

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL  
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR  
INEXCO OIL COMPANY ✓

3. ADDRESS OF OPERATOR  
106 Mid America Building, Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
1200' FNL & 1200' FWL, Sec. 20, T-21-S, R-26-E  
At proposed prod. zone  
Same

5. LEASE DESIGNATION AND SERIAL NO.  
~~NMS 84~~ NM-84-B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
NONE

8. FARM OR LEASE NAME  
ARCO

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
CATCLAW DRAW

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
Sec. 20, T-21-S, R-26-E

12. COUNTY OR PARISH  
Eddy

13. STATE  
N. Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
4 miles Southeast to Happy Valley, New Mexico

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
1200'

16. NO. OF ACRES IN LEASE  
1000

17. NO. OF ACRES ASSIGNED TO THIS WELL  
640

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
None

19. PROPOSED DEPTH  
11,500'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3325 GL Est.

22. APPROX. DATE WORK WILL START\*  
7-6-73

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48#	500	500 sx.
12-1/4	8-5/8		2,300	1000 sx.
7-7/8	5-1/2	17 & 20	11,500	400 sx.

Propose to drill from surface to total depth with rotary tools. Set 500' of 13-3/8" surface casing, and 2300' of 8-5/8" intermediate casing. Cement will be circulated on both strings. New casing will be used, and proper blowout prevention equipment including Hydril will be employed throughout the drilling operations.

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ARTESIA, NEW MEXICO

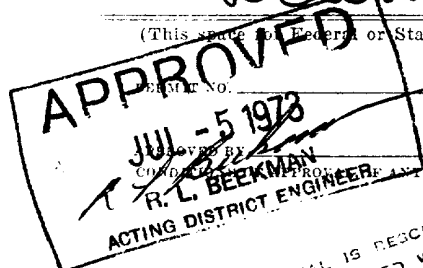
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention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

24. DEEVEN MERMIS

SIGNED *[Signature]* TITLE Div. Producing Manager DATE 6-25-73

(This space is for Federal or State office use)

Subject to Compliance with attached Well Control Requirements dated 6-22-73



THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.

EXPIRES OCT - 5 1973

DECLARED WATER BASIN 13 3/8"

CEMENT BEHIND CASING MUST BE CIRCULATED 8 5/8"

\*See Instructions On Reverse

NOTIFY USGS IN SUFFICIENT TIME TO ASSESS THE 8 5/8" CASING.



# United States Department of the Interior

## GEOLOGICAL SURVEY

P. O. Drawer U  
Artesia, New Mexico 88210

June 22, 1973

### NOTICE


#### DRILLING WELL CONTROL REQUIREMENTS FOR DEEP WELLS DRILLED ON FEDERAL OIL AND GAS LEASES IN THE ARTESIA DISTRICT

The following requirements are established in accordance with 30 CFR 221.24, 221.36, and 221.37. Blowout preventer equipment, choke equipment, drilling fluid characteristics, drilling fluid monitors, and the conduct of drilling procedures shall be such as are necessary to prevent the blowout of any well. In addition to all other applicable rules, regulations, and accepted good operating practices, drilling shall be in accordance with the following safety requirements:

1. After setting the 8-5/8 inch casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report. In addition, the pipe rams and bag-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.
2. Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.
3. A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.
4. Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.
5. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before

drilling into the Wolfcamp formation  
and used until production casing is run and cemented. Monitoring  
equipment shall consist of the following:

- (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.
7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

  
James A. Knauf  
District Engineer

Lease No.	NM-84-B
Well	I-Catchlaw Draw
Drillsite	1200/N&W 20-21S-26E
Depth	11,500' Morrow
Approved	July 9, 1973

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102  
Superseding O-101  
Effective 10-1-65

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

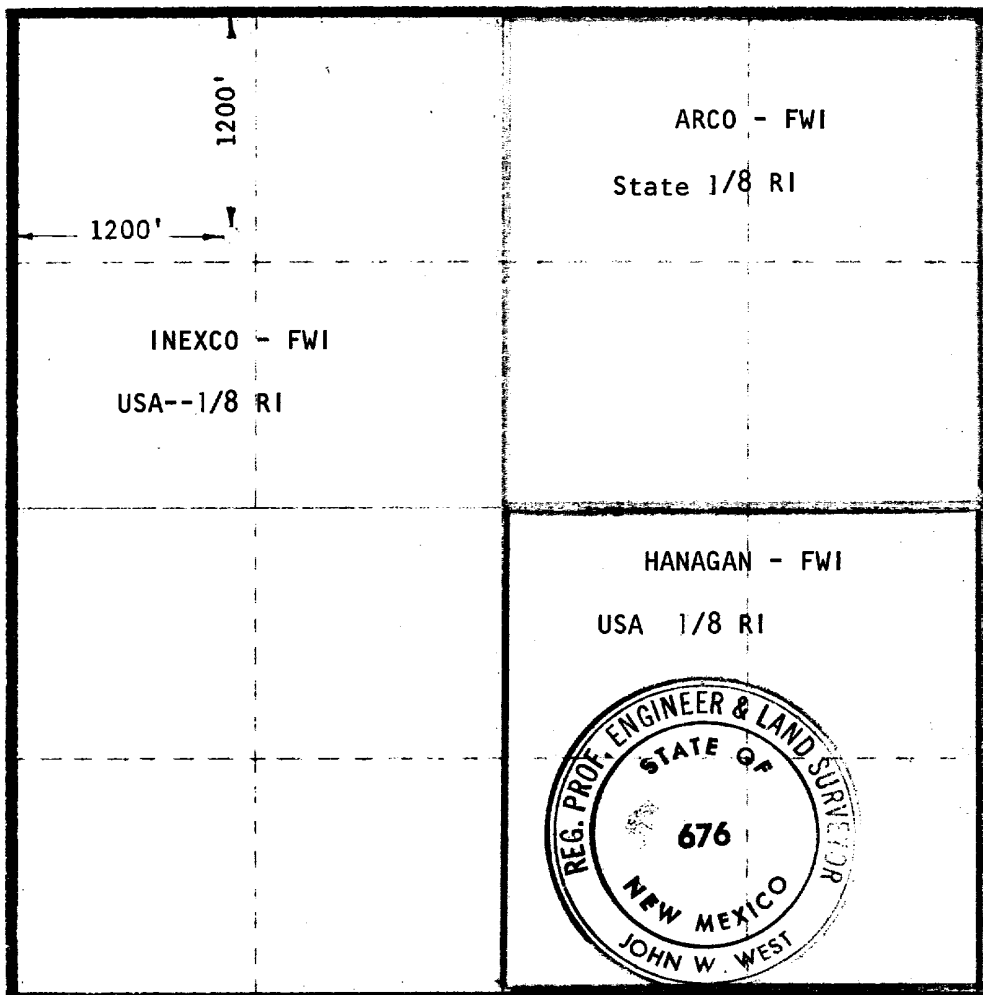
INEXO OIL COMPANY			Lessee ARCO FEDERAL Com,		Well No. 1
Tract Letter D	Section 20	Township 21 SOUTH	Range 26 EAST	County EDDY	
Approximate Location of Well: 1200 feet from the NORTH line and 1200 feet from the WEST line					
Ground Level Elev.	Producing Formation		Pool Und. Catclaw Draw main	Dedicated Acreage 640	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this 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 best of my knowledge and belief.

Name  
**DELVEN MERMIS**  
Position  
**DIV. PROD. MANAGER**  
Company  
**INEXO OIL COMPANY**

Date  
**6-25-73**

I hereby certify that the well location shown on this plat is based on the notes of actual surveys made by me under my supervision and that the section is true and correct to the best of my knowledge and belief.

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**ALBUQUERQUE, NEW MEXICO**

Date Surveyed  
**JUNE 22, 1973**

Registered Professional Engineer and Land Surveyor

*John W West*  
Certificate No. **676**





June 25, 1973

United States Department of Interior  
U. S. Geological Survey  
Drawer "U"  
Artesia, New Mexico 88210

Re: Development Plan for Surface Use  
Arco No. 1 Permit to Drill  
Eddy Co., New Mexico

Gentlemen:

The surface use plan of development relative to the drilling of the Arco No. 1 well is as follows:

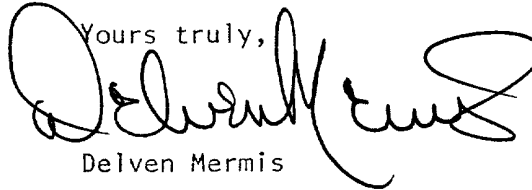
1. Arco No. 1  
1200' FNL, 1200' FWL, Sec. 20, T-21-S, R-26-E  
Eddy Co., New Mexico
2. Well location, existing roads, lateral roads to well, proposed access roadway, and existing water wells available in the area are located on the enclosed plat.
3. The location will be self contained, and will be the site of tank battery site & flowlines should a commercial producer be established.
4. A reserve pit will be used to contain disposed drilling fluids during drilling operations, and will be restored to natural surroundings in the event of a dry hole.
5. Camps not applicable
6. Air strips not applicable
7. Location layout plat is enclosed.
8. Location will be cleaned up and maintained in the event of production, and will be restored if well is abandoned.
9. USGS personnel are requested to be present at the location site for an inspection of the surface on June 28, 1973.

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ARTESIA, NEW MEXICO**

Additional information will be furnished upon request.

Yours truly,  
  
Delven Mermis

DM/jt

Enclosure

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U. S. GEOLOGICAL SURVEY  
ARTEZIA, NEW MEXICO

DETAILED MUD PROGRAM  
ARCO NO. 1  
SEC. 20, T-21-S, R-26-E  
EDDY CO., NEW MEXICO

0-500'

Spud with fresh water, sufficient gel will be added to maintain 36-40 seconds per 1000 cc viscosity. Soda ash will be used to treat out hardness of water and extend yield of the clay. If seepage or loss of circulation occurs add loss circulation material to mud. P. H. will be maintained above 8.0.

500' - 2,300'

Drill out with fresh water, add paper to fight seepage. Dry drill to casing point if necessary. Fluid weight 8.4 to 8.8 ppg.

2,300' - 7,500'

Continue drilling with fresh water, maintain 28 to 36 viscosity with gel. Maintain PH above 8.0 and fluid weight at 9.1 ppg or less.

7,500' - 11,250'

Maintain viscosity at 32 to 45 seconds per 1000 cc by use of XC Polymer. Formation protection will be provided by additions of potassium chloride and PH will be controlled at 9.5 by use of caustic. Seepage will be controlled by additions of paper. Maintain fluid weight between 9.1 & 9.7 ppg with brine or potassium chloride.

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A schematic diagram of a wellhead and BOP stack assembly. The diagram shows a vertical stack of components. At the top is a vertical pipe labeled '1'. Below it is a BOP stack assembly labeled '2'. To the right of the BOP stack is a horizontal pipe labeled 'FLOW LINE' with an arrow pointing right. Below the BOP stack are two sets of 'BLIND RAMS' labeled '3' and '4'. Below these are two sets of 'PIPE RAMS' labeled '3' and '4'. At the bottom of the stack is a wellhead assembly. To the left of the wellhead is a horizontal pipe labeled 'Flow' with an arrow pointing left. To the right of the wellhead is a horizontal pipe labeled 'TO CHOKES' with an arrow pointing right. The wellhead assembly includes a valve labeled '5' and a valve labeled '6'. The 'TO CHOKES' line includes a valve labeled '7' and a valve labeled '8'.

- ALL EQUIPMENT IN CHOKE LINE, RELIEF LINE, AND KILL LINES TO BE 3000 - PSI WORKING PRESSURE.

JUN 28 1973

100-1575  
 C. B. [illegible] SURIN  
 LANTERIA, NEW MEXICO

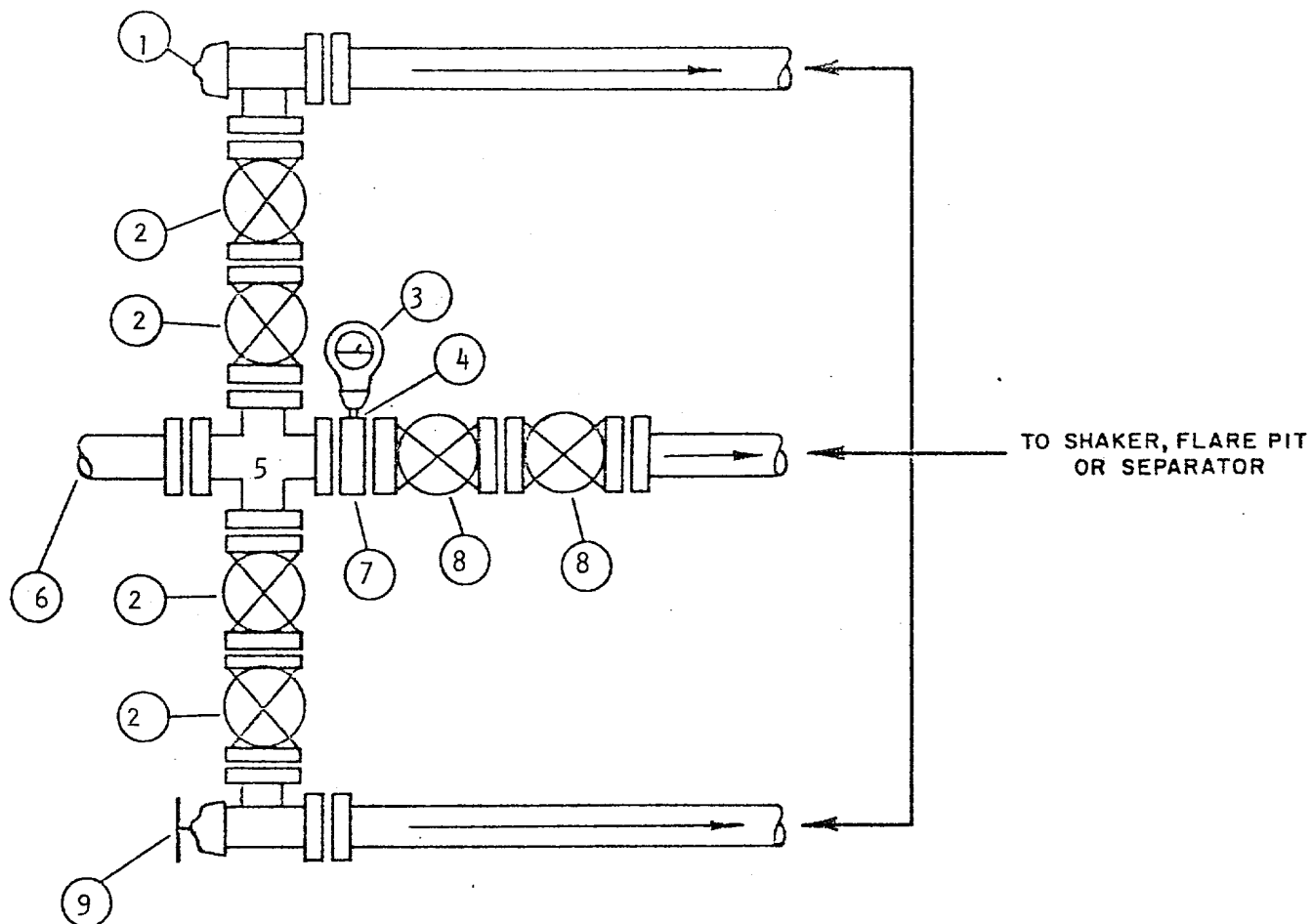
DRILLING CONTROL HOOK-UP  
3000 PSI WORKING PRESSURE

106 Mid America Bldg - Midland, Texas 79701

915-684-5745

Midland Division

INEXCO OIL COMPANY



1. 2" - 3000# WP Positive Choke
2. 2" - 3000# WP Gate Valve
3. Pressure Gauge 5000#
4. 1" - Hydraulic Nipple w/3000# Valve
5. Cross 4" x 4" x 2" x 2" 3000# WP
6. 4" - 3000# WP Ext. Spool
7. 4" DBL Studded Adapter Flange w/Tap 1" NPT
8. 4" - 3000# WP Gate Valve
9. 2" - 3000# WP Adjustable Choke

(SCHEMATIC  
**CHOKE MANIFOLD HOOK-UP**  
 ALL EQUIPMENT IN CHOKE LINE, RELIEF  
 LINE, AND KILL LINES TO BE 3,000 PSI  
 WORKING PRESSURE



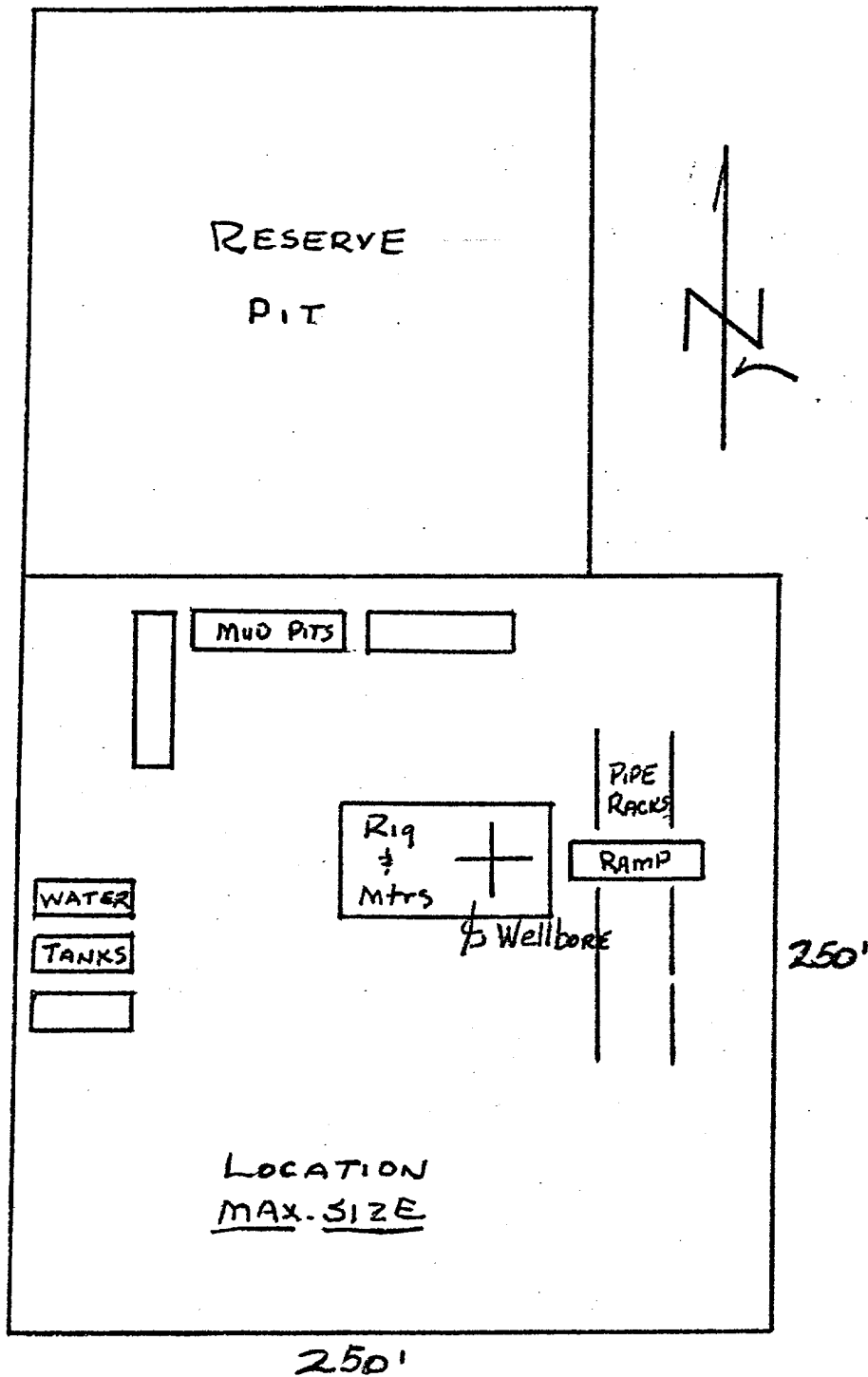
TEXACO OIL COMPANY

106 Mid America Bldg. - Midland, Texas 79701

915-684-5745

Midland Division

INEXCO OIL COMPANY  
NO. 1 ARCO  
SEC. 20, T-21-S, R-26-E  
EDDY CO., NEW MEXICO

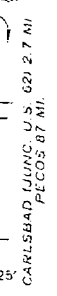


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(for class)



U. S. GEOLOGICAL SURVEY  
ARTIFICIAL REEF MONITOR

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

June 29, 1973

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Inexco  
106 Mid America Building  
Midland, Texas 79701

O. C. C.  
ARTESIA, OFFICE

Attention: Mr. George D. Zimmerman

Administrative Order NSI-611

Gentlemen:

Reference is made to your application for approval of a gas well location for your ARCO Federal Com Well No. 1, to be located 1200 feet from the North line and 1200 feet from the West line of Section 20, Township 21 South, Range 26 East, NMPM, Catclaw Draw Morrow Gas Field, Eddy County, New Mexico.

Waivers of objection have been received from offsetting operators and the waiting period prescribed by Rule 104 F may be dispensed with in this instance.

Therefore, by authority granted me by the provisions of Rule 3 of Order No. R-1670-C of the Commission Rules and Regulations, the above-described unorthodox location is hereby approved.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/dr

cc: ✓ Oil Conservation Commission - Artesia  
Oil & Gas Engineering Committee - Hobbs  
U. S. Geological Survey - Artesia