

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

Atlantic Richfield Company

3. ADDRESS OF OPERATOR

Box 1710, Hobbs, New Mexico 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface 2370' FSL & 1510' FWL (Unit letter K)

At proposed prod. zone

Same as above

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

Approx 13 miles East of Artesia, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any.)

16. NO. OF ACRES IN LEASE

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

6200'

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

3694' GR

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8-5/8" OD	24# K-55	1000'	350 sx Circ to surface
7-7/8"	5-1/2" OD	14 & 15.5# K-55	6300'	1725 sx Circ to surface

Propose to drill an infill development well within the Empire Abo Unit area to more economically recover additional oil reserves & conserve reservoir pressure in accordance with Unit OCC Rules & Regulations.

Blowout Preventer Program attached.

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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

Ray Knott

TITLE

Dist. Drlg. Supt.

DATE

1/19/77

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS VALID IF OPERATIONS
ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES JUL 6 1977
*See Instructions On Reverse Side

DECLARED WATER BASIN
DATE HE 8/3/77
CANNOT BE DRILLED
CANNOT BE CIRCULATED

NOTIFY USGS IN SUFFICIENT TIME TO
WITHIN CONSIDERING THE 8/3/77 CASING.

N MEXICO OIL CONSERVATION COMMISS
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-112
 Supersedes O-128
 Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator ATLANTIC RICHFIELD COMPANY			Lease Empire Abo Unit "K"		Well No. 183
Unit Letter K	Section 1	Township 18 South	Range 27 East	County Eddy	
Actual Footage Location of Well: 2370 feet from the south line and 1510 feet from the west line					
Ground Level Elev. 3694.0	Producing Formation Abilene	Pool Empire Abo	Dedicated Acreage 40		

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 consolidated by communitization, unitization, force-pooling, etc?

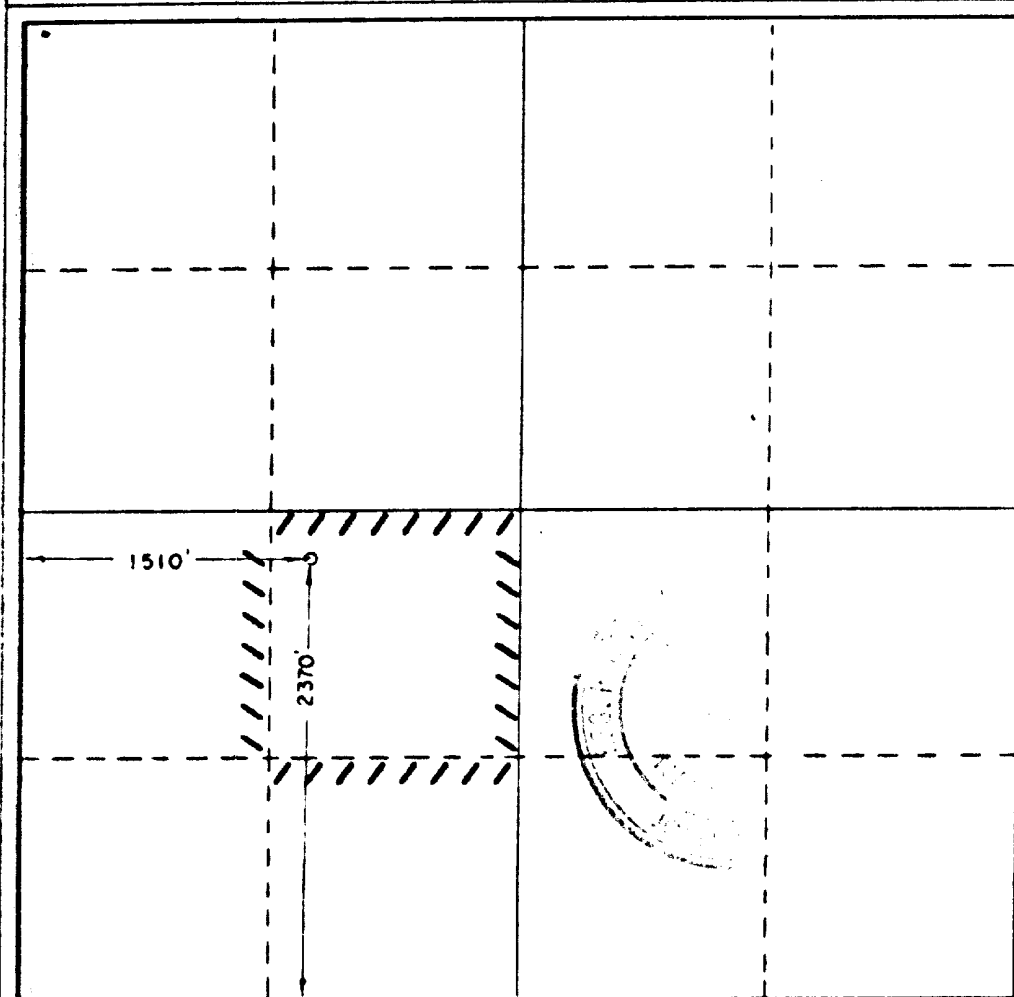
☒ Yes ☐ No If answer is "yes," type of consolidation

Unitization

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.

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CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

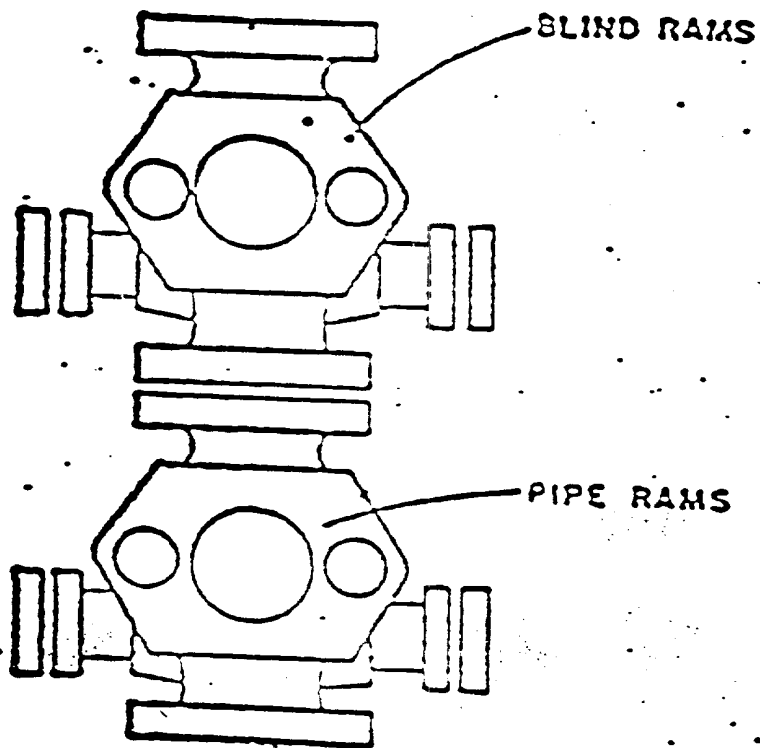
Name John W. West
 Position _____
 Dist. Dir. Supt. _____
 Company Atlantic Richfield Company
 Date 1/18/77

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed Oct 4, 1976
 Registered Professional Engineer and/or Land Surveyor

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





ATLANTIC RICHFIELD COMPANY
Blow Out Preventer Program

Lease Name Empire Abo Unit "K"

Well No. 183

Location 2370' FSL & 1510' FWL
Sec 1-18S-27E, Eddy County, N.M.

BOP to be tested before installed on well and will be maintained in good working condition during drilling. All wellhead fittings to be of sufficient pressure to operate in a safe manner.

To Supplement USGS Form 9-331-C, "Application for Permit to Drill, Deepen or Plugback" the following additional information is submitted:

Operator: Atlantic Richfield Company
Lease & Well No: Empire Abo Unit "K" #183
Location: Unit letter K, 2370' FSL & 1510' FWL
Section 1-18S-27E, Eddy County, New Mexico

1. See Form 9-331C
2. See Form 9-331C
3. The geologic name of the surface formation is:
Tertiary with some Triassic exposed.
4. See Form 9-331C
5. See Form 9-331C
6. The estimated tops of important geologic markers are:
Queen 1128', San Andres 2055', Glorieta 3523', Abo 5694'.
7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are:

Santa Rosa Water Formation	-	±300'	Brackish
Empire Yates Seven Rivers	-	±340'	Oil & Gas
Artesia Grayburg Queen SA	-	1128'	Oil & Gas
Abo	-	5790'	Oil & Gas
8. The proposed casing program including the size, grade and weight-per-foot of each string has been indicated on Form 9-331C. All strings of casing will be new.
9. See Form 9-331C for amount of cmt. Cl C cmt cont'g 4% gel, 1# flocele, 6# salt/sk & 2% CaCl will be used for cmtg surface csg. Cl C cmt 50:50 pozmix cont'g 2% gel, .6% CFR-2, 8# salt/sk & 5# gilsonite/sk will be used to cmt 1st stage on production string and HLW cmt cont'g 8#/sk salt, followed by Cl C cmt cont'g 8#/sk salt will be used to cmt 2nd stage.
10. The pressure control diagram is attached to Form 9-331C. The following additional information of the pressure control equipment is as follows:

Size: 10"-900 Series Db1 Hyd Pipe and Blind Rams

Pressure Ratings (or API Series): 3000# WP, 6000# T

Testing Procedures: Pressure up to 1500# PSIG before drilling out of casing

Testing Frequency: Upon installation, daily and on all trips.

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11. The type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained will be as follows:

0-1000' Spud mud; 1000-5575' brackish water; 5575-6300' SWG 34-38 Vis, 5-8 WL, 30,000 PPM Salinity.
12. The auxiliary equipment to be used will consist of:

Kelly cocks and a sub on floor with full opening valve to be used when needed. No mud logging to be performed.
13. The testing, logging and coring programs will be:

GR-DLL w/RXO (MSFL) & Caliper, GR-Calibrated Neutron, CNL-FDC, Sonic and Tape logs for Coriband Analysis. Will run straddle tests on Abo after logging to locate Gas-Oil contact. No coring will be performed.
14. No abnormal pressures or temperatures are expected to be encountered.
15. The starting date will be approx 3/15/77 and will be completed approx 3/30/77.

A handwritten signature in dark ink, appearing to be 'J. J. Jones' or similar, written in a cursive style.

Multi-Point Surface Use and Operations Plan

Atlantic Richfield Company
Well No. "K" 183 Empire Abo Unit
2370' FSL & 1510' FWL Sec 1-T18S-R27E
Eddy County, New Mexico
Lease, New Mexico 0557371
(Development Well)

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This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. Existing Roads:

- A. Exhibit "A" From Artesia, N.M. go East 9 miles on U.S. Highway 82, turn right off Highway 82 on black top road (Amoco Gasoline Plant Road). Go Southeast on black top road approximately 2.7 miles, then turn west on existing dirt road approximately 1.2 miles, turn south .3 miles, turn west .2 miles, then northeast to location.
- B. Exhibit "B" is a plat showing all existing roads within a one mile radius of the well site and the planned access road.

2. Planned Access Roads:

- A. Length & Width: New road required will be 12 feet wide and 880' long. This new road is labeled and color coded red on Exhibit "B". The center line of the proposed new road from beginning to the wellsite, has been staked and flagged with the stakes being visible from any one to the next.
- B. Turnouts: none
- C. Culverts: no culverts. Will use low water crossing.
- D. Cuts and Fills: Approximately 4' cut on north side of location. Minimum fill on south side of location.
- E. Gates, Cattleguards: none

3. Location of Existing Wells:

- A. See Exhibit "B" for existing wells within a 1 mile radius of location.

4. Location of Existing and/or Proposed Facilities:

- A. Location of the existing tank battery and flow lines from well no. "K" 183 are shown on Exhibit "C". The gas injection and salt water disposal lines are buried. The flow lines are not buried.
- B. When the proposed well is completed for production, the location of the new flow line to the existing battery is shown on Exhibit "C". The line will not be buried. The proposed flow line has not been staked and flagged.

5. Location and Type of Water Supply:

- A. Water for drilling will be used from a fresh water well within the Empire Abo Unit boundaries located in Section 6-18S-28E and transported by pipeline to wellsite. The water line will not cause additional surface disturbance and will be removed after drilling is completed.

6. Source of Construction Materials:

- A. Johnson Construction Company, P. O. Box 837, Eunice, New Mexico, will be furnishing caliche for surfacing the road and the well pad. The source of caliche will be from an existing pit located in SW/4 SE/4 Sec 1-18S-27E and any royalty payments will be made by the construction company.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests 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 trash pit is shown on Exhibit "D".
- F. All trash and debris will be buried or removed from the wellsite within 30 days after drilling or completion operations.

8. Ancillary Facilities: none

9. Wellsite Layout:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit and location of major rig components.
- B. Only minor levelling of the wellsite will be required. No significant cuts and fills will be necessary. Other than a 4' cut on north side of location and a minimum fill on south side of location.
- C. The reserve pit will be plastic lined.
- D. 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 location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. On Federal surface - after abandonment, any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. All pits to be abandoned within 90 days.

11. Other information:

- A. Topography: rolling hills
- B. Soil: Caliche & sand
- C. Flora and Fauna: Flora consists of cockle-burs, needle grass, rag weeds, grease bush and cat claw and native grass. Fauna consists of coyotes, jack rabbits, cotton tails, kangaroo mice, hawks, quail, dove, field lark and rattle snakes.
- D. Ponds and Streams: none
- E. Residences and Other Structures: none
- F. Land Use: Oil and gas production, grazing and hunting in season.

Well No. "K" 183 Empire Abo Unit
Eddy County, New Mexico
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G. Surface Ownership: BLM

12. Operator's Representative:

The field representative responsible for assuring compliance with the approved surface use and operations plan are as follows:

Name: Jack D. Jones
Address: P. O. Box 1710, Hobbs, New Mexico 88240

Office Phone: (505) 393-7163
Home Phone: (505) 392-5268

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 Atlantic Richfield Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

1/25/77
Date

J. D. Jones
District Drilling Supt.

