In. TYPE OF WORK

SUBMIT IN TRICATE*

Form approved. Budget Bureau No. 42-R1425.

Ut., PD STATES. C. COPY (Other Instructive reverse side DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

30-05/- 5-0006 5. LEASE DESIGNATION A D SERIAL NO.

6. IF INDIAN, ALLOTTEE CR TRIBE NAME

NM - 9702

DRILL A DEEPER		DEEPEN	☐ PLUG BACK ☐		TO STATE MORE MENT WAS IN				
b. Type of well							Prisor Unit	Prisor Unit	
WELL G	AS OTHER			NGLE K	MULTIPI ZONE		S. FARM OR LEASE NAM	(E	
2. NAME OF OPERATOR							Prisor Teles	l Unit	
Exxon Corpor	ation						9. WELL NO.		
3. ADDRESS OF OPERATOR			R	ECEI	VE		1	tu.	
Box 1600, Mi	dland, TX 7970	1				:	10. FIELD AND POOL, O	R WILDCAT	
4. LOCATION OF WELL (E At surface	eport location clearly as	nd in accordance wi	th any S	the Sugemen	1976		Wildcat		
1980 FNL and 1980' FWL of Section						**	11. SEC., T., R., M., OR B		
At proposed prod. zone				O. C.	C.		Sec. 20, T-16-	S R_1_F	
Same	·····			AUTFRIA.				•	
14. DISTANCE IN MILES			T OFFICI	Z.*			12. COUNTY OR PARISH	13. STATE	
24 miles Nort	heast from Hat	cn, N.M.					Sierra	New Mexic	
10. DISTANCE FROM PROP LOCATION TO NEARES			16. NO	. OF ACRES IN	LEASE		OF ACRES ASSIGNED		
PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) 1,980			2,537.89		40				
18. DISTANCE FROM PROI	POSED LOCATION*		19. PR	OPOSED DEPTH		20. ROTA	ARY OR CABLE TOOLS	 	
TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.				12,500 Rotary					
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)					, ,	22. APPROX. DATE WOL	RF WILL START*	
GR 4	,613'					- · ·	October 1,	1976	
23.		PROPOSED CASI	NG ANI	CEMENTING	PROGRA	M			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	оот	SETTING D	ЕРТН	-	QUANTITY OF CEMEN	T	
14-3/4	11-5/8	54.5 & 42		400		300	cubic feet		
10-5/8	8-5/8	32				î .	cubic feet		
7-7/8	5	15		12300		275	cubic feet		

RECEIVED

SEP 1 4 1976

U. S. GEOLOGICAL SURVEY, ARTESIA, NEW MEXICO

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.

signed Melba Gripling TITLE Provation Specialist	DATE 9-10-75
(This space for Federal or Styte office use)	
APPROVAL THIS APPROVAL TITLE MITTIN 3 MONTHS.	DATE
CONDITION OF THE ANY: AFE NOT COMME	

to Lee No	WELL LOCAT	TION AND ACREAGE DEL		Supersedes C-128 Effective 1-1-65
ite Lee. No. NM 970		must be from the outer boundari		WEN
perator	All distances	I egga	U. SEPIA	1976 1
Exxon Corpora	tion	Prisor Feder	al Units Ground	1876 1
nit Letter Section	1	th Ronge	Counties/A COCAL Sierra NEW AN	SURVEY
F 2	0 16 Sou	th TEast	BICITA VIV	7/00
1000	om the North	line and 1980	feet from the West	line
	Producing Formation	Pool		Dedicated Acreage:
GR 4,613'	Wildcat	Wildcat		40 Acres
1. Outline the acre	age dedicated to the su	bject well by colored pen	cil or hachure marks on	the plat below.
interest and roya	lty).	·		thereof (both as to working of all owners been consoli-
dated by commun	itization, unitization, for	ce-pooling. etc?		
☐ Yes ☐ N	lo If answer is "yes	"type of consolidation		
				that I Man savenes side of
		act descriptions which ha	ve actually been consor	idated. (Use reverse side of
this form if neces	l be essioned to the well	until all interests have h	een consolidated (by c	ommunitization, unitization,
No allowable will	otherwise) or until a non	-standard unit, eliminatin	g such interests, has be	en approved by the Commis-
sion.		, ,	·	
	Å C	ві	A	CERTIFICATION
Di			"	
		i i	I herel	by certify that the information con-
		· •	tained	herein is true and complete to the
!	086	i	best o	f my knowledge and belief.
,	0 0			
,		ţ	Name	411 0 : 6
E	ուսուսուսում -		H Me	ba Knisling
		Į 1	I Fosition	Proration Specialist
1000	\	1 1	i L	Exxon Corporation
1980'	} - ∂' [ì	Box 160	•
		ļ.	Date	
	Ę	1		9-13-76

L	1 K	J	"	by certify that the well location
		!	1 1	on this plat was platted from field
	'	!		of actual surveys made by me or
	i	1	• 1	my supervision, and that the same
		i 1	1 1	re and correct to the best of my
}	1	i	knowl	edge and belief.
	TVED		P	
KEDI	1	l ·	Date Su	rveved
unu.	1976	!		opt. 1,1976
NOV 5	1370	•	<u> </u>	red Professional Engineer
	+ -	i 1	and/or	Land Surveyor
[] . U.	C. G. A, OFFICE	•		of Usho to dit
, arral	· · · ·	•	ز ۱۱	IT A. ITPOSETVER
ARTESI				Table Trace
ARTESI			Certific	rate No. 1382

Ε

Speed Letter.

New Mexico Oil Conservation	A STATE OF THE STA	Exxon (poration Attn: Oil & Gas Accounting
Box 2088		Box 1600 Midland, TX 79701
Santa Fe, New Mexico 87501		
Subject API Unique Well Nos.	The state of the s	
MESSAGE		
Please furnish the API Uni	que Well Number for Pr	isor Federal Unit Well No. 1 and return
		ppe.
	Date 9-13-	76 Signed Melba Knipling
API number 36	0-051-2000	6 assigned to the
above well		
D 000		
Section 1998	Date //- 8	2-76 Signed W. a. Grassett
WilsonJones	RETAIN WHITE COPY, RET	

EXON COMPANY, U.S.A.

September 23, 1976

File No. 22-3

MORE THE DESCRIPTION OF THE DESC

NOV 5 1976

RECEIVED

O. C. C.

SEP 28 1976

U. S. Geological Survey P. O. Drawer U Artesia, New Mexico 88210 4. S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

Attention: Mr. James A. Knauf

Gentlemen:

We respectfully request that esports submitted be kept confidential for a period of six months after completics.

The expires or the following were to be urrited:

Lease Designation

and Serial Number Lease Name & Well No.

Location

Count y

NM-9702

Prisor Federal Unit #1

Sec. 20, T-16-S, R-1-E

Sierra, New Mexico

Very truly yours,

W. R. Wardroup

MK:rf

cc: Mr. J. E. Kapteina, Engineer Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

A FEEL NOORPORATION

SEP STATE

N. M. O. C. C. CON

POST OFFICE BOX 1600 - MIDLAND, TEXAS 79701

October 27, 1976

File No. 22-3

MIDGONTHIENT PRODUCTION DIVISION SOUTHWESTERN EXPLORATION DIVISION WIR WARSPOUR DRILLING MANAGER

Prisor Federal Unit Well No. 1, Wildcat, Sierra County, New Mexico

RECEIVED

OCT 28 1976 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

U. S. Geological Survey P. O. Drawer U Artesia, New Mexico 88210

Gentlemen:

Please refer to Item No. 5, Water Supply, of Revision #1 of the Surface Use Plan for the above well. By Letter No. 3100 dated October 18, 1976, Mr. Daniel E. C. Rathbun, District Manager, Bureau of Land Management, Las Cruces, New Mexico, denied our request dated September 28, 1976 for use of Estes Tank No. 3 as a water source. We have now obtained permission to secure water from Rincon Water Consumers Coop, Rincon, New Mexico, which is 28 miles southwest of the drillsite or from a well on the L-7 Ranch which is 25 miles northwest of the drillsite. Water from both source; would be hauled over public roads to the turn-off at Upham and then over existing and proposed federal roads to the drillsite.

Very truly yours,

W. R. Wardroup Ly 250

MK:rf

2cc: Bureau of Land Management
 Las Cruces District Office
 Box 1420
 Las Cruces, New Mexico 88001

cc: Mr. J. E. Kapteina, Engineer Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

EXON COMPANY, U.S.A.

POST OFFICE BOX 1600 - MIDLAND, TEXAS 79701

PRODUCTION DEPARTMENT MIDCONTINENT DIVISION

September 28, 1976

File No. 22-3

Prisor Federal Unit Well No. 1, Wildcat, Sierra County, New Mexico

RECEIVED

SEP 3 0 1976

U. S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

U. S. Geological Survey

P. O. Drawer U

Artesia, New Mexico 88210

Attention: Mr. James A. Knauf

Gentlemen:

Attached are six copies of Revision #1 for the Surface Use Plan and map for the above well.

Very truly yours,

Melba Knipling

Proration Specialist

Attachments

2 cc: Bureau of Land Management

Las Cruces District Office

Box 1420

Las Cruces, New Mexico 88001 (w/attachments)

cc: Mr. J. E. Kapteina, Engineer

Oil Conservation Commission

Box 2088

Santa Fe, New Mexico 87501

SURFACE USE PLAN

RECEIVED

Exxon Corporation - Prisor Federal Unit, Well No. 1 1,980' FNL & 1,980' FWL, Sec. 20, T-16-S, R-1-E

Lease NM 9702, Sierra County, New Mexico

(Exploratory Well)

SEP 3 0 1976

ARTESIA NEW MEXICO

ARTESIA, NEW MEXICO

1. EXISTING ROADS - Detailed map showing drillsite location in relation to a town or known point and all existing roads within three miles of the wellsite are shown on Exhibit "A".

From Las Cruces go northwest 32 miles on Interstate 25 to the Upham Exit, turn on County Road and go north for 16 miles to Upham, turn east for 1 mile, turn north for $\frac{1}{2}$ mile and then on existing ranch road go easterly for $3\frac{1}{2}$ miles. From this point 4,000 feet of new road is planned. This new road is necessary to bypass an archaeological site along existing ranch road. The road will continue for another 3 miles in a northeasterly direction to an intersection with a Chevron Pipeline and southeasterly down the pipe line right of way for 2,000 feet. From this point 900 feet of new road is planned in an easterly direction to the proposed location.

2. PIANNED ROADS - Refer to Exhibit "A" of proposed roads and cattle guards. We plan to construct approximately 4,900' of new 12' wide road. No culverts or special drainage features are necessary in this area. Low water crossings will be utilized with low places to be caliched. New road is colored red on Exhibit "A".

Colored blue is $6\frac{1}{2}$ miles of unimproved ranch roads which are to be bladed and low places are to be caliched. The center line of the proposed new access road will be staked with flagging being visible from any one stake to the next. Mr. Lewis Cain, Grazing Lessee, has been contacted about replacing the gates with cattle guards at least 12' wide in the south line of Section 19 and the east line of Section 24, T16S, R1W. The road will be bladed and where caliched will be compacted.

A temporary Tramroad Right-of-Way Application and Permit (Form 2800-6) to provide an access road across 19,800 feet of Federal land outside of Exxon's Prisor Federal Unit boundary is being filed with the BLM with appropriate application fee and mileage charge.

- 3. LOCATION OF EXISTING WELLS There is no production in the area. The mearest abandoned well is approximately 9 miles away.
- 4. TANK BATTERIES, PRODUCTION FACILITIES AND LEASE PIPELINES There are no tank batteries, production facilities or lease pipelines on the lease. If production is established, a tank battery and related production equipment will be constructed on the south side of the caliche pad. All lease lines are to be constructed on top of or buried under the caliche pad with the possible exception of a vent line that will extend not more than 150' from the caliche pad.
- 5. WATER SUPPLY A request dated September 28, 1976 is being made to the BLM for use of Estes Tank No. 3, as a water source based on our anticipated use. Estes Tank No. 3 is located in the SE/4 NE/4 Sec. 23, Tl6S, RlW. The water will be hauled or pumped through a pipe line which will be laid along the access road to

the location. If this source is insufficient, water will be hauled from the nearest commercial source.

6. CONSTRUCTION MATERIAL - Caliche will be obtained from pits in the NW/4 NW/4 and SE/4 NW/4 Sec. 20, T16S, R1E. The caliche will be hauled over existing roads and proposed new or improved roads to the drillsite. The caliche will be purchased by Exxon from the BLM. A contract for Cash Sale of Mineral Materials Application (Form 3600-4) is being filed with the BLM.

7. WASTE DISPOSAL -

- a. Drill cuttings will be disposed of in the reserve pit.
- b. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.
- c. Trash, waste paper, garbage and junk will be burned or buried with a minimum of 24" cover. Waste material will be contained to prevent scattering by wind prior to ultimate disposal.
- d. Any produced water will be contained in tanks and be disposed of in an approved manner. Oil produced will be stored in tanks until sold, at which time it will be hauled from location.
- e. Current laws and regulations pertaining to disposal of human waste will be complied with.
- f. If productive, maintenance waste will be placed in special containers and buried or hauled away periodically.
- 8. ANCILIARY FACILITIES No camps, airstrips, etc., will be constructed.

9. WELLSITE LAYOUT -

- a. Refer to Exhibit "B" for wellsite layout.
- b. Caliche pad size 200' x 250' (with 20 x 25' east extension). Pad size may vary slightly depending on size of drilling rig available.
- c. Terrain at the wellsite is almost flat. Minimum cut and fill will be required.
- d. The pad will be topped with 6 inches of bladed, watered and compacted caliche.
- e. Reserve pit will be approximately 130' x 150' joining the caliche pad on the north.
- 10. RESTORATION OF SURFACE At the completion of the well, the pits will be backfilled and leveled as soon as practical after allowing them to dry.

 Waste materials will be burned or buried with at least 24" of cover. At the time of final abandonment, other USGS and BLM restoration stipulations will be complied with.

11. OTHER INFORMATION -

a. Just prior to completion of the well, four or five shot holes, 150 feet deep, 50 feet apart located approximately 750 feet north and south or east and west of the well will be drilled. The holes will be plugged immediately after they are utilized to obtain seismic data. No roads

will be built to the shot holes and minimum environmental disturbance will result.

b. Setting and Environment

Terrain - Flat. See Exhibit "A", topographic map of area. Soil - Sandy soil Vegetation - Sparse vegetation, being mostly greasewood, shinnery and other semi-desert plants, with very little grass.

c. Distances to Nearest:

Ponds and streams - There are no surface waters within 1 mile.

Water Wells - There are two windmills located 6,000' to the northwest and 6,500' to the southeast of the location.

Residences and buildings - there are no houses or buildings within } mile.

Arroyos, Canyons, Hills, etc. - There are no surface features within 1/2 mile.

- d. Surface Use Grazing and hunting.
- e. Effect on Environment Drillsite, which is in flat semi-arid desert country, is in a low environmental risk area. The total effect of drilling and producing this and other wells in this area would be minimal.
- f. Surface Ownership The proposed drillsite is on Federal surface with a grazing permit issued by BLM to Mr. Lewis Cain. We are securing a road easement for a portion of the existing ranch road which crosses land owned by the State of New Mexico. State lands to be crossed are the E/2 of Sec. 21, excepting the SW/4 of the SE/4 and the S/2 of Sec. 22, T16S, R1W, as shown on Exhibit "A". Exxon will comply with all terms, conditions and requirements of the State of New Mexico in granting this easement including restoration of surface. Operations will be conducted on Federal land or State owned land. There will be no operations on privately owned land.
- g. Pipeline Chevron Pipeline is located approximately 1,000' west of the location, running generally in a north-south direction which will be crossed by the new road to be constructed. Exxon has notified Chevron and obtained their consent to use the existing pipeline service road. Exxon will take precautions to protect the pipeline.
- h. Open Pits All unattended pits containing mud or other liquids will be fenced.

- i. Well Sign Sign identifying and locating well will be maintained at drillsite commencing with the spudding of the well.
- 12. OPERATOR'S REPRESENTATIVE Field representative who can be contacted concerning compliance of this Surface Use Plan is:

W. R. Wardroup P. O. Box 1600 Midland, TX 79701 Office Phone: 915-684-4411 Home Phone: 915-694-5067

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 Exxon Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. A copy of this plan will be posted at the wellsite during the drilling of the well for reference by all contractors and subcontractors.

Date September 27, 1976

W. R. Wardroup

Division Drilling Manager

SURFACE USE PLAN

EXXON CORPORATION - PRISOR FEDERAL UNIT, WELL NO. 1

1,980' FNL & 1980 FWL, SEC. 20, T-16-S, R-1-E

LEASE NM 9702, SIERRA COUNTY, NEW MEXICO

(EXPLORATORY WELL)

1. EXISTING ROADS - Detailed map showing drillsite location in relation to a town or known point and all existing roads within three miles of the wellsite are shown on Exhibit "A".

From Las Cruces go northwest 32 miles on Interstate 25 to the Upham Exit, turn on County Road and go north for 16 miles to Upham, turn east for 1 mile, turn north for 1/2 mile and then on existing ranch road go easterly for 5 1/2 miles and southeasterly for 1 1/2 miles. From this point, 2,600' of new road is planned northeasterly to the proposed location.

#11

2. PLANNED ROADS - Refer to Exhibit "A" of proposed roads and cattle guards. We plan to construct approximately 2,600' of new 12' wide road. No culverts or special drainage features are necessary in this area. Low water crossings will be utilized with low places to be caliched. New road is colored red on Exhibit 'A".

Colored blue is 7 miles of unimproved ranch roads which are to be bladed and low places are to be caliched. The center line of the proposed new access road will be staked with flagging being visible from any one stake to the next. Mr. Lewis Cain, Grazing Lessee, has been contacted about replacing the gates with cattle guards at least 12' wide at the S/4 of Section 19 and the E/4 of Section 24, T16S, RIW. The road will be bladed and where caliched will be compacted.

- 3. LOCATION OF EXISTING WELLS There is no production in the area. The nearest abandoned well is approximately 9 miles away.
- 4. TANK BATTERIES, PRODUCTION FACILITIES AND LEASE PIPELINES There are no tank batteries, production facilities or lease pipelines on the lease. If production is established a tank battery and related production equipment will be constructed on the south side of the caliche pad. All lease lines are to be constructed on top of or buried under the caliche pad with the possible exception of a vent line that will extend not more than 150' from the caliche pad.
- 5. WATER SUPPLY The source of water for drilling this well will be Estes Cank No. 3 located in the SE/4 NE/4 Sec. 23, T16S, RlW. The water will be hauled or pumped through a pipe line which will be laid along the access road to the location. If this source is insufficient, water will be hauled from the nearest commercial source.
- 6. CONSTRUCTION MATERIAL Caliche will be obtained from a new pit in the SE/4 NW/4 Sec. 20, T16S, RIE. Should this source be insufficient, caliche will be obtained at a point as close to the drillsite as possible. (Caliche appears to be readily available near the well site). The caliche will be hauled over existing roads and proposed new or improved roads to the drillsite. The caliche will be purchased by Exxon from the B.L.M.

7. WASTE DISPOSAL -

- a. Drill cuttings will be disposed of in the reserve pit.
- b. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.
- c. Trash, waste paper, garbage and junk will be burned or buried with a minimum of 24" cover. Waste material will be contained to prevent scattering by wind prior to ultimate disposal.
- d. Any produced water will be contained in tanks and be disposed of in an approved manner. Oil produced will be stored in tanks until sold, at which time it will be hauled from location.
- e. Current laws and regulations pertaining to disposal of human waste will be complied with.
- f. If productive, maintenance waste will be placed in special containers and buried or hauled away periodically.

- 8. ANCILIARY FACILITIES No camps, airstrips, etc., will be constructed.
- 9.. WELLSITE LAYOUT
 - a. Refer to Exhibit "B" for wellsite layout.
 - b. Caliche pad size 200' \times 250' (with 20 \times 25' east extension). Pad size may vary slightly depending on size of drilling rig available.
 - c. Terrain at the wellsite is almost flat. Minimum cut and fill will be required.
 - d. The pad will be topped with 6 inches of bladed, watered and compacted caliche.
 - e. Reserve pit will be approximately 130' \times 150' joining the caliche pad on the north.
- 10. RESTORATION OF SURFACE At the completion of the well, the pits will be backfilled and leveled as soon as practical after allowing them to dry. Waste materials will be burned or buried with at least 24" of cover. At the time of final abandonment, other U.S.G.S. and B.L.M. restoration stipulations will be complied with.
- 11. OTHER INFORMATION
 - a. Just prior to completion of the well, four or five shot holes, 150 feet deep, 50 feet apart located approximately 750 feet north and south or east and west of the well will be drilled. The holes will be plugged immediately after they are utilized to obtain seismic data. No roads will be built to the shot holes and minimum environmental disturbance will result.
 - b. Setting and Environment

Terrain - Flat. See Exhibit 'A", topographic map of area.

Soil - Sandy soil

Vegetation - Sparse vegetation, being mostly greasewood, shinnery and other semi-desert plants, with very little grass.

c. Distances to Nearest:

Ponds and streams - There are no surface waters within 1 mile.

Water Wells - There are two windmills located 6,000' to the northwest and 6,500' to the southeast of the location.

Residences and Buildings - There are no houses or buildings within $\frac{1}{2}$ mile.

Arroyos, Canyons, Hills, etc. There are no surface features within ½ mile.

- d. Surface Use Grazing and hunting.
- e. Effect on Environment Drillsite, which is in flat semi-arid desert country, is in a low environmental risk area. The total effect of

drilling and producing this and other wells in this area would be minimal.

- f. Surface Ownership The proposed drillsite is on Federal surface with a grazing permit issued by B.L.M. to Mr. Lewis Cain. We are securing a road easement for a portion of the existing ranch road which crosses land owned by the State of New Mexico. State lands to be crossed are the E/2 of Sec. 21 and the S/2 of Sec. 22, T16S, RlW, as shown on Exhibit "A". Exxon will comply with all terms, conditions and requirements of the State of New Mexico in granting this easement including restoration of surface. Operations will be conducted on Federal land or State owned land. There will be no operations on privately owned land.
- g. Pipeline-Chevron Pipeline is located approximately 1,000' west of the location running generally in a north-south direction which will be crossed by the new road to be constructed. Exxon has notified Chevron and obtained their consent to cross the pipeline and easement with the road. Exxon will take precautions to protect the pipeline.
- h. Open Pits All unattended pits containing mud or other liquids will be fenced.
- i. Well Sign Sign identifying and locating well will be maintained at drillsite commencing with the spudding of the well.
- 12. OPERATOR'S REPRESENTATIVE Field representative who can be contacted concerning compliance of this Surface Use Plan is:

Harold G. Davidson
P. O. Box 1600
Midland, TX 79701

Office Phone: 915-684-4411 Home Phone: 915-694-5324

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 Exxon Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. A copy of this plan will be posted at the wellsite during the drilling of the well for reference by all contractors and subcontractors.

Date Sept 13,1976

W. R. Wardroup

Division Drilling Manager

Prisor Federal Unit, Well No. 1

1. The geologic name of the surface formation.

Alluvium

2. The estimated tops of important geologic markers.

San Andres	4,920'
Pennsylvanian	8,200'
Mississippian	10,800'
Ellenburger	11,420'

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

```
Cretaceous - oil 3,600 - 4,200'
San Andres - gas 4,920 - 5,200'
Wolfcamp Pennsylvanian Ellenburger - gas 7,800 - 12,500'
Water 0 - 200'
```

4. The proposed casing program

<u>Depth</u>	Size	<u>Wt.</u>	Grade	New or Used
400	11-3/4	54.5 & 42	J & H	New
5200	8-5/8	32	J & K	New
12300	5	15	J, N & O	2,500' Used 9,800' New

- 5. See attached sketch of pressure control equipment. The equipment installed on 11-3/4" casing will be minimum 10", 2000 psi working pressure. It will be tested to 1500 psi initially and to 1000 psi weekly thereafter. The equipment installed on 8-5/8" casing will be minimum 8", 3000 psi working pressure. It will be tested initially to 2500 psi and to 2000 psi weekly thereafter.
- 6. Fresh water and/or unweighted fresh water mud will be employed for rotary drilling. The following approximate quantities of mud materials will be maintained on location:
 - a) 300 sacks of bentonite
 - b) 100 sacks of barite (for slugs)
 - c) 100 sacks of caustic soda
 - d) 50 sacks of soda ash
 - e) 100 sacks of lost circulation material
 - f) 50 sacks of mud thinner

- 7. The following auxiliary equipment will be used:
 - a) Upper and lower Kelly cocks
 - b) Full-opening ball type safety valve to fit each type and size of drill pipe in use shall be on the rig floor, in the open position, at all times.
 - c) A plug profile for accepting a pump-down type back pressure valve will be run in the drill string. The back pressure valve will be available on the rig floor.
 - d) Pit volume totalizer
 - e) Trip tank to insure that hole takes proper amount of fluid on trips.
- 8. The testing, logging, and coring programs to be followed with provision made for required flexibility.

Proposed Drillstem Tests

1 at 4,000 - 4,200'
1 at 5,000 - 5,200'
2 at 8,800 - 11,000'
2 at 12,000 - 12,500'

Proposed Cores

3 cores from 8,400' - 10,000'

Proposed Logging Program

5,400

Gamma Ray BHC
Dual Laterolog
FDC CNL
400' - 12,500'
Mudlogger
12,500' TD

Gamma Ray BHC
Dual Induction
FDC - CNL
Dip Log
SRS

- Abnormal pressure and the pressure of hydrogen sulfide gas are not expected but lost circulation is entirely possible. Temperature gradient is expected to be higher than normal (approximately 1.8° /100 feet) but it is not expected to cause any undue problems. Drilling crews will be given training in handling abnormal pressure and sour gas. Drilling crew proficiency tests will be held weekly to determine how quickly the well could be shut-in in an emergency situation. Lost circulation material will be on location, readily available to slug the hole in case lost circulation occurs.
- 10. It is anticipated that the drilling operation will begin October 1, 1976, and will be completed on January 1, 1977.

BLOWOUT PREVENTER SPECIFICATION EQUIPMENT DESCRIPTION

TYPE II-C

All equipment should be at least 3000 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.
- 8. 4-inch flanged gate or plug valve.
- 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° E11.
- 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).
- 38. 2-inch flanged plug or gate valve.
- 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.
- Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

MIDLAND DRILLING ORGANIZATION BLOWOUT PREVENTER SPECIFICATION TYPE II - C



