

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. LC-064975	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Collins & Ware, Inc.		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 600 W. Illinois, Ste. 701 Midland, TX 79701		8. FARM OR LEASE NAME Greener 13 Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 330' ENL & 330' FWL of Section 13 At proposed prod. zone Unit D		9. WELL NO. 1	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 30 Miles West of Hobbs, NM		10. FIELD AND POOL, OR WILDCAT UNDES. Quail Ridge Bone Springs	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 13, T-20-S, R-33-E	
16. NO. OF ACRES IN LEASE 160		12. COUNTY OR PARISH Lea	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 100'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3595.3 GR		22. APPROX. DATE WORK WILL START* Upon Approval	

23. PROPOSED CASING AND CEMENTING PROGRAM Capitan Controlled Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	450'	Sufficient to Circulate
17.5"	13 3/8"	54-68#	3200'	Sufficient to Circulate
12 1/4"	8 5/8"	24-32#	5250'	Sufficient to Circulate
7 7/8"	5 1/2"	17-20#	9800'	750 sacks - see slips

After setting production casing, pay zone will be perforated and stimulated as necessary.

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

RECEIVED
SEP 30 8 43 AM '91
CADD AREA

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 TITLE Agent DATE 9-26-91
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 10-15-91

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

*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

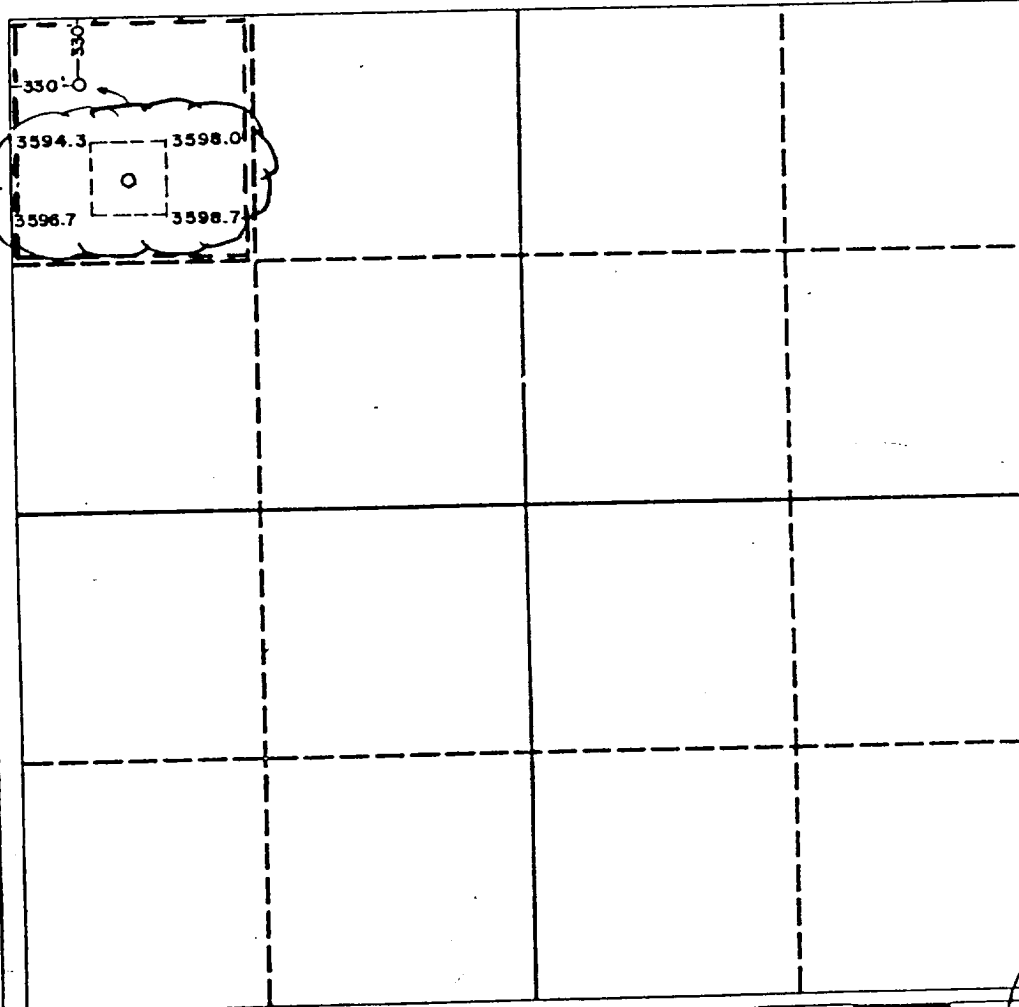
DISTRICT III
1000 Rio Bonos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator COLLINS & WARE INC.			Lease GREENER 13 FEDERAL		Well No. 1
Unit Letter D	Section 13	Township 20 SOUTH	Range 33 EAST	County NMPM	LEA
Actual Footage Location of Well: 330 feet from the NORTH line and 330 feet from the WEST line					
Ground level Elev. 3595.3	Producing Formation Bone Springs	Pool Teas Bone Spring Undesignated Quail Ridge		Dedicated Acreage: 40 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
G. Thane Akins
Printed Name
G. Thane Akins
Position
Agent
Company
Collins & Ware, Inc.
Date
September 26, 1991

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
AUG. 27, 1991
Signature & Seal of
Professional Surveyor

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

SUPPLEMENTAL DRILLING DATA

COLLINS & WARE, INC.
GREENER 13 FEDERAL WELL NO. 1

1. SURFACE FORMATION: Quaternary

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	1400'
Top Salt	1540'
Base Salt	3100'
Yates	3300'
Delaware	5400'
Bone Springs	8350'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Bone Springs Oil

4. PROPOSED CASING AND CEMENTING PROGRAM:

20" 94# H-40 casing to be set at 450' in 26" hole. Casing to be cemented with 400 sacks of light cement tailed in with 200 sacks of Class "C" with 2% CaCl. Cement to circulate.

13 3/8" 54-68# K-55 ST&C casing is to be set at approximately 3200' in 17 1/2" hole. Casing to be cemented with 1500 sacks of light cement with 1% CaCl and 5# salt per sack tailed in with 200 sacks of Class "C" with 1% CaCl and 5# salt per sack. Cement to circulate.

8 5/8" 24-32# K-55 and S-80 ST&C casing is to be set at approximately 5250' in 12 1/4" hole. Casing is to be cemented with 800 sacks of light cement tailed in with 200 sacks of Class "C" with 1% CaCl. Cement to circulate.

5 1/2" 17# 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 750 sacks of 50-50 Poz "H" cement. Cement to tie back.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling below the surface pipe, will be either a 1500 psi working pressure double ram type preventer or a 1500 psi working pressure annular type preventer. See attached BOP sketch.

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 450': Fresh water spud mud - Viscosity 30 to 36 as required for hole cleaning
450' to 3200': Brine conditioned as necessary for control of viscosity, Weight 9.8-10, pH 9-10, Viscosity 32-36
3200' to 5250': Cut brine. Weight 9.5-10#. pH 9-10, Viscosity 32-36, weight as necessary for well control.
5250' 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

7. AUXILIARY EQUIPMENT:

Geolograph from surface to total depth.

A mud logging trailer will be in use while drilling below the intermediate casing.

8. TESTING, LOGGING, AND CORING PROGRAMS:

No drill stem tests are planned.

Compensated Neutron - Litho-density Log and Dual Laterolog with MSFL Log/GR from total depth back to intermediate casing. Gamma Ray log will be continued back to surface.

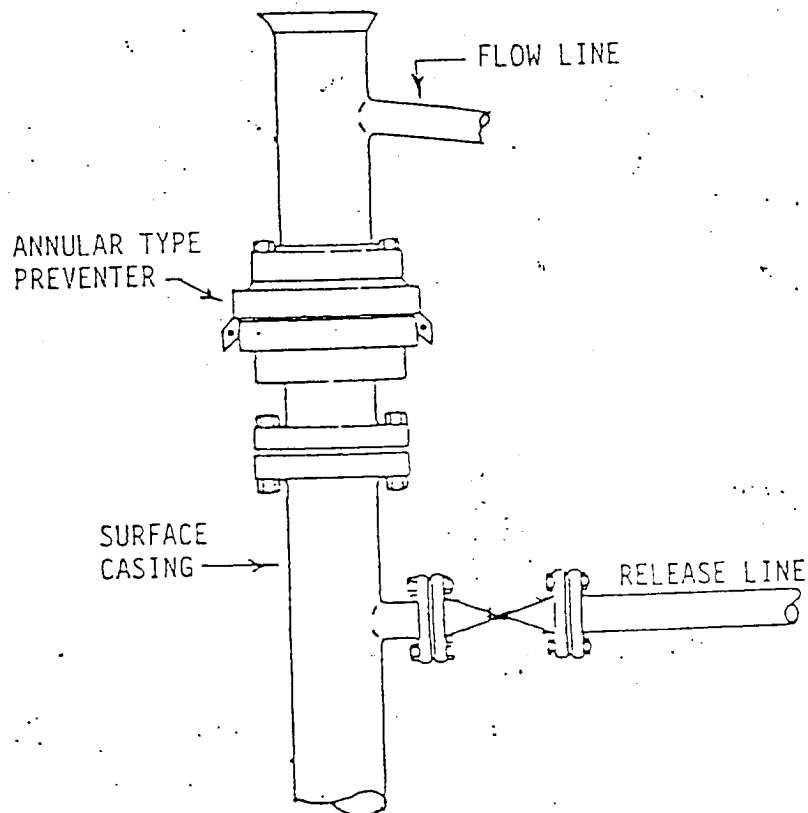
No coring is planned.

9. ABNORMAL PRESSURES AND TEMPERATURES:

None anticipated.

10. ANTICIPATED STARTING DATE:

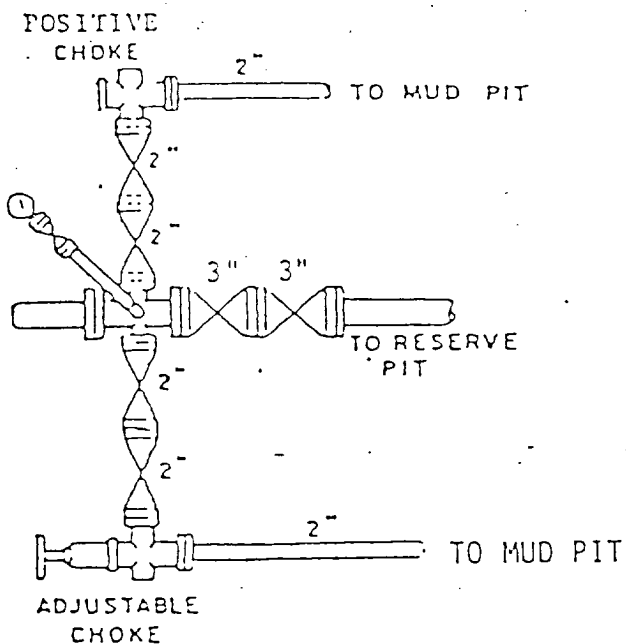
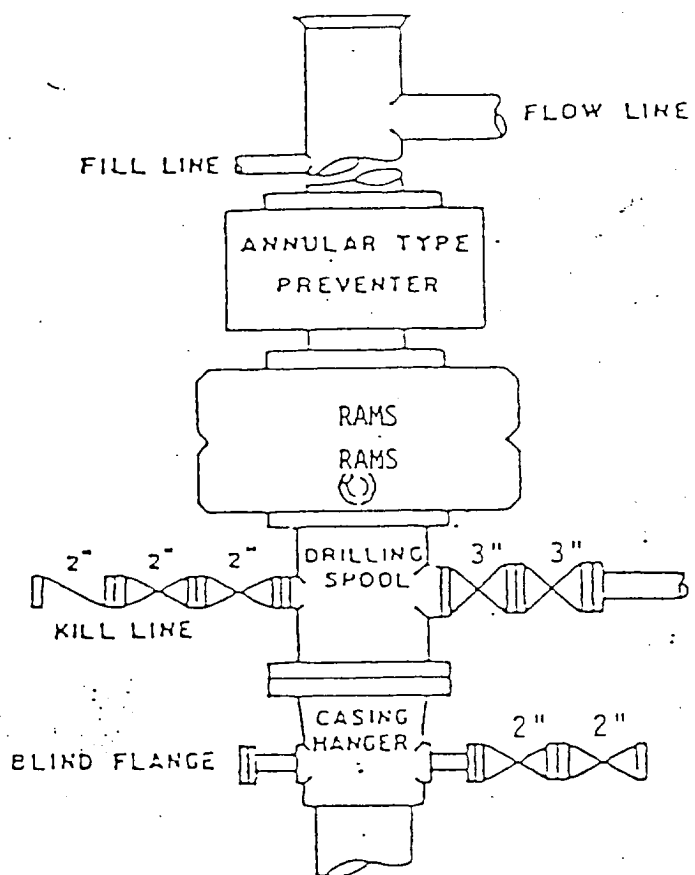
It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 55 days.



1500 PSI WORKING PRESSURE

IN USE WHILE DRILLING BELOW
SURFACE CASING

BOP ARRANGEMENT



BOP STACK

3000 PSI WORKING PRESSURE

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

BOP ARRANGEMENT