

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

Midwest Oil Corporation

JUL 18 1973

## 3. ADDRESS OF OPERATOR

1500 Wilco Building

Midland, Texas 79701

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

At surface

1980' FNL &amp; 1980' FWL

At proposed prod. zone

Same

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

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

1980'

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

## 16. NO. OF ACRES IN LEASE

## 19. PROPOSED DEPTH

12,000

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

## 20. ROTARY OR CABLE TOOLS

Rotary

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

Gr. 3394'

## 22. APPROX. DATE WORK WILL START\*

July 15, 1973

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
24	20	94	40'	premix
17½	13 3/8	48	400	250 sx
12½	9 5/8	36 & 40	2650	1300 sx
* 8 3/4	7	23 & 26	10800	200 sx
8 3/4	5½	17	12000	150 sx
* 6 1/8	4½	11.6	10700-12000	100 sx

\* optional - A 7" protective csg string is planned if abnormally pressured gas zones are encountered.

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

Bonnie Husband

TITLE

Production Clerk

DATE

6-25-73

(This space for Federal or State office use)

PERMIT NO.

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

APPROVED  
JUL 17 1973  
H. B. BEEKMAN  
DISTRICT ENGINEER  
ACTING DISTRICT ENGINEERTHIS APPROVAL IS RESCINDED IF OPERATIONS  
ARE NOT COMMENCED WITHIN 3 MONTHS.  
EXPIRES  
OCT 17 1973

TITLE

APPROVAL DATE

DATE

Subject to Compliance with  
the attached Well Control  
Requirements dated 6-22-73

\*See Instructions On Reverse Side

Copy to SF

30-015-20903

5. LEASE DESIGNATION AND SERIAL NO.

NM 0528035-A

6. IF INDIAN, ALLOTTEE OR TRIBAL NAME

NM 14195

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Cottonwood Spring Unit

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

20-25S-26E

12. COUNTY OR PARISH

13. STATE

Eddy

N. Mex.

640 320

RECEIVED  
JUN 27 1973  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-4-65

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

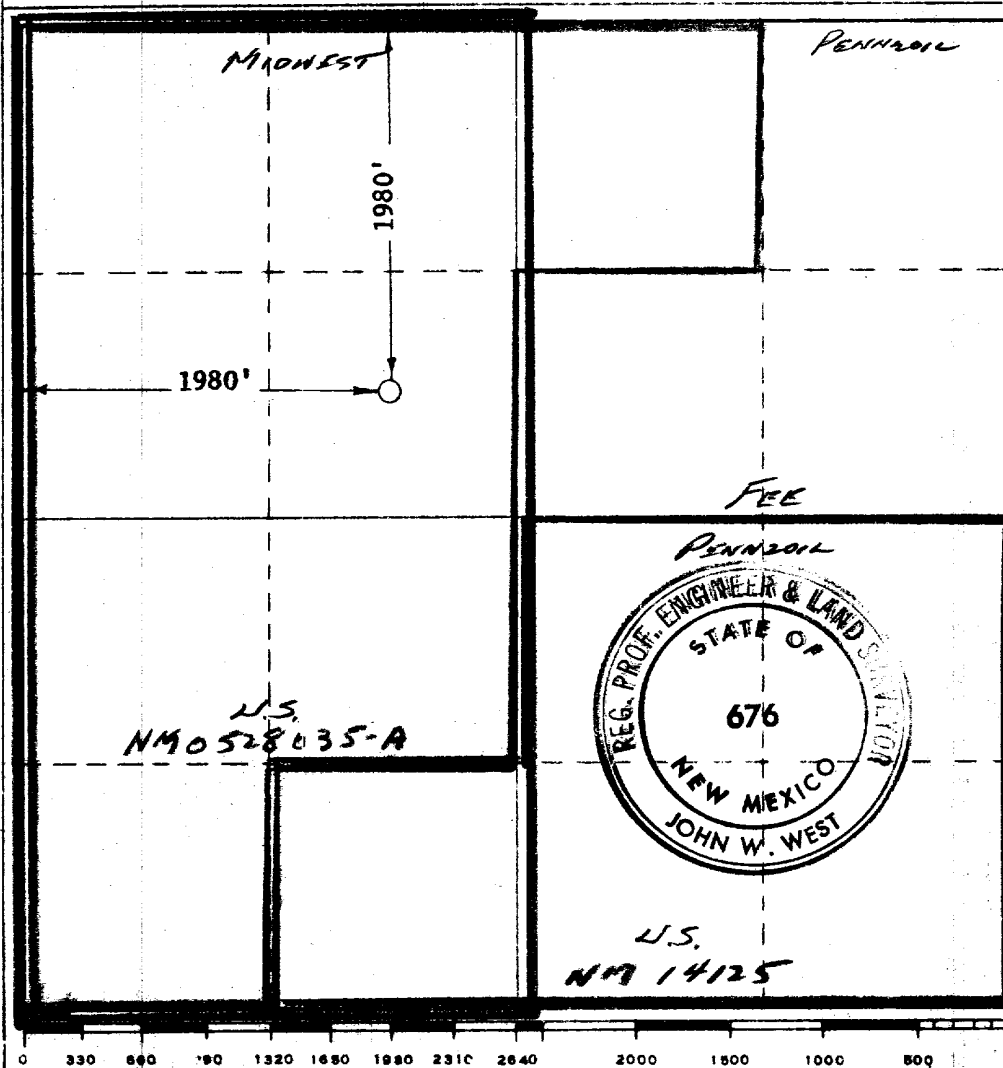
Operator <b>MIDWEST OIL CORPORATION</b>		Lease <b>COTTONWOOD SPRING Unit</b>		Well No. <b>1</b>
Unit Letter <b>F</b>	Section <b>20</b>	Township <b>25 SOUTH</b>	Range <b>26 EAST</b>	County <b>EDDY</b>
Actual Footage Location of Well: <b>1980</b> feet from the <b>NORTH</b> line and <b>1980</b> feet from the <b>WEST</b> line				
Ground Level Elev. <b>3394'</b>	Producing Formation <b>Morrow</b>	Pool <b>Wildcat</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 UNITIZATION

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.

*Bonnie Husband*  
Name

Bonnie Husband

Position

Production Clerk

Company

Midwest Oil Corporation

Date

6-25-73

I hereby certify that the well location shown on this plat was plotted from field notes and 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

JUNE 14, 1973

Registered Professional Engineer and/or Land Surveyor

*John W West*  
Certificate No.

676



# United States Department of the Interior

## GEOLOGICAL SURVEY

P. O. Drawer U  
Artesia, New Mexico 88210

June 22, 1973

### NOTICE

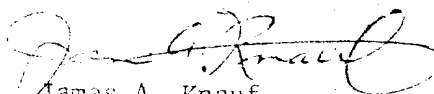
#### DRILLING WELL CONTROL REQUIREMENTS FOR DEEP WELLS DRILLED ON FEDERAL OIL AND GAS LEASES IN THE ARTESIA DISTRICT

The following requirements are established in accordance with 30 CFR 221.24, 221.36, and 221.37. Blow preventer equipment, choke equipment, drilling fluid characteristics, drilling fluid monitors, and the conduct of drilling procedures shall be such as are necessary to prevent the blowout of any well. In addition to all other applicable rules, regulations, and accepted good operating practices, drilling shall be in accordance with the following safety requirements:

1. After setting the casing string and before drilling into formation, the blow preventers and related control equipment shall be pressure tested at working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in writing and a representative to witness the tests and shall be furnished a copy of the pressure test report. In addition, the high pressure type preventer shall be actuated at least once each 24 hours and checked each time the drill pipe is out of the hole.
2. Accumulators shall maintain a pressure capacity reserve at all times to provide for operation of hydraulic preventers.
3. A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.
4. Blowout prevention drills shall be actuated as necessary to insure that each drilling crew is properly trained to carry out emergency duties.
5. Mud level monitors shall be used with floor indicators and visual and audio alarms shall be maintained and operating before

drilling into the Welpcamp  
and used until production casing is run and cemented. Monitoring  
equipment shall consist of the following:

- (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.
7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

  
James A. Knauf  
District Engineer

Lease No. NM 0528035-A  
Well No. 1 Cottonwood Spring Unit  
Drillsite 1980/NW 20-25-26  
Depth 12000 MORROW  
Approved 7-17-73

## SURFACE DEVELOPMENT PLAN

Midwest Oil Corporation  
Cottonwood Spring Unit No. 1  
Sec. 20, T25S, R26E  
Eddy County, New Mexico

1. Existing roads - See attached map.
2. Planned access roads - See attached plat.
3. Location of wells - No existing wells within specified two-mile radius.
4. Lateral roads to well locations - See attached map.
5. Tank batteries and flow lines will be located on well pad.
6. Water supply - Water will be supplied by trucks.
7. Waste disposal - All metal, wood, paper or other waste material will be collected and disposed of in a waste collection pit located on the northeast edge of the well pad. No waste will be allowed on the surrounding surface. The waste pit will be covered when the drilling and completion operations have been finalized.
8. Produced brine water will be collected in a metal tank and trucked to the nearest available salt water disposal facility.
9. Produced gas will be sold through the best available market in this area.
10. Location layout - See attached plat.
11. Restoration of surface - Reserve pits will be levelled and smoothed after drying. The area will be cleaned of all waste and restored as nearly as possible to its original contour.
12. Blowout preventer equipment as shown on the attached plat will be installed when surface casing is set.

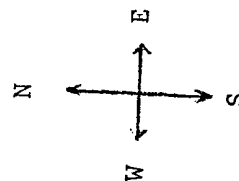
Complete and detailed mud program is attached.

*Bonnie Husband*  
Bonnie Husband

Production Clerk

June 25, 1973

RECEIVED  
JUN 27 1973  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO



20

Location

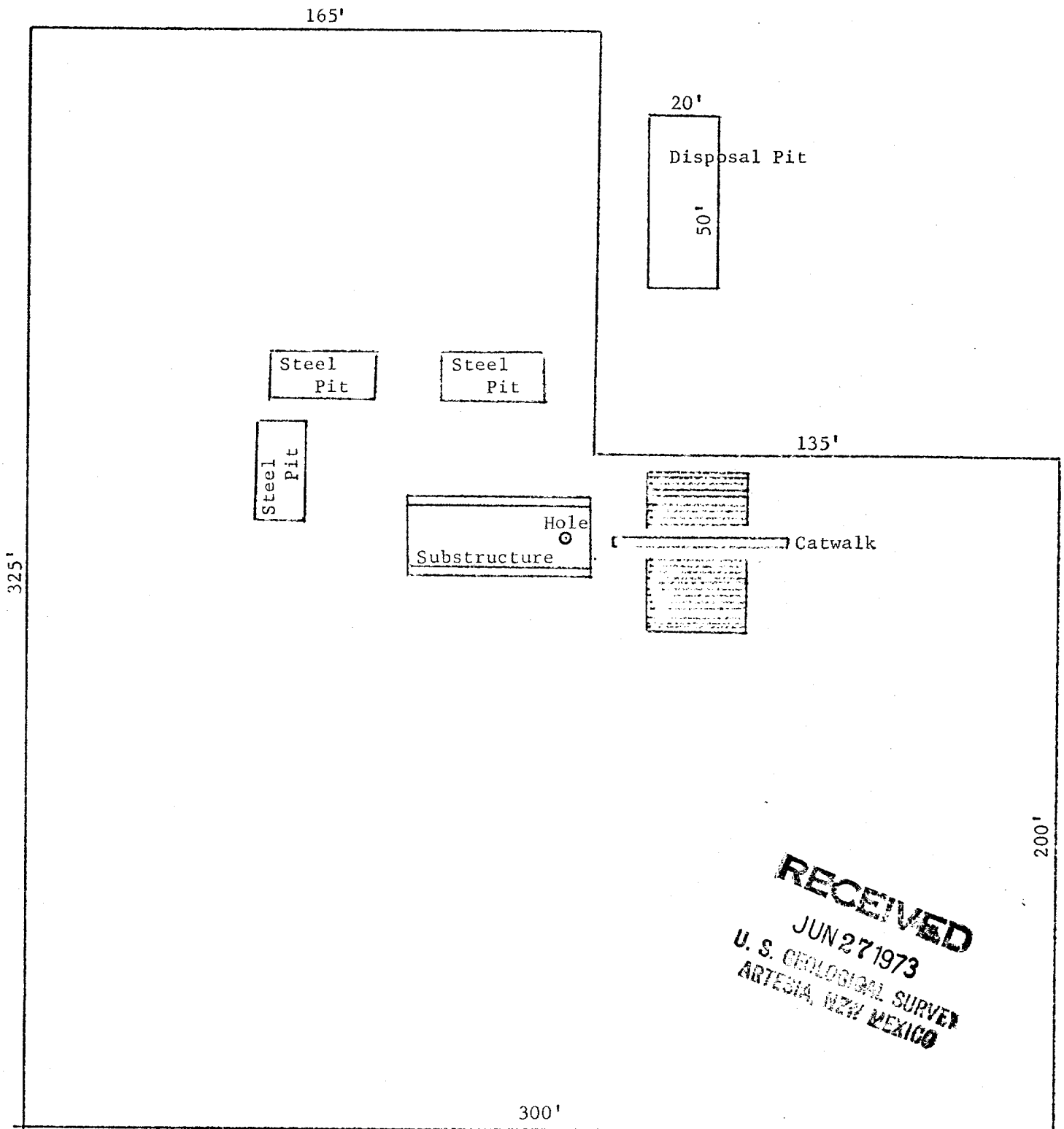
Planned Access Road  
4000'

19

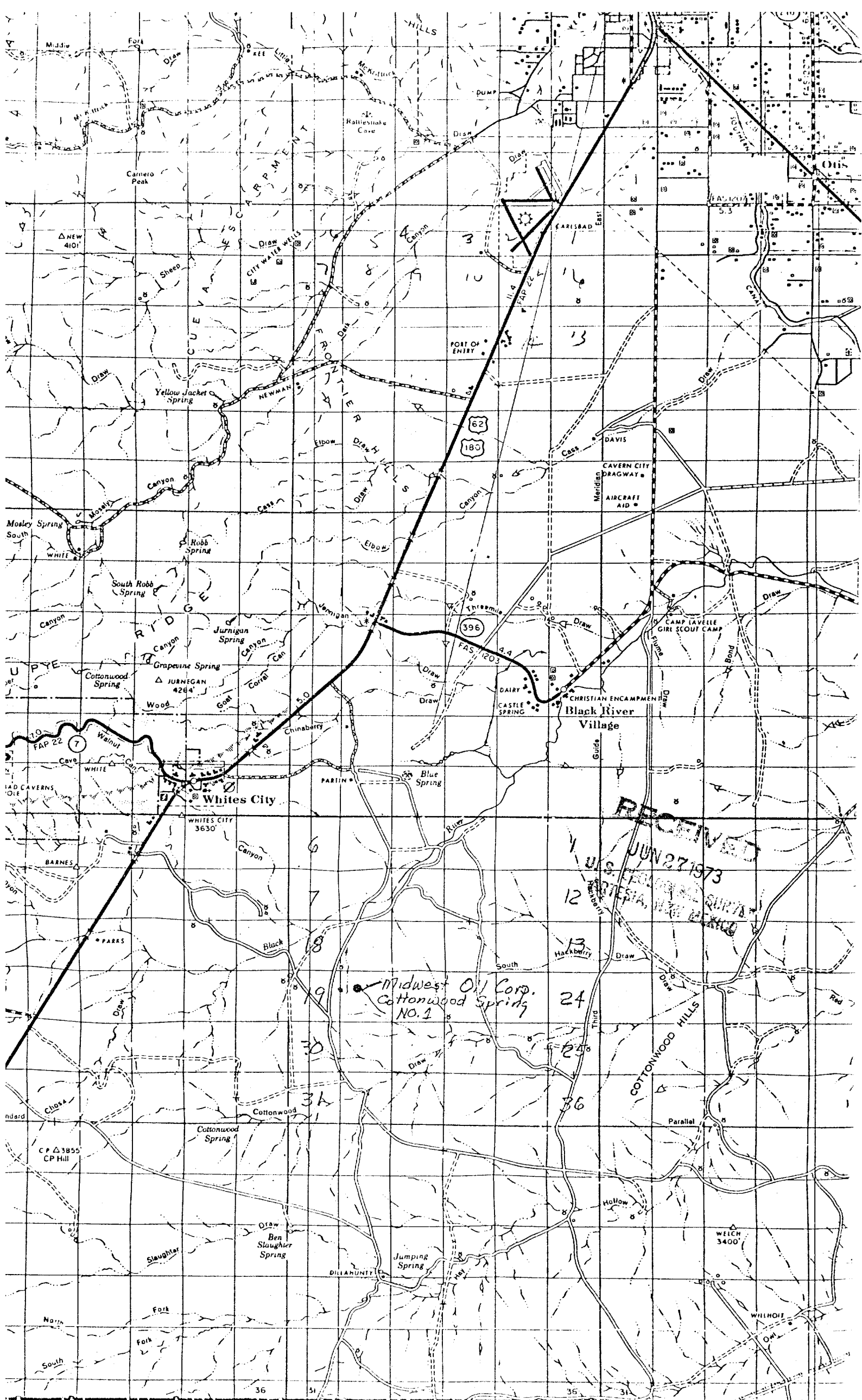
Existing County Road

**RECEIVED**  
JUN 27 1973  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

Midwest Oil Corporation  
#1 Cottonwood Spring  
1980' FN & 1980' FWL  
Sec. 20, T25S, R26E  
Eddy County, New Mexico



**RECEIVED**  
JUN 27 1973  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

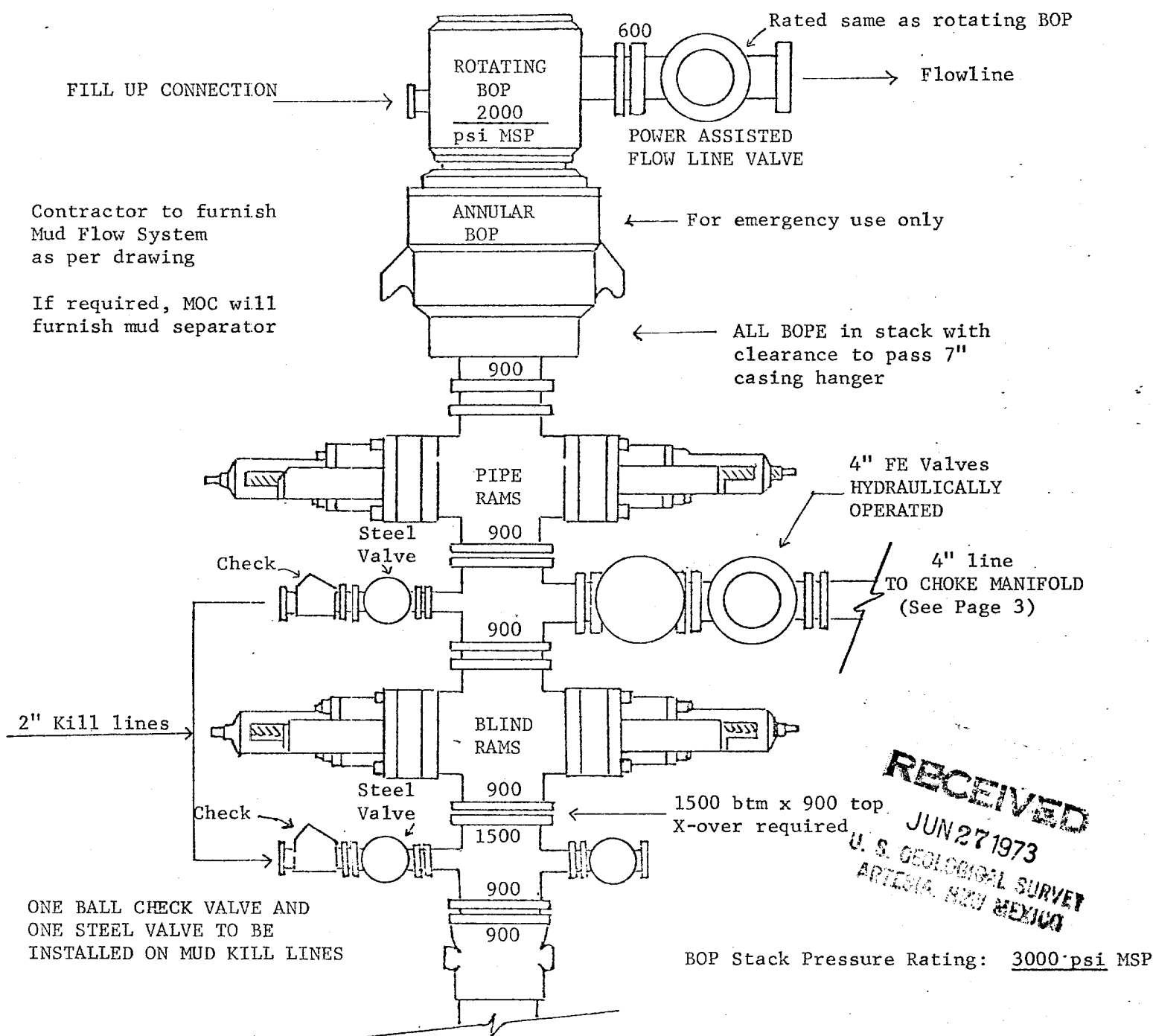




MUD PROGRAM - #1 COTTONWOOD SPRING UNIT

<u>Approx Interval</u>	<u>Type Mud</u>	<u>Wt.</u>	<u>Vis</u>	<u>W.L.</u>	<u>Other</u>
0 - 400	FW Spud				
400 - 2650	Brine	10.0	N.C.		
2650 - 9400	Fresh	8.4	N.C.		
9400 - 10,400	Brine	10.0	30 - 33		
10,400 - TD	Polymer	9.3 - 10.3	30 - 36	5	zero solid

RECEIVED  
JUN 27 1973  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO



**RECEIVED**  
JUN 27 1973  
U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1. ALL PREVENTERS TO BE HYDRAULICALLY OPERATED WITH SECONDARY MANUAL CONTROLS INSTALLED PRIOR TO DRILLING OUT FROM UNDER CASING.
2. CHOKE OUTLET TO BE A MINIMUM OF 4" DIAMETER.
3. KILL LINE TO BE OF ALL STEEL CONSTRUCTION OF 2" MINIMUM DIAMETER.
4. OPENING BETWEEN RAMS TO BE FLANGED, STUDDED, OR CLAMPED.
5. ALL CONNECTIONS FROM OPERATING MANIFOLDS TO PREVENTERS TO BE ALL STEEL HOSE OR TUBE A MINIMUM OF ONE INCH IN DIAMETER.
6. THE AVAILABLE CLOSING PRESSURE SHALL BE AT LEAST 15% IN EXCESS OF THAT REQUIRED WITH SUFFICIENT VOLUME TO OPERATE THE B.O.P.'s.
7. ALL CONNECTIONS TO AND FROM PREVENTER TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE B.O.P.'s.
8. UPPER & LOWER KELLY COCK TO BE INSTALLED ON KELLY. USE MUD SCREEN IN LOWER VALVE.
9. INSIDE BLOWOUT PREVENTER TO BE AVAILABLE ON RIG FLOOR.
10. DUAL OPERATING CONTROLS - ONE LOCATED BY DRILLERS POSITION AND THE OTHER LOCATED A SAFE DISTANCE FROM THE RIG FLOOR.
11. KILL LINE FOR EMERGENCY USE ONLY - NOT TO BE USED FOR FILL UP.
12. STABBING VALVES FOR ALL CONNECTIONS IN DRILL STRING TO BE LOCATED ON RIG FLOOR.
13. HOLE MUST BE KEPT FILLED ON TRIPS BELOW INTERMEDIATE CASING. OPERATOR NOT RESPONSIBLE FOR BLOWOUTS RESULTING FROM NOT KEEPING HOLE FULL.
14. DRILLPIPE FLOAT MUST BE INSTALLED AND USED BELOW ZONE OF FIRST GAS INTRUSION, OR 10,000', WHICHEVER COMES FIRST