

Form 3160-3
(November 1983)
(formerly 9-331C)

NM OFF. CONS. COMMISSION
Draw DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

30-015-27525 C/SF
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Yates Petroleum Corporation

3. ADDRESS OF OPERATOR

105 South Fourth Street, Artesia, New Mexico 88210

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

At surface

660' FNL & 660" FEL

At proposed prod. zone

Same

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

30 miles SW of Artesia, New Mexico

10. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drilg. unit line, if any)

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

16. NO. OF ACRES IN LEASE

677.60

19. PROPOSED DEPTH

9000'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

3851' GR

22. APPROX. DATE WORK WILL START*

ASAP

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"	54.5#	400'	550 sx - circulated
12 1/4"	8 5/8"	24#	1300'	400 sx - circulated
7 7/8"	5 1/2"	17 & 15.5#	TD	1000 sx as warranted SEE STIPS.

Yates Petroleum Corporation proposes to drill and test the Morrow and intermediate formations. Approximately 400' of surface casing will be set and cement circulated to shut off gravel and cavings. We will run intermediate casing and if commercial, production casing will be run and cemented, will perforate and and stimulate as needed for production.

MUD PROGRAM: FWGEl to 1300'; cut Brine to 5500'; SWGEl/ST/Driscap to TD

BOP PROGRAM: BOP will be installed at the offset and tested daily.

Approval Subject to
General Requirements and
Special Stipulations
Attached

10-1
7-9-93
NO. 9421

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

Landman

5/25/93

TITLE

DATE

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

(ORIG. SGD.) RICHARD L. MANUS

AREA MANAGER

APPROVED BY

DATE

CONDITIONS OF APPROVAL, IF ANY: Location is:

Subject
Like App.
By State

PENDING NEL APPROVAL

CASE # 10742
ORDER # R-9930

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

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

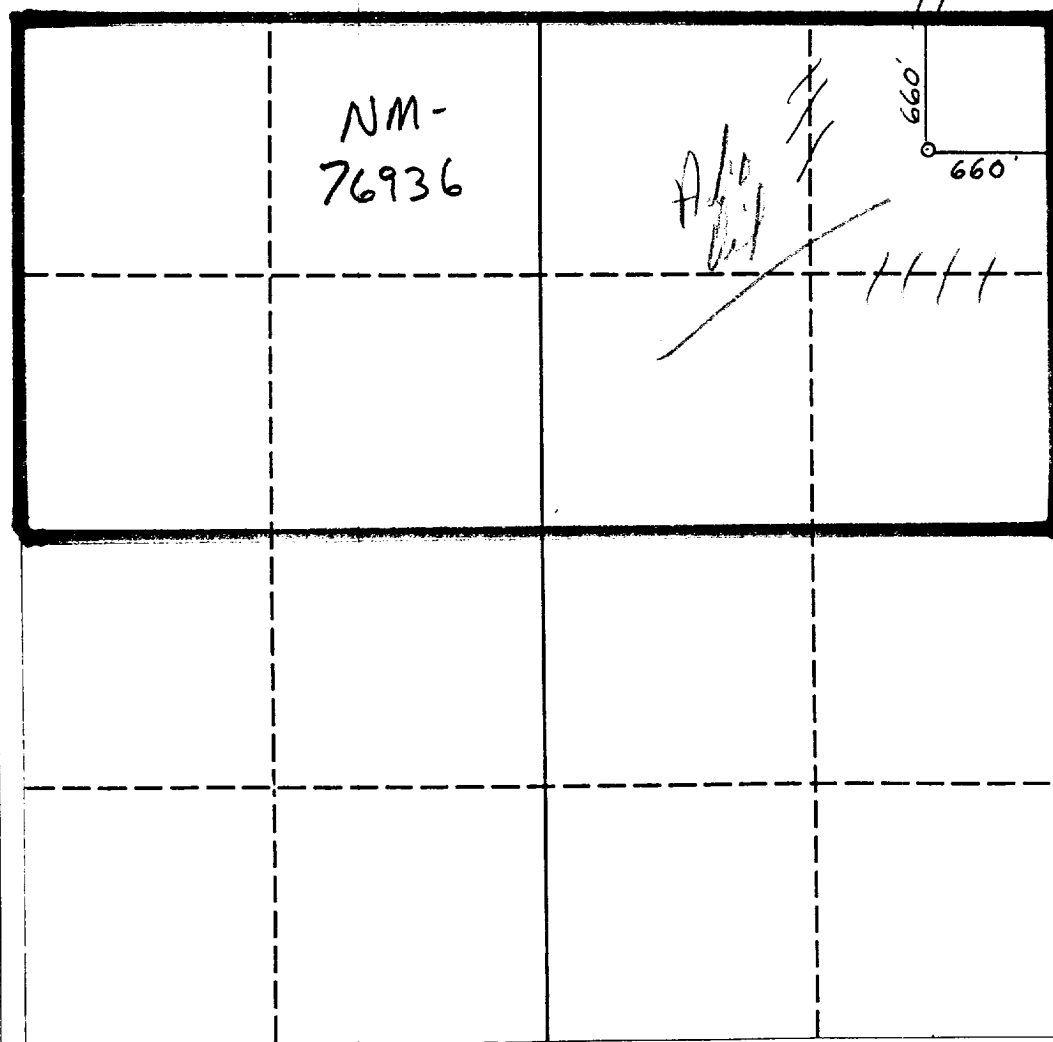
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator YATES PETROLEUM CORPORATION			Lease SUNFLOWER AHW FEDERAL		Well No. 2
Unit Letter A	Section 31	Township 19 SOUTH	Range 24 EAST	NMPM	County EDDY COUNTY, NM
Actual Footage Location of Well: 660 feet from the NORTH line and 660 feet from the EAST line					
Ground level Elev. 3851.	Producing Formation Morrow		Pool Undes. Morrow	Dedicated Acreage: 320 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 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 *Ken Beardump*
Printed Name **Ken Beardump**
Position **land man**
Company **Yates Pet. Corp.**
Date **5-19-93**

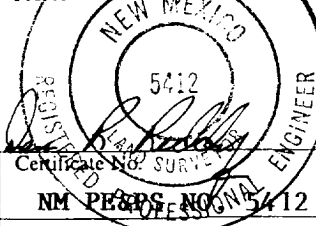
SURVEYOR CERTIFICATION

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

MAY 11 1993

Signature & Seal of Professional Surveyor



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

YATES PETROLEUM CORPORATION

Sunflower "AHW" Federal #2

660' FNL and 660' FEL

Sec. 31-T19S-R24E

Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:

San Andres	384'
Glorieta	1754'
Abo	3743'
Wolfcamp Lime	4923'
Cisco	6335'
Canyon Lime	7275'
Strawn	7902'
Atoka	8359'
Morrow Clastics	8609'
Chester Lime	8835'
TD	9000'

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

Water: Approximately 300'
Oil or Gas: All potential zones

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.
4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Si00</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8	54.50#	J55	8R	ST&C	0-400'	400'
12 1/4"	8 5/8"	24#	J55	8R	ST&C	0-1300'	1300'
7 7/8"	5 1/2"	17#	K55	8R	LT&C	0-1300'	1300'
		15.5#	K55	8R	LT&C	1300-6800'	5500'
		17#	K55	8R	LT&C	6800-8650'	1850'
		17#	N80	8R	LT&C	8650-9000'	350'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

B. CEMENTING PROGRAM:

Surface casing: 150 sx thickset, 10#/sx gilsonite, 1/2#/sx flocele, 3% CaCl₂. Tailed with 400 sx "C" 2% CaCl₂.

Intermediate Casing: 250 sx Haliburton Lite, 10#/sx gilsonite, 1/2#/sx flocele. Tailed with 150 sx "C", 2% CaCl₂.

Production Casing: 1000 sx "H", .6% Halad-9, .3% CFR-3.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1300'	FWGEL	8.3-8.7	30-38	N/C
1300-5500'	Cut Brine	8.9-9.2	29	N/C
5500-TD	SW GEI			
	Starch Drispac	9.0-9.3	34-38	Less than 12

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: 10' samples from surface to TD.

Logging: CNL-LDT TD-csg with GR-CNL on up to surface; DLL with RXO TD-csg; LSS TD to csg.

Coring: As warranted.

DST's: Upper Abo Dolomite; possible Morrow; otherwise as warranted.

7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From:	TO:	Anticipated Max. BHP:	PSI
From:	TO:	Anticipated Max. BHP:	PSI
From:	TO:	Anticipated Max. BHP:	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: Surface & Intermediate Hole.

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: Less than 9.0 #/gal gradient.

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 15 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation
Sunflower "AHW" Federal #2
660' FNL and 660' FEL
Sec. 31-T19S-R24E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 30 miles Southwest of Artesia New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

1. Go south of Artesia on Highway 285 for approximately 15 miles.
2. Turn west on Rock Daisy Rd. (23) for approximately 10.5 miles
3. Turn north on lease road for approximately 4 miles.
4. New road starts here.

2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 1000' in length from the point of origin to the southeast edge of the drilling pad. The road will lie in a(n) North to South direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Some traffic turnout will be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. There are no production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

Dirt contractor will get any construction materials and pay or make any deal for it.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill. Burial on site is not approved.

8. ANCILLARY FACILITIES: P/L on lease going east, 3" steel buried gas pipeline (on plat).

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged.

10. PLANS FOR RESTORATION

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP: Bureau of Land Management, Carlsbad, Resource Area.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE

A. Through A.P.D. Approval:

Ken Beardemphl, Landman
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

B. Through Drilling Operations,
Completions and Production:

Mike Slater, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

14. 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 Yates Petroleum Corporation and its contractors and 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.

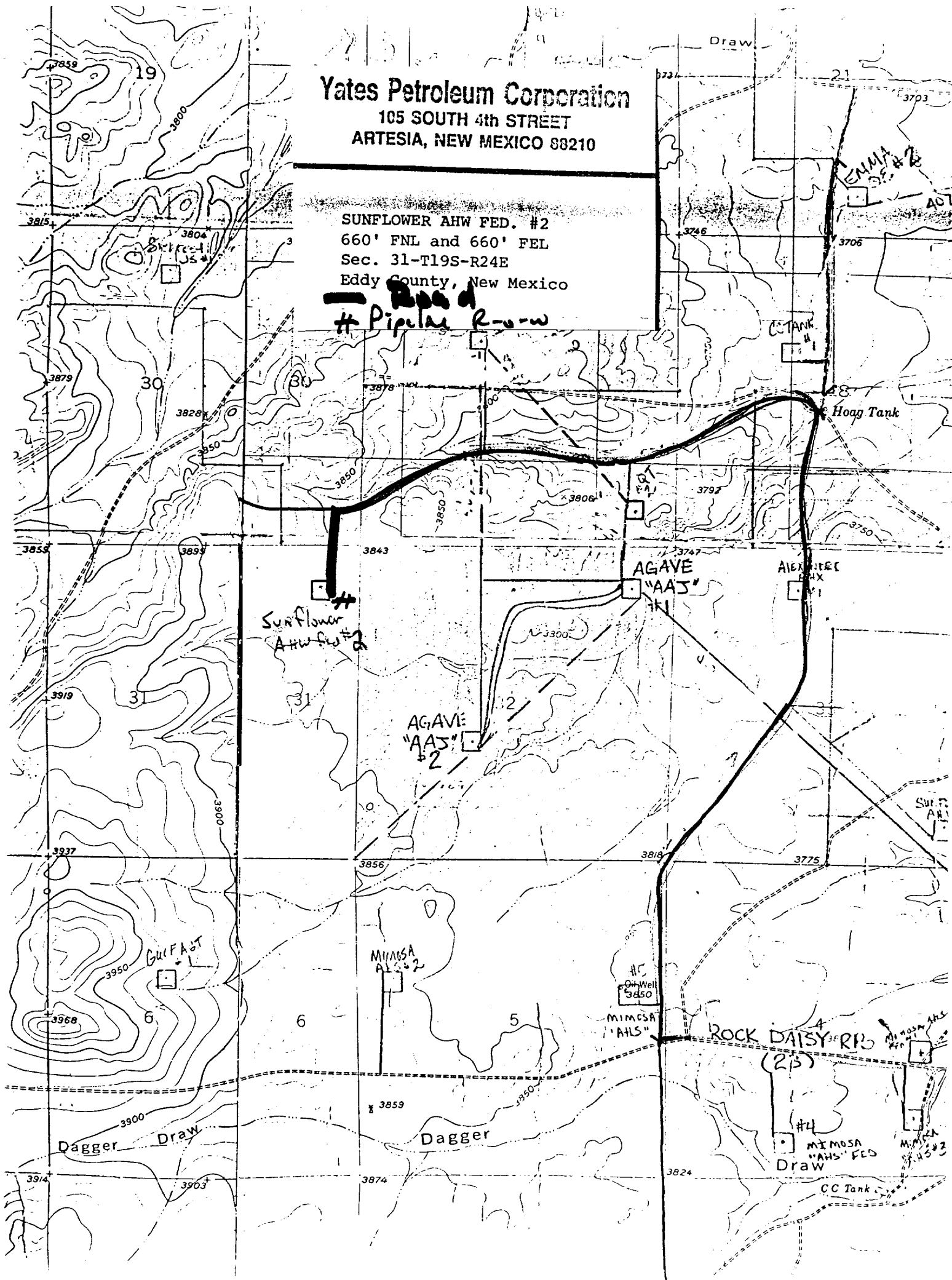
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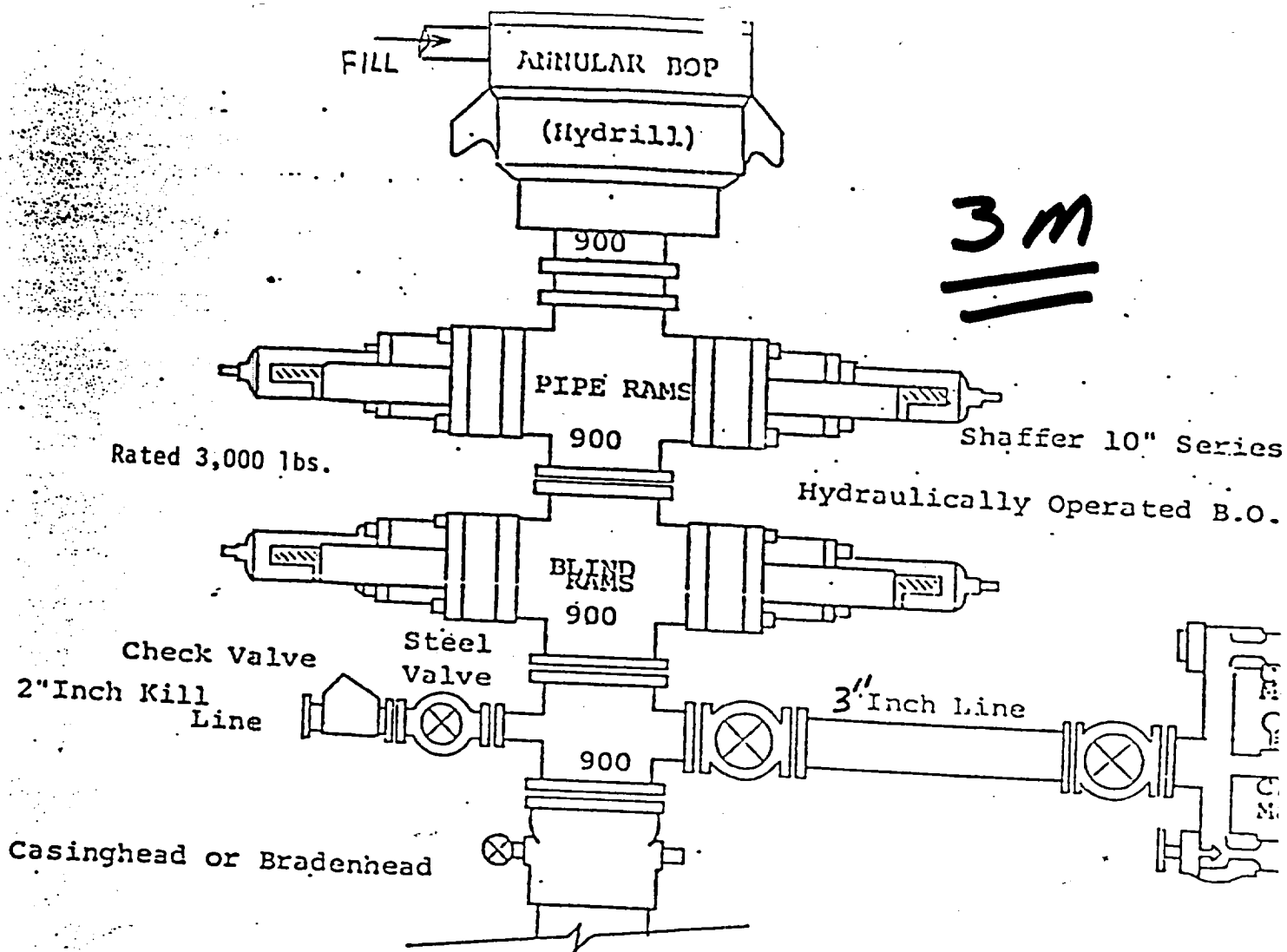

Landman

105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

SUNFLOWER AHW FED. #2
660' FNL and 660' FEL
Sec. 31-T19S-R24E
Eddy County, New Mexico

Pipeline R-u-w





THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1. All preventers to be hydraulically operated with secondary manual control installed prior to drilling out from under casing.
2. Choke outlet to be a minimum of 3" diameter.
3. Kill line to be of all steel construction of 2" minimum diameter.
4. All connections from operating manifolds to preventers to be all steel hole or tube a minimum of one inch in diameter.
5. The available closing pressure shall be at least 15% in excess of the required with sufficient volume to operate the B.O.P.'s.
6. All connections to and from preventer to have a pressure rating equivalent to that of the B.O.P.'s.
7. Inside blowout preventer to be available on rig floor.
8. Operating controls located a safe distance from the rig floor.
9. Hole must be kept filled on trips below intermediate casing.

EXHIBIT
B

YATES PETROLEUM CORPORATION

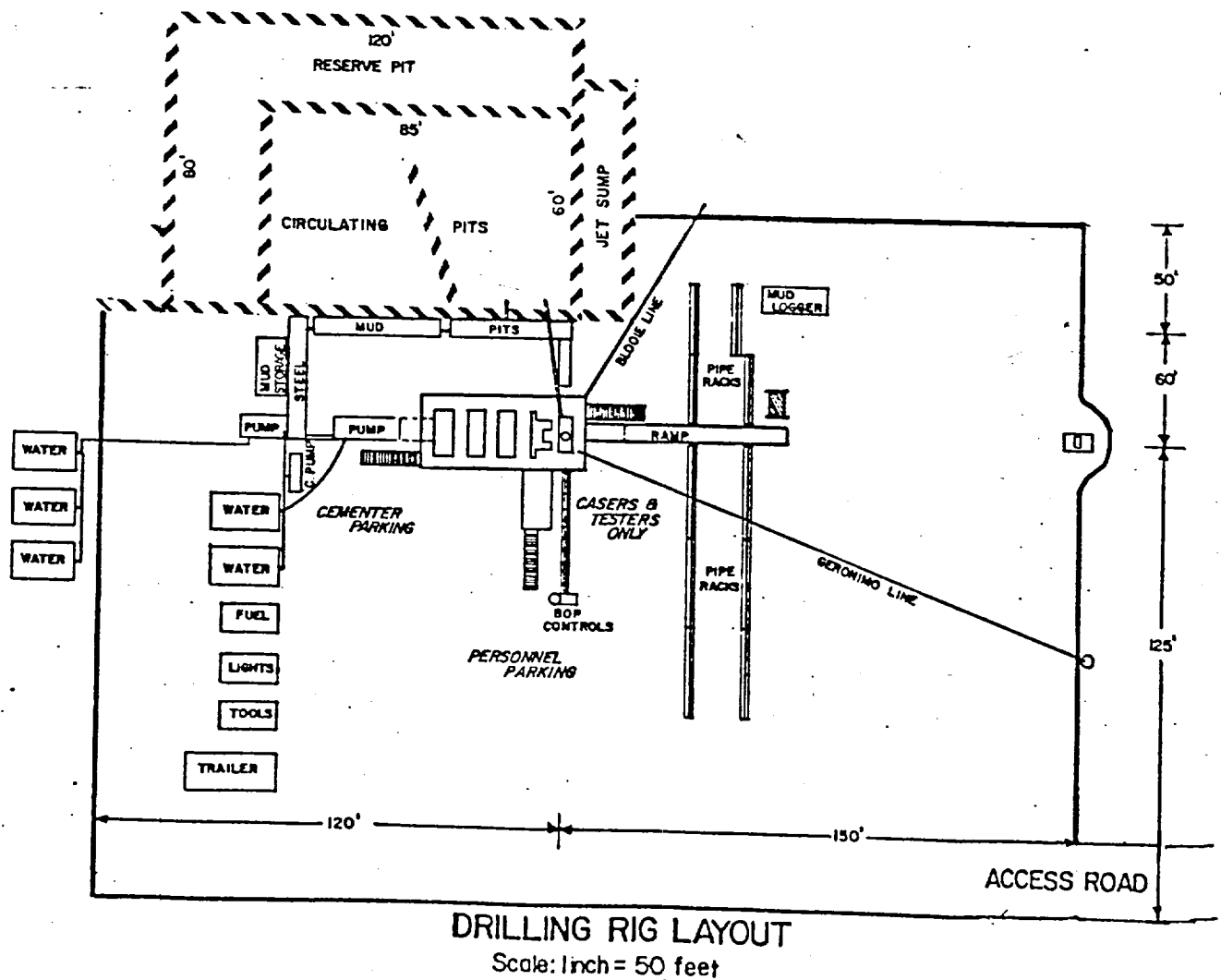
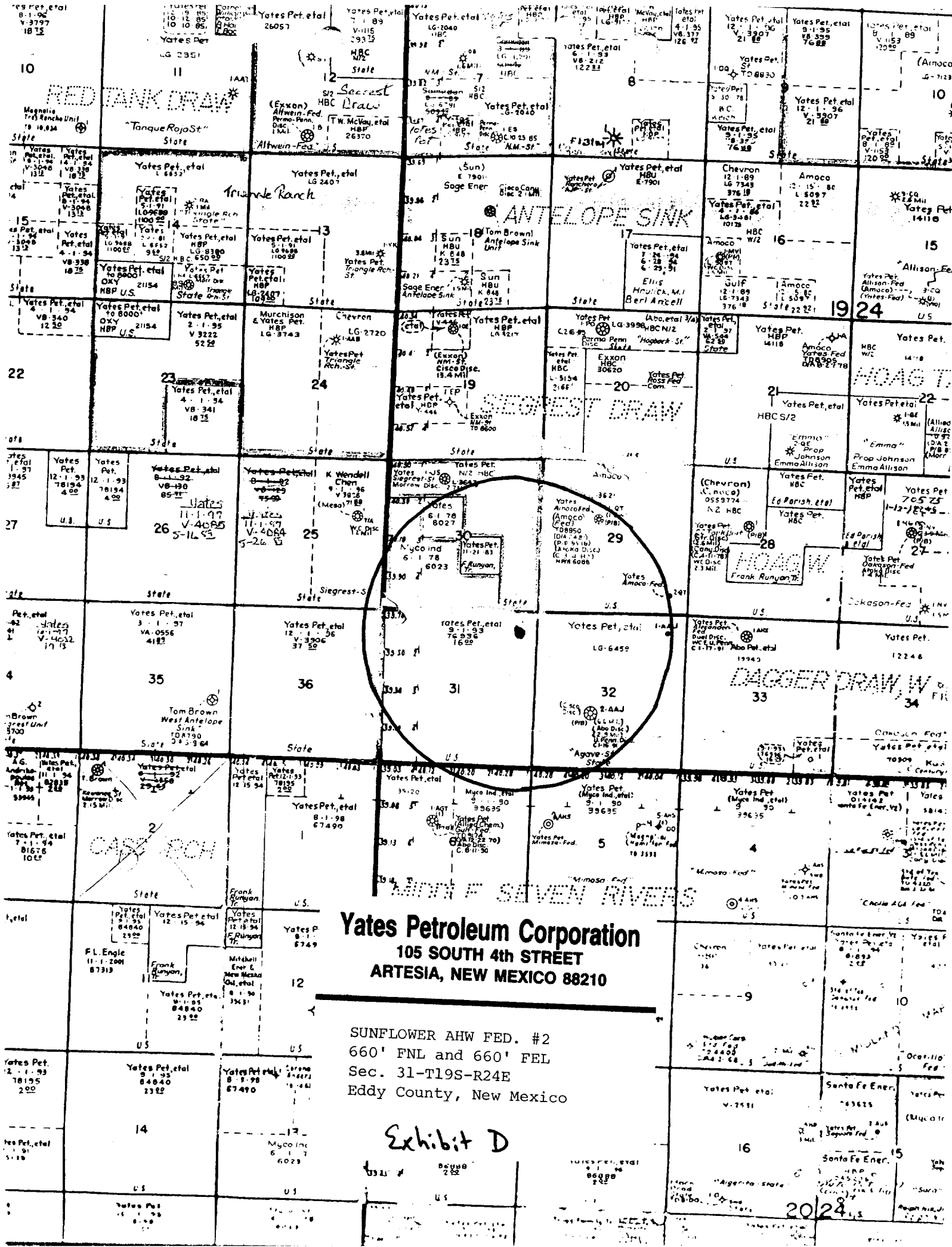


Exhibit C



Yates Petroleum Corporation
105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

SUNFLOWER AHW FED. #2
660' FNL and 660' FEL
Sec. 31-T19S-R24E
Eddy County, New Mexico

Exhibit D

2024

**YATES PETROLEUM CORPORATION
Sunflower "AHW" Federal #2
660' FNL and 660' FEL
Section 31-T19S-R24E
Eddy County, New Mexico**

H2S Drilling Operations Plan

Personnel employed at the rig site shall receive training in H2S detection, safe drilling procedures and contingency plans. H2S safety equipment shall be installed and functional 3 days or 500 feet prior to encountering known or probable H2S zone at 7500' feet.

Submitted with the APD is a well site diagram showing:

- 1) Drilling rig orientation, location of flare pit.
- 2) Prevailing wind direction.
- 3) Location of access road.

Primary briefing area will be established 150' from wellbore and up wind of prevailing wind direction. Secondary briefing area will be established 180 degrees from primary briefing area.

A H2S warning sign will be posted at the entrance of the location. Depending on conditions, a green, yellow, or red flag will be displayed.

Green - Normal conditions

Yellow - Potential danger

Red - Danger H2S present

Wind indicators will be placed on location at strategic, highly visible areas. H2S monitors (a minimum of three) will be positioned on location for best coverage and response. H2S concentrations of 10 ppm will trigger a flashing light and 20 ppm will trigger an audible siren.

H2S breathing equipment will consist of:

- 1) 30 minute "pressure demand" type working unit for each member of rig crew on location.
- 2) 5 minute escape packs for each crew member.
- 3) Trailer with a "cascade air system: to facilitate working in a H2S environment for time period greater than 30 minutes.

Sunflower "AHW" Federal #2
Page 2

Breathing equipment will be stored in weather proof cases or facilities. They will be inspected and maintained weekly.

The mud system will be designed to minimize or eliminate the escape of H₂S at the rig floor. This will be accomplished through the use of proper mud weight, proper pH control of the drilling fluid and the use of H₂S scavengers in the drilling fluid. A mud gas separator will be utilized when H₂S is present in the mud.

Drilling experience has shown that wells in developmental areas, (i.e. Dagger Draw, Livingston Ridge Delaware, and Lusk Delaware) are normally pressured and don't experience either H₂S kicks or loss of returns. Due to these circumstances, we request exceptions to the rule requiring flare line with remote lighter and choke manifold with minimum of one remote choke. This equipment would be provided on exploratory wells or wells with the known potential for H₂S kicks. Additionally, a SO₂ monitor would be positioned near the flare line, and a rotating head utilized.

The drill string, casing, tubing, wellhead, blowout preventers and associated lines and valves will be suitable for anticipated H₂S encounters.

Radio and or mobile telephone communication will be available on site. Mobile telephone communication will be available in company vehicles.

Drill stem testing to be performed with a minimum number of essential people on location. They will be those necessary to safely conduct the test. If H₂S is encountered during a drill stem test, essential personnel will mask up and determine H₂S concentration. The recovery will then be reversed to flare pit. Pulling of test tools will be conducted in a safe manner.