

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

Collins & Ware Inc.

3. ADDRESS OF OPERATOR

600 W. Illinois, Ste. 701 Midland, TX 79701

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

At surface

330' FWL & 1980' FSL of Section 31 unit L

At proposed prod. zone

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

28 Miles East of Carlsbad, NM

15. DISTANCE FROM PROPOSED\*

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

330'

16. NO. OF ACRES IN LEASE

120±

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.

1650'

19. PROPOSED DEPTH

8700'

20. ROTARY OR CABLE TOOLS

Rotary

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

3612.5 GR

Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START\*

Upon Approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

R-111-P Potash Secretary's Potash

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48# - 61#	800'	Sufficient to Circulate
12 1/4"	8 5/8"	24# - 32#	4500'	Sufficient to Circulate
7 7/8"	5 1/2"	15.5#- 20#	8700'	Sufficient to tie with Intermediate

After setting production casing, drilling rig will be replaced with completion rig. Pay zone will be perforated and stimulated as necessary.

See attached for: Supplemental drilling data  
BOP sketch  
Surface use and operations plan

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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

*G. Thane Akins*  
G. Thane Akins

TITLE

Agent

DATE

9/13/91

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

10-18-91

CONDITIONS OF APPROVAL, IF ANY:

\*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.

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SEP 30 8 43 AM '91  
CARTER  
AREA  
OFFICE

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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

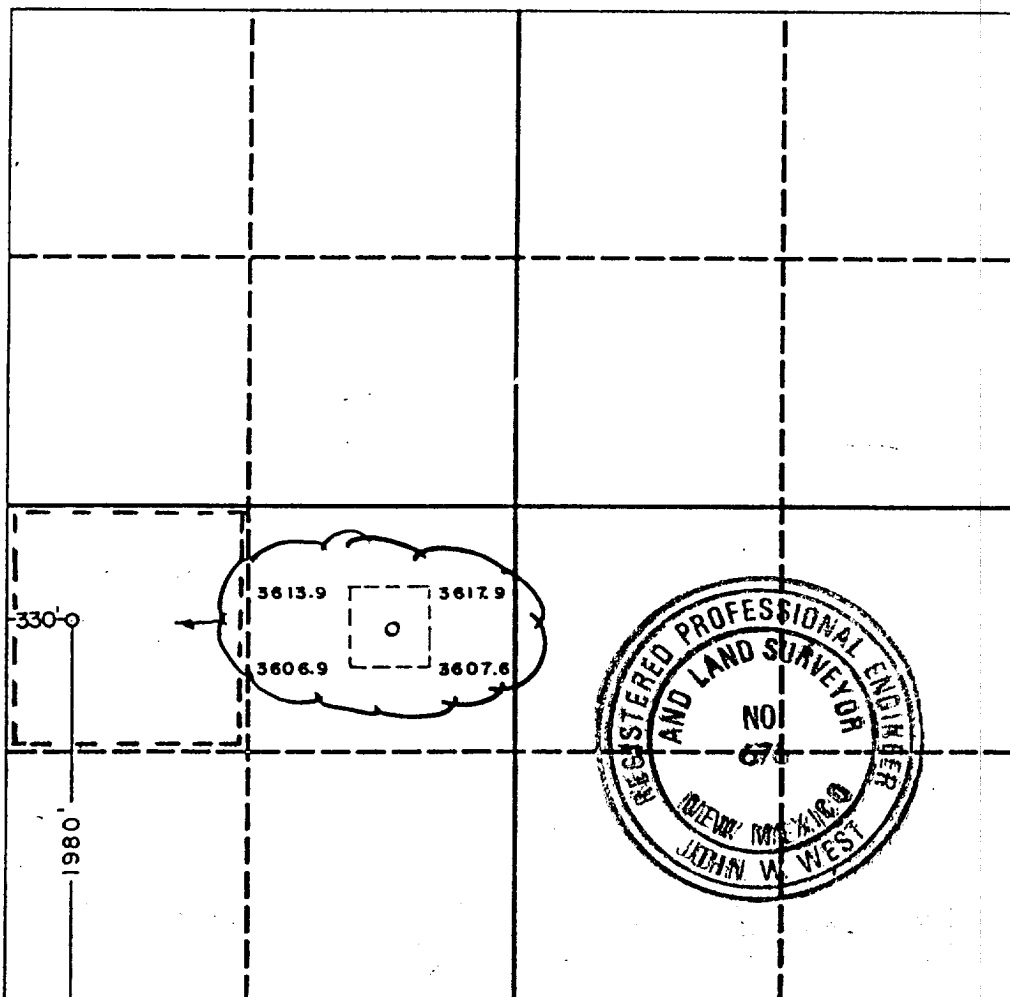
DISTRICT III

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 COLLINS & WARE INC.			Lease B W FEDERAL 31		Well No. 2
Unit Letter L	Section 31	Township 21 SOUTH	Range 32 EAST	NMPM	County LEA
Actual Footage Location of Well: 1980 feet from the SOUTH line and 330 feet from the WEST line					
Ground level Elev. 3612.5	Producing Formation Delaware Brushy Canyon		Pool Northeast Unders. Livingston Ridge Delaware	Dedicated Acreage: 40 43.70 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>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.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					



OPERATOR CERTIFICATION

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

Signature

*G. Thane Akins*

Printed Name

G. Thane Akins

Position

Agent

Company

Collins & Ware, Inc.

Date

9-13-91

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

8-26-91

Signature & Seal of  
Professional Surveyor

*Ronald J. Eidson*

Certificate No. JOHN W. WEST, 676

RONALD J. EIDSON, 3239

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## SUPPLEMENTAL DRILLING DATA

COLLINS & WARE, INC.  
B W 31 FEDERAL WELL NO. 2

1. SURFACE FORMATION: Quaternary

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	750'
Delaware	4450'
Bell Canyon	4550'
Cherry Canyon	5450'
Brushy Canyon	7200'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Brushy Canyon	Oil
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4. PROPOSED CASING AND CEMENTING PROGRAM:

13 3/8" 48-61# K-55 ST&C casing is to be set at approximately 800' in 17 1/2" hole. Casing to be cemented with 500 sacks of light cement tailed in with 200 sacks of Class "C" with 2% CaCl. Cement to circulate.

8 5/8" 24-32# J-55 and S-80 ST&C casing is to be set at approximately 4500' in 12 1/4" hole. Casing is to be cemented with 1200 sacks of light cement tailed in with 200 sacks of Class "C" with 1% CaCl. Cement to circulate.

5 1/2" 15.5# and 20# K-55 and N-80 LT&C casing is to be set at 8700' in 7 7/8" hole. Casing is to be cemented with 600 sacks of Class "H" cement. Cement to tie back.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 12 1/4" hole, will be either a 1500 psi working pressure double ram type preventer or a 1500 psi working pressure annular type preventer.

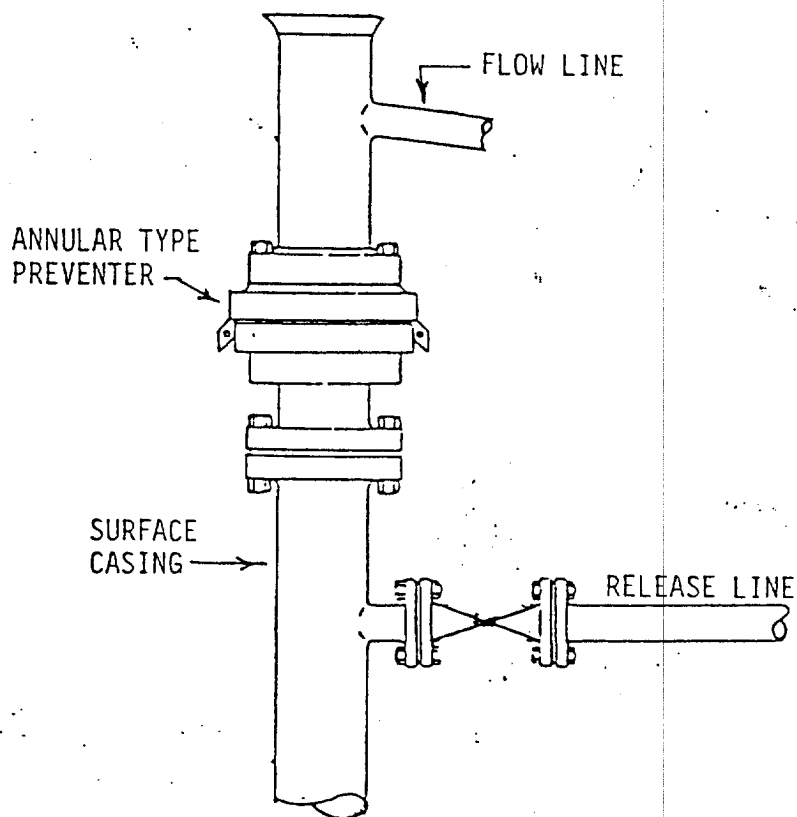
Blowout prevention equipment, while drilling below the 8 5/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 800': Fresh water spud mud - Viscosity 30 to 36 as required for hole cleaning

800' to 4500': Brine conditioned as necessary for control of viscosity, Weight 9.8-10, pH 9-10, Viscosity 32-36

4500' to T.D.: Water-based drilling fluid conditioned as necessary for control of weight, viscosity, pH and water loss. Weight 9-10, Viscosity 38-45, pH 9-10, Filtrate while drilling pay zone 6-15



1500 PSI WORKING PRESSURE

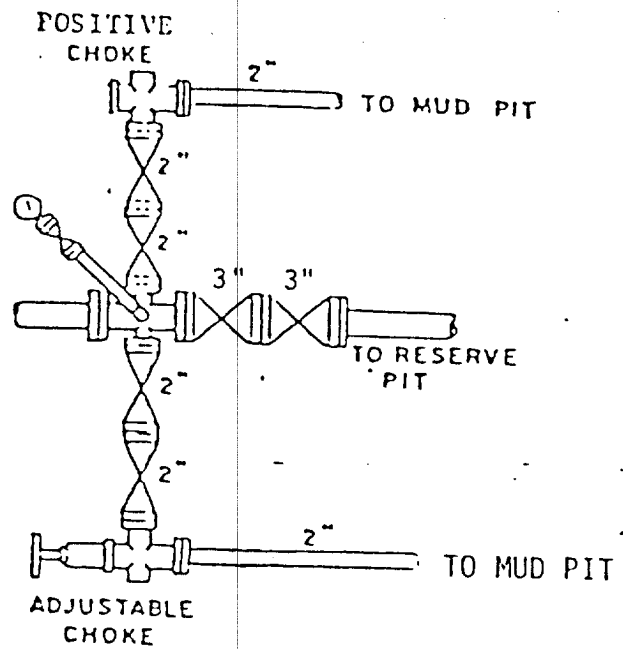
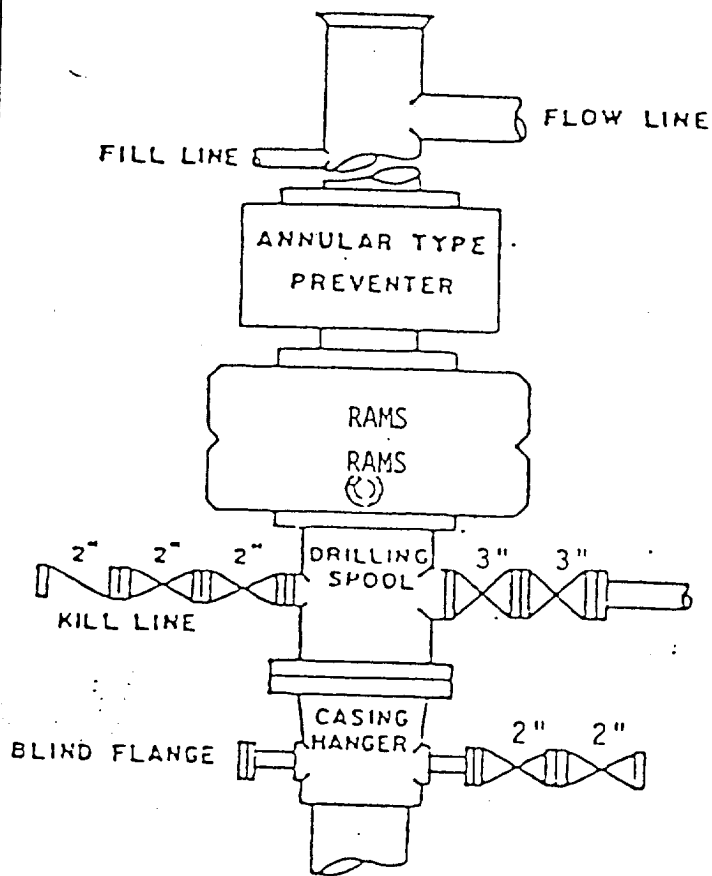
IN USE WHILE DRILLING BELOW  
SURFACE CASING

BOP ARRANGEMENT

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### BOP STACK

3000 PSI WORKING PRESSURE

IN USE WHILE DRILLING BELOW  
8-5/8" CASING SEAT

BOP ARRANGEMENT



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6-10-68  
HOLDS