

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input type="checkbox"/> Re-enter DEEPEN <input checked="" type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 0897
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER SWDW SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR ARCO Oil and Gas Company Division of Atlantic Richfield Company		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR Box 1710, Hobbs, New Mexico 88240		8. FARM OR LEASE NAME Fletcher A DE Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980' FSL & 1980' FEL (Unit letter J) At proposed prod. zone as above		9. WELL NO. 4
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx 27 miles west Hobbs, N.M.		10. FIELD AND POOL, OR WILDCAT Lynch Yates 7R Qn
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-20S-34E
16. NO. OF ACRES IN LEASE 240		12. COUNTY OR PARISH Lea
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE N.M.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS W.O. Rig
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3696.6' GR		22. APPROX. DATE WORK WILL START* 4/15/80

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
16"	13-3/8" OD	48# H-40	65'	50 sx
12" to 706'				
10" to 1230'				
8" to 3644'	5 1/2" OD	15.5# J-55	3643'	1825 sx in 3 stages
5" to 3681' TD				

Above csg left intact in well when P&A 8/8/72.

Propose to re-enter & convert a previously P&A well to a salt water disposal well in the Yates 7R Qn formation in the following manner:

1. Rig up, remove dry hole marker, dig out cellar, install WH & BOP.
2. Drill out cmt plug 0-100', cmt plug 1400-1650', cmt plug 3200-3643' & OH 3643-3681' original TD. Press test csg, squeeze cmt csg if necessary.
3. Deepen to 4000'. Run logs.
4. RIH w/pkr, set @ approx 3500' & acidize w/4500 gals 15% NEA acid.
5. POH w/pkr & tbg. RIH w/pkr on internally PC tbg, circ corrosion inhibited wtr, set pkr. Install press gauge in tbg/csg annulus. Run SWD injectivity test and complete as a SWDW in the Lynch Pool.

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 [Signature] TITLE Dist. Drlg. Supt DATE 3/25/80

(This space for Federal or State office use)

PERMIT NO. APPROVED	APPROVAL DATE
APPROVED BY AUG 28 1980	TITLE
CONDITIONS OF PERMIT	DATE
DISTRICT SUPERVISOR	

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

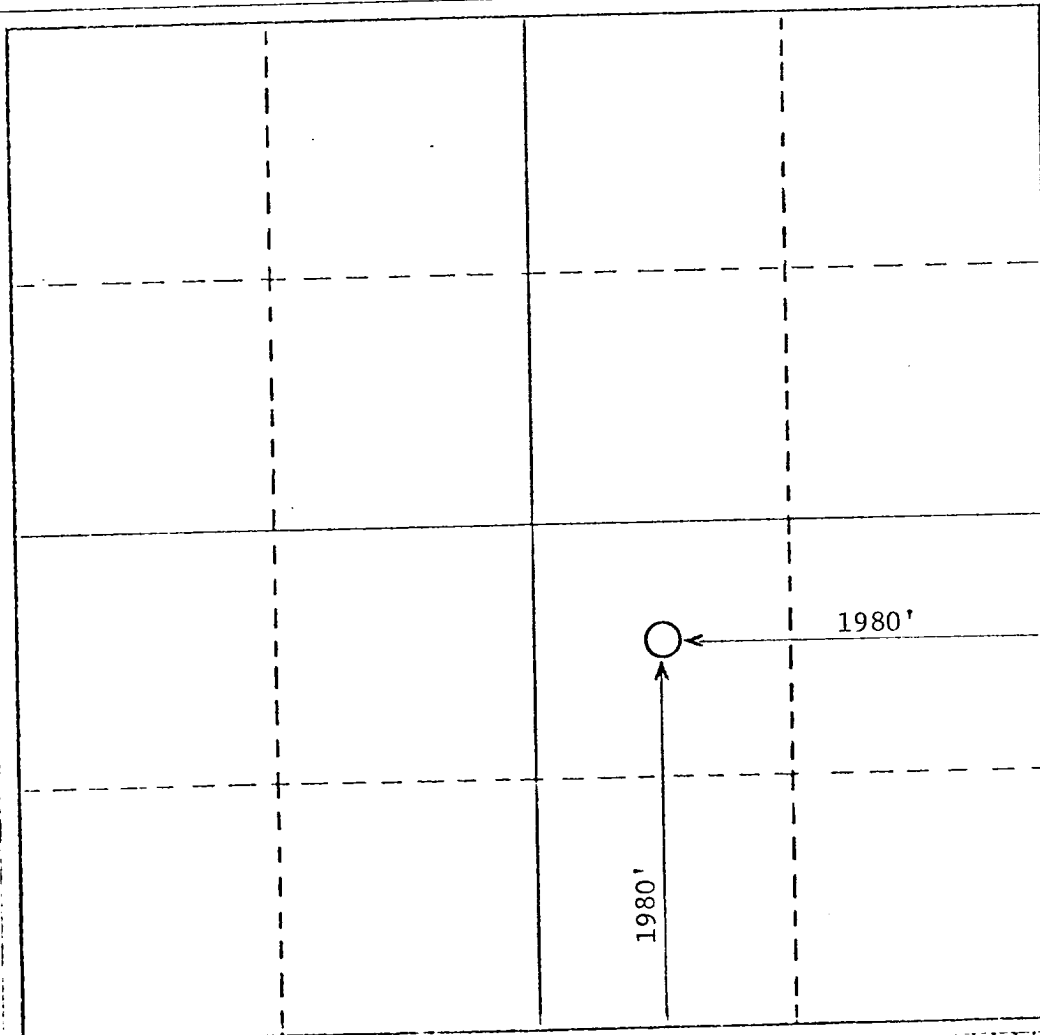
Operator ARCO Oil and Gas Company Division of Atlantic Richfield Company			Lease Fletcher A DE Federal		Well No. 4
Unit Letter J	Section 27	Township 20S	Range 34E	County Lea	
Actual Footage Location of Well:					
1980		feet from the South	line and	1980	feet from the East line
Ground Level Elev. 3696.6'	Producing Formation Yates 7Rivers		Pool Lynch	Dedicated Acreage: 40 Acres	

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 _____

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 _____

Position _____

Dist. Drlg Supt.

ARCO Oil and Gas Company
 Division of Atlantic Richfield Company

Date _____

3/25/80

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 _____

Registered Professional Engineer
 and/or Land Surveyor

Certified to file _____

To supplement USGS Form 9-331C "Application for Permit to Drill, Deepen or Plugback", the following additional information is submitted to comply with USGS Order NTL-6.

Operator: ARCO Oil & Gas Company - Division of
Atlantic Richfield Company
Lease & Well No: 4 Fletcher A DE Federal
Location: Unit Letter J
Section 27-20S-34E, Lea County, N.M.
Lease, New Mexico 0897
Development well _____ Exploratory well _____
Re-enter P&A well - Convert to SWDW

1. See Well Location and Acreage Dedication Plat Form C-102.
2. See Form 9-331C for elevation above sea level of unprepared location.
3. The geologic name of the surface formation is: Unknown
4. The type of drilling tools and associated equipment to be utilized will be: Workover rig with reverse circ equipment.
5. The proposed deepening depth will be 4000'.
6. The estimated tops of important geologic markers are:

1568'	Anhydrite	3532'	Yates
1775'	Top Salt	3657'	Seven Rivers
3355'	Base Salt		
7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are:

895 - 920'	Water
3544 - 3564'	Oil
3580 - 3586'	Oil
3610 - 3620'	Oil
3657 - 3674'	Oil
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 _____ Used X and are intact in hole.
9. See Form 9-331C for amount of cmt.

This is a re-entry into old P&A well and casing was left intact when plugged. No cmtg will be required with the exception of a possible cement squeeze job and amount and kind of cmt to be used will be determined from logs.

10. The pressure control diagram is attached to Form 9-331C. The following additional information of the pressure control equipment is as follows:
- 5½" OD Csg: Size: 10"-Series 900 Dbl Ram & Hyd.
Pressure Ratings: 3000# WP, 6000# T
Testing Procedure: Pressure up to 1500# before drilling out of casing.
Testing Frequency: Upon installation, daily and on all trips the kill lines to be flushed.

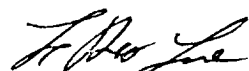
11. The type and characteristics of the proposed circulating medium or mediums to be employed for reversedrilling and the quantities and types of mud and weighting material to be maintained will be as follows:

Drilling fluids to be used will be 10# salt gel mud necessary to re-enter old well, drill cement plugs and deepen from 3681-4000' (329').

12. The testing, logging and coring programs will be:

<u>Drill Stem Test</u>	<u>Logs</u>	<u>Coring</u>
None	Density Neutron Gamma Ray CBL/CCL	None

13. There are no abnormal pressures or temperatures expected to be encountered.
14. The anticipated starting date will be 4/15/80 and completed approx 5/1/80.
15. The auxiliary equipment to be used will consist of: Kelly cocks & a sub on floor w/full opening valve to be used when needed. Mud logging will not be necessary for re-entry.



District Drilling Supt.