

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT ROSWELL DISTRICT OFFICE P.O. BOX 1397 ROSWELL, NEW MEXICO 88201



OCT 11 '88

O. C. D.

OCT 07 1988

NM-57633 3162.41 (065)

J. C. Williamson P.O. Box 16 Midland, Texas 79702

Gentlemen:

Your Application for Permit to Drill the No. 1 Exx Federal well in the NW&SW& sec. 15, T. 20 S., R. 29 E., Eddy County, New Mexico, lease NM-57633, to a depth of 6300 feet to test the Delaware formation in the Oil-Potash Area, is hereby approved as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the Bureau of Land Management Office checked on the attached special stipulation, in sufficient time for a representative to witness all cementing operations.

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Sincerely,

OFIG. Sgd. David L. Mari

FOR

Francis R. Cherry, Jr. District Manager

1 Enclosure

ce: NMOCD, Artesia - 2

Form 31603 (November 1983) (formerly 9-331C)	DEPARTM	INITED STAT	E INTERI	•	tiette on		No. 1004-0136 31, 1985
APPLICAT	ION FOR PERM	IT TO DRILL	, DEEPEN	N, OR PLUG	BACK	6. IF INDIAN, ALLOTTE	B OR TRIBE NAME
In. TYPE OF WORK	DRILL X	DEEPEI	·	PLUG BA		7. UNIT AGREEMENT 1	AMB
b. TIPE OF WELL OIL WELL	GAS WELL OTRI		81NG 20N1			S. FARM OR LEASE NA	
2. NAME OF OPERATO		<b></b>	2011			Exx Federal	
	J.C. Williams	son				9. WELL NO.	· · · ·
3. ADDRESS OF OPER.		M* 17 1	т	70700		1	
	P.O. Box 16	Midland		79702		10. FIELD AND POOL,	
At surface	1980' FSL &		with any Sta	te requirements.•)	Ht L	Wildcat DE 11. BEC., T., R., M., OR AND SURVEY OR A	BLE.
At proposed prod	same					Sec. 15. T-	20-S, R-29-E
14. DIBTANCE IN MI	ILES AND DIRECTION FROM	NEABEST TOWN OR	POST OFFICE*	· · - · · · · · · · · · · · · · · · · ·	·····	12. COUNTY OB PABISE	13. BTATE
13 mile	es northeast of	Carlsbad, Ne	ew Mexico	i		Eddy	New Mexico
15. DISTANCE FROM LOCATION TO NE PROPERTY OR LE (Also to deares	AREST	440 '	16. NO.	DF ACRES IN LEASE 160		HACEES ASSIGNED	
TO NEAREST WE OR APPLIED FOR, C	PROFOSED LOCATION® ILL, DRILLING, COMPLETED ON THIS LEASE, FT.	none	19. PROP	05ED DEPTH 6300'	20. ROTA	RY OR CABLE TOOLS Rotary	
	w whether DF, RT, GR, e	3288.2'	GR			22. APPROX. DATE WO October 1,	
23.		PROPOSED CA	ASING AND	CEMENTING PROGE	AM		
SIZE OF HOLE	SIZE OF CASING	WEIGHT P	ER FOOT	SETTING DEPTH		QUANTITY OF CEME	NT
20"	16"	75#		250'		x <u>circulate</u>	
14-1/2"	11-3/4"	35#		1200'		x <u>_circulate</u>	
11" 7-7/8"	8-5/8" 5-1/2"	24# & .   5.5#	32#	3000 ' 6300 '		x sx in 2 stages above pay	
			0			Jul 25 8 53 M	RECEIVED
	ICEIBE PROPOSED PROGRAM		){ deepen or plu				
	is to drill or deepen dire						
24. BIGNED	the tim	te	1	oduction		07-	22-88
(This space for	Federal or State office u	se)					
PERNIT NO	·		A)	PPROVAL DATE			
APPROVED BY CONDITIONS OF A	PPBOVAL, IF ANY :		TITLE			DATE	

# \*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

# W MEXICO OIL CONSERVATION COMMITION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128

Effective 1-i-65

All distances must be from the outer boundaries of the Section Weil No. Lerator 0.186 1 Lxx Federal J.C. Williamson Section ~wr.ship 1-mie .nty r.it Letter Eddy 19 East 20 South 15ontion of Well: Actual Foclage 1 440 West feet thin, the 1980 feet trim the une mid edmatest Accesses Ground Level Elev. Freduking Fermutien Wildcat DELAWARE 40 3288.2 Delaware A 100 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 consoliduted by communitization, unitization, force-pooling, etc? N/A [] Yes T No If answer is "ves," type of consolidation \_\_\_\_ If answer is "no?" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of N/Athis form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information contained herein is true and complete to the of my knowledge and belief. Jan Pfister Production na na J.C. Williamson 21.0 07-18-88 I hereby certify that the well location shown on this plat was plotted from field of actual surveys made by me or my supervision, and that the same and correct to the best of my knowledge and belief M The Surveyed July 8,1988 Registore i Frofessional Engineer Certificate No. JOHN w WEST. 676 3239 RONALD J. EIDSON 2000 800

1 800

1000

330

660

90

1320

1650

26 40

#### J. C. WILLIAMSON Exx Federal #1

## 1. SURFACE FORMATION: Quaternary Alluvium

#### 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	270'
Tansil	1170'
Yates	1400'
Goat Seep Reef	1650'
T/Delaware Sand series	3350'
T/Lower Delaware	5600'
T/Bone Springs Lime	5950'
T/First Bone Springs sand	6250'

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

Fresh Water	above	200'
Delaware (oil)	3350'	- 5950'
Bone Springs	5950'	- 6300'

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

Casing program is shown on Form 9-331 C.

22" hole for surface casing will be drilled to a depth below fresh water zones. 16" surface casing will be run to 250 feet, below all fresh water zones and will be cemented to the surface with 300 sacks of Class "C" cement.

11-3/4" casing will be run and cemented at 1200' with 800 sx Class "C" cement and circulate. If cement does not circulate appropriate action will be taken by operator per BLM requirements.

8-5/8" casing will be run and cemented at 3100', prior to entering delaware section and will be cemented with 500 sacks of Class "C" cement at 3000', tying same back into 1st intermediate 11-3/4" casing.

5-1/2" casing will be run to total depth and will be cemented at a total depth if significant shows are encountered in the Bone Springs formation, or in the Delaware formation if significant shows are encountered in the Delaware sand series. Cement will be brought back to a height to tie back into 8-5/8" casing above 3100' and above all potential pay zones.

#### 5. PRESSURE CONTROL EQUIPMENT:

Pressure control equipment will consist of a 3000# double ram hydraulically controled blow out preventer and a 3000# choke manifold, and will be put on the hole after the 8-5/8" and been set.

#### 6. CIRCULATING MEDIUM:

The circulating medium will be fresh water down to 250 feet and brine water down to 1200', fresh water from 1200' to 3100' and brine water below 3100'.

This will be accomplished by using a Texas Pattern or double horseshoe pit design.

7. AUXILARY EQUIPMENT:

Not Applicable.

8. TESTING, LOGGING AND CORING PROGRAM:

Formation testing will be made by conventional drill stem test; however none are anticipated.

It is planned that a compensated neutron-density gamma ray and gamma ray dual laterolog will be run when total depth is reached, with a backup computer cross-plot analysis utilizing these logs.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE GAS:

None anticipated.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence on October 1, 1988, or as soon as the application is approved.

#### SURFACE USE AND OPERATIONS PLAN

# FOR

### J. C. WILLIAMSON Exx FEDERAL #1 1980' FSL & 440' FWL Sec. 15, T-20-S, R-29-E EDDY COUNTY, NEW MEXICO

LOCATED:

13 air miles Northeast of Carlsbad, New Mexico

FEDERAL\_LEASE\_NUMBER: NM 57633

LEASE ISSUED:

January 1, 1979

RECORD LESSEE: Exxon Company USA, Inc.

ACRES IN LEASE:

160

Federal

SURFACE OWNERSHIP:

POOL:

ATTACHMENTS:

- A. General Road Map
- B. Plat Showing existing well and existing roads
- C. Lease Plat
- D. Drilling Rig Layout

Wildcat. Statewide Rules.

E. BOP Diagram

#### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well. Access to the location will be gained by using an existing road to the previously permitted J.C. Williamson TOG Federal #1, then proceeding to the applied for location as discussed below.
- B. Exhibit "B' is a plat showing existing roads in the vicinity of a well site. Existing roads are shown by a double black line.
- C. The road south of the location is a well-improved road and will not need to be graded or be improved in any manner.

## 2. PLANNED ACCESS ROAD:

A new road will be needed since the location is 1240' from the nearest improved road. This road will be cut and surfaced.

- A. <u>SURFACING MATERIAL</u>: Some surfacing material should be needed for the prepared location. If necessary, 4" caliche, watered and compacted will be used in those areas of the road where water might stand during a rain storm.
- B. MAXIMUM GRADE: One-half Percent.
- C. TURNOUTS: None required.
- D. <u>DRAINAGE DESIGN</u>: New road will have a drop of six inches from the center on each side.
- E. CULVERTS: None required.
- F. <u>CUTS AND FILLS</u> None necessary. Only clearing and minor leveling will be required.
- G. <u>GATES AND CATTLE GUARD</u>: No fence will need to be cut in conjunction with drilling operations so no cattleguard will be needed.

#### 3. LOCATION OF EXISTING WELLS:

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

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

- A. There are no existing facilities on this lease that may be used for production facilities for this well.
- B. If production is encountered, the needed production facilities will be located on the lease pad.

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

A. Fresh water necessary for drilling will be purchased and hauled to the well site over existing and proposed roads for the 20" and 11" hole, brine water will be hauled for make up water of the 14-1/2" and 7-7/8" hole.

#### 6. SOURCE OF CONSTRUCTION MATERIALS:

Material needed for road and location improvement will be obtained from an approved caliche pit located 1/2 mile south and 2 miles west of the location just north of the main east/west access road in the area.

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

- A. Drill cuttings will be disposed of the drilling pit.
- B. Drilling fluid will be allowed to evaporate in the drilling pit until the pit is dry.
- C. Water produced during testing of this well will be disposed of in the drilling pit. Oil produced during test will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- 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 "D"
- F. All trash and debris will be buried or removed from the will site within 30 days after finishing drilling and/or completion operations.

# 8. ANCILLARY FACILITES:

A. None Required.

### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, trash pit, and the location of major rig components.
- B. Only minor leveling of the well site will be required, No significant cut and fill will be necessary.
- C. The pad and pit area has been 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 cleaned of all trash, junk and all material buried so as to leave the well site in as an aesthetically pleasing condition as possible.

- B. Any unguarde\_ pits containing fluids will be  $\beta$  enced until they are filled.
- C. After abandonment, all equipment, trash and junk will be removed or buried and the location cleaned. Any special abandonment rehabiltation and/or special revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. No location will be reclaimed and reseeded prior to well abandonment.
- 11. OTHER INFORMATION:
  - A. <u>TOPOGRAPHY:</u> The land surface is relatively level. Regional slope is to the southwest.
  - B. SOIL: The top soil at the well site is a gravelly, loamy sand.
  - C. <u>FLORA AND FAUNA</u>: The vegetative cover is sparse and consists of mesquite, grease wood, 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 approximately five and one-half miles West of the proposed well site.
  - E. <u>RESIDENCE AND OTHER STRUCTURES</u>: There are no occupied dwellings or operating windmills within one mile of proposed well site.
  - F. <u>ARCHAEOLOGICAL</u>, <u>HISTORICAL</u>, <u>AND</u> <u>OTHER</u> <u>CULTURAL</u> <u>SITES</u>: None observed in the area.
  - G. LAND USE: Grazing and hunting in season.
  - H. SURFACE OWNERSHIP: Federal.

#### 12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan is:

J. C. Williamson 890 One Midland National Center Midland, Texas 79701 Attention: Ralph E. Williamson Office Phone: 915-683-2200 Home Phone: 915-682-2600

#### 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 presently exist; that the statements made in the 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 J. C. Williamson and its contractors and subcontractors in conformity with this plan and the term and conditions under which it is approved.





EXHIBIT "B"

# SCALE 2'' = 1 MILE

J.C. Williamson

Exx Federal No. 1 1980' FSL & 440' FWL Sec.15-20-29 Eddy County, New Mexico

- LEGEND:
- Proposed Well Location
- Oil Well -☆ Gas Well
- Plugged Well O Drilling Well
- Existing Roads
- ====== Proposed Road
- -\*\*\*\*\* Barbed Wire Fence
- .---- Lease Lines
- \_\_\_\_ High Pressure Gas Pipeline



# EXHIBIT "C"

J.C. Williamson

EXX Federal No. 1 1980' FSL & 440' FWL Sec. 15, T20S, R29E Eddy County, New Mexico

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#### EXHIBIT "E"

# BOP Diagram

A flange double ram type blowout preventer will be used on this well. After the 8-5/8" casing has been set and cemented, an 11" double ram BOP will be put on and kept in service during the drilling of this well. After 11-3/4" 1st intermediate casing has been set and cemented to surface as per BLM specifications a 13-5/8" casing head with 11-3/4" bushing will be placed in the hole, and an 11-3/4" drilling nipple will be used until 8-5/8" casing is set and cemented.



J.C. Williamson Exx Federal No. 1 Sec. 15-20-29 Eddy County, New Mexico