

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.

NM 59392

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Yates "35" Federal

9. WELL NO.

1

10. FIELD AND POOL OR WILDCAT

Wildcat

11. SEC., T., R., M., OR S.E.  
AND SURVEY OR AREA

35-19S-32E

12. COUNTY OR PARISH

Lea

13. STATE

NM

## 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

Anadarko Petroleum Corporation

(505) 748-3368

3. ADDRESS OF OPERATOR

P.O. Drawer 130, Artesia, New Mexico 88211-0130

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

At surface

At proposed prod. zone

800' FNL &amp; 1650' FEL

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

12 miles South of Maljamar, New Mexico

15. DISTANCE FROM PROPOSED\*

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

800'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

None

19. PROPOSED DEPTH

7900'

20. ROTARY OR CABLE TOOLS

Rotary

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

3565.9 GL

22. APPROX. DATE WORK WILL START\*

February 24, 1990

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" ST&C	48#, H-40	0'-1140'	Setting intermediate is optional (hole size will not chg.)
12-1/4"	9-5/8" ST&C	36#, K-55	0'-3100'	
12-1/4"	9-5/8" ST&C	36#, S-80	3100'-4600'	
12-1/4"	9-5/8" ST&C	40#, S-80	4600'-4900'	Cement - SEE BELOW*
7-7/8"	5-1/2" ST&C	15.5#, K-55	0'-6600'	
7-7/8"	5-1/2" ST&C	17#, K-55	6600'-7900'	

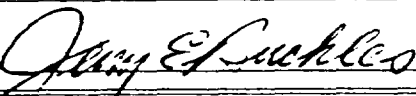
\*SEE NEXT PAGE (Exhibit F)

For proposed cementing program  
as well as proposed casing options.

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.

SIGNATURE



TITLE

Area Supervisor

DATE

2/01/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

YATES PETROLEUM CORPORATION

Case No. 9964

06/27/90 Examiner Hearing

Exhibit No. 7

\*See Instructions On Reverse Side

OPTION #1 (omit 9-5/8")

13-3/8" Surface Casing: Circulate to the surface using 700 sx Class C w/4% gel, 2% CaCl & 1#/sx Flocele. Tail-in w/300 sx Class C w/2% CaCl and 1#/sx Flocele.

9-5/8" Intermediate Casing: Omit

5-1/2" Production Casing: Cement 1st Stage from TD (7900') to 3300' using 940 sx Howco Lite with 1#/sx Flocele. Tail-in w/425 sx Class C w/.5% Halad-322 and 3#/sx KCL. Open DV Tool and cement 2nd Stage from 3300' to surface using 2300 sx Howco Lite w/15#/sx Salt, 1#/sx Flocele, and 5#/sx Gilsonite. Tail-in w/100 sx Class C w/2% CaCl.

OPTION #2 (w/9-5/8")

13-3/8" Surface Casing: Circulate to the surface using 700 sx Class C w/4% gel, 2% CaCl and 1#/sx Flocele. Tail-in w/300 sx Class C w/2% CaCl and 1#/sx Flocele.

9-5/8" Intermediate Casing: Cement 1st Stage from 4900' to 3000' using 250 sx Howco Lite, 15#/sx Salt, 1#/sx Flocele, and 5#/sx Gilsonite. Tail-in with 300 sx Class C w/2% CaCl. Open DV tool. Cement 2nd Stage from 3000' to surface w/900 sx Halco Lite w/15#/sx Salt, 1#/sx Flocele, and 5#/sx Gilsonite. Tail-in w/100sx Class C w/2% CaCl.

5-1/2" Production Casing: Cement from TD (7900') to 4600' using 225 sx Howco Lite w/1#/sx Flocele. Tail-in w/425 sx Class C w/.5% Halad-322 and 3#/sx KCL.

# OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

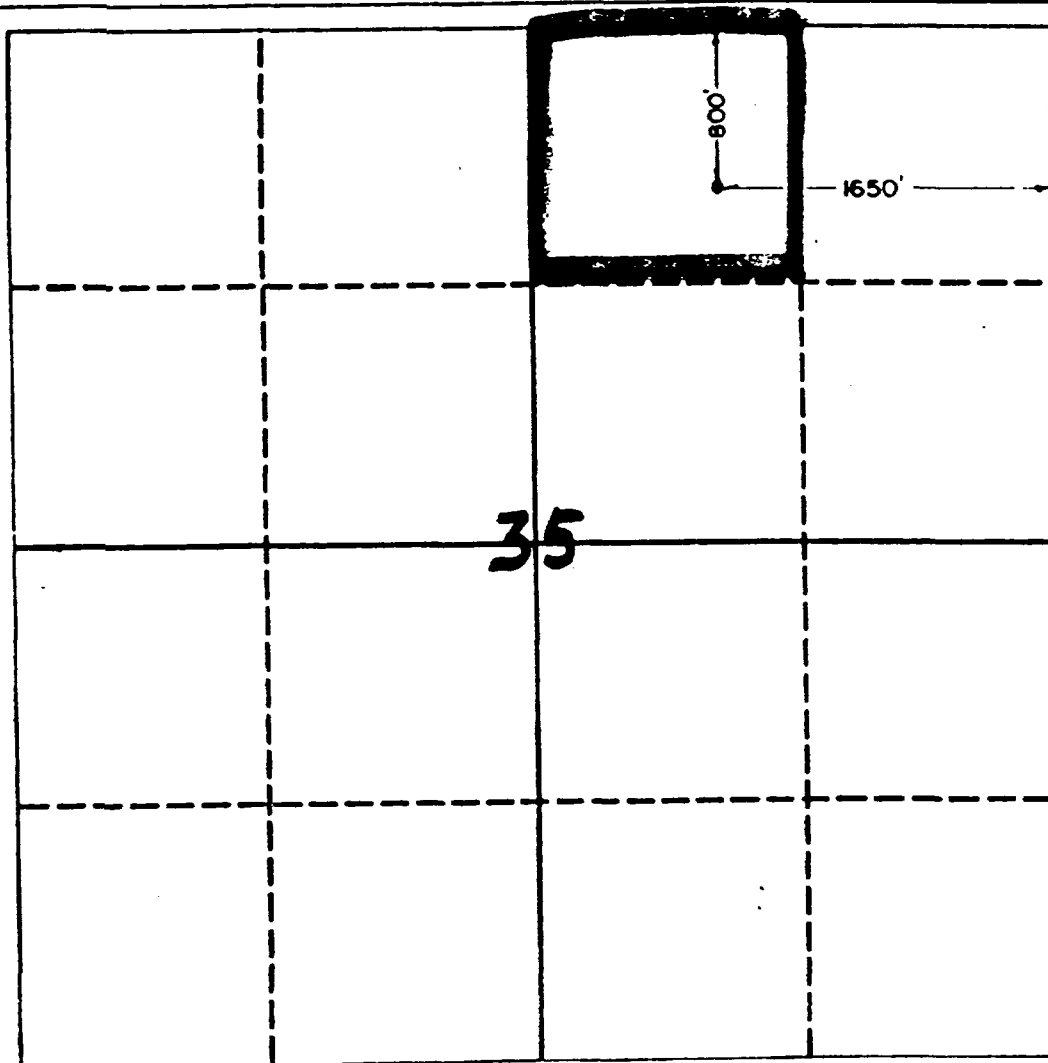
DISTRICT III  
1000 E. Avenue Rd., Aztec, NM 87410

## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>ANADARKO PETROLEUM CORP.</b>			Lease <b>YATES "35" FEDERAL</b>		Well No. <b>1</b>
Unit Letter <b>B</b>	Section <b>35</b>	Township <b>19 SOUTH</b>	Range <b>32 EAST</b>	County <b>NMFM LEA</b>	
Actual Footage Location of Well: <b>800</b> feet from the <b>NORTH</b> line and <b>1650</b> feet from the <b>EAST</b> line					
Ground level Elev. <b>3565.9</b>	Producing Formation <b>BS LM/ DELAWARE</b>		Pool <b>WILDCAT</b>	Dedicated Acreage: <b>40</b> Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 interest 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 interest, has been approved by the Division.



### OPERATOR CERTIFICATION

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

Signature

Printed Name

**Jerry E. Buckles**

Position

**Area Supervisor**

Company

**Anadarko Petro. Corp.**

Date

**February 1, 1990**

### SURVEYOR CERTIFICATION

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.

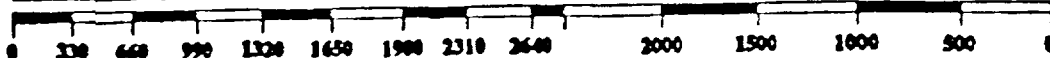
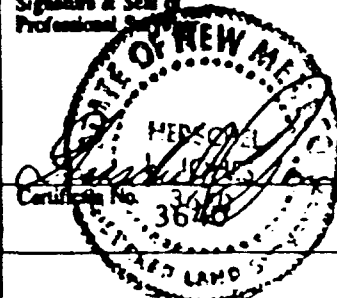
Date Surveyed

**1/29/90**

Signature & Seal of  
Professional Surveyor

Certificate No.

**3648**



APPLICATION FOR PERMIT TO DRILL  
ANADARKO PETROLEUM CORPORATION  
YATES "35" FEDERAL WELL #1  
800' FNL & 1650' FEL  
Sec. 35, T19S, R32E; NMPM

In conjunction with Form 3160-3, Application for Permit to Drill, Anadarko Petroleum Corporation submits the following items of pertinent information in accordance with Onshore Oil & Gas Order Nos. 1&2, and with all other applicable federal and state regulations.

1. The geologic surface formation is of alluvium of quaternary age.
2. Estimated tops of geologic markers are as follows:

Rustler	1100'	Delaware	4900'
T. Salt	1200'	Delaware (pay sd)	6000'
B. Salt	2700'	Bone Springs	7700'
Yates	2950'	Bone Springs Lm	7800'

3. The estimated depths at which water, oil, or gas formations are expected to be encountered:

- \* Water: 150' - 1100' Red bed
- \*\* Oil: 6000' - 6050' Delaware
- \*\* Oil: 7800' - 7850' Bone Springs Lime

\*Groundwater to be protected by 13-3/8" surface casing with cement circulated to the surface.

\*\*Potentially productive horizons to be protected by 5-1/2" production casing with cement tied back into the next casing string, ie: intermediate (if set), or surface casing (if intermediate is not set).

4. Proposed Casing Program:

Surface

0'-1140'± (1140') 13-3/8", 48#, H-40, ST&C

Intermediate (OPTIONAL)

NOTE: This intermediate casing is OPTIONAL. It will only be set if lost circulation problems develop while drilling the interval from 1140'± to 4900'.

0'-3100' (3100')	9-5/8", 36#, K-55, ST&C
3100'-4600' (1500')	9-5/8", 36#, S-80, ST&C
4600'-4900' (300')	9-5/8", 40#, S-80, ST&C

Production Casing

0'-6600' (6600')	5-1/2", 15.5#, K-55, ST&C
6600'-7900' (1300')	5-1/2", 17.0#, K-55, ST&C

For additional Proposed Casing Program Information, see Form 3160-3 and Exhibit B.

5. Pressure Control Equipment: See Exhibit C.
6. Mud Program: See Exhibit D.
7. Auxilliary Equipment: Upper Kelly Cock, Full Opening Stabbing Valve.
8. Testing, Logging, and Coring Programs:
  - DST's: 1 (possible) in Delaware  
1 (possible) in Bone Springs Lm
  - Logging:
    - 2-Man Mudlogging unit from 4900' to T.D.
  - Electric Logs:
    - Dual Induction Laterolog
    - Gamma Ray/Litho Density Log
    - Gamma Ray/Compensated Neutron w/Caliper Log
  - Coring:
    - No coring is anticipated.
9. Abnormal Pressures, Temperatures, or Other Hazards:
  - Lost circulation is anticipated from 3000'-4800' in the Yates formation.
  - High Pressure - none is anticipated.
10. Anticipated Starting Date: February 24, 1990.
  - NOTE: Lease Expiration Date is Feb. 28, 1990.
11. Statement Accepting Responsibility for Operations:
  - See next page, Exhibit A.

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.:	NM-59392
Legal Description:	Insofar as lease covers N/2 Section 35, T19S-R32E, NMPM, Lea County, New Mexico
Formations:	Delaware Sand Bone Spring Lime
Bond Coverage:	Nationwide Bond \$150,000
BLM Bond File No.:	153571
Date:	Executed April 1, 1988; Filed April 28, 1988

ANADARKO PETROLEUM CORPORATION



Michael R. Goode  
Attorney-in-Fact

STATE OF TEXAS                    )  
  )  
COUNTY OF MIDLAND            )

The foregoing instrument was acknowledged before me this 26th day of January, 1990, by Michael R. Goode, Attorney-in-Fact for Anadarko Petroleum Corporation, a Delaware corporation, on behalf of said corporation.

My Commission Expires:

10-23-93


  
Notary Public  
State of Texas

Exhibit A

## SUMMARY

### Drilling, Drill Stem Tests, Casing and Cementing Programs

1. Drill 17-1/2" hole to 1140'± using a Fresh Water Mud System. Will be in Rustler at surface.
2. Run 13-3/8", 48#, H-40, ST&C casing with a Texas Pattern (notched) Guide Shoe on the bottom of shoe joint and an insert float valve in top of shoe joint. Place a stop ring 3'± above guide shoe, then install a centralizer directly above guide shoe. Place three more centralizers on every other collar (total a four centralizers).
3. Cement 13-3/8" with 700 sx Class C w/4% gel, 2% CaCl and 1/4#/sx Flocele. Slurry weight - 13.5#/gal w/a slurry volume of 1.72 cu ft/sx, and a water ratio of 9.06 gals/sx. Tail-in w/300 sx Class C 2/2% CaCl and 1/4#/sx Flocele. Slurry weight - 14.8#/gal w/a slurry volume of 1.32 cu ft/sx and a water ratio of 9.06 gal/sx. Use one wooden plug to displace cement.
4. Nipple up and install BOP. Test casing to 600# psi after 18 hrs. and drill out cement.
5. Drill 12-1/4" hole to 4900'± in top of Delaware using a Brine Water Mud System. Anticipated loss circulation zone from 3000'-4800' in the Yates formation (Capitan Reef) with the possibility of dry drilling.
- 6.a At 4900' we propose to choose either OPTION #1 or OPTION #2 as follows:

OPTION #1 - Eliminates setting the 9-5/8" intermediate casing. Anadarko has determined that this casing string should not be required if circulation is maintained while drilling the interval from 3000' - 4800'. Two nearby wells maintained circulation when they drilled this interval and two other nearby wells lost circulation when they drilled this same interval.

\*NOTE: (a)  
denotes  
Option#1  
& (b)  
denotes  
Option#2

- 7.a Drill 7-7/8" hole from 1140' to TD @ 7900'± using a Brine Water Mud System. Mud weight (10#/gal), viscosity (32-35 sec), and water loss (12-15 cc).

8.a Drill stem tests are anticipated in the following zones: Delaware - 6000'; Bone Springs Lime - 7800'. DST flow periods and shut-in times will be determined on location. A mud logging unit will be on location at 4900' to assist in evaluating samples and shows for exact drill stem test intervals. Run Litho Density-Compensated Neutron-Gamma Ray Log, & Dual Induction-Laterolog.

9.a If production is indicated by DSTs and logs, run 5-1/2" casing as follows:

<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Description</u>
0'-6600'		(6600')	5-1/2", 15.5#, K-55, ST&C
6600'-7900'		(1300')	5-1/2", 17.0#, K-55, ST&C

Use a float shoe on the bottom of shoe joint and a float collar on top of the shoe joint. Use Halliburton Weld A to threadlock both the float shoe and float collar. Place a stop ring 3'± above float shoe, then install a centralizer directly above float shoe. Any joints which have been blasted and ruffcoated should be spaced out across both or either of the two potential pay zones (as indicated by tests or logs). Use 10-15 centralizers. All centralizers will be placed on ruffcoated joints or at a DV tool (if used). Set float shoe at 7900'±. Set a DV tool @ 3300'± and 3 cement baskets spaced as needed. Threadlock the Multiple Stage Cementer w/Halliburton Weld A.

10.a Proceed cement w/500 gals Super Flush 102. Cement First Stage of 5-1/2" w/940 sx Howco Lite w/¼#/sx Flocele. Slurry weight - 12.4#/gal with a slurry volume of 1.97 cu ft/sx and a water ratio of 10.9 gal/sx. Tail-in w/425 sx Class C w/.5% Halad-322 and 3#/sx KCL. Slurry weight - 15.6#/gal w/a slurry volume of 1.18 cu ft/sx and a water ratio of 5.2 gal/sx. Use one rubber plug to displace cement to float collar (7800'±).

Open DV tool (@ 3300') and pump Second Stage consisting of 2300 sx Howco Lite w/15#/sx Salt, ¼#/sx Flocele, and 5#/sx Gilsonite. Slurry weight - 12.5#/gas w/a slurry volume of 1.95 cu ft/sx and a water ratio of 9.54 gal/sx. Tail-in w/100 sx Class C w/2% CaCl. Slurry weight - 14.8#/gal with a slurry volume of 1.32 cu ft/sx and a water ratio of 6.3 gal/sx. Use one rubber plug to displace cement to DV tool (@ 3300'±). Estimated top of cement - circulate.

6.b OPTION #2 - Calls for the 9-5/8" intermediate casing to be set. This will be necessary if circulation is lost and cannot be re-established by the depth of 4900'. In other words, hole conditions



will determine whether or not this string of pipe should be set. If normal drilling and cementing operations below 4900' seem to be jeopardized by lost circulation problems above 4900', then this intermediate casing will be set and cemented at 4900'.

With a float shoe on the bottom of shoe joint and a float collar at the top of shoe joint, use Halliburton Weld A (threadlock compound) to lock. Place a stop ring 3'± above float collar, then install a centralizer directly above float shoe. Nine more centralizers will be spaced where needed (for a total of 10 centralizers). Three cement baskets will also be spaced where needed. Set a Multiple Stage Cementer (DV Tool) @ 3000'±, and threadlock w/Halliburton Weld A. Set float shoe @ 4900'±.

- 7.b Proceed cement w/1000 gals of Super Flush 102, then cement First Stage of 9-5/8" w/250 sx Halco Lite w/5#/sx Gilsonite and 1/4#/sx of Flocele. Slurry weight - 12.4#/gal w/a slurry volume of 1.99 cu ft/sx and a water ratio of 10.63 gal/sx. And tail-in w/300 sx Class C w/2% CaCl<sub>2</sub>, 1/4#/sx of Flocele, and 5#/sx Gilsonite. Slurry weight - 14.8#/gal w/a slurry volume of 1.32 cu ft/sx, and a water ratio of 6.3 gal/sx. Use one rubber plug to displace cement. Estimated top of cement @ 3000'.

Open DV Tool and cement Second Stage through DV Tool @ 3000' w/900 sx Halco Lite w/15#/sx Salt, 1/4#/sx Flocele, and 5#/sx Gilsonite. Slurry weight - 12.5#/gal w/a slurry volume of 1.95 cu ft/sx and a water ratio of 9.54 gal/sx. Tail-in w/100 sx Class C w/2% CaCl<sub>2</sub>. Slurry weight - 14.8#/gal w/a slurry volume of 1.32 cu ft/sx and a water ratio of 6.3 gal/sx. Use one rubber plug to displace cement. Estimated top of cement @ surface (circ).

- 8.b Nipple up and install BOP. Test casing to 1500# psi for 30 minutes after WOC 18 hrs and drill out cement.
- 9.b Drill 7-7/8" hole from 4900' to TD @ 7900'± using a Fresh Water Mud System. Mud weight (8.6#/gal), viscosity (32-35 sec), and water loss (12-15 cc).
- 10.b Drill stem tests are anticipated in the following zones: Delaware - 6000'; Bone Springs Lime - 7800'. DST flow periods and shut-in times will be determined on location. A mud logging unit will be on location at 4900' to assist in evaluating samples and shows for exact drill stem test intervals. Run Litho Density-Compensated Neutron-Gamma Ray Log, & Dual Induction-Laterolog.

11.b If production is indicated by DSTs and logs, run 5-1/2" casing as follows:

<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Description</u>
0'-6600'		(6600')	5-1/2", 15.5#, K-55, ST&C
6600'-7900'		(1300')	5-1/2", 17.0#, K-55, ST&C

Use a float shoe on the bottom of shoe joint and a float collar on top of the shoe joint. Use Halliburton Weld A to threadlock both the float shoe and float collar. Place a stop ring 3'± above float shoe, then install a centralizer directly above float shoe. Any joints which have been blasted and ruffcoated should be spaced out across both or either of the two potential pay zones (as indicated by tests or logs). Use 10-15 centralizers. All centralizers will be placed on ruffcoated joints or at a DV tool (if used). Set float shoe at 7900'±.

12.b Proceed cement w/500 gal Super Flush 102. Cement 5-1/2" w/225 sx Halco Lite w/¼#/sx Flocele. Slurry weight - 12.4#/gal w/a slurry volume of 1.97 cu ft/sx and a water ratio of 10.9 gal/sx. Tail-in w/425 sx Class C w/.5% Halad-322 and 3#/sx KCL. Slurry weight - 15.6#/gal with a slurry volume of 1.18 cu ft/sx and a water ratio of 5.2 gal/sx. use one rubber plug to displace cement to float collar (7860'±). Estimated top of cement - 4600' (300' above 9-5/8" casing shoe).

11.a/  
13.b

Perforations, acid job, and additional stimulation to be determined after drilling and prior to completion.

## Drilling Fluid Program

### Surface:

Spud with fresh water. Add paper and other non-toxic LCM to combat seepage and loss circulation. Complete loss of circulation should not occur. If it does occur, we will drill "dry" to our surface target of 1140'±.

### Intermediate:

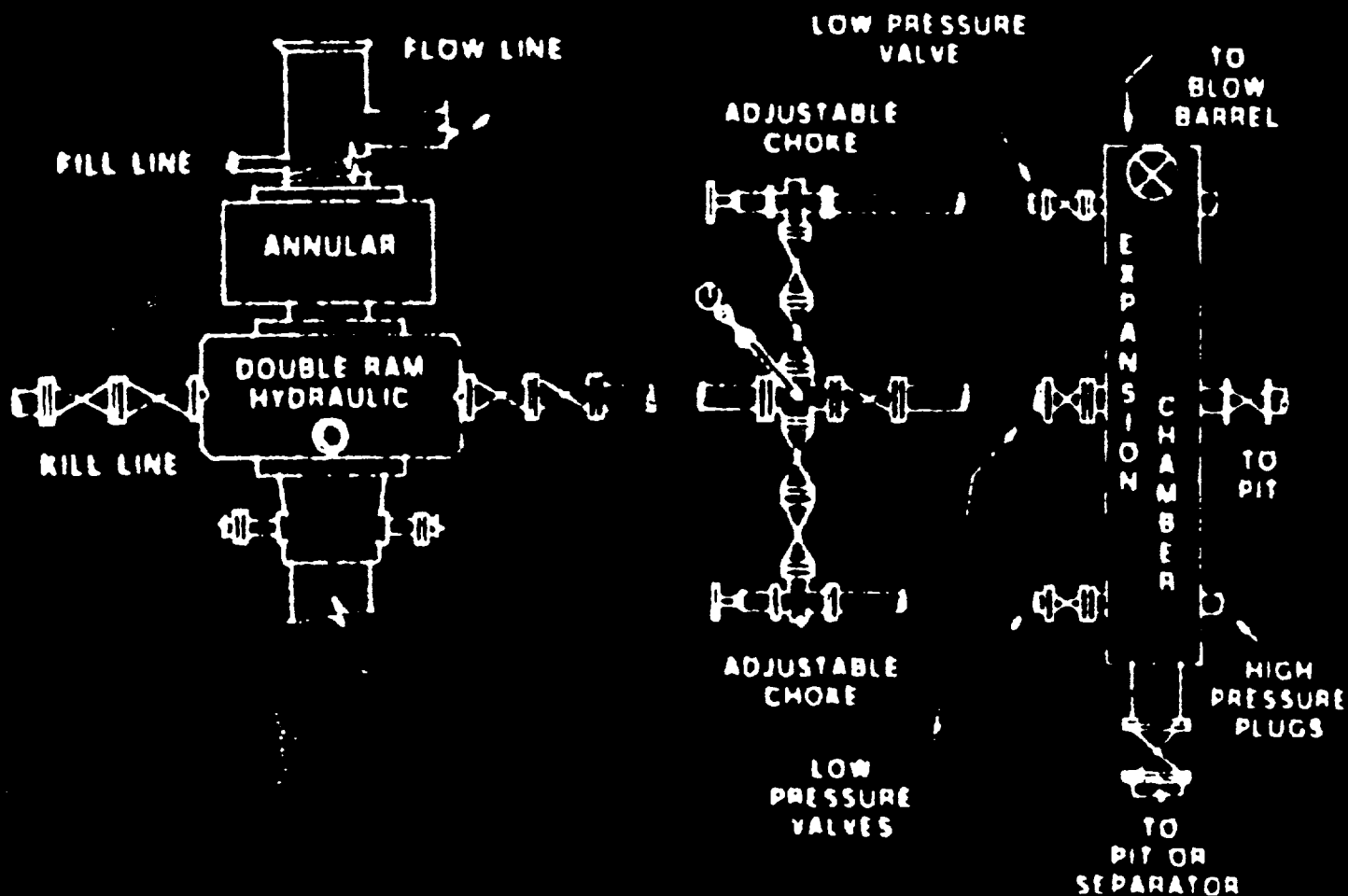
(Optional)

Drill out from under surface casing with brine water adding paper for seepage. Complete loss of circulation is possible. If this occurs, we will drill "dry" to 4900'± and then set intermediate casing (option #2). Otherwise, if circulation is maintained, we will continue drilling with brine water and paper through this section of the hole.

### Production:

(Option #1) - Drill out from under surface casing with brine water adding paper for seepage. Start mudding up at 4900' for samples. By 6000', mud system should have 10#/gal. mud, Viscosity (32-35 sec.), and water loss (12-15 cc). Mud system should remain relatively unchanged by TD (7900'±).

(Option #2) - Drill out from under intermediate casing with fresh water adding lime and paper for seepage. Start mudding up at 4900' for samples. By 6000', mud system should have 8.6#/gal. mud with a viscosity of 32-35 sec., and a water loss of 12-15 cc. Mud system should remain relatively unchanged by TD (7900'±).



Standard Blowout Preventer Stack

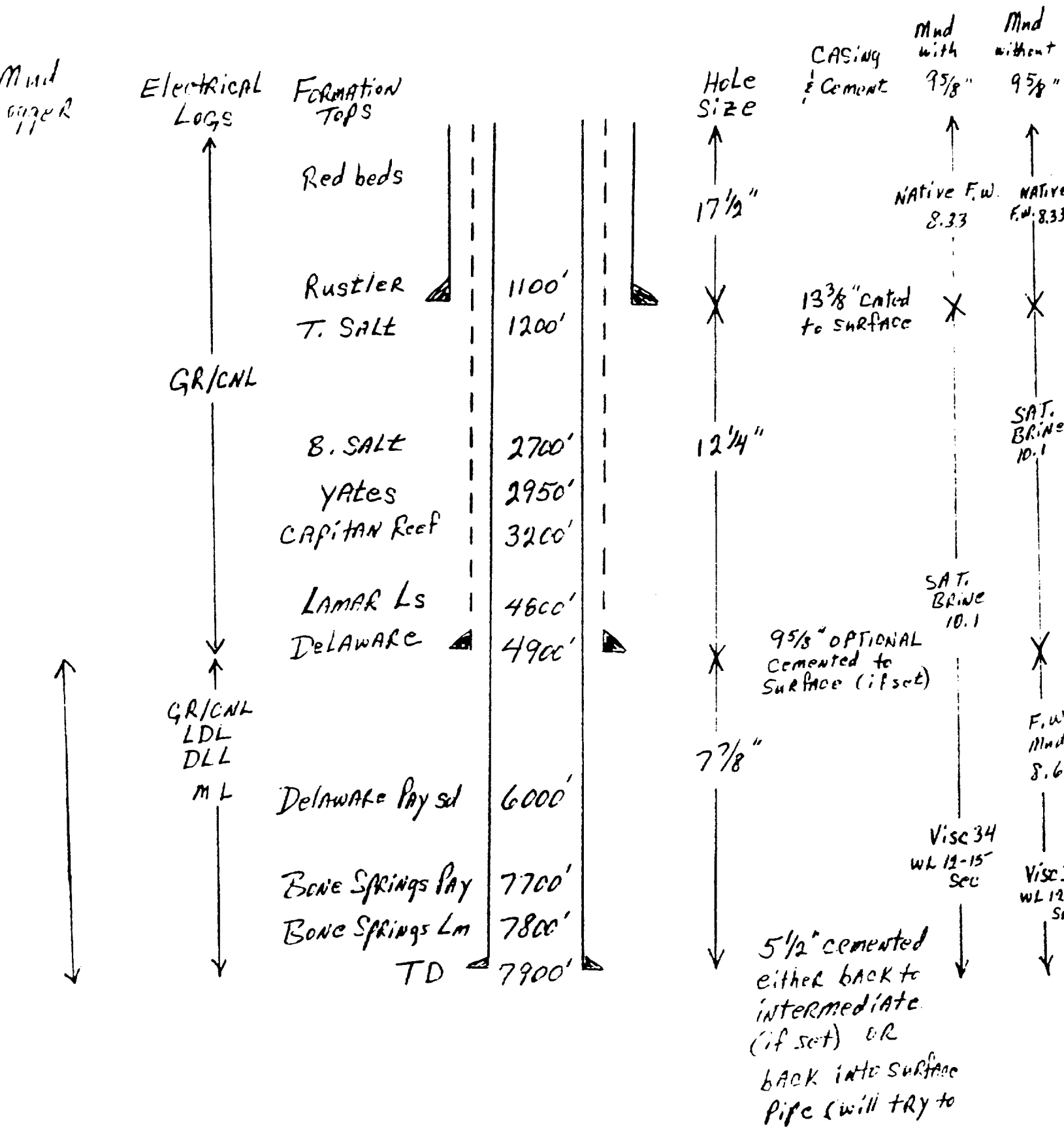
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Yates "35" Fed. #1

Exhibit C

Depth	Formation tops	Drilling Problems	T° surveys H <sub>2</sub> S	Size	Size Depth	without 9 5/8" (option #1)	with 12" (option #2)	Dr
500	Red beds Surface -- -- 1100'	Possible Sloughing Clays				NATIVE F.W. 8.33	NATIVE F.W. 8.33	
1000	Rustler-1100' T. SALT-1200'		Fluid caliper Surface hole	17 1/2"	13 3/8", 48#			1 2
1500					H-40, ST&C @ 1140'	SAT. brine 10.1	SAT. Brine 10.1	
2000		SALT section washout is likely			(Isolates Surface Water and Red Beds) Cemented w/ 1000sx			
2500	B. SALT-2700							
3000	Yates-2950	Loss Circ. is possible 2800'-3700' in the Capitan Reef.						
3500			Fluid caliper intermediate hole if 9 5/8" is set.					
4000								
4500			Temp. survey if cement doesn't circ.					
5000	Delaware-4900			12 1/4"	9 5/8", 36# - ? - ? -	SAT. brine 10.1	F.W. Mud 8.6	12-
5500					40#, K-55 5-80, ST&C (Isolates Salt Section & Capitan Reef potential loss Circ. zone) Cemented w/ 1550sx	Visc. 34 WL 12-15 Sec.	Visc 34 WL 12-15 sec	14
6000	Delaware (Pay) -- 6000							15
6500			0'-TD Deviation Survey each 500' < 5°					16
7000								17
7500	Bone Springs -- 7700							18
7700	Bone Springs Lm	TD 7900'	TD 4300' D.H. Legs w/	7 7/8"	5 1/2", 15.5# 17#, K-55 ST&C @ 7900'			

# yates "35" Fed. #1



## SURFACE USE PLAN

Anadarko Petroleum Corporation  
Yates "35" Federal #1  
800' FNL & 1650' FEL, Sec. 35, T19S, R32E  
Lea County, New Mexico

1. EXISTING ACCESS ROADS - Area map, Exhibit G, shows existing access roads in green. All roads shall be maintained in a condition equal that which existed prior to the start of construction.
  - A. Exhibits G, H, & I show the proposed wildcat well site as staked.
  - B. From Carlsbad, New Mexico, travel 25 miles East on U.S. Highway #62-180 to State Road #243 (old #176). Travel Northeastern on the state road 3.75 miles. Then turn left at intersection, staying on State Road #243 (old #176). Travel North 6 miles to the entrance on the East side of Phillip's Lusk Plant. Turn East on an oil field lease road through cattle-guard, off blacktop. Travel 2.25 miles and cross a second cattleguard. Turn South 1.3 miles, then turn East. Travel East 1.4 miles to the end of our existing caliche access road. Our proposed access road then continues East for .35 miles then swings South for 1.0 miles to aqueduct. Turn right (South-west) and follow flagged proposed access road, down aqueduct, .2 miles to location.
2. PLANNED ACCESS ROADS - Approximately 8180' of new access road will be constructed.
  - A. The access road will be crowned and ditched to a 12'-00" wide travel surface with a 40' right of way.
  - B. Gradient on all roads will be less than 5.00%.
  - C. Turnouts will be necessary.
  - D. Road will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
  - E. The new access road has been flagged. Earthwork will be as required by field conditions.
  - F. Culverts in the access road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the topography.

- G. New access road will skirt around a Synder Ranch water tank (as shown on Exhibit I), avoiding tank by 300' to minimize disturbance of wildlife.
  - H. The .2 of planned access road along aqueduct is flagged, with the centerline of roadway being 40' South of aqueduct.
3. LOCATION OF EXISTING WELLS IN A ONE MILE RADIUS
- A. Water Wells - None known.
  - B. Disposal Wells - None known.
  - C. Drilling Wells - None.
  - D. Producing Wells - As shown on Exhibit H (in orange).
  - E. Abandoned Wells - As shown on Exhibit H (in blue).
4. IF, UPON COMPLETION, THE WELL IS A PRODUCER, ANADARKO WILL FURNISH A SUNDRY NOTICE WITH PLATS (IF NEEDED) SHOWING ON-WELL PAD FACILITIES AND OFF-WELL PAD FACILITIES (IF NEEDED) BEFORE CONSTRUCTION OF THESE FACILITIES START.
5. LOCATION AND TYPE OF WATER SUPPLY - Water will be purchased locally from a private source and trucked over the access roads or piped in flexible lines laid on top of the grounds.
6. SOURCE OF CONSTRUCTION MATERIALS - If needed, construction materials will be obtained from the drill site's excavations or from a local source. The most likely source is an open active caliche pit shown in yellow on Exhibit G. These materials will be transported over the access route as shown on Exhibit G.
7. METHODS FOR HANDLING WASTE DISPOSAL
- A. 1. Drill cuttings will be disposed of in the reserve pit.
  - 2. Trash, waste paper, and garbage will be placed in a burn pit and occasionally burned to prevent wind scattering. When the rig moves out, all trash and debris left at the site will be contained to prevent scattering and will be buried at least 36" deep within a reasonable period of time.



3. Mud remaining after completion of the well will be picked up by the supplier, including broken sacks.
  4. Sewage from trailer houses will drain into holes with minimum depth of 10'. These holes will be covered during drilling and backfilled upon completion. A "Port-a-John" will be provided for rig crews. This will be properly maintained during the drilling operations and removed upon completion of the well.
  5. Chemicals remaining after completion of the well will be stored in the manufacturers containers and picked up by the supplier.
- B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time they will be transported by tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES - No camps or airstrips will be constructed.

## 9. WELL SITE LAYOUT

- A. Exhibit E shows the proposed well site layout.
- B. This exhibit indicates proposed location of reserve and trash pits; and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be unlined, unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with PVC or polyethylene liner. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'-00" over the reserve pits dikes where the liner will be anchored down.
- E. This pasture contains no cows at present, therefore, no fencing of the reserve pit is planned until after the drilling rig leaves. Then it will be temporarily fenced.

10. PLANS FOR RESTORATION OF SURFACE - Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recountered to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

11. OTHER INFORMATION


- A. The topography is of a rolling terrain with vegetation of sagebrush and native grass. The soils are blowsand over caliche base. See topographic map - EXHIBIT I.
- B. The surface is used to mainly access producing wells in the area and minimal grazing for livestock. It is administered by the BLM and is being leased to Dr. Larry Squires, Snyder Ranch, P.O. Box 2158, Hobbs, New Mexico 88241.
- C. An archeological study is being conducted for the location and new access road. The report will be submitted separately when completed.
- D. There are no building of any kind in the area.

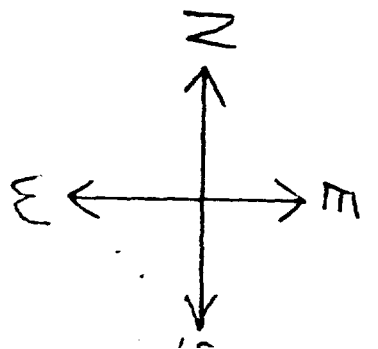
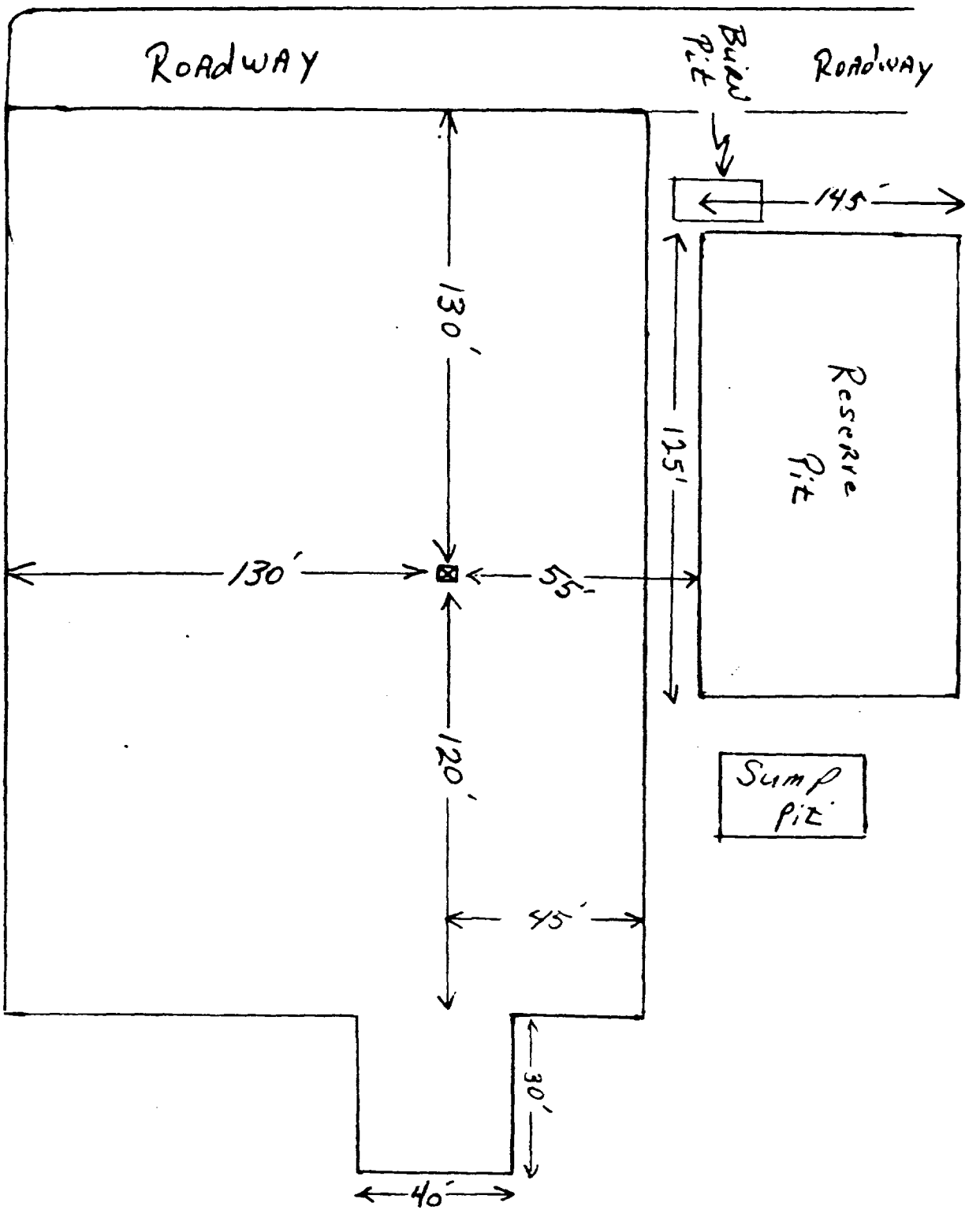
12. OPERATOR'S REPRESENTATIVE - Anadarko Petroleum Corporation's field representative for contact regarding compliance with the Surface Use Plan is:

Before, during, and after drilling:

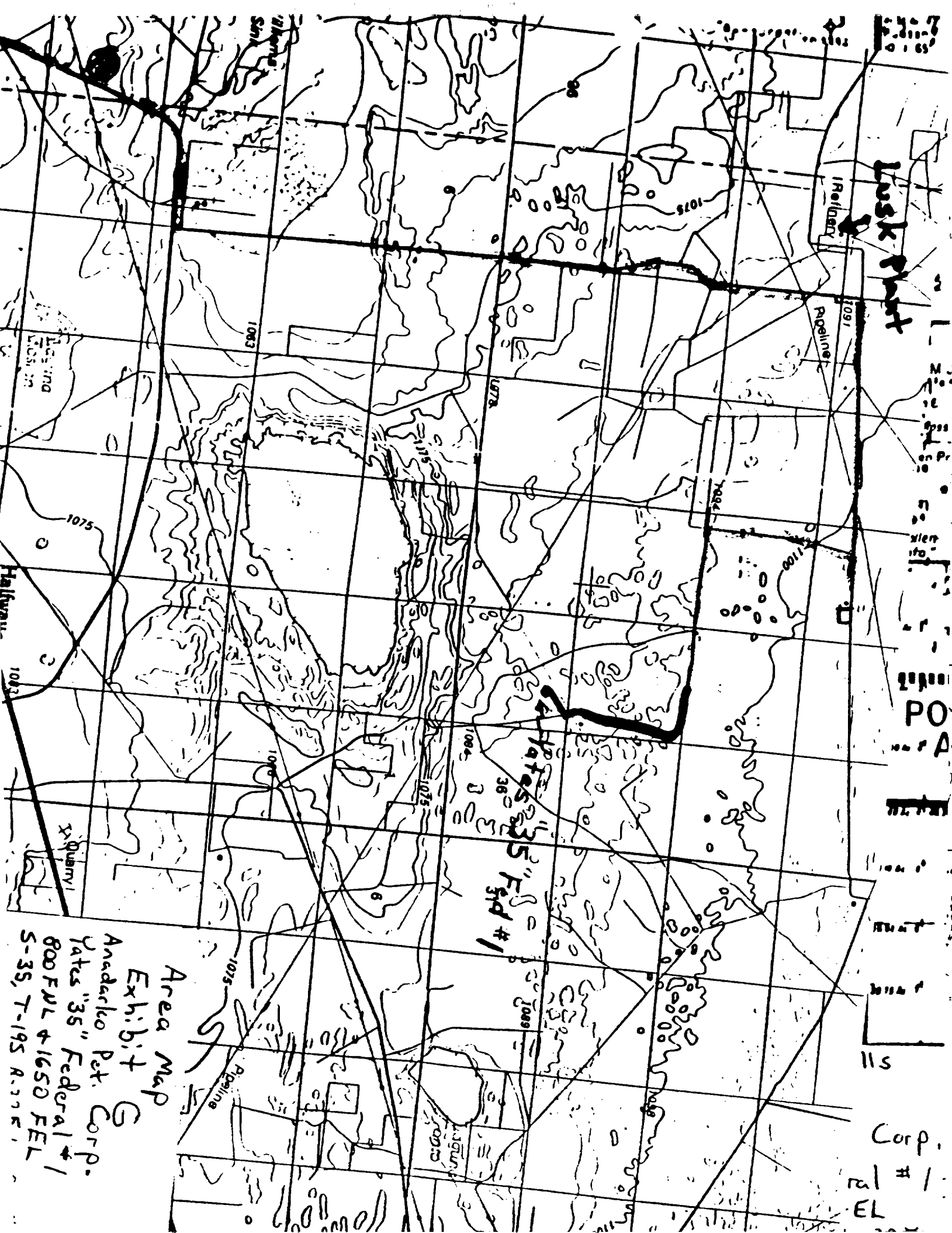
Mike Braswell  
(505) 748-3368

13. CERTIFICATION - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that the statements made in this plan are the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Anadarko Petroleum Corporation and its contractors/subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C.1001 for the filing of a false statement.

  
Area Supervisor  
Anadarko Petroleum Corporation



ANADARKO Petroleum Corporation  
 "35" Fed. # 1  
 YATES



Area Map  
Exhibit G  
Anadarko Pet. Corp.  
Yates "35" Federal #1  
800 FUL + 1650 FEL  
S-35, T-19S R-22E

Corp.  
#1  
EL