

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

C & K Petroleum, Inc.

3. ADDRESS OF OPERATOR

607 Midland National Bank Bldg., Midland, Texas 79701

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

At surface 1980' FN and 660' FE Lines, Sec. 29, T-22-S, R-26-E
Eddy County, New Mexico
At proposed prod. zone

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

4 miles Southwest, Carlsbad, N.M.

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED

320

18. DISTANCE FROM PROPOSED LOCATION*

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

Initial Well

19. PROPOSED DEPTH

12,000'

20. ROTARY OR CABLE TOOLS

Rotary

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

22. APPROX. DATE WORK WILL START*

Upon Approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
	20'	Conductor Pipe	30'	4 yd. Remix
17"	13-3/8"	68#	1300'	1200 Sx. to be circ.
12-1/4"	9-5/8"	36# & 40#	5400'	1800 Sx. to be circ.
7-7/8"	5-1/2"	17# & 20#	12000'	400 Sx.

Proposed Program: We will drill well with a spudder to a depth to adequately test the Captain Reef. Estimated depth 500'. Operations will probably be suspended for a short time at this point. We will then replace the spudder with a Rotary Rig and proceed to drill well to 12,000' or to a depth to adequately test the Morrow formation. A detailed mud program, blowout preventer sketch and location plats are attached. The blowout preventer equipment will be Yellow Jacketed before drilling out of the Permian. In addition the blowout equipment will be tested weekly.

NOTE: This amended application is to replace our original application dated Sept. 11, 1974.

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

TITLE Administrative Supervisor

DATE 9-19-74

(This space for Federal or State office use)

SUBJECT TO ATTACHED DEEP WELL CONTROL

REQUIREMENTS DATED JUN 22 1973

APPROVAL DATE

DATE

APPROVED

APPROVED BY 1974

COMMISSIONER OF GEOSCIENCES, IF ANY:

H. L. BEEKHOF

ACTING DISTRICT ENGINEER

THIS APPROVAL IS
ARE NOT COMMENCED WITHIN 3 MONTHS.

DEC 24 1974

*See Instructions On Reverse Side

DECLARED WATER BASIN

Casing must be circulated

NOTIFY US AT THE TIME TO
WITNESS CEMENTING THE CASING

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION AT

Form 10-1
Supersedes 10-128
1-1-74

All distances must be from the outer boundaries of the Section

C & K Petroleum, Inc.		West Airport Fed. Com.		1
Section H	Range 29	Tract 22 South	Tract 26 East	County Eddy
Year 1980	North	660	East	
3688.8'	Morrow	Wildcat	320	

- 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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes" type of consolidation *Will be communitized or unitized if productive.

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) See reverse side of form.

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.

Tract #2 NM-18824 C & K Pet., Inc.	Tract #3 Fee Lands Hanagan & Hanagan 1980'
	
Tract #1 NM-0554955 C & K Petroleum, Inc.	660'
Tract #3 Fee Lands Hanagan & Hanagan	

CERTIFICATION

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

D. E. Cooper

Administrative Supervisor

C & K Petroleum, Inc.

September 13, 1974

I hereby certify that the well location shown on this plat was plotted from field notes and actual surveys made by me or under my supervision and the same is true and correct to the best of my knowledge and belief.

9-12-1974

John W. West

576

○ Tract #1 - 37.50%
NM 0554955 - 120 ac. - SE/4 NE/4 & N/2 SE/4, Sec. 29, T-22-S, R-26-E, Eddy Co., N.M.
WI - 100% C & K Petroleum, Inc.
RI - Federal Lands

○ Tract #2 - 25.00%
NM 18824 - 80 ac. - W/2 NE/4, Sec. 29, T-22-S, R-26-E, Eddy Co., New Mexico
WI - C & K Petroleum, Inc.
RI - Federal Lands

● Tract #3 - 37.50%
R.I. Floyd Fee Land - 120 ac., NE/4 NE/4 & S/2 SE/4, Sec. 29, T-22-S, R-26-E,
Eddy Co., New Mexico
WI - Hanagan & Hanagan
RI - R. I. Floyd



DRILLING FLUID SERVICES

OILFIELD PRODUCTS DIVISION
Dresser Industries, Inc.

SUGGESTED MUD PROGRAM

Mud Program

Mr. G. C. Tompson
C & K Petroleum, Incorporated
607 Midland National Bank Building
Midland, Texas 79701

Dear Mr. Tompson:

The following is a suggested drilling fluid and casing program with estimated mud cost for your well to be drilled in 22S-26E, Eddy County, New Mexico.

CONDUCTOR: 40' of 20"

Rathole machine.

SURFACE: 400' of 13 3/8"

Suggest drilling surface hole with air (dusting), with possibility of mist drilling part of surface hole.

NOTE: Water intrusion can be expected at any depth.

COMMENTS:

1. Suggest mixing 200 barrels of 70 sec/1000 cc viscosity consisting of Magcogel and Lime and spot in bottom of surface hole prior to running casing to insure a good cement bond around bottom of surface casing.

INTERMEDIATE: 5,400' of 9 5/8"

Suggest drilling out from under surface with air (dusting), with the possibility of mist drilling the major portion of intermediate hole.

Water intrusion can be expected at any depth.

COMMENTS:

1. Suggest mixing 300 barrels of 50 to 60 sec/1000 cc viscosity consisting of Magcogel and Soda Ash and spot in bottom portion of intermediate hole prior to running casing to insure a good cement bond around bottom of casing.

2. There is a possibility you may encounter a large volume of water that will deem mist drilling impractical.

In the event a large volume of water is encountered, suggest loading hole with fresh water installing jet subs in the drilling string and aerate drilling fluid to casing point.

PRODUCTION: 12,000' of 5 1/2"

Suggest drilling out from under intermediate with air (dusting) with the possibility of mist drilling.

This type drilling fluid should be sufficient to drill to 8,800'.

COMMENT:

1. In the event water intrusion or hole conditions deem dust or mist drilling impractical, suggest loading hole with fresh water, install jet subs in drilling string and aerate drilling fluid to 8,800'.

At 8,800' suggest loading hole with brine water and circulating hole, checking for seepage or loss.

If no loss of drilling fluid occurs, suggest reducing hole size and drill to 10,500' with 10.0 lbs/gal. brine water, using Lime for pH control (10.0 to 11.0 pH).

At 10,500' suggest taking a water loss control of the drilling fluid with My-Lo-Jel. Suggest the following drilling fluid characteristics:

Weight:	10.0 to 10.2 lbs/gal.
Viscosity:	28 to 30 sec/1000 cc
Water Loss:	15.0 cc or less

This type drilling fluid should be sufficient to drill to 12,000', with exception of weight and viscosity which may need altering as hole conditions dictate.

In the event a seepage or loss of drilling fluid occurs after loading hole with the 10.0 lbs/gal. brine water system at 8,800', suggest running 7 5/8" casing at 8,800', then drill out below 7 5/8" casing with 10.0 lbs/gal. brine water using Lime for pH control (10.0 to 11.0 pH).

At 10,500' suggest taking water loss control of the drilling fluid with My-Lo-Jel.

Suggest the following drilling fluid characteristics:

Weight:	10.0 to 10.2 lbs/gal.
Viscosity:	28 to 30 sec/1000 cc
Water Loss:	15.0 cc or less

This type drilling fluid should be sufficient to drill to 12,000' with exception of weight and viscosity which may need altering as hole conditions dictate.

COMMENTS:

1. There is a possibility you may encounter high pressure gas in the Strawn-Morrow Section that will require a drilling fluid weight in excess of 10.0 lbs/gal. to control.

In the event high pressure gas is encountered, suggest raising weight of drilling fluid with Soda Ash to 10.2 - 10.5 lbs/gal.

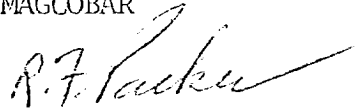
2. There is a possibility you may encounter high pressure gas in the Strawn-Morrow Section that will require a drilling fluid weight in excess of 10.5 lbs/gal. to control.

In this event suggest reducing water loss of drilling fluid to 1.0 cc or less with My-Lo-Jel and raise weight of drilling fluid with Magcobar or displace the brine water system with a premixed fresh water Lignosulfonate weighted system.

3. The proper use of drilling head equipment, Swaco's separator, degasser, adjustable chokes, etc. is very important from 10,000' to total depth. All of this equipment is necessary in the drilling of this well.
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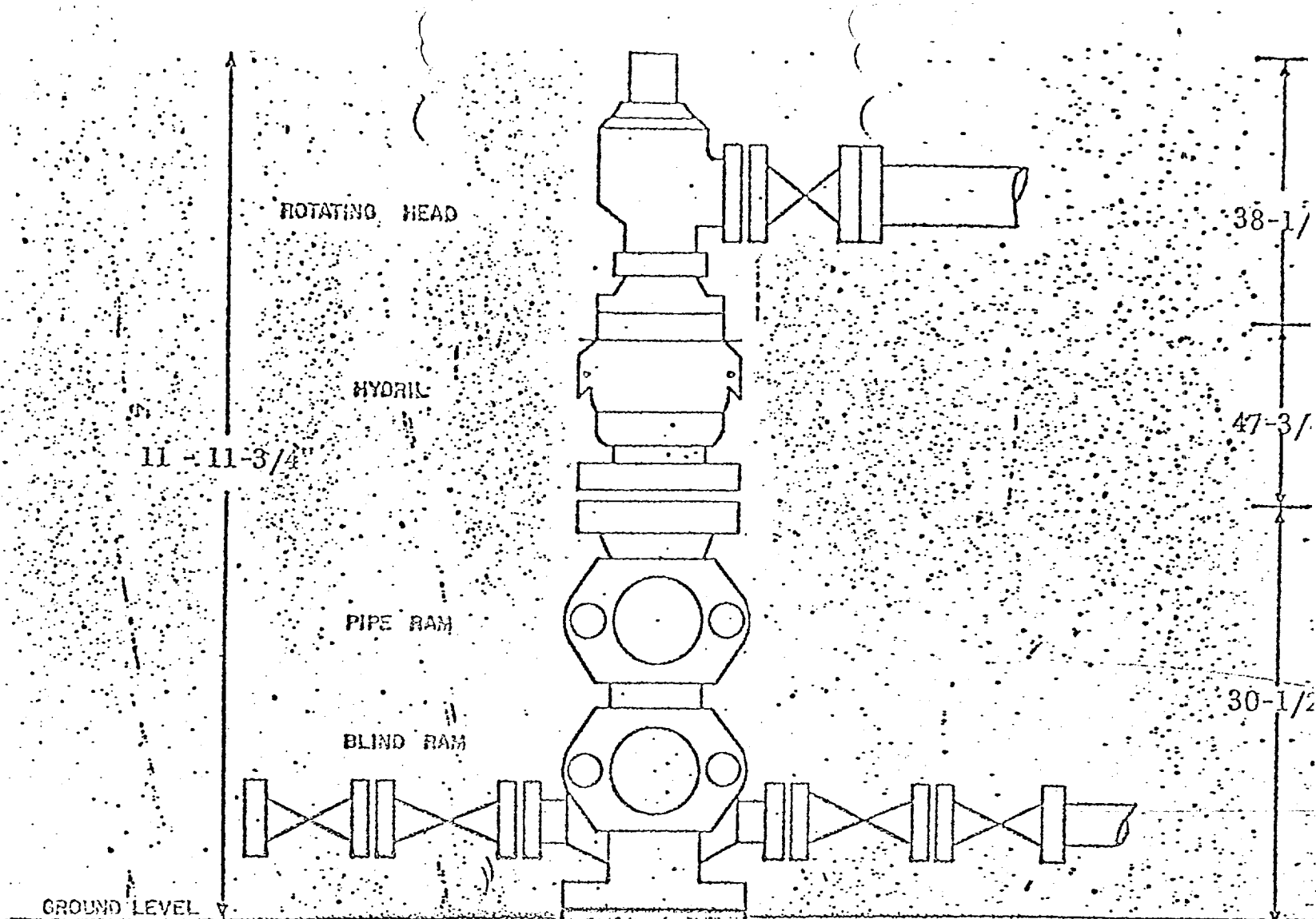
Yours very truly,

MAGCOBAR



R. F. Parker
Regional Engineer

RFP:jb



Contractor furnish:

- 1 - Mud Cross 27" high, 10" x 5000#^{WP} w/2" and 4" x 5000#^{WP} side outlets
- 1 - Double Ram Type Space Saver - 10" x 5000#
- 1 - Hydril - 10" x 5000#^{WP}

Operator furnish:

Rotating Head