Form 3160-3 (November 1983) (formerly 9-331C)	DEPARTMENT	ED STATES	Notalia (ot CERIOR <sup>- 80</sup>	IT IN SK ber instruct reverse sid 2210		5. LEASE DESIGNATION LC-065928-/	AND BEBIAL NO.
APPLICATIO	N FOR PERMIT T	O DRILL, DE	EPEN, OR P	LUG B	ACK	6. IF INDIAN, ALLOTTE	E OR TRIBE NAME
	RILL IXX	DEEPEN	PL	UG BAC	K 🗆	7. UNIT AGBEEMENT N	XAME
	GAS OTHER		SINGLE XX	MULTIPL ZONE		8. FABM OR LEASE NA	ME
2. NAME OF OPERATOR		MITCHELL				LITTLEFIELD 9. WELL NO.	BO FEDERAL
3. ADDRESS OF OPERATOR		MITCHELLY				5	
	P. O. BOX Report location clearly and	( 50682, MID	LAND, TEXAS	79710		10. FIELD AND POOL, O	
4. LOCATION OF WELL ( At surface		AND 1650' F			14	BRUSHY DRAW 11. SEC., T., B., M., OB	BLK.
At proposed prod, zo		- AND 1000 F	EL UF SECTI	UN 34 UN	6	LOT 11, SEC.34, T.20	6 S., R.29 E.
	AND DIRECTION FROM NEAR				TCO	12. COUNTY OR PARISH	
15. DISTANCE FROM PROD			UF MALAGA, 5. NO. OF ACRES IN		17. NO. 0	EDDY F ACRES ASSIGNED	NEW MEXICO
LOCATION TO NEARE: PROPERTY OR LEASE (Also to nearest dr		330'	419.4	1	TO TH	23.13	
18. DISTANCE FROM PRO TO NEAREST WELL,	DRILLING, COMPLETED.		. PROPOSED DEPTH			AT OR CABLE TOOLS	
OR APPLIED FOR, ON T 21. ELEVATIONS (Show W	HIS LEASE, FT. ( hether DF, RT, GR, etc.)	60'	5200'	!	К	OTARY 22. APPROX. DATE WO	OBK WILL START*
21. 22		2877.6' GL				UPON APPROV	AL
23.		PROPOSED CASING	AND CEMENTING	PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING I	DEPTH		QUANTITY OF CEME	NT
12-1/4"	8-5/8"	24#		50'		ICIENT TO CIR	
7-7/8"	*4-1/2" *OR 5-1/2"	<u> </u>		<u>00'</u> 00'		) SACKS See stips	
	ther production of ded prior to rea AFTER SETTING F AND STIMULATED	ching total	depth. SING, PAY Z			NR DE	RECI Mar 31 3
<b>JUL 13 '9</b> 0	SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA BOP SKETCH SURFACE USE AND OPERATIONS PLAN Post FD-1 GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED						
O. C. D.			SURFACE US	E AND U	PERALI	UNS PLAN	
ARTESIA, OFFICE	APPROVAL SUBJECT					Port ID-1	
	GENERAL REQUIREM					7-20-90	<u>.</u>
	SPECIAL STIPULATIO	NQ			9,	lew La + HI	PF
zone. If proposal is to	ATTACHED BE PROPOSED PROGRAM : If p drill or deepen directiona	proposal is to deepen lly, give pertinent da	or plug back, give ita on subsurface l	data on pro ocations and	sent prod	uctive zone and propos	ed new productive
24.	1 DV	7 ( 39).	- 5642)		·		
SIGNER MA	hur fe/m	au TITLE	Agent			DATE May	29,1990
(This space for Fed	ur R. Brown leral or State office use)						
BEB3(17) 80			APPROVAL DATI	E			
PERMIT NO.	410. Second and		AREA MANALES CARLS	WHOE AREA		DATE	240
APPROVED BY	NO. MOTOL DV ALCONDE	TITLE .	(IAHLS*			DATE	en i v

## \*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## MEXICO OIL CONSERVATION COMMI. WELL LOCATION AND ACREAGE DEDICATION PLAT

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

	A11	distances must be f	ron the outer boundaries of	the Section.	<u> </u>	
Operator			Lecase			Well No.
and the second	GEORGE H. MITCHELL		Littlefiel	County	ederal	5
Jnit Letter Sect G	34	26 South			Eddy	
Actual Foolage Location				L	····	
	t from the Nort	h line and	·····	t from the	East	line
Ground Level Elev.	Producing Formation		BRUSHY DRAW		Ded	Icated Acreage: 23.13
2877.6	DELA				l	Acres
2. If more than o interest and ro	one lease is dedic yalty).	ated to the well	ell by colored pencil of 1, outline each and iden	ntify the on	mership there	of (both as to working
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sion.			<u> </u>		CE	RTIFICATION
		27.0181	PROFESSION AND SUMPER		teined herein i begt of my kne Name Arthur Position Agent Company GEORGE Date	H. MITCHELL
871.86		2876.		690.36 <sup>°</sup> 1172.16 <sup>°</sup>	shown an this nates of actua under my supe	fy that the well lacation plat was plotted from field il surveys made by me or rvision, and that the some erract to the best of my
NEW ME	XICO				Date Surveyed	1000
IEAAJ	•				May 7,	1990
					Registered Profe and/or Land Surv gentificate No. 1	-

## SUPPLEMENTAL DRILLING DATA

# GEORGE H. MITCHELL WELL NO.5 LITTLEFIELD BO FEDERAL

### 1. SURFACE FORMATION: Quaternary.

- - -----

## 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Delaware	2870'
Delaware Sand	29201
Bell Canyon	3820'
Cherry Canyon	4810'
Brushy Canyon	5200'

#### 3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Delaware Sand	0i1
Cherry Canyon	0i1

#### 4. PROPOSED CASING AND CEMENTING PROGRAM:

SETTING DEPTH					
CASING SIZE	FROM	TO	WEIGHT	GRADE	JOINT
8-5/8"	0	350'	24#	K-55	STC
4-1/2" OR 5-1/2"	0 0	5200 <i>'</i> 5200'	9.5# 14#	K-55 K-55	STC STC

Whether production casing will be 4-1/2" OD or 5-1/2" OD will be decided prior to reaching total depth.

8-5/8" casing will be cemented with approximately 150 sacks of Class "C" with 2% CaCl. Cement to circulate.

5-1/2" casing will be cemented with sufficient Light cement, tailed-in with 200 sacks of POZMIX A, to fill back to the salt section.

above the top

5. PRESSURE CONTROL EQUIPMENT:

A 3000 psi working pressure, double ram type preventer will be in use while drilling below the surface casing.

A BOP sketch is attached.

## 6. CIRCULATING MEDIUM:

Surface to 350 feet: F f	resh water with lime or gel as needed for or viscosity control. Viscosity: 28 - 30.
350 feet to 4800 feet:	Brine conditioned as necessary for control of seepage, pH, and viscosity. Viscosity: 28 - 32.
4800 feet to 5200 feet:	Brine conditioned as necessary for control of seepage, pH, and viscosity. Viscosity: 35 - 40.

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## 7. AUXILIARY EQUIPMENT:

Drill string safety valves will be maintained on the rig floor while drilling operations are in progress.

8. TESTING, LOGGING, AND CORING PROGRAMS:

No drill stem tests are planned.

Electric logs will include GR-CNL logs.

.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

No abnormal pressures or temperatures are anticipated.

## 10. ANTICIPATED STARTING DATE:

It is planned that work will commence upon approval of this application with drilling and completion operations lasting about 30 days.





BOP STACK



BOP ARRANGEMENT

# SURFACE USE AND OPERATIONS PLAN

<u>FOR</u>

## GEORGE H. MITCHELL WELL NO.5 LITTLEFIELD BO FEDERAL 1610'FNL & 1650'FEL SEC.34. T.26 S., R.29 E. EDDY COUNTY, NEW MEXICO

LOCATED: 16 air miles south-southeast of Malaga, New Mexico.

FEDERAL LEASE NUMBER: LC-065928-A.

LEASE ISSUED: July 1, 1951. Lease is in producing status.

ACRES IN LEASE: 419.41.

RECORD LESSEE: George H. Mitchell.

SURFACE OWNERSHIP: Federal.

POOL: Brushy Draw Delaware.

POOL RULES: Statewide. 40 acre spacing for oil.

EXHIBITS: A. Road Map

- B. Plat Showing Existing Wells and Existing Roads
- C. Drilling Rig Layout
- D. Topo Plat

## 1. EXISTING ROADS:

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well site can be reached from the west or from the east. Point "A" on the plat is on US 285 between Mileposts 3 and 4, approximately 13 miles south of Malaga, New Mexico, where a paved road goes east. To go to the proposed well site from this point, exit US 285 to the east onto the paved road and go 4.2 miles, crossing the Pecos river at 3.7 miles, to where a good caliche road goes westerly. Turn west and go westerly and southeasterly (also see Exhibits "B" and "D") 1.5 miles to where the road turns east. Turn east and go about 500 feet and the proposed well site will be on the right at a distance of about 400 feet.

Point "B" on the plat is on State highway 128, at Milepost 22.5, approximately 32 miles west of Jal, New Mexico, where a paved road goes south to Orla, Texas. To go to the proposed well site from this point, go south 15 miles to where a a caliche road goes west. Turn west and go 15 miles to a point about 500 feet east of where the road turns north. The proposed well site is about 400 feet south of this point.

B. Exhibit "B" is a plat showing existing pertinent roads in the vicinity of the proposed well site. Existing roads are color coded.

#### 2. PLANNED ACCESS ROAD:

A. Length and Width: The new road needed for access will be 12 feet wide and about 500 feet long, and is shown labeled and color coded red on Exhibit "B". The centerline of the proposed new road is staked and flagged. All of the proposed new road is within the lease boundary.

B. <u>Surfacing Material</u>: Plans are to grade the access road and use in-place material for the road surface. If additional surfacing material is needed, caliche will be used.

C. <u>Maximum Grade</u>: One percent.

D. Turnouts: None needed.

E. <u>Drainage Design</u>: The new road will be crowned with drainage to the side.

F. Culverts: None necessary.

G. Cuts and Fills: None necessary.

H. Gates and Cattle Guards: None needed. No fences involved.

## 3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".

### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. This well will produce into the existing tank battery, located as shown on Exhibit "B", near well No. 2. The flow line will be laid on the ground alongside the proposed and existing road, and will extend, as shown on Exhibit "B" from the well to the existing tank battery.

#### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is not planned that a water well will be drilled. Water needed for drilling operations will be purchased and trucked to the well site, or will be moved to the well site by temporary pipeline laid on the ground alongside existing and proposed roads.

#### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Well site construction will utilize on-site material as much as possible. Any additional caliche needed for construction work will be taken from an existing pit on Federal land in the NE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 26, T.26 S., R.29 E., Eddy County, New Mexico.

#### 7. METHODS OF HANDLING WASTE MATERIAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during tests will be disposed of in the drilling pits

D. Oil produced during tests will be stored in test tanks until sold.

E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".

F. All trash and debris will be buried or removed from the well site within thirty days after finishing drilling and/or completion operations.

#### 8. ANCILLARY FACILITIES:

A. None required.

## 9. WELL SITE LAYOUT:

A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash pit, and the location of major drilling rig components.

B. The well site is in a broad, shallow drainage area lying in an east to west direction. A berm is to be constructed to divert drainage from the east around the south side of the well pad and back to the normal drainage area west of the well site.

C. Any cut and fill necessary will be minimal. However, clearing and levelling of the pad and pit area will be required. The pad and pit area is staked and flagged.

#### 10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until the pits are dry.

C. After abandonment, all equipment, trash and junk will be removed and and the well site will be cleaned. Any special rehabilitation and/or special revegetation requirements of the surface management agency will be complied with and will be accomplished as rapidly as possible.

#### 11. OTHER INFORMATION:

A. <u>Topography</u>: The land surface in the area is gently undulating. In the immediate area of the proposed drill site, the land surface slopes gently to the west. Regionally, drainage is to the west toward the Pecos River.

B. Soil: Top soil in the area is a gravelly loam.

C. Flora and Fauna: The vegetative cover is moderate and includes mesquite, yucca, weeds, and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles,

dove, and quail.

D. <u>Ponds and Streams</u>: The Pecos River is about a half-mile west of the proposed drill site. There are no other ponds or streams.

E. <u>Residences and Other Structures</u>: There are no occupied dwellings within a mile of the proposed well site.

F. <u>Archaeological, Historical, and Cultural Sites</u>: None observed in the area.

G. Land Use: Oil and gas production, grazing, and wildlife habitat.

H. Surface Ownership: Federal.

12. OPERATOR'S REPRESENTATIVE:

George P. Mitchell, Agent for George H. Mitchell P. O. Box 50682 Midland, Texas 79710 Phone: 915-684-4748

#### 13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently 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 George H. Mitchell and his contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

May 26, 1990

Arthur R. Brown, Agent for

Arthur R. Brown, Agent f George H. Mitchell







