

N.M.O.C.D. COPY

FORM IN TRIPLICATE
(Other instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1425.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

CONOCO INC. ✓

RECEIVED

3. ADDRESS OF OPERATOR

P. O. Box 460, Hobbs, N.M. 88240

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

At surface

2180' FSL & 1980' FWL

At proposed prod. zone ✓

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

15. DISTANCE FROM PROPOSED*

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

18. DISTANCE FROM PROPOSED LOCATION*

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

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

3718' GR (est.)

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 #	500'	430sx - circulate
12 1/4"	9 5/8"	36 #	1200'	593 sx - circulate
8 3/4"	7"	26 #	8100'	1438 sx - 1200'

It is proposed to drill a straight hole to a TD of 8300' and complete it as a South Dagger Draw Upper Penn gas well.

See attachments for 10 point well plan and 13 point Surface Use Plan.

GAS NOT DEEPENED

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

7-29-81

(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

30-015-23904

5. LEASE DESIGNATION AND SERIAL NO.
NM-045276

6. IF INDIAN ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Preston Federal

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
South Dagger Draw Upper Penn

11. SEC., T., R., OR BLK.
AND SURVEY OR AREA
Sec. 34, T-20S, R-24E

12. COUNTY OR PARISH
Eddy

13. STATE
NM

22. APPROX. DATE WORK WILL START*

December 1, 1981

RECEIVED
AUG 3 1981OIL & GAS
GEOLOGICAL SURVEY
NEW MEXICOPOSTED ID-1
API + NL HAND
9-4-81

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form
Supervisors' Office

All distances must be from the outer boundaries of the Section

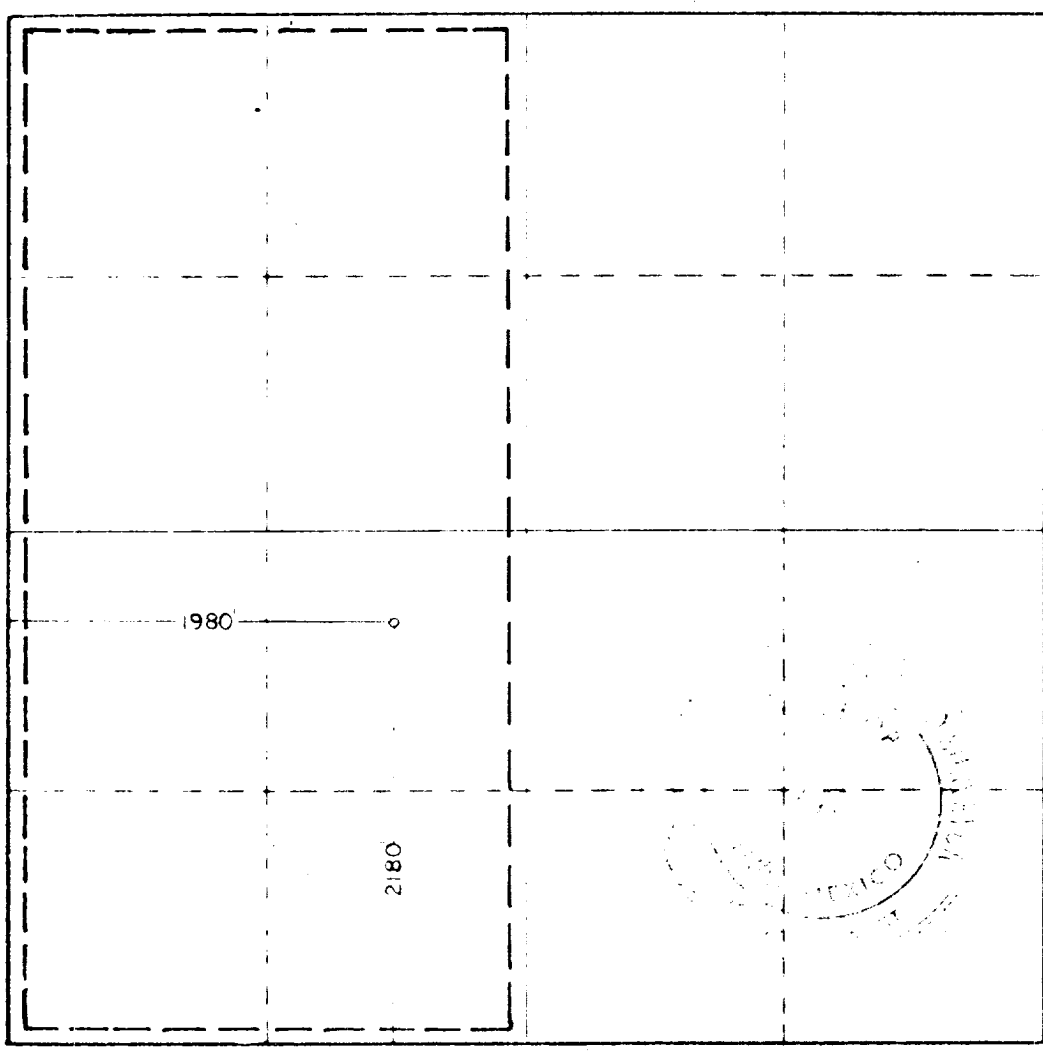
Section		Range		Twp	
1000000, 2		PRINCE FEDERAL		3	
1		Cisco		South Dagger Draw Upper Penn	
				320	

- 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 _____

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.



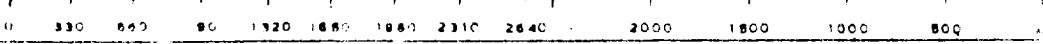
CERTIFICATION

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

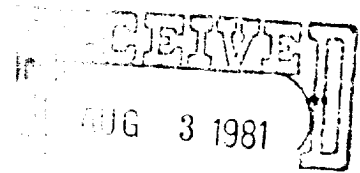
Wm A. Pennington
Administrative Supervisor
Conoco Inc.
July 29, 1981

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: 7-22-81
Registration: Professional Engineer
Title: Surveyor
John W. West
Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239



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



Conoco Inc.
Preston Federal No. 3
Section 34, T-20S, R-24E
Eddy County, New Mexico

OIL & GAS
GEOLOGICAL SURVEY
NEW MEXICO

1. The geologic name of the surface formation is Grayburg Water.
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'- 500' 13-3/8", 54.5#, K-55, STC
 - 0'-1200' 9-5/8", 36#, K-55, STC
 - 0'-9800' 7", 26#, K-55, LTC
5. A drawing of API Series 900 Blowout Preventer Specifications 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'- 500' 8.5-9.0 ppg spud mud
 - 500'-1200' 8.5-9.0 ppg fresh water
 - 1200'-8300' 8.5-9.0 ppg low solid polymer
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 for the well is December 1, 1981 with a duration date of approximately 31 days.

WELL NAME Preston Federal No. 3 FIELD Dagger Draw DATE
 ELEVATION Est. GRD 3718' KB 3733' PROPOSED T.D. 9800'
 LOCATION (SURFACE) 2130' FSL & 1980' FWL OF SECTION 34 T- 2CS A-24E
 COUNTY Eddy STATE N.M. SPACING 320 Acres

GEOLOGICAL ESTIMATES

	<u>ZONE</u>	<u>TOP</u>	<u>CONTENT</u> (O=Oil, G=Gas, W=Water)
San Andres	dolo	620'	O,G,W
Glorieta	ss	2150'	O,G,W
Yeso	dolo	2280'	O,G,W
Wolfcamp	dolo	5630'	---
Cisco	ls.	7620'	O,G,W

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

<u>DEPTH POINTS</u>	<u>TYPE</u>	<u>HOLE SIZE</u>	<u>REMARKS</u>
0'-8200'	(1) Deviation	17 1/2", 12 1/4", 8 3/4"	One every 250' to 1200'
0'-8200'	(7) Geolograph	17 1/2", 12 1/4", 8 3/4"	One every 500' to TD
1200'-8200'	(5) DLL-GR	8 3/4"	2" & 5" Scales
1200'-8200'	(6) FDC-CNL-GR-CAL	8 3/4"	2" & 5" Scales
0'-8200'	(9) Mud logger	8 3/4"	
1200'-8200'	(10) Cement Bond Log	7" Casing	

CONOCO TO FURNISH WATER, CONTRACTOR TO FURNISH FUEL.

PROPOSED WELL PLAN

WELL NAME Preston Federal No. 3

FIELD Dagger Draw, South

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

DRILLING AND COMPLETION PROCEDURE

1. 0'-500' - Drill a 17 1/2" hole. Run and cement 13 3/8" casing (See cement & casing programs). WOC 18 hours. Pressure test casing to 600 psi for 30 mins.
2. 500'-1200' - Drill a 12 1/4" hole. Run and cement 9 5/8" casing (See cement & casing programs). WOC 18 hours. Pressure test casing to 600 psi for 30 mins.
3. 1200'-8300' - Drill a 8 3/4" hole. Drill out shoe and pressure test formation to 200 psi. Run open hole logs, run, and cement casing (See casing & cement programs).
4. Detailed completion procedure to be prepared after open hole logs are analyzed. Anticipate a Cisco single completion.

LIST TYPE OF STRING BY CODE LITERS, 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	ANT	WT. IN AIR, WT. IN MUD		REMARKS
							1000 LBS	1000 LBS	
(S) 0'-500'	13 3/8"	12.459"	54.5#	K-55	STC	500'	27.3		
(I) 0'-1200'	9 5/8"	8.765"	36#	K-55	STC	1200'	43.2		
(P) 0'-8300'	7"	6.151"	26#	K-55	LTC	8300'	213.2		Sandblast bottom 500'

TYPE OF STRING	CENTRALIZERS		SCRATCHER		OTHER ACCESSORY EQUIPMENT (SUCH AS DEGASSERS, MUD, CENTRIFUGE FLOAT COLLARS, ETC. - SPECIFY)		REMARKS
	INTERVAL	NO. FROM-TO	NO. INTERVAL	NO. FROM-TO			
SURFACE	(5) 0'-500'		None		Guide shoe and float collar	Centralizers - 100' spacing	
INTERMEDIATE	(12) 0'-1200'		None		Float shoe and float collar	Centralizers - 100' spacing	
PRODUCTION	(2) 1100'-1200'	(15) 7500'-7775'			Float shoe and float collar	Centralizers - 40' spacing Scratchers - 15' spacing	
	(20) 7400'-8300'						

<u>DEPTH INTERVAL FROM-TO</u>	<u>WEIGHT LBS/CAL</u>	<u>TYPE</u>	<u>OIL %</u>	<u>pH</u>	<u>WATER LOSS (cc)</u>	<u>VIS. (sec.)</u>	<u>YIELD POINT</u>	<u>THINNING AGENTS</u>	<u>WATER LOSS AGENTS</u>
0'-500'	8.5-9.0	Spud							As needed
500'-1200'	8.5-9.0	Fresh water							As needed
1200'-7500'	8.5-8.8	Fresh water							As needed
7500'-8300'	8.5-8.9	Fresh water Low solids Polymer		+10.5	5 to 10	38 to 40			As needed

REMARKS

1. Drill out intermediate with fresh water.
2. Add sufficient gel to carry cuttings.
3. Lower viscosity and yield point prior to cementing.
4. Pressure surge to be kept to a minimum.

CEMENT

TYPE OF STRING INTERVAL (FT) FROM-TO TYPE MIX	GEL%	SALT%	CaCl ₂	SLURRY WEIGHT LB./GAL	SLURRY YIELD CF/SKX	TOTAL AMT. REQUIRED SKX/CF	FILL UP	BHT	SIZE	REMARKS
(S) 0'-500'										
Class 'C'	4%		2%	13.05	1.88	230/431	Circ.	75°	17 1/2"	100% excess
Class 'C'			2%	14.80	1.32	200/264				
(1) 0'-1200'										
Class 'C' Thixset			2%	14.10	1.50	200/300	Circ.	80°	12 1/4"	100% excess
Class 'C' Light			2%	12.70	1.84	193/355				
Class 'C'			2%	14.80	1.32	200/264				
(P) 0'-8300'										
Class 'H' Light				12.70	1.65	743/1368	1200'	140°	8 3/4"	100% excess
Class 'H'				16.40	1.06	695/737				

NOTE:

1. Add 1/4# sx. Flocele to cement if necessary for lost circulation.
2. Reciprocate production casing while cementing.
3. Preceded 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 w/TFW.
7. Condition mud to have low plastic viscosity and yield strength.

SPECIAL DRILLING EQUIPMENT

TO BE IN OPERATION BEFORE DRILLING WOLFCAMP (5630')

Totco Drilling Recorder (or equivalent)

Record depth and drilling rate, weight (hook load), rotary RPM, rotary torque, (or AMPS) stand pipe pressure, and pump SPM. Unit installed at driller's position.

Flow Sensor and Pump Stroke Counter

Dial indicator and control unit at driller's position. High and low alarms for percent flow installed in dog house.

Pit Volume Totalizer

Dial indicator at driller's position. Recorder with alarms for volume increase or decrease installed in dog house.

Mud Gas Separator

Installed in mud return line.

Swaco (Cameron) Adjustable Choke

Manifold along with a manually adjustable choke so that each choke can be isolated from flow stream. Turns in choke line to be kept to a minimum. Lines to be tied down to prevent excessive movement under flow conditions. Control console to be in view of driller.

Double Deck Shaker

Installed for use from 1200' to 9433' to help reduce solids in the mud.

Drilling Head

To allow for drilling ahead while encountering a pressure kick.

PROPOSED WELL PLAN OUTLINE

WELL NAME: Preston Federal No. 3

COUNTY Eddy STATE N.M.

LOCATION: 2180' FSL & 1980' FWL

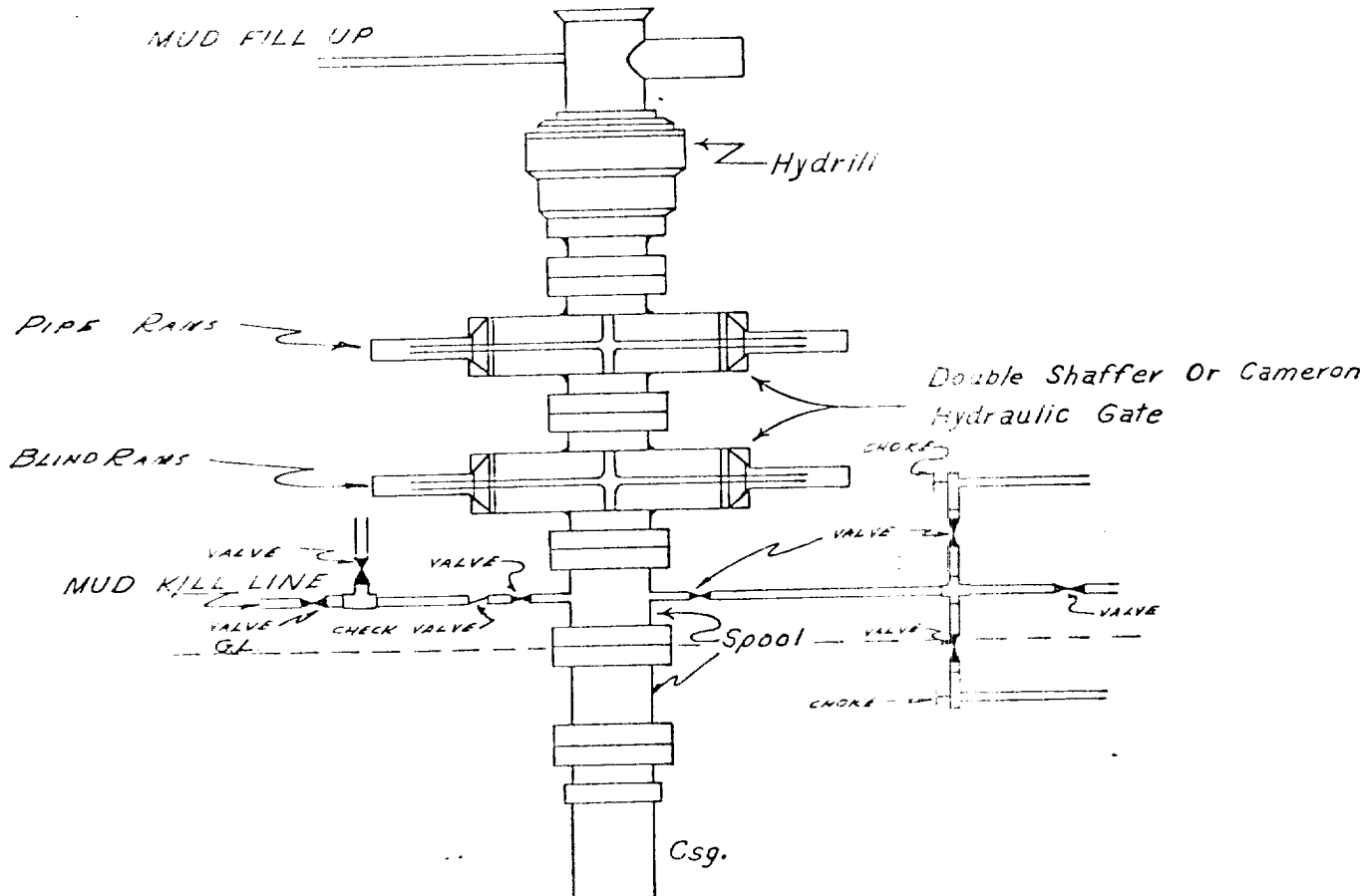
EST. CB: 3723'

34-20S-24E

EST. GL: 3708'

[illegible]

CONTINENTAL OIL COMPANY
Blow-out Preventer Specifications



API SERIES 900

NOTE:

Manual and Hydraulic controls with closing unit no less than 75' from well head.
Remote controls on rig floor.

DUE TO SUBSTRUCTURE CLEARANCE,
HYDRILL MAY OR MAY NOT BE USED.

SURFACE USE PLAN

Conoco Inc.
Preston Federal No. 3
Section 34, T-20S, R-24E
Eddy County, New Mexico

The plan is to accompany "Application for Permit to Drill" the subject wells. The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the wells may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so all contractors and sub-contractors will be aware of all items of this plan.

1. EXISTING ROADS.

- A. The proposed well site is 2180' FSL and 1980' FWL of Section 34, T-20S, R-24E, Eddy County, New Mexico.
- B. Exhibit "A" is a portion of a New Mexico road map showing existing roads. Directions to the location are as follows: From Artesia go south on hiway 285 15 miles, turn west 8.5 miles, turn south 5.5 miles.
- C. Access roads are shown on Exhibits "B" and "C".
- D. Existing roads will be repaired as needed.

2. PLANNED ACCESS ROADS.

- A. No new roads required.

3. LOCATION OF EXISTING WELLS

See Exhibit C.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. Tank Batteries: None within one mile.
- B. Producing Facilities: None within one mile.
- C. Oil Gathering Lines: None within one mile.
- D. Other Lines: None within one mile.
- E. Rehabilitation: Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location. Rehabilitation of the surface is planned to be completed within 45 days from commencement.

5. WATER SUPPLY

Water will be hauled from Foster Water Station.

6. SOURCE OF CONSTRUCTION MATERIALS

Caliche will be hauled from a pit located in Section 31, T-19S, R-25E.

7. METHODS FOR HANDLING WASTE DISPOSAL

Waste Disposal: Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" of dirt. See Exhibit "D" for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted to the survey for appropriate approval.

8. ANCILLARY FACILITIES

None required.

9. WELL SITE LAYOUT

Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, reserve pit, etc. The reserve pit will be lined with plastic. The pad and pits are staked.

10. PLANS FOR RESTORATION OF SURFACE

Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.

11. OTHER INFORMATION

A. Terrain: Rolling hills.

B. Soil: Sandy.

C. Vegetation: Grasses, brush.

D. Surface Use: Grazing.

E. Ponds and Streams: None within one mile.

F. Water Wells: None within one mile.

- G. Residences and Buildings: None within one mile.
- H. Arroyos, Canyons, Etc.: Box Canyon 450' south of well site.
- I. Well Sign: Sign identifying and locating well will be maintained at drill site with the spudding of the well.
- J. Open Pits: All pits containing mud or other liquids will be fenced.
- K. Archaeological Resources: See archaeological report.

12. OPERATOR'S REPRESENTATIVE

Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Production and Drilling
M. L. Wise
P.O. Box 460
Hobbs, New Mexico 88240
Phone: 393-4141

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

7/25/81
Date

M. L. Wise
M. L. Wise
Drilling Superintendent

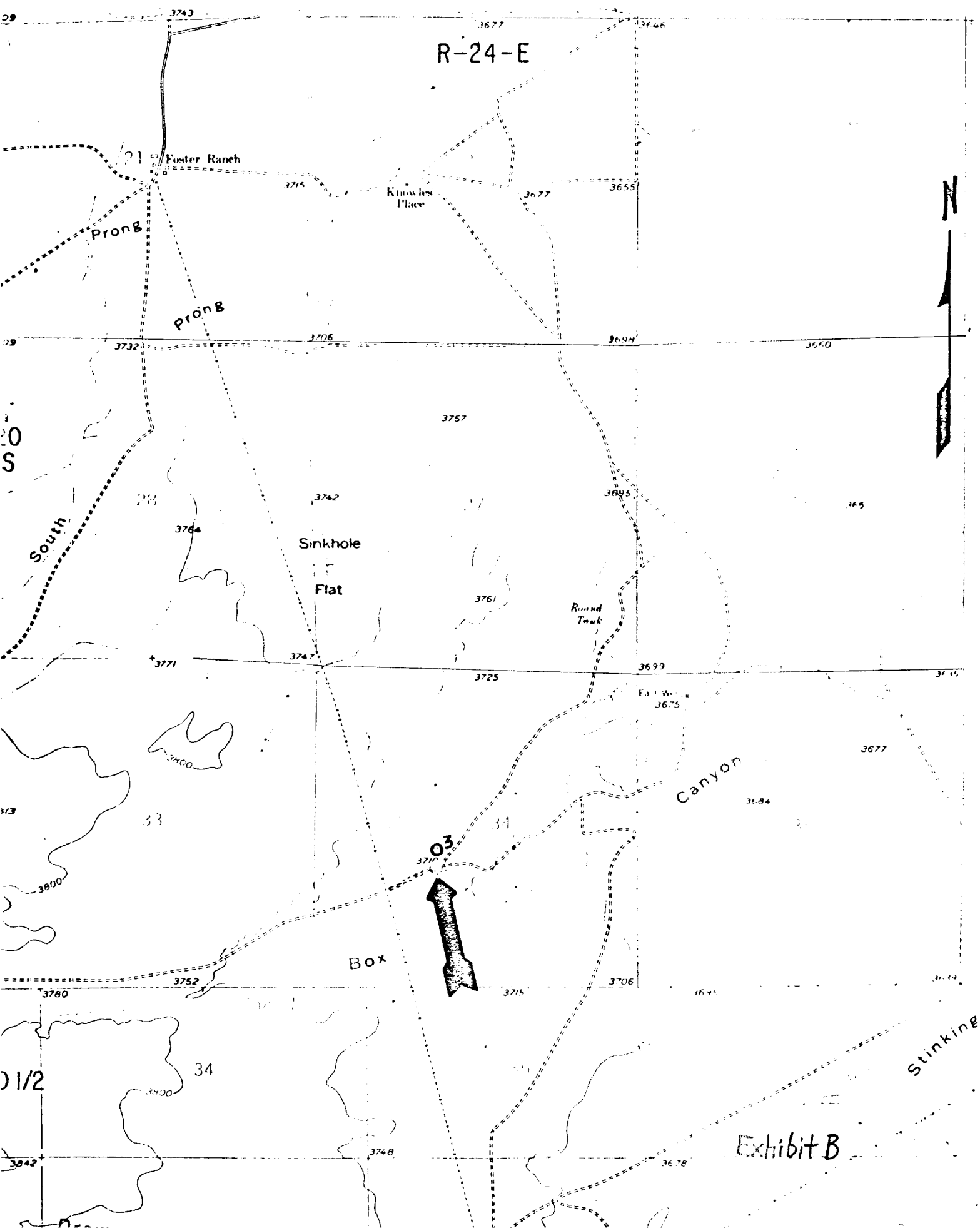
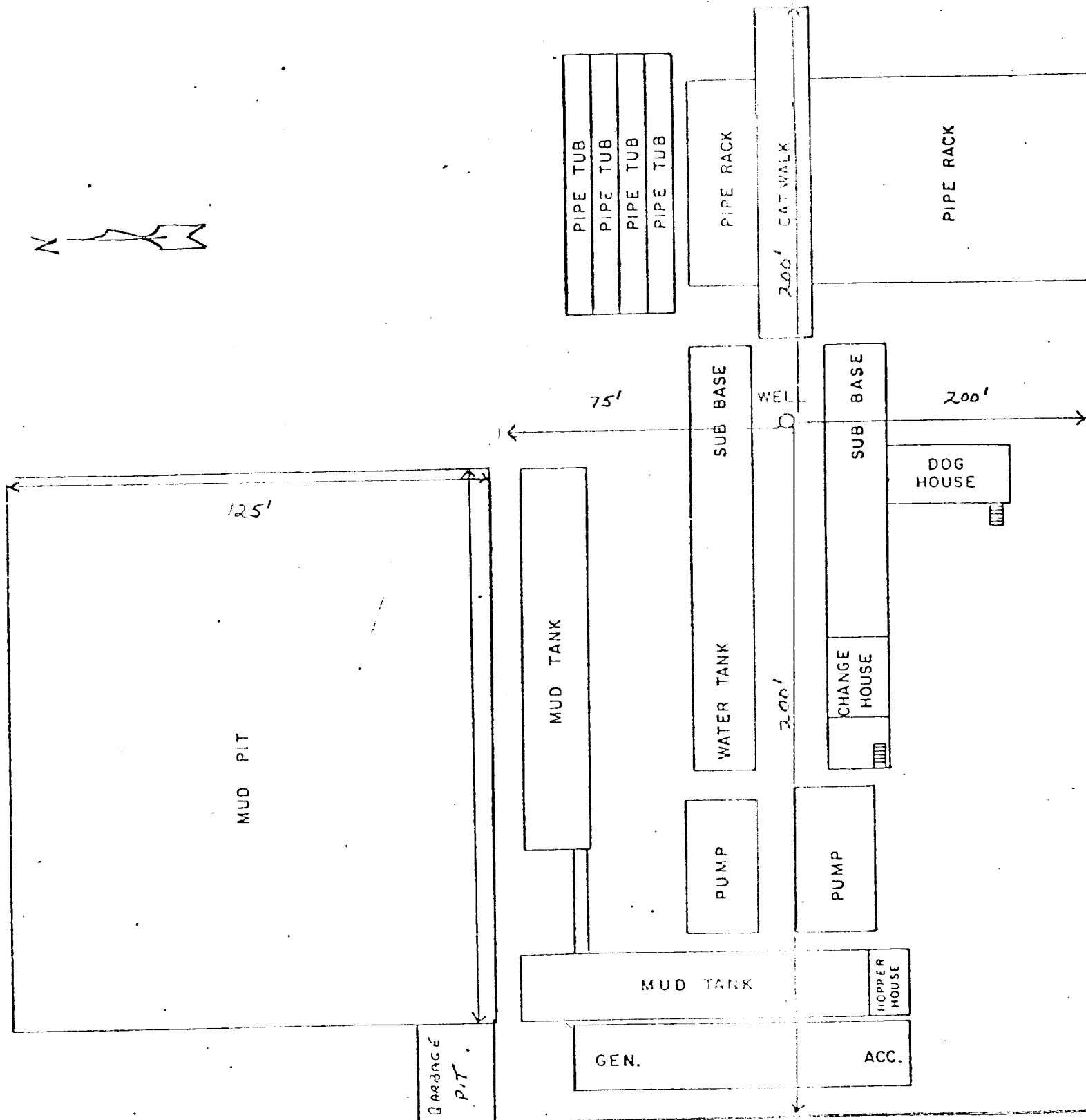


Exhibit C



CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT

RIG LAYOUT

Exhibit D

Engineer: ~~XXXXXXXXXX~~

Draftsman: ~~68~~ Date: 1-4-73