

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-042,6

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

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>				
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				
2. NAME OF OPERATOR ARCO Oil and Gas Company Division of Atlantic Richfield Company				
3. ADDRESS OF OPERATOR P. O. Box 5540, Denver, Colorado 80217				
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 865' FNL & 1520' FWL (NE NW) Section 3-27N-11W At proposed prod. zone Approx the same				
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7-1/2 miles north of Bloomfield, 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 2562.96		17. NO. OF ACRES ASSIGNED TO THIS WELL 321 3/6 320 W 1/2
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		19. PROPOSED DEPTH 6810'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6130' GL			22. APPROX. DATE WORK WILL START* When appr'd appl. rec'd	
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#	500'	Cement to surface
7-7/8"	4-1/2" OD	10.5#	T.D.	500 sxs To cover the dip blowout.

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

RECEIVED

MAR 17 1980

U. S. GEOLOGICAL SURVEY,  
FARMINGTON, N. M.

APR 8 1980

OIL CON. COM.  
DIST. 3

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

W. A. Waither, Jr.

TITLE Operations Manager

DATE March 12, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

NMOCG

APPROVED

APR 4 1980

DISTRICT ENGINEER

All distances must be from the outer boundaries of the Section

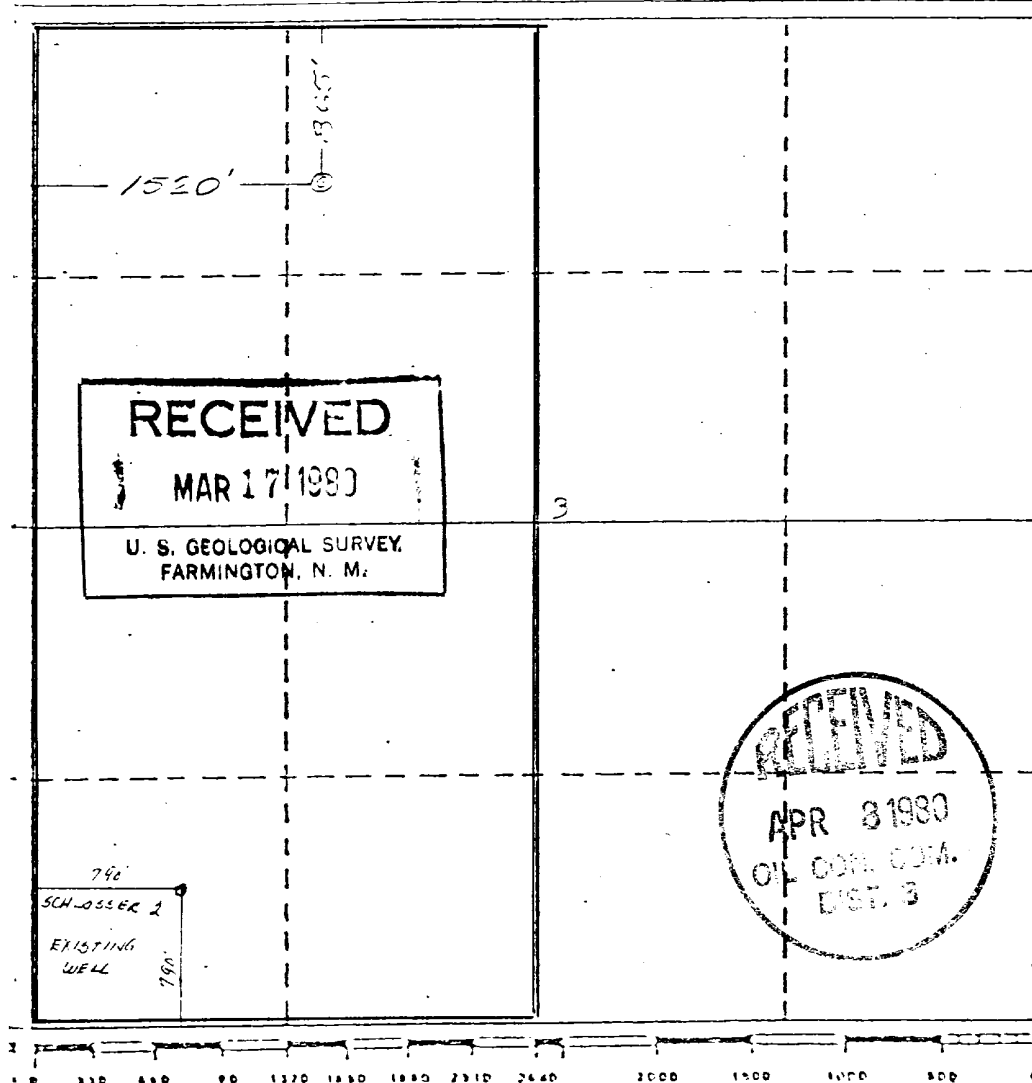
Company <b>ARCO OIL AND GAS COMPANY</b>			Lease <b>SCHLOSSER WN FEDERAL</b>		Well No. <b>2-E</b>
Unit Letter <b>C</b>	Section <b>3</b>	Township <b>27 NORTH</b>	Range <b>11 WEST</b>	County <b>SAN JUAN</b>	
Actual Well Location of Well: <b>565</b> feet from the <b>NORTH</b> line and <b>1520</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>6130</b>	Producing Formation <b>Sakota</b>	Pool <b>Basin Sakota</b>		Dedicated Acreage: <b>321.36</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Division.



# CERTIFICATION

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

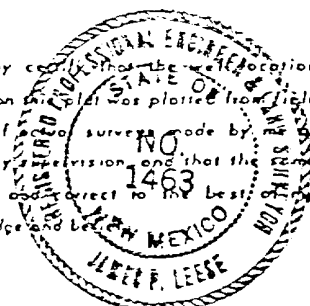
Name **W. A. Walther, Jr.**

Position **Operations Manager**

Company **ARCO Oil and Gas Co**  
**Div. of Atlantic Richfield Co**

Date  
**3-13-80**

I hereby certify that the well location shown on this plat was plotted from field notes of a survey 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  
**December 17, 1979**

Registered Professional Engineer  
**James P. Leese**

Certificate No.  
**1463**

## DRILLING PLAN

SCHLOSSER WN FEDERAL #2E  
NE NW 865' FNL & 1520' FWL  
Section 3-27N-11W  
San Juan County, New Mexico

1. SURFACE FORMATION: Tertiary - Nacimiento
2. GEOLOGICAL MARKERS:

Kirtland	1410'	Upper Mancos	4665'
Fruitland	1760'	Gallup	5562'
Pictured Cliffs	1970'	Lower Mancos	6105'
Lewis	2055'	Greenhorn	6345'
Chacra	2915'	Graneros	6410'
Cliff House	3520'	Dakota	6530'
Point Lookout	4380'	Morrison	6760'
3. ANTICIPATED MINERAL BEARING FORMATIONS:

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

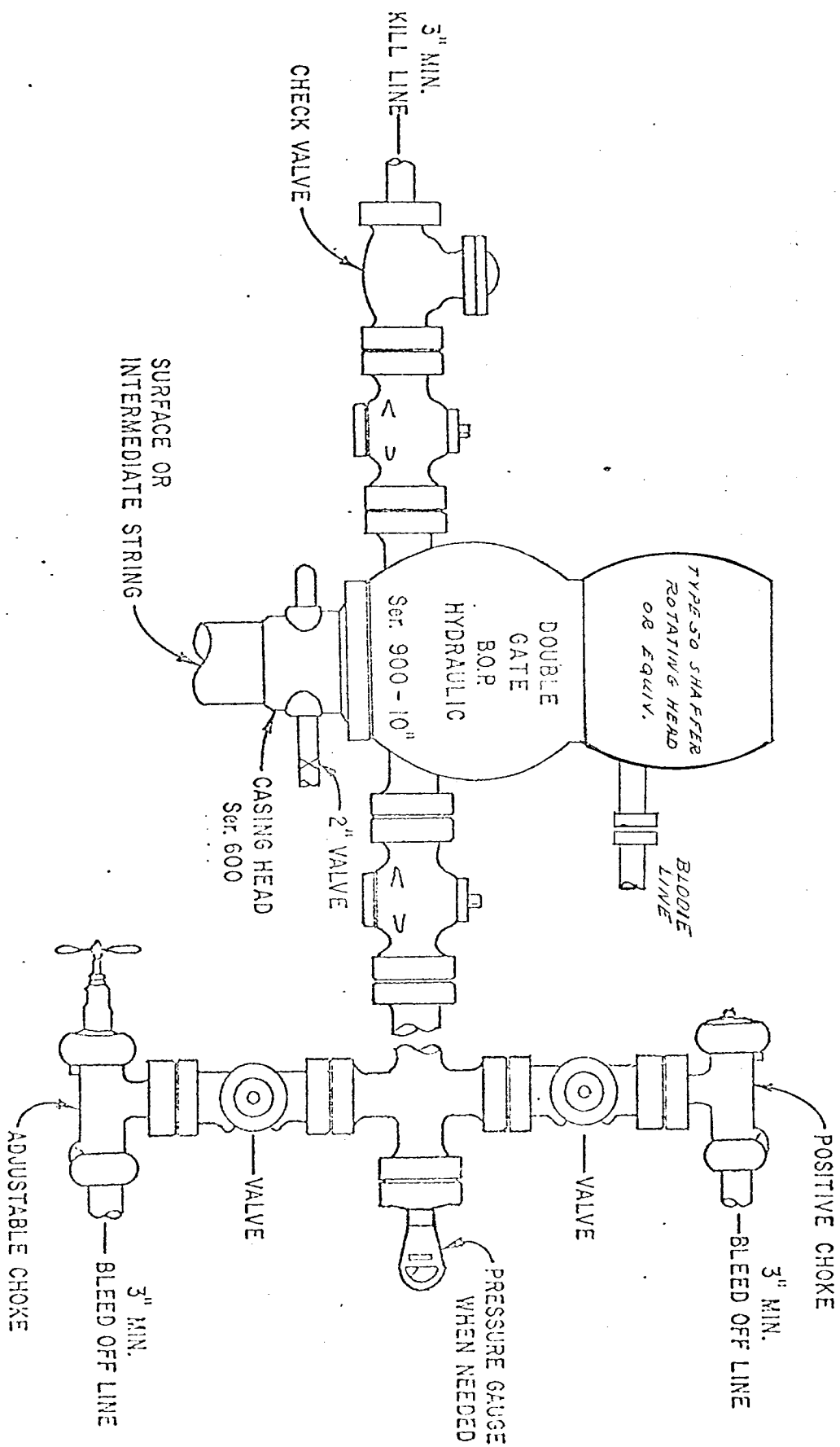
Surface	to	500'	8-5/8", 24#, K-55, ST&C
Production	to	T.D.	4-1/2", 10.5#, K-55, ST&C
5. CONTROL EQUIPMENT:

Blowout Preventor - Ram Type, hydraulic operator  
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	500'	Gel and lime to drill surface hole and set casing
500'	to	4000'	Treated water to support hole
4000'	to	T.D.	Low solids non-dispersed 9.0-9.1#/gal, 38-45 vis., WL 8cc 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 April 30, 1980. Depending upon rig availability, equipment, weather, etc., this starting date could be extended.



## SURFACE USE AND OPERATIONS PLAN

SCHLOSSER WN FEDERAL #2E  
NE NW 865' FNL & 1520' FWL  
Section 3-27N-11W  
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 Bloomfield, New Mexico approximately 7-1/2 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 be approximately 100' long. 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 and Gas Company, Division of Atlantic Richfield Company has 3 existing wells within the one (1) mile radius of this location, they are:  
  
    Schlosser WN Federal #2  
    Schlosser WN Federal #5  
    Schlosser WN Federal #6  
  
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 6-1/4 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 reseeded.

11. OTHER INFORMATION: It is mostly barren on this location with small amounts of Russian thistle and rabbit brush. Drainage is to the northeast into Kutz Canyon and then northwesterly to the San Juan River.

This location will require a 8' cut on the west end and a 4' fill on the east end. A small ravine on the north side will be filled approximately 10'.

The V door of the rig will be to the west with the pits on the southeast side.

The nearest dwelling is 5 miles north 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, cultural, 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  
P. O. Box 5540  
Denver, Colorado 80217

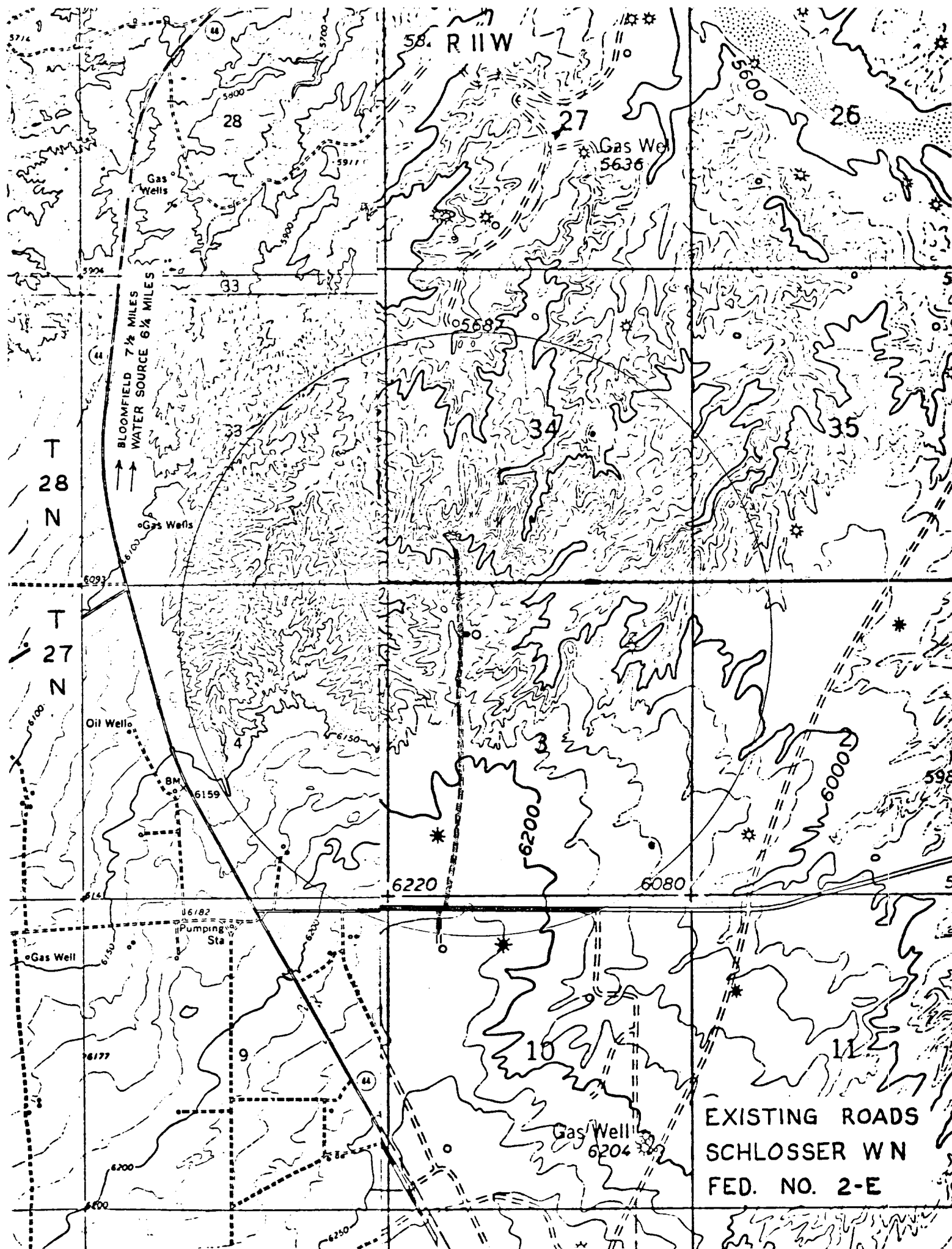
LOCAL REPRESENTATIVE:

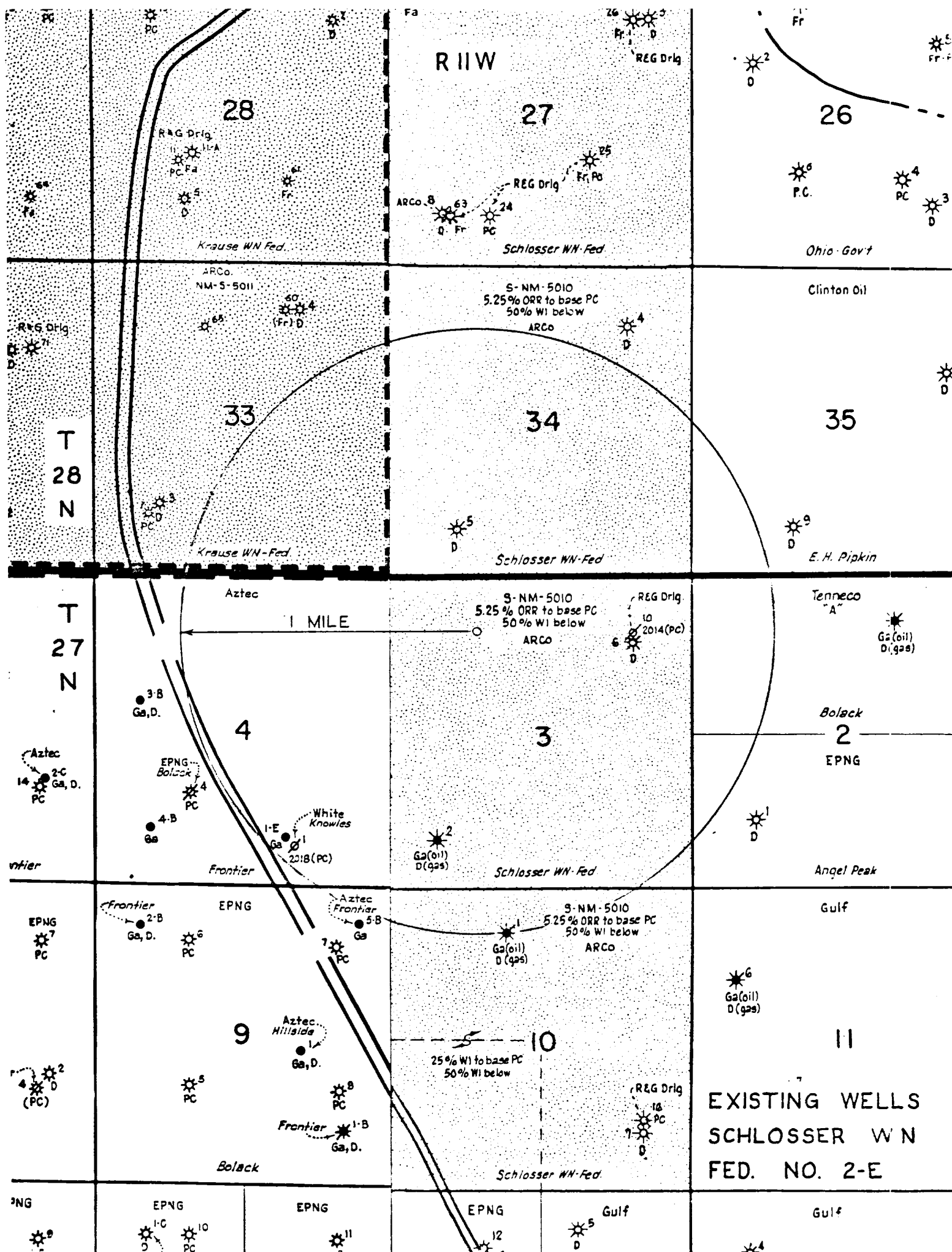
J.E. Taylor  
ARCO Oil and Gas Company  
Division of Atlantic Richfield Company  
P. O. Box 2197  
Farmington, New Mexico 87401  
(505) 325-7527  
325-7968

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.

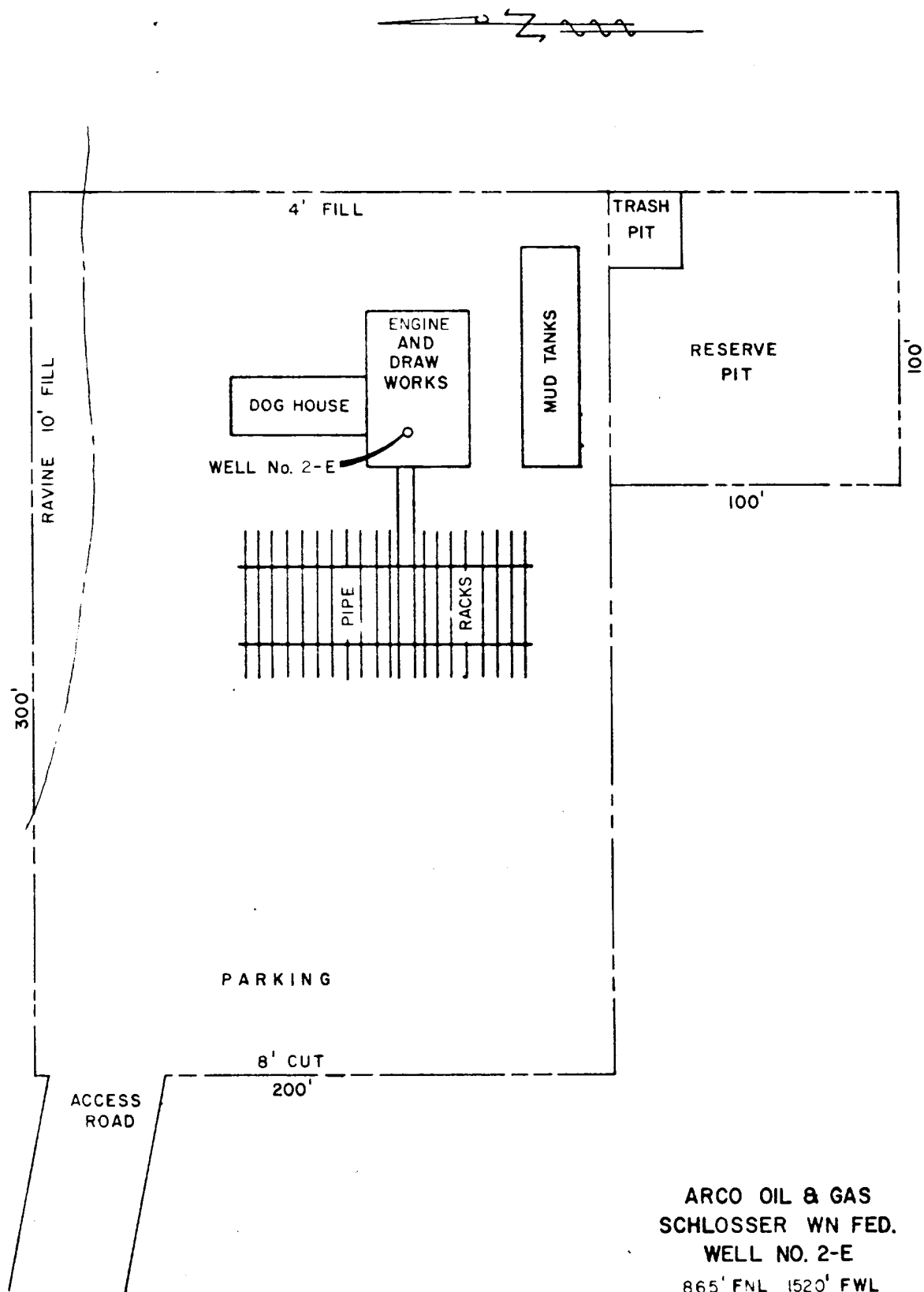
March 13, 1980  
Date

W. A. Walther, Jr.  
W. A. Walther, Jr.  
Operations Manager



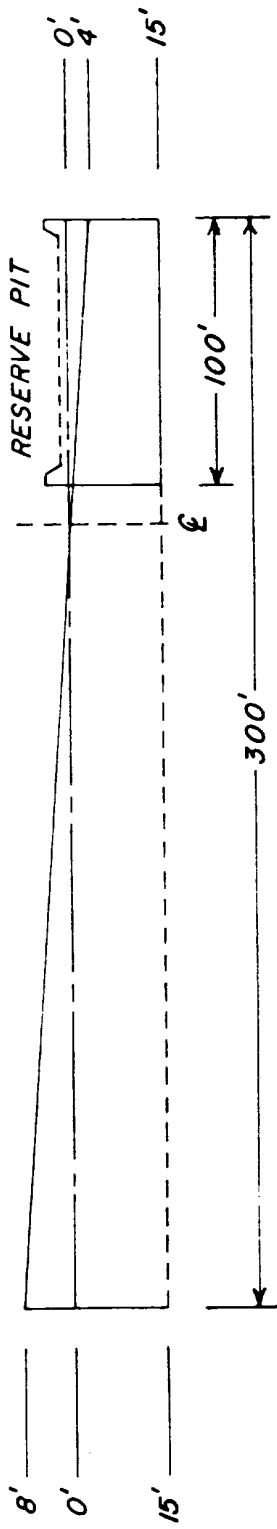




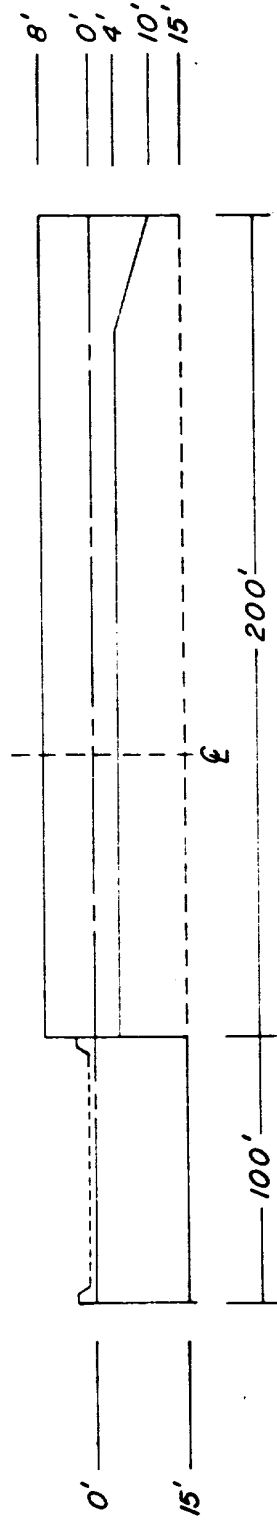


ARCO OIL & GAS  
SCHLOSSER WN FED.  
WELL NO. 2-E

865' FNL 1520' FWL  
SEC. 3 T 27 N - R 11 W  
SAN JUAN COUNTY, NEW MEXICO



WEST TO EAST



SOUTH TO NORTH

SCHLOSSER WN FEDERAL  
WELL NO. 2-E