Form 9-331 C
(May 1963)

CC TO O.C.C.

SUBMIT IN TRIPLI[illegible]
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-025-27090

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: LC 031670 b

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☑ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☐

7. UNIT AGREEMENT NAME: SEMU

8. FARM OR LEASE NAME: SEMU Blinebry/Tubb A

9. WELL NO.: 113

2. NAME OF OPERATOR: CONOCO INC.

3. ADDRESS OF OPERATOR: P. O. Box 460, Hobbs, N.M. 88240

10. FIELD AND POOL, OR WILDCAT: Blinebry / Tubb

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface: 1650' FNL & 990' FWL
At proposed prod. zone: Same

RECEIVED
SEP 23 1980
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 20, T-20S, R-38E

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

12. COUNTY OR PARISH: Lea | 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	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.	19. PROPOSED DEPTH	20. ROTARY OR CABLE TOOLS
	6700'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3543.5' 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
	17 1/2"	13 3/8"	54.5#	1450'	1131 sx. - CIRCULATE
*	12 1/4"	9 5/8"	40 #	4200'	1346 sx - CIRCULATE
	8 1/2"	7 "	26#	6700'	538 sx.

It is proposed to drill a straight hole to a TD of 6700' & complete it as a Blinebry / Tubb dual oil well.

See attachments for 10-point well plan, 13-point surface use plan, & BOP specs.

* Intermediate csg. will be run only if severe water flow is encounted. If intermediate csg. not needed, will cmt. production string w/ 1926 sx. cmt-CIRCULATE

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 R. E. Bingham TITLE Administrative Supervisor DATE 9/16/80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (Orig. Sgd.) PETER W. CHESTER TITLE ACTING DISTRICT ENGINEER DATE OCT 8 1980

CONDITIONS OF APPROVAL, IF ANY:

USGS-6
NMFU-4
FILE
Release folder-2

*See Instructions On Reverse Side

N MEXICO OIL CONSERVATION COMMI N

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
CONOCO INC.	S E M U BLINEBRY - TUBB "A"	113

Unit Letter	Section	Township	Range	County
E	20	20 SOUTH	38 EAST	LEA

Actual Footage Location of Well: 1650 feet from the NORTH line and 990 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3543.5	Blinebry / Tubb	Weir Blinebry / Monument Tubb	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

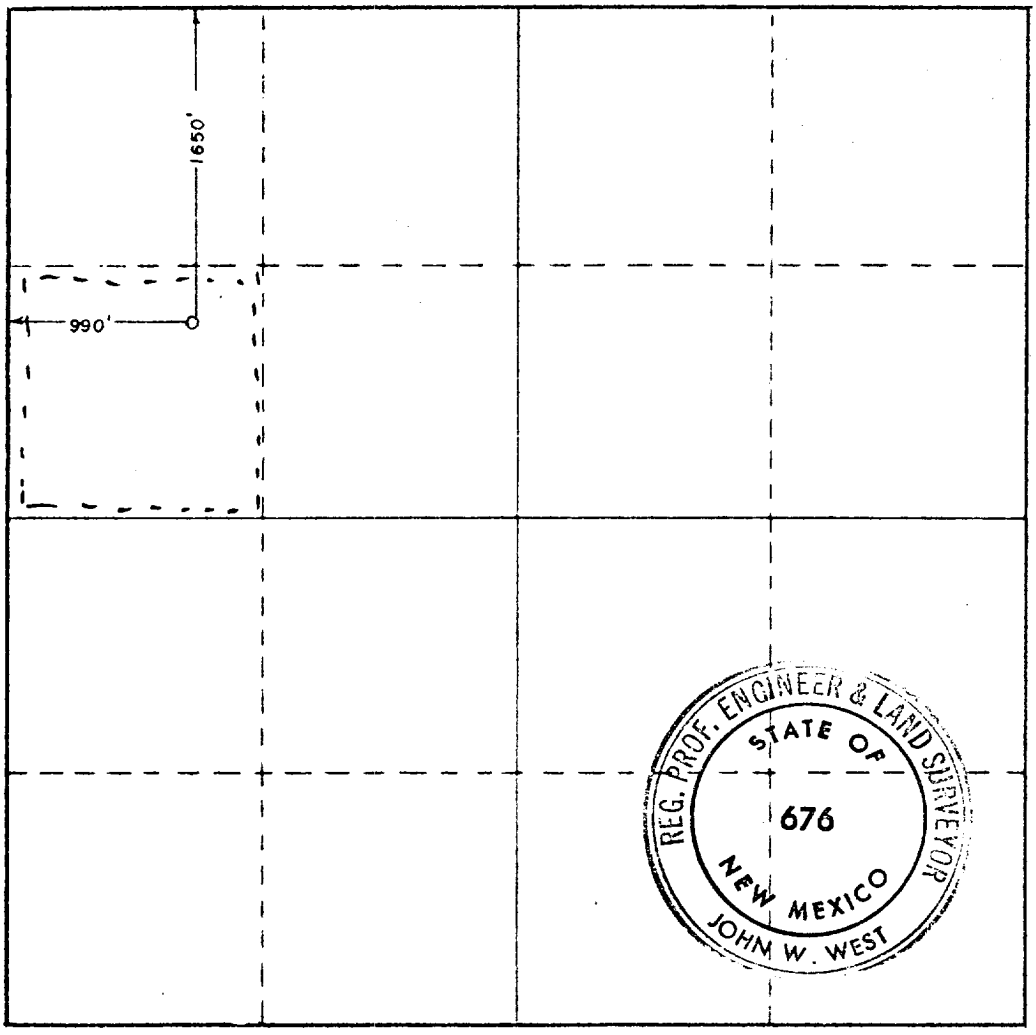
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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.

Name: D. E. Bingham

Position: ADMIN. SUPERVISOR

Company: CONOCO INC.

Date: 9/16/80

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: AUGUST 14, 1980

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6668
Ronald J. Eidson 3239

ATTACHMENT TO FORM 9-331 C
APPLICATION FOR PERMIT TO DRILL

Conoco Inc.
SEMU Blinebry-Tubb A No. 113
Sec. 20, T-20S, R-38E
Lea County, New Mexico

1. The geologic name of the surface formation is Pleistocene Sand.

2. The estimated tops of important geologic markers are shown on the attached Proposed Well Plan.

3. The estimated depths at which anticipated water, oil, gas or other mineral-bearing formations to be encountered are shown on attached Proposed Well Plan.

4. The proposed casing program is as follows:
   0' - 1450' 13 3/8" 54.5 # K-55 STC
   0' - 4200' 9 5/8" 40# K-55 STC
   0' - 6700' 7" 26# K-55 LTC

5. A drawing of an API Series 900 Blowout Preventer Specification is attached. Pipe rams and blinds will be checked to 1,000 psi for 30 minutes when BOP is installed. BOP will be checked when casing string is set and operated daily for checks.

6. The proposed mud program is as follows:
   0' - 1450' 8.5 - 9.0 ppg spud mud
   1450' - 6700' 9.0 - 10.0 ppg. salt water gel

7. The auxiliary equipment to be used is:
   (1) kelly cocks
   (2) floats at the bit

8. It is proposed to run GR CAL CNL FDC PDC logs at selected intervals.

9. No abnormal pressures or temperatures are expected to be encountered in this well.

10. The anticipated starting date is October 1, 1980 with a duration of approximately 21 days.

PROPOSED WELL PLAN OUTLINE

WELL NAME: SEMU BLINEBRY-TUBB "A" NO. 113 COUNTY: LEA

LOCATION: 1650' FNL & 990 FWL STATE: NM
Sec. 20, T-20S, R-38E EST. KB: 3557'
EST. GL: 3545'

DEPTH	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE	CASING		(PPG) FRACTURE GRADIENT	(PPG) FORMATION PRESSURE GRADIENT	MUD	
				SIZE (IN)	SIZE (IN)	DEPTH (FT)			(PPG) WEIGHT	TY
1000	Pleistocene Water SS	90'-200'	Deviation Geolograph 0'-6700'		54.5# K-55 STC					
	Rustler Anhy.	1410'						8.3	8.5	
	Salado Salt	1500'		17-1/2	13-3/8	1450'	12-13	8.5	9.0	SPUD
2000										
	Base Salt	2640'								
	Yates SS.	2690'								
3000	Seven Rivers Dolo.	2940'								
	Queen SS.	3520'								
		Possible water flow 3500'-3900'			40# K-55 STC					
4000	San Andres Dolo.	4050'		12-1/4	9-5/8	4200'	13-14	9.0-13	9.0-13.0	gel
5000										
	Glorieta SS.	5360'								
	Blinebry Mkr.	5860'								
6000										
			DLL-GR FDC-CNL-GR-CAL 4200'-6700' PDC 4200'-6700'		26# K-55 LTC 7"			less than 8.3		
	Tubb SS	6350'								
	Drinkard Dolo.	6660'								
	TD.	6700'		8-1/2		6700'	14.9-15.1		9.0-10.0	Salt gel
7000										

NOTE: Intermediate casing will be run only if severe water flow is encountered.

WELL NAME SEMU BLINEBRY-TUBB "A" NO. 113 FIELD NMFU DATE 6/23/80

ELEVATION EST. GRD 3545' KB 3557' PROPOSED T.D. 6700'

LOCATION (SURFACE) 1650' FNL & 990' FWL OF SECTION 20 T-20S R-38E

COUNTY LEA STATE NM SPACING

GEOLOGICAL ESTIMATES

ZONE	TOP	CONTENT
WATER SS.	90'-200'	Fresh Water
RUSTLER ANHY.	1410'	-
SALADO SALT	1500'	-
BASE SALT	2640'	-
YATES SS.	2690'	O, W, G
SEVEN RIVERS DOLO.	2940'	O, W, G
QUEEN SS.	3520'	O, W, G
SAN ANDRES DOLO.	4050'	O, W, G
GLORIETA SS.	5360'	O, W, G
BLINEBRY MKR.	5860'	O, W, G
TUBB SS.	6350'	O, W, G
DRINKARD DOLO.	6660'	O, W, G

WELL SURVEYS - (List types by code numbers as follows: Directional and/or Deviation (1); Deflection (2); Caliper (3); Temperature (4); Electrical (5); Radioactive (6); Geograph (7) Photoclinometer (8); Mudlogging (9); Other (10) and name of that type)

DEPTH POINTS	TYPE	HOLE SIZE	REMARKS
0'-6700'	(1) Deviation	17-1/2", 12-1/4", 8-1/2"	One every 250' to base salt One every 500' thereafter
0'-6700'	(7) Geograph	17-1/2", 12-1/4", 8-1/2"	
4200'-6700'	(5) DLL-GR	8-1/2"	2" & 5" Scales
4200'-6700'	(6) FDC-CNL-GR-CAL.	8-1/2"	2" & 5" Scales
4200'-6700'	(6) PDC (GR-COLLAR)	7" Casing	Depth Control
0'-6700'	(4) Temperature	7" Casing	Determine top of cement

CONOCO TO FURNISH WATER, CONTRACTOR TO FURNISH FUEL.

PROPOSED WELL PLAN

WELL NAME SEMU BLINEBRY-TUBB "A" NO. 113 FIELD NMEU

ATTACHMENT	NO.	REQUIRED	NOT REQUIRED
CASING CENTRALIZERS, SCRATCHERS	____	X	____
CEMENTING	____	X	____
MUD PROGRAM	____	X	____
WELL PLAN OUTLINE	____	X	____
PORE PRESSURE - FRAC GRADIENT	____	____	____
PROJECTED PROGRESS	____	____	____
CROSS SECTION OR WELL COURSE	____	____	____
HYDRAULICS PROGRAM	____	____	____
BIT PROGRAM	____	____	____
VENDER USAGE LIST	____	____	____

DRILLING AND COMPLETION PROCEDURE

1. 0'-1450' Drill a 17-1/2" hole. Run and cement 13-3/8" casing. (See cement and casing programs.) WOC 18 hours. Pressure test casing to 600 psi for 30 mins.

2. 1450'-4200' - Drill a 12-1/4" hole. Drill out shoe and pressure test formation to 300 psi. *Run and cement 9-5/8" casing. (See cement and casing programs.) WOC 18 hours. Pressure test casing to 600 psi for 30 minutes.

3. 4200'-6700' - Drill an 8-1/2" hole. Drill out shoe and pressure test formation to 600 psi. Run open hole logs, run and cement 7" casing (See cement and casing programs.)

4. Detailed procedure to be prepared after open hole logs are analyzed. Anticipate a dual completion in Blinebry and Tubb intervals.

NOTE: Intermediate casing will be run only if severe water flow is encountered. If intermediate casing is not run, change bit size to 8-1/2" @ 4200'.

CASING, CENTRALIZERS & SCRATCHERS

LIST TYPE OF STRING BY CODE LETTERS, i.e. CONDUCTOR (C); SURFACE (S); INTERMEDIATE (I); PRODUCTION (P); LINER (L); PERFORATIONS (PP)

TYPE OF STRINGS & INTERVAL (FT) FROM-TO	OD	DRIFT ID	WT PER FT	GRADE	THREAD	AMT	WT. IN AIR, 1000 LBS	WT. IN MUD 1000 LBS	REMARKS
(S) 0'-1450'	13-3/8"	12.459"	54.5#	K-55	STC	1450'	79		
*(I) 0'-4200'	9-5/8"	8.679"	40#	K-55	STC	4200'	168		D.V. TOOL & ECP @ 3400'
(P) 0'-6700'	7"	6.151"	26#	K-55	LTC	6700'	174.2		Sandblast bottom 850'

TYPE OF STRING	CENTRALIZERS NO.	CENTRALIZERS INTERVAL FROM-TO	SCRATCHER NO.	SCRATCHER INTERVAL FROM-TO	OTHER ACCESSORY EQUIPMENT (SUCH AS DEGASSERS, MUD, CENTRIFUGE FLOAT COLLARS, ETC. - SPECIFY)	REMARKS
Surface	(15)	0'-1450'	None		Guide shoe and float collar	Centralizers - 100' spacing
*Intermediate	(2) (16)	1350'-1450' 2600'-4200'	None		Float shoe, float collar, D.V. Tool & ECP @ 3400'	Centralizers - 100' spacing
Production	(2) (21)	4100'-4200' 5860'-6700'	(15) (15)	5860'-6085' 6350'-6575'	Float shoe and float collar	Centralizers - 40' spacing Scratchers - 15' spacing

NOTE: Intermediate will be run only if a severe water flow is encountered.
If intermediate is not run, use a D.V. tool in 7" @ 3400' w/2 metal petal baskets below D.V. tool.

MUD PROGRAM

DEPTH INTERVAL FROM-TO	WEIGHT LBS/GAL	TYPE	OIL %	pH	WATER LOSS (cc)	VIS. (sec.)	YEILD POINT	THINNING AGENTS	WATER LOSS AGENTS
'-1450'	8.5-9.0	Spud		9.0+					As needed
1450'-4200'	9.0-10.0	Salt gel		9.0-10.0					As needed
4200'-6400'	9.0-10.0	Salt gel		9.0-10.0					As needed
6400'-6700'	9.0-10.0	Salt gel		9.0-10.0	10-15	34-36			As needed

EMARKS

1. Below 1450' drill w/saturated brine to keep hole enlargement to a minimum.
2. Add gelling agents as required to carry cuttings.
3. Keep pressure surges to a minimum below 1450'.
4. Begin reducing water loss and increasing viscosity at 6400' to achieve above properties at T.D.

CEMENT

TYPE OF STRING INTERVAL (FT) FROM-TO TYPE MIX	GEL%	SALT%	CaCl2	SLURRY WEIGHT LB./GAL	SLURRY YIELD CF/SKX	TOTAL AMT. REQUIRED SKX/CF	FILL UP	BHT	SIZE	REMARKS
(S) 0'-1450'										
Class 'C'	4%	-	2%	13.05	1.88	931/1750	Circ.	75°	17-1/2"	100% excess
Class 'C'	-	-	2%	14.80	1.32	200/264				
(I) 0'-4200'										
Around Shoe										
Class 'C'	-	-	2%	14.80	1.32	380/501	3400'	85°	12-1/4"	100% excess
Thru D.V. Tool @ 3400'										
Class 'C' Light	-	18%	-	13.20	1.92	766/1471	Circ.	75°	12-1/4"	100% excess
Class 'C'	-	18%	-	15.20	1.38	200/276				
(P) 0'-6700'										
Around Shoe										
Class 'C' Light	-	-	-	12.70	1.84	338/621	3400'	95°	8-1/2"	100% excess
Class 'C'	-	3#/sx.	-	14.80	1.32	200/264				
7" cement for use if intermediate is not run.										
(P) 0'-6700'										
Around Shoe										
Class 'C' Light	-	-	-	12.70	1.84	441/812	3400'	95°	8-1/2 & 12-1/4"	100% excess
Class 'C'	-	-	-	14.80	1.32	200/264				
Thru D.V. tool @ 3400'										
Class 'C' Light	-	18%	-	13.20	1.92	1085/2083	Circ.	80°	12-1/4"	100% excess
Class 'C'	-	18%	-	15.20	1.38	200/276				

NOTE:

1. Add 1/4#/sack Flocele to cement if necessary for lost circulation.
2. Reciprocate production casing while cementing.
3. Preceed cement with 500 gallons mud flush.
4. Re-calculate cement volumes for production casing after open hole caliper is run.
5. Lab test production casing cement slurries prior to cementing.
6. Utilize top and bottom plugs. Pump top plug with TFW.
7. Condition mud to have low plastic viscosity and yield strength.