

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

ARCO Oil &amp; Gas Company

Division of Atlantic Richfield

## 3. ADDRESS OF OPERATOR

Suite 501

1860 Lincoln Street, Denver, Colorado 80295

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

At surface

1710' FNL &amp; 1520' FWL Section 27-28N-11-W

At proposed prod. zone

Approximately Same

## 14. DISTANCE IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

5 1/2 miles South of Broomfield, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

1710'

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

1100'

## 16. NO. OF ACRES IN LEASE

2566.96

## 19. PROPOSED DEPTH

6500'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

W 100/320

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5727 GL. Ungraded

22. APPROX. DATE WORK WILL START\*  
When approved application  
rec'd/Approx. 1-20-80.

## 23.

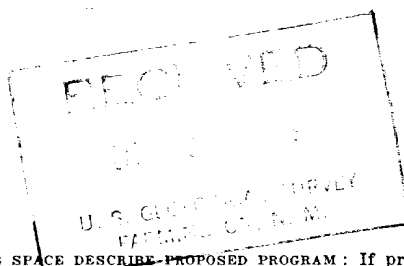
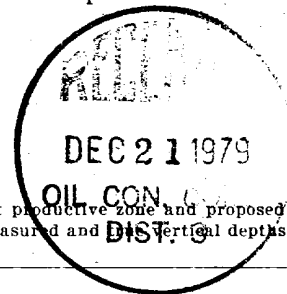
## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8 OD	24#	399'	300 sx
7 7/8	4 1/2 OD	10.5#	T.D.	500 sx

ADDITIONAL WELL NEEDED PURSUANT TO NEW MEXICO ORDER R-1670-V.  
U.S.G.S. RATIFICATION DATED JUNE 8, 1979.

Propose to drill well to a depth sufficient to test the Dakota Formation, setting surface casing and if productive setting production casing. If the Dakota Formation is productive will perforate, test and treat if necessary.

Pursuant to the provisions of NTL-6 attached are: Certified Location Plat  
Drilling Plan with attachment  
Surface Use and Operations Plan with  
attachments.

*gas is declined*

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 vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

*[Signature]*

TITLE

Operations Manager

DATE

Dec 14, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*ok 3/8/80*

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-55

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

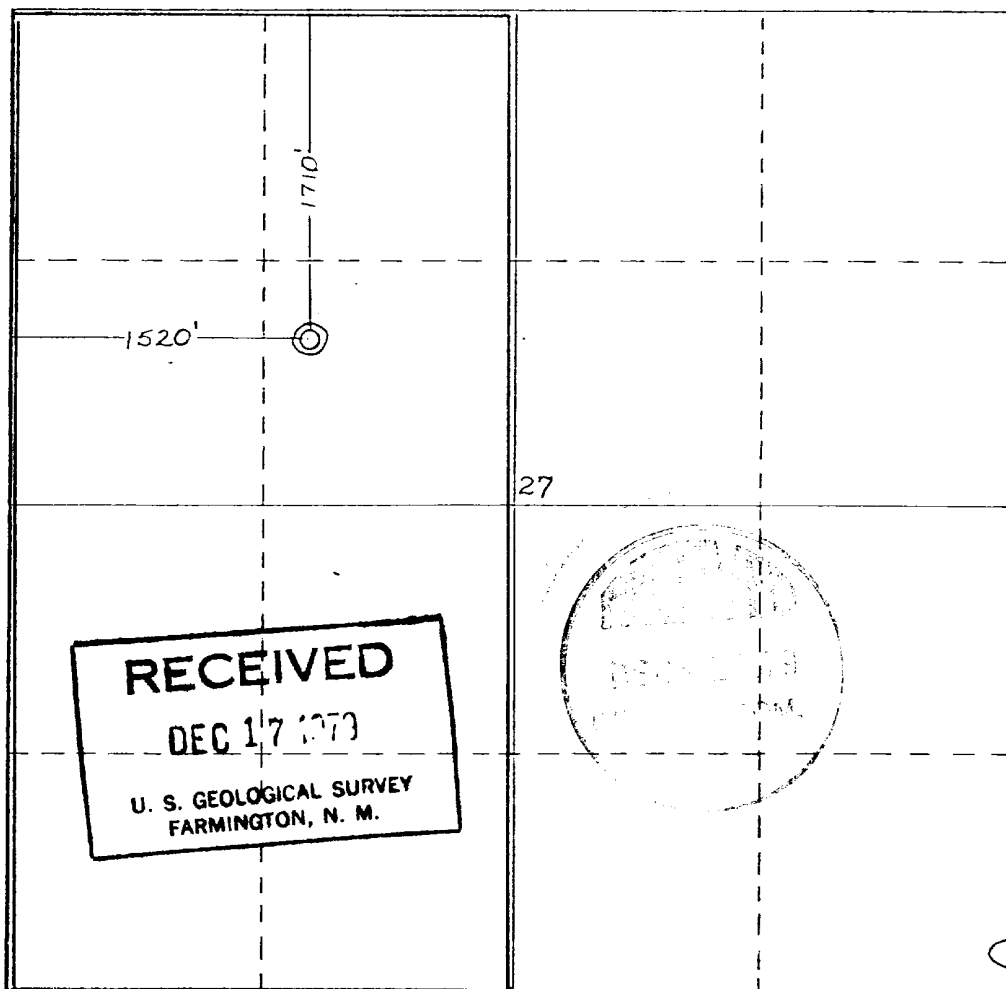
Operator <b>ARCO OIL &amp; GAS COMPANY</b>			Lease <b>SCHLOSSER WN FEDERAL</b>		Well No. <b>8 E</b>
Unit Letter <b>F</b>	Section <b>27</b>	Township <b>28 NORTH</b>	Range <b>11 WEST</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>1710</b> feet from the <b>NORTH</b> line and <b>1520</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>5727</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin</b>	Dedicated Acreage: <b>320</b> 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.) \_\_\_\_\_

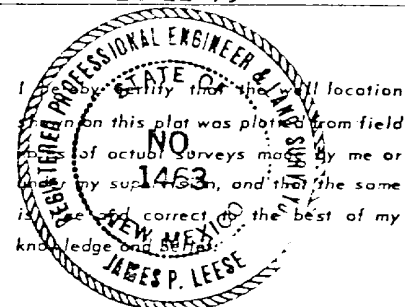
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name *James P. Leese*  
Position Operations Manager  
Company ARCO Oil & Gas Co.  
Div. of Atlantic Richfield Co  
Date 12-12-79

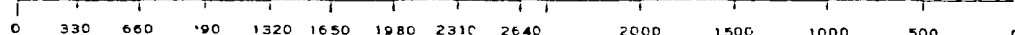


Date Surveyed  
**October 29, 1979**  
Registered Professional Engineer  
and/or Land Surveyor

*James P. Leese*  
James P. Leese

Certificate No.

**1463**



## DRILLING PLAN

SCHLOSSER WN FEDERAL #8E  
NW¼ Section 27-T28N-R11W  
San Juan, New Mexico

1. SURFACE FORMATION: Tertiary
2. GEOLOGICAL MARKERS:

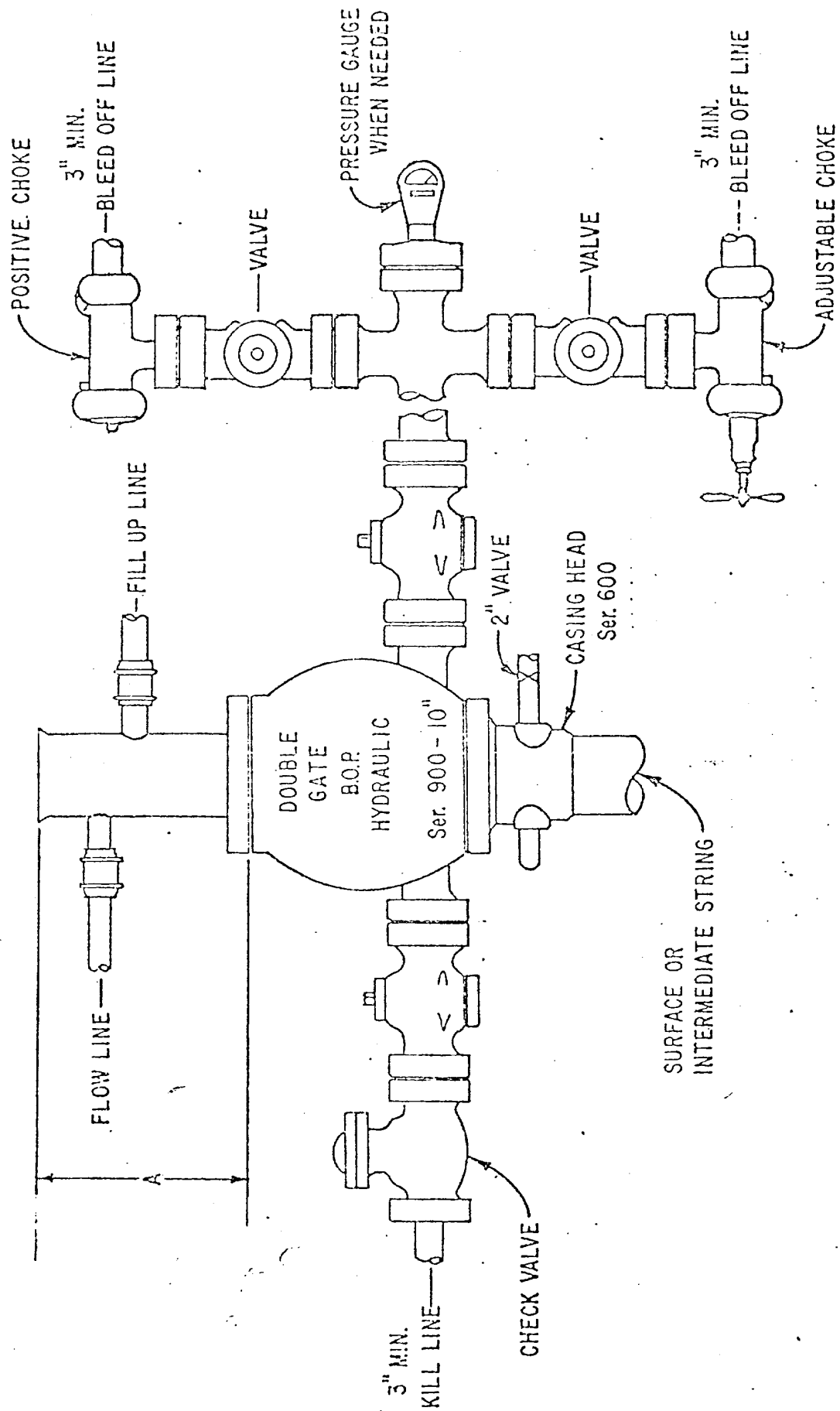
Kirtland	1102'	Upper Mancos	4351'
Fruitland	1455'	Gallup	5251'
Pictured Cliffs	1657'	Lower Mancos	5789'
Lewis	1735'	Greenhorn	6037'
Chacra	2587'	Graneros	6099'
Cliff House	3201'	Dakota	6214'
Point Lookout	4061'	Morrison	6444'
3. ANTICIPATED MINERAL BEARING FORMATIONS:

Fruitland	(Poss. Gas)
Pictured Cliffs	(Poss. Gas)
Cliff House	(Poss. Gas)
Gallup	(Poss. Gas)
Dakota	(Poss Oil/Gas)
4. CASING PROGRAM:

Surface	to	300' 8-5/8" 24# K55 ST&C,
Production	to	T.D. 4-1/2" 10.5# K55, ST&C
5. CONTROL EQUIPMENT: Blowout Preventor - Ram Type, hydraulic operated  
Rams - Two: One blind ram and one pipe ram.  
Series - 900 (3000#WP, 6000#T)  
Manufacturer - Cameron or Shaffer  
Pressure test at 1000 psi prior to drilling out of casing string.  
Operational checks to be made daily and on trips.  
Sketch attached.
6. DRILLING FLUIDS:

0	to	300' Gel and lime to drill surface hole and set casing.
300'	to	T.D. Low solids non-dispersed 9.0-9.1#gal., 38-45 vis., WL 8 cc or less.
7. AUXILIARY EQUIPMENT: Kelly cock  
Sub on floor with full opening valve for use in drill pipe when Kelly is not in the string.
8. TESTING, LOGGING AND CORING: At this time no drill stem tests or cores are planned. However, hole conditions and information obtained while drilling may alter these plans.
9. ABNORMAL PRESSURES, TEMPERATURES, POTENTIAL HAZARDS: There are no abnormal pressures, temperatures or potential hazards in the area. The maximum anticipated pressure is 3600 psi. Weight material will be maintained on location at all times.
10. STARTING DATE - COMPLETION: Dirtwork and road work for this location will require 2 or 3 days. Moving in and rigging up 2 to 3 days. Drilling and completion will require approximately 30 days, for a total of 36 days. In the event of bad weather or other delays this time could be considerably extended.

NTL-6 indicates a minimum of 30 days are required to obtain District Engineer's approval, in which case operations on this well could not be commenced until approximately January 20, 1980. Depending upon rig availability, equipment, weather etc., this starting date could be extended.



SURFACE USE AND OPERATIONS PLAN

SCHLOSSER WN FEDERAL #8E  
NW¼ Section 27-T28N-R11W  
N.M.P.M., SAN JUAN COUNTY, NEW MEXICO

1. EXISTING ROADS: A portion of topographic map is attached showing the existing roads within a one (1) mile radius of the location (colored green). Main access will be from Broomfield, New Mexico approximately 5½ miles north. None of the existing roads will require any improvement. However, due to road conditions, weather, etc., these roads will be maintained to whatever extent is required.
2. PLANNED ACCESS ROAD: The planned access road will leave the existing road approximately 200 feet north this location. The road will be approximately 18' wide (sufficient to handle drill equipment). The grade will not exceed 8%. There will be no cattle-guards, culverts, fence cuts, etc.
3. LOCATION OF EXISTING WELLS: Existing wells within one (1) mile radius of this location are shown on the attached map.
4. EXISTING AND/OR PROPOSED FACILITIES: Arco Oil & Gas Company, Division of Atlantic Richfield Company has 2 existing wells within the one (1) mile radius of this location, they are:

Schlosser WN Federal #3 NENE Section 27-T28N-R11W  
Schlosser WN Federal #8 SWSW Section 27-T28N-R11W

The above wells each have 1-300 bbl storage tank and production unit which is located approximately 150' from the well head and is connected to the well with a buried gas line.

There are numerous other Schlosser WN Federal wells proposed for this area, but due to the drilling rig availability it is not possible at this time to anticipate which wells will be drilled prior to the drilling of this well. The production facilities for this well will be similar to the above wells.

5. WATER SUPPLY: It is anticipated that water will be obtained from the San Juan River approximately five (5) miles north of this location. The water will be trucked over New Mexico Highway 44, existing roads and the planned access road in item number 2 above.
6. CONSTRUCTION MATERIALS: None anticipated.
7. WASTE DISPOSAL: Cuttings and drilling fluids will be disposed of in the reserve pit. A trash or burn pit will be used to dispose of trash, garbage, etc. If the reserve pit is sufficiently dry when the well is completed, both the reserve and trash pit will be filled. If the reserve pit is not sufficiently dry when the well is completed it will be fenced for the protection of livestock and wildlife to be filled at such time when it is sufficiently dry.  
  
Produced fluids will be disposed of in the reserve pit. Any oil accumulation on the reserve pit during drilling and completion operations will be skimmed off and held in a temporary storage tank for later disposition. Trash and debris cleanup will be commenced as soon as the completion rig moves out.
8. ANCILLARY FACILITIES: None are proposed.
9. WELL SITE LAYOUT: Per the attached sketches. The reserve pit will be approximately 100' by 100' and will be unlined.
10. RESTORATION OF SURFACE: Other than the area needed for operation and production facilities the site will be contoured as near as possible to its original state. Reseeding or any other restoration will be as specified by the Bureau of Indian Affairs and the United States Geological Survey. Any stockpiled topsoil will be distributed over the disturbed area for final grading and reseeding.
11. OTHER INFORMATION: Vegetation in this area consists of very sparse amounts of rabbit brush, sage brush, yucca and morman tea with a few scrub cedar trees. Drainage is to the Kutz Canyon and on to the San Juan River.

This location will require a 15 ft. cut on the west and north sides and a 15 ft. fill on east side.

The V door of the rig will be to the south with the pits on east side.

11. (Con't.) The nearest dwelling is 4 miles north and 1 mile east along Highway 44.

To the best of our knowledge there are no domestic water wells in the area.

To our knowledge there are no archaeological, cultured, or historical sites in the area which will be involved. However, an archaeological survey will be made and the report submitted as soon as it is received.

With the short period of operation and the restoration of the surface, any disturbance to vegetation and wildlife will be temporary and minimal. It is not anticipated that there will be any substantial impact on the environment.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE:

W. A. Walther, Jr.  
(303) 575-7031  
575-7153

C. E. Latchem  
(303) 575-7127  
575-7152

B. J. Sartain  
(303) 575-7035  
770-7849

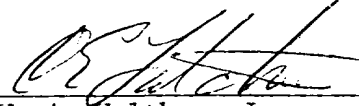
ARCO Oil and Gas Company  
Division of Atlantic Richfield Company  
Suite 501  
1860 Lincoln Street  
Denver, Colorado 80295

LOCAL REPRESENTATIVE:

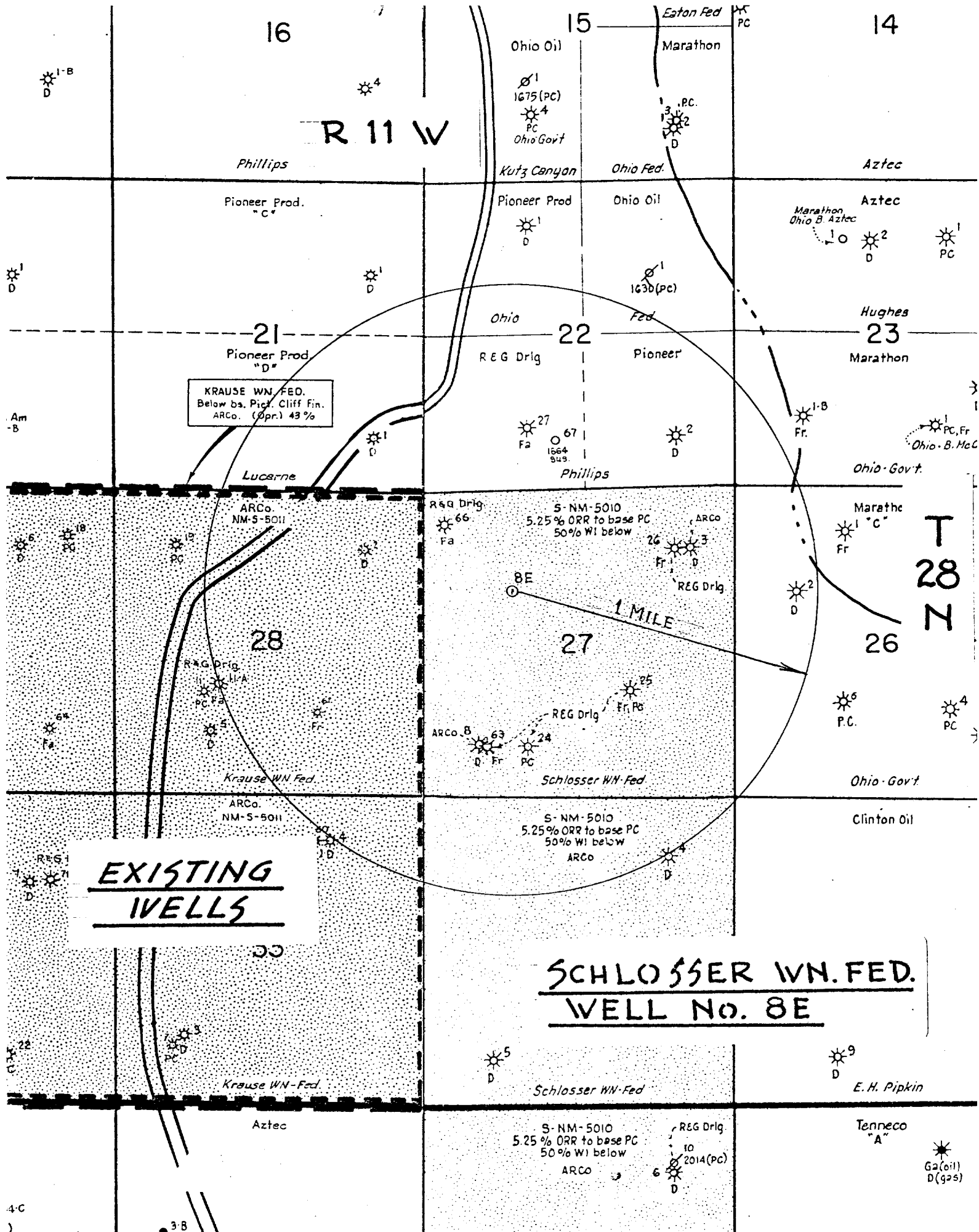
J. E. Taylor  
ARCO Oil and Gas Company  
Division of Atlantic Richfield Company  
P. O. Box 2197  
Farmington, New Mexico 87401  
(505) 325-7527  
325-7968

- 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 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 ARCO Oil and Gas Company, Division of Atlantic Richfield Company and its contractors and sub contractors in conformity with this plan and the terms and conditions under which it is approved.

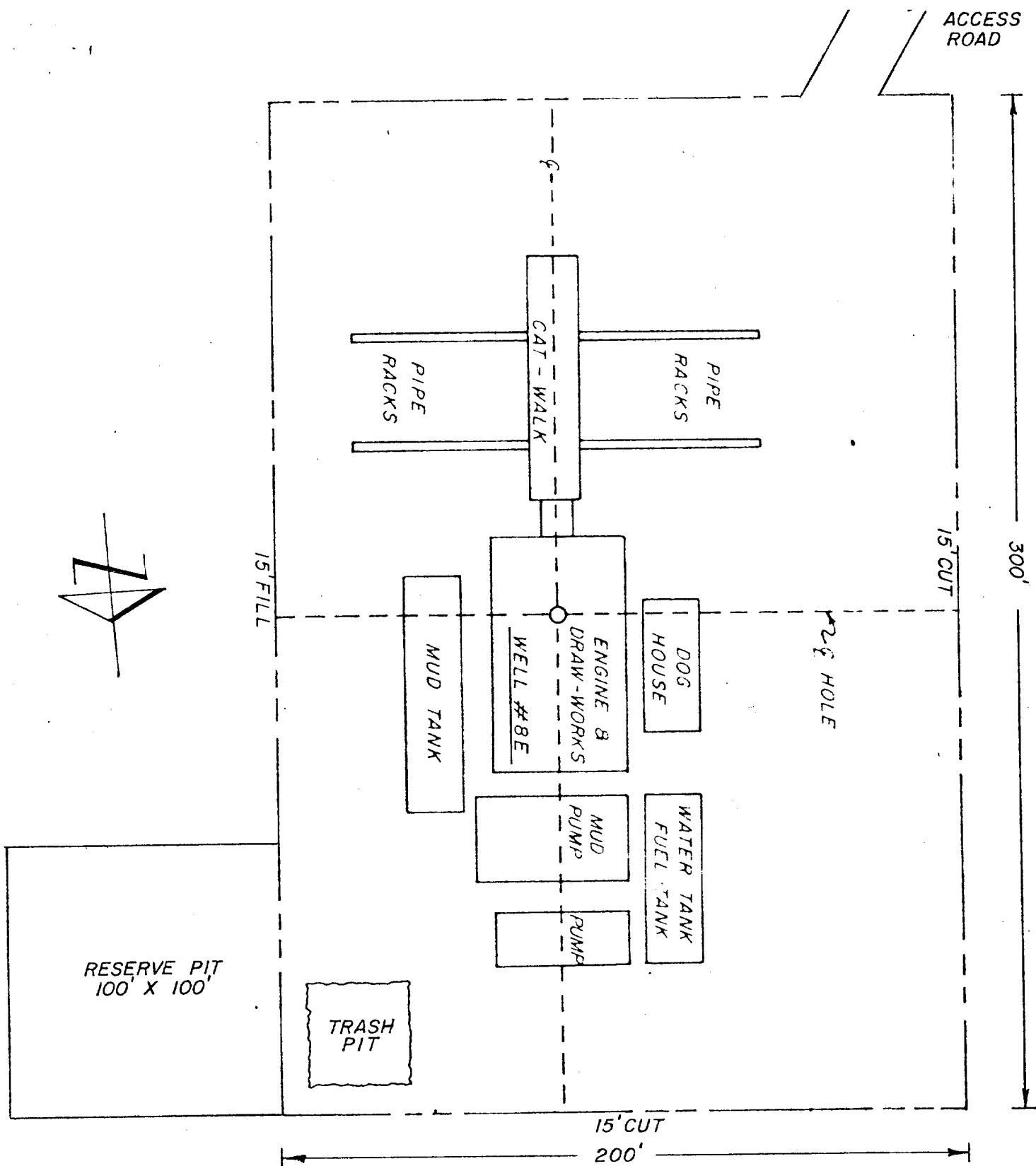
Dec. 14, 1979  
DATE

  
W. A. Walther, Jr.  
Operations Manager

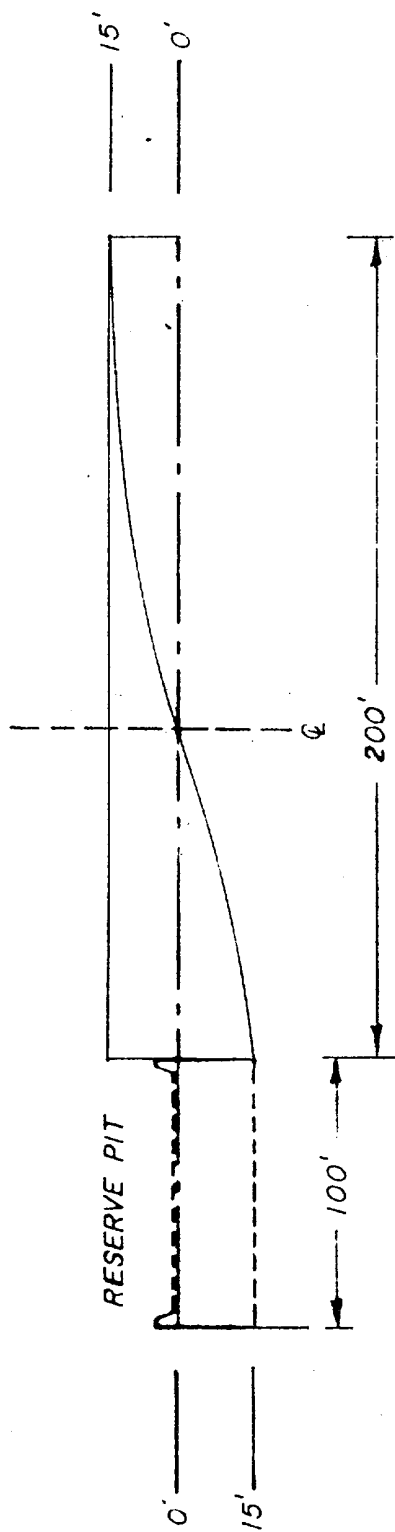




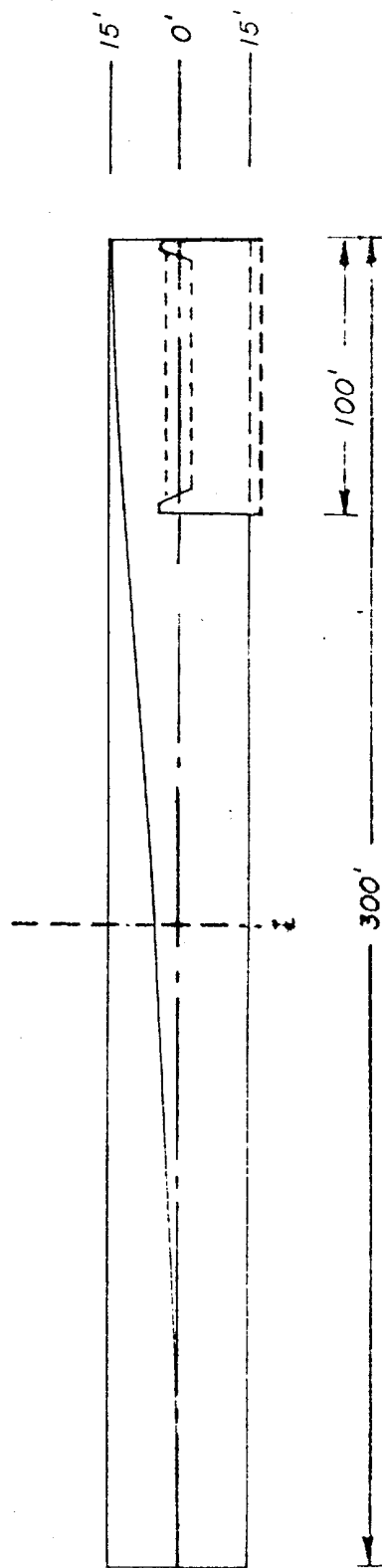




SCHLOSSER WN FEDERAL No. 8 E  
 1710' FNL, 1520' FWL, Sec. 27 - 28 N - 11 W



NORTHEAST TO SOUTHWEST.



SOUTHEAST TO NORTHWEST

SCHLOSSER WN FEDERAL  
WELL No. 8 E