, 19	82		
23.	F	ROPOSED CASI	NG AND CH	EMENTING PE	OGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	00 <b>T</b>	SETTING DEPTI	E	QUANTITY OF CEMEN	T	
12 1/4"	8 5/8"	24#		3.50 1		225 sx C	IRCULATE	
7 7/8"	5 1/2"	14#		2300'		600 sx		

## BOP - Type II-C, 2000 WP



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Melba Knipling TIT	LE Unit Head	DATE February 26, 1982
(This space for Federal or State office use)		
PERMIT NO.	APPBOVAL DATE	
APPROVED BY <u>APPROVED</u> CONDITIONS OF APPROVAL, IF ANY: (Orig. Sgd.) GEORGE H. STIEWA APR 7 1982	LB A 1	DATE
FOR JAMES A. GILLHAM		

# Exxon Lse No. \_\_\_\_\_ Now MEXICO OIL CONSERVATION COMMIS State Lase. No.

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

Operator			Le	Lease			Well No.
Exxon	Corporation	· · · · · · · · · · · · · · · · · · ·			en Fed		
nit Letter	Section 25	Township I Ĝ	ε	Range 28 [	Cou	nty Eddy	
	ocation of Well:						
860	feet from th	ne North	line and Po	660	feet from		line edicated Acreage:
3664		rose & Premi	1		- Gray		40 Actes
						chure marks on the	plat below.
	than one lea and royalty).		o the well, o	utline each a	nd identify	the ownership the	eof (both as to working
		e of different own tion, unitization, f			well, have	e the interests of a	ll owners been consoli
🗌 Yes	No No	If answer is "ye	s," type of c	onsolidation			
			tract descrip	tions which h	ave actual	ly been consolidate	d. (Use reverse side o
	if necessary			tereste have	heen cons	olidated (by comm	initization, unitization
forced-no	oling. or othe	erwise) or until a no	n until all in m-standard u	nit, eliminati	ng such in	terests, has been a	pproved by the Commis
sion.	onag, or one			,	0		
	<b>p</b> /	c/\		B/	i i i i i i i i i i i i i i i i i i i		CERTIFICATION
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				ŧ	65	C' best of my k	nowledge and belief.
	$\mathbf{X}$						
						Name	J. j.
		·		- <u>s</u>		# Anell	a Jupline
			$\langle \rangle$	$\land$		UN	IT HEAD
		$\searrow$		1	$\setminus$ / -	Company Ex	xon Corporation
X	I	$\times$	$\sim$	l	$\mathbf{X}$		idland, Texas
		$/$ $\setminus$ $ $			/	Date	ວ່ <b>ງ/ ຊ</b> ງ
				$\mathbb{N}$	Ň	\	2-24-82
<u></u>	<del>X</del>	ĸ					
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		$\setminus$ /	$\sim$ /		$\langle /$		s plat was piotted from field
$\sim$	l			1	$\mathbf{X}$	notes of ac	ual surveys made by me o
			$ / \setminus $	1	/	under my su	pervision, and that the same
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						knowledge a	nd beliet.
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		$/$ $\setminus$ $ $			$ \land \land$	and/or Land S	arveyor
						1111	1112000
/	N/			<u> </u>		Certificate No.	
							1382

## ALLEN FEDERAL #1 EDDY COUNTY, NEW MEXICO FEDERAL LEASE NO. NM-24155

- 1. The geologic name of the surface formation: Recent.
- 2. The estimated tops of important geologic markers:

Salado	280'
Yates	700'
Seven Rivers	920'
Queen	1675'
Grayburg	1830'
Premier Sd.	2190'

3. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to occur:

Water	280'
Oil & Gas	1675'
Oil	920'

4. Proposed Casing Program:

String	Size	<u>Weight/Grade</u>	Condition	<u>Depth Interval</u>
Surface	8-5/8"	24 <b>#</b> /K−55	New or Used	0-350'
Production	5-1/2"	14 <b>#/K-</b> 55	New or Used	0-2300'

5. Minimum specifications for pressure control equipment.

a.	Wellhead Equipment –	Threaded type 2000 psi WP for 8-5/8" x 5-1/2" casing program and 2-7/8" tubing.
ь.	Blowout Preventers -	Refer to attached drawing and list of equipment titled "type II-C" for description of BOP stack and choke manifold.

- c. BOP Control Unit Unit will be hydraulically operated and have at lease 4 control stations.
- d. Testing When installed on 8-5/8" surface casing the BOP stack will be tested to a low pressure (200-300 psi) and to 2000 psi. Casing rams will be tested in like manner when installed prior to running production casing. An operational test of the blowout preventers will be preformed on each round trip (but not more than once each day); the annular and pipe ram preventers will be closed on drill pipe, and the blind rams will be closed while pipe is out of the hole.
- 6. Type and Anticipated Characteristics of Drilling Fluid:

Depth Intervals (Feet)	Mud Type	Weight (ppg)	Funnel Visc. (Sec/Qt)	WL (cc)	pН
0- 350'	FW Mud	8.5-8.8	40-60	-	11.0
350-2300'	Cut Brine	8.6-9.2	20	10	11.0

EDDY COUNTY, NM FEDERAL LEASE NO. NM-24155 February 17, 1982 Page 2

7. Auxiliary Control Equipment:

a. Kelly Cocks: Upper and lower installed on kelly.

b. Safety Valve: Full opening ball type to fit each type and size of drill pipe in use will be available on rig floor at all times, in open position for stabbing into drill pipe when kelly is not in the string.

- c. Trip tank to insure that hole is full and takes proper amount of fluid on trips. Will be used during drilling of production hole.
- d. Mud system monitoring equipment and floats at the bit will not be used unless conditions dictate.
- 8. Testing, Logging, and Completion Programs:
  - a. Logging: Surface casing to TD. DLL-HSFL-GR-FDC-CNL-GR-CAL
  - b. Completion Formation: Queen 1675' 1830'

Proposed Completion Procedure: \*

- c. Production Method: Run packer on 2-7/8" tubing and set above Queen perforations. Produce Queen oil up the tubing.
- 9. Abnormal Pressure or Other Possible Hazards:
  - a. No abnormal pressure anticipated.
  - b. No. H<sub>2</sub>S problem is expected.
- 10. It is anticipated that the drilling and completion operations will begin about March 15, 1982 and be finished in approximately 3 weeks.
  - \* See attached completion procedure.

LLA/drh

### RECOMMENDED COMPLETION PROCEDURE

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- 1. Run in hole with bit and scraper. Clean to TD.
- 2. Run GR/CCL log from TD to above pay zone.
- 3. Perforate about 1720'-1750' with approximately 60 shots.
- 4. RIH with bridge plug and packer.
- 5. Spot 500 gals 15% HCL across the perforations.
- 6. Sand-water frac with 15,000 gals gelled 2% KCL water and 80,000# sand.
- 7. Pull treating equipment out of hole.
- 8. Run tubing, rods and pump, as needed. Drop 5 gals of corrosion inhibitor down the tubing while running rods and pump.

LLA/drh 2/17/82 MIDLAND DRILLING ORGANIZATION BLOWOUT PREVENTER SPECIFICATION TYPE II - C



E1/5//6

#### BLOWOUT PREVENTER SPECIFICATION EQUIPMENT DESCRIPTION

#### TYPE II-C

All equipment should be at least 2000 psi WP or higher unless otherwise specified. 1. Bell nipple. 2. Hydril or Shaffer bag type preventer. 3. Ram type pressure operated blowout preventer with blind rams. 4. Flanged spool with one 4-inch and one 2-inch (minimum) outlet. 5. 2-inch (minimum) flanged plug or gate valve. 6. 2-inch by 2-inch by 2-inch (minimum) flanged tee. 7. 4-inch pressure operated gate valve. 4-inch flanged gate or plug valve. 8. 9. Ram type pressure operated blowout preventer with pipe rams. 10. Flanged type casing head with one side outlet (furnished by Exxon). 11. 2-inch threaded (or flanged) plug or gate valve (furnished by Exxon). Flanged on 5000# WP, threaded on 3000# WP or less. 12. Needle valve (furnished by Exxon). 13. 2-inch nipple (furnished by Exxon). 14. Tapped bull plug (furnished by Exxon). 15. 4-inch flanged spacer spool. 16. 4-inch by 2-inch by 2-inch by 2-inch flanged cross. 17. 2-inch flanged plug or gate valve. 18. 2-inch flanged adjustable choke. 19. 2-inch threaded flange. 20. 2-inch XXH nipple. 21. 2-inch forged steel 90° Ell.
22. Cameron (or equal.) threaded pressure gage. 23. Threaded flange. 35. 2-inch flanged tee. 36. 3-inch (minimum) hose. (Furnished by Exxon). 37. Trip tank. (Furnished by Exxon). 2-inch flanged plug or gate valve. 38. 39. 2-1/2-inch pipe, 300' to pit, anchored. 40. 2-1/2-inch SE valve. 41. 2-1/2-inch line to steel pit or separator. NOTES: 1. Items 3, 4 and 9 may be replaced with double ram type preventer with side outlets between the rams. 2. The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled. 3. Kill line is for emergency use only. This connection shall not be used for filling. 4. Replacement pipe rams and blind rams shall be on location at all times. 5. Only type U, LWS and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.

6. Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.