

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

Koch Industries Inc.

3. ADDRESS OF OPERATOR

P.O. Box 2256, Wichita, Kansas 67201

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

At surface

1030' FSL & 870' FEL

At proposed prod. zone

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

Appr. 20 miles NE of Bloomfield, N.M.

15. DISTANCE FROM PROPOSED*

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

870'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320.78

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.Appr. 3700'
east & north

19. PROPOSED DEPTH

6100'

20. ROTARY OR CABLE TOOLS

Rotary

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

6670' GR

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4"	10-3/4"	40.5#	200'	250 sx
8-3/4"	7"	20#	3800'	500 sx
6-1/4"	4-1/2"	10.5#	6100'	275 sx

- Set new 10-3/4" 40.5# K-55 ST&C csg @ 200'. Press. test csg to 1000#. Cmt w/enough cmt to circulate it to the surface. WOC 24 hours.
 - Drill w/wtr & native mud to appr 1800'. Mud up w/Gel-Benex type mud & drill thru the Pictured Cliffs formation (3500-3700'). Set 7" 20# N-80 ST&C csg (new or tested to 5000#) @ 3800'. Cmt w/enough cmt to cover the Pictured Cliffs formation. WOC 24 hrs. Pressure test csg & BOP's to 3000# before drilling out.
 - 3" LWP Shaeffer double pipe & blind rams BOP's will be used. Check BOP's each tour & blind rams each trip.
 - Drill 6-1/4" hole to TD. Set & cmt 4-1/2" 10.5# H-40 new csg to TD w/BOT liner hanger, cmt w/enough cmt to circulate out top of liner. WOC 24 hrs.
 - Well head equipment will consist of 2000# WP Brewster equipment for 10-3/4" surface & 7" intermediate casing.
- Over

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 Asst. Operations Manager DATE 10-5-77

(This space for Federal or State office use)

PERMIT NO.

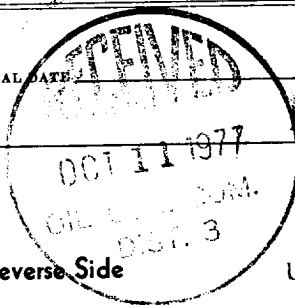
APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



RECEIVED

OCT 7 1977

U.S. GEOLOGICAL SURVEY

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

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6. Mud program will be as follows:

0-200'	Gel-lime slurry
200-1800'	Water & Benex
1800-3800'	Gel-Spersene Mud
3800- TD	Drill w/gas
7. Anticipated BHP @ TD max. of 2000#. No abnormal pressures anticipated.
8. Auxillary & BOP equipment on rig as follows:
 - A. Double ram BOP
 - B. Kelly cocks (if required)
 - C. Rotating drilling head
 - D. Kill valve on rig floor (if required)
9. Complete well by swabbing csg dry. Perf Mesa Verde w/l HPF & frac w/gelled KCl water & sand.

Development Plan for Surface Use
GARDNER #4-A

1. Existing Roads: (Exhibit "A")
Equipment and personnel will utilize U.S. Highway 550 approx. 12 miles west of the location. The existing exit from the highway will be used.
2. Planned Access Roads: (Exhibit "A")
Location is near an existing road with approximately 1/4 mile of new road needed.
3. Location of Existing Wells:
The proposed well is approximately three-quarter miles east and north of an existing well.
4. Location of Tank Battery and Flow Lines:
The tank battery will be built right on the drilling location near the proposed well. No additional land will be damaged.
5. Location and Type of Water Supply:
The source water to be used in the drilling operation will be from the irrigation ditch on Highway 550 appr. 12 miles west of the proposed location. Water will be hauled in trucks.
6. Source of Construction Materials:
All construction materials for this location are to be borrowed material accumulated during construction of the location site and access road. No additional materials are anticipated at this time.
7. Methods of Handling Waste Disposal:
The drilling contractor will furnish a metal toilet. Cuttings, metal, wire, etc. that will not burn will either be buried or hauled off the location.
8. Ancillary Facilities:
There are no planned ancillary facilities at this time.
9. Well Site Layout: (Exhibit "B")
Will spot the small mobile rig in the most convenient manner on a compact drilling pad. No particular terrain or drainage problem is anticipated.
10. Plans for Restoration of the Surface:
A minimum of the area will be disturbed to build the location. Upon completion of drilling, the area will be leveled and the pits either fenced or filled as soon as the rig is moved. All areas not needed in producing operations will be seeded with a mixture of five pounds crested wheat grass, five pounds intermediate wheat grass and three pounds nomad alfalfa to each acre. The planting to be done when conditions are favorable.
11. Other Information:
The location is on a mesa top in rolling broken terrain of sandy, gravelly soil with some sandstone outcroppings. The area vegetation consists of: pinon, juniper, Gambel's oak, mountain mahogany, sage brush, antelope bitterbrush, prickly pear cactus and yucca.
12. Lessee's or Operator's Representative:

Delvin Echard
3605 North Dustin Street
Farmington, New Mexico 87401
Mobile Phone (505) 325-1549
Home Phone (505) 325-0598

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 _____ our contractor

_____ and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

October 5, 1977

Date



Vernon G. Lowe

Assistant Operations Manager