

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. NM 70335		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBAL NAME		
2. NAME OF OPERATOR Phillips Petroleum Company ✓			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR 4001 Penbrook St., Odessa, Texas 79762			8. FARM OR LEASE NAME Livingston Ridge		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface Unit F, 1980' FWL & 1980' FNL At proposed prod. zone Unit F, 1980' FWL & 1980' FNL			9. WELL NO. 7		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 22 mi. East of Carlsbad, NM			10. FIELD AND POOL, OR WILDCAT Cabin Lake (Delaware)		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1980'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 1, T-22-S, R-30-E		
16. NO. OF ACRES IN LEASE 320.48			12. COUNTY OR PARISH Eddy		
17. NO. OF ACRES ASSIGNED TO THIS WELL 40			13. STATE NM		
18. PROPOSED DEPTH 7700'			20. ROTARY OR CABLE TOOLS Rotary		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3316' (Unprepared) 3314'			22. APPROX. DATE WORK WILL START* Upon approval		

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"	48#	475'	650 sk C-Circ. to surface
12-1/4"	8-5/8"	24#	3700'	1200 sk C-Circ. to surface
7-7/8"	5-1/2"	15.5# & 14#	7700'	900 sk C -TOC 3500'

USE MUD ADDITIVES AS NEEDED FOR CONTROL

BOP EQUIPMENT FIGURE 7-9 or 7-10 (See attached schematic)

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.

SIGNED J. L. Maples TITLE Assistant, Regulation and Proration DATE 5/11/90
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Orig. Signer TITLE MANAGER
CONDITIONS OF APPROVAL, IF ANY: _____ DATE 6-14-90

*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.

NEW MEXICO OIL CONSERVATION COMMISSION
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.

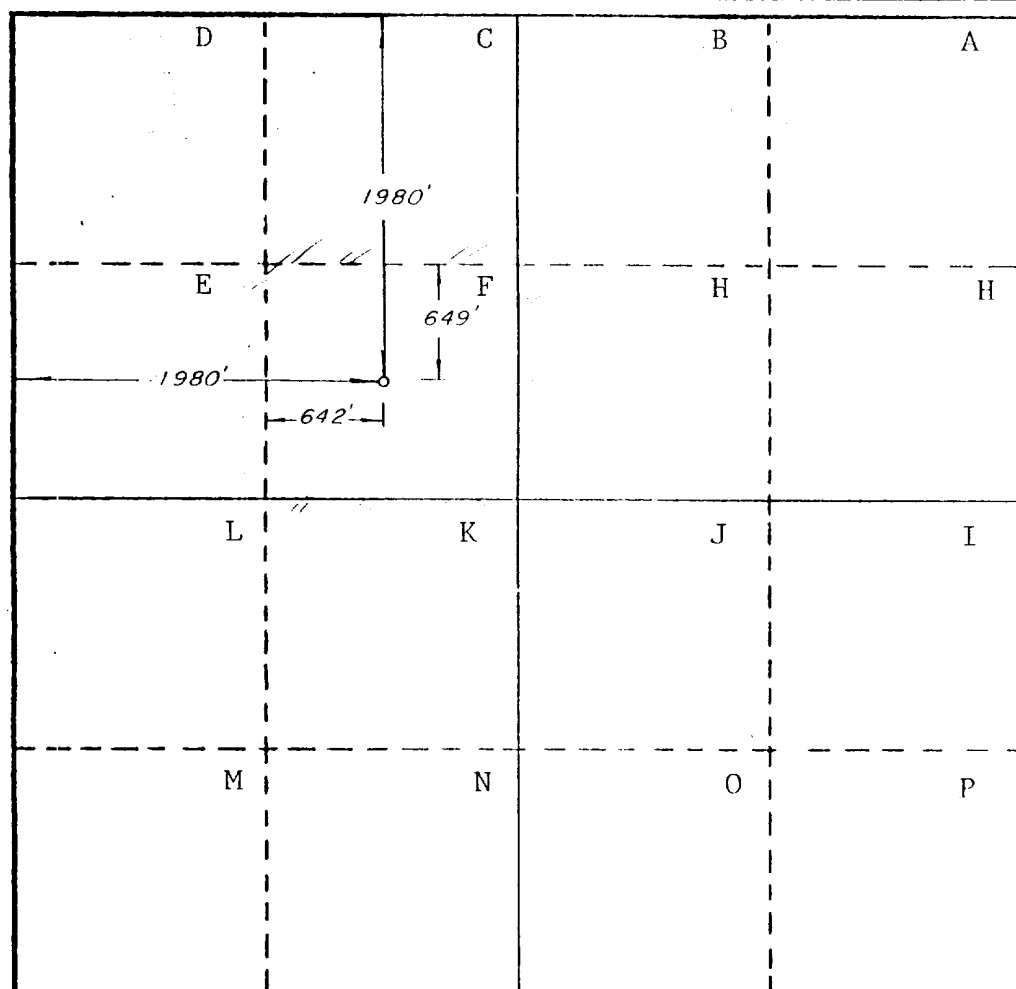
Operator PHILLIPS PETROLEUM COMPANY			Lease Livingston Ridge		Well No. 7
Unit Letter F	Section 1	Township 22-S	Range 30-E	County Eddy	
Actual Footage Location of Well:					
1980 feet from the North line and		1980 feet from the West line			
Ground Level Elev. 3314'	Producing Formation Delaware	Pool Cabin Lake (Delaware)		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 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.

J. L. Maples
Name
J. L. Maples

Position
Asst., Regulation & Proration
Company
PHILLIPS PETROLEUM COMPANY

Date
5/21/90

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.

April 2, 1990

Date Surveyed
Richard B. Duniven
Registered Professional Engineer
and/or Land Surveyor

Richard B. Duniven
Certificate No.

4882

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

SURFACE USE PLAN

Phillips Petroleum Company, Livingston Ridge Lease, Well No. 7, 1980' FNL & 1980' FWL, Section 1, T-22-S, R-30-E, Eddy County, New Mexico. (Fed Lease No. 70335.)

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 22 miles east of Carlsbad, , New Mexico. The following is a discussion of pertinent information concerning the possible effect which the proposed drilling well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

A. None

2. Planned Access Roads

A. To run west to east to planned drillsite.

B. Turnouts: None

C. Drainage Design: New road will have center line to side line slope

D. Culverts, Cuts and Fills: None

E. Surfacing Material: Caliche well pad and roads.

F. Gates, Cattleguards, Fences: None

G. Proposed Road: The proposed road is centerline staked.

3. Locations of Existing wells: None

4. Locations of Tank Batteries, Production Facilities, Production Gathering, and Service Lines: The present tank battery is located - Section 1, T-22-S, R-30-E

Flow line from Well No. 7 to run alongside proposed access roadway.

5. Water Supply Source: Hauled

6. Source of Construction Materials

A. Caliche for surfacing the new road and well pads will be obtained from


Federal pit from Section 11

B. Caliche pit is located on Federal pit from Section 11

7. Methods for Handling Waste Disposal

Will be put in separate waste pits and covered with minimum of 2' backfill. (See sketch.) If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. All produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted for appropriate approval.

8. Ancillary Facilities: None
9. Well Site Layout: Attached sketch shows the relative location and dimensions of the well pad, mud pit, reserve pit, and trash pit. Location will be 250 X 250.
10. Plans for Restoration of Surface:
Pit will be backfilled and levelled as soon as practical to original condition. If well is productive, caliche pad will remain as well service pad. If dry hole, pads and access roads will be ripped per regulations. 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 60 days from commencement.
11. Other Information:
- A. Terrain: See Archaeological Survey
- B. Soil: See Archaeological Survey
- C. Vegetation: See Archaeological Survey
- D. Surface Use: Possible grazing
- E. Ponds and Streams: None
- F. Water Wells: None
- G. Residences and Buildings: 2 miles west of drill site
- H. Arroyos, Canyons, etc.: None
- I. Well Sign: Sign identifying and locating the well will be maintained at drill site with the spudding of the well.
- J. Archaeological Resources: See Archaeological Survey
12. Operator's Representative: Field personnel who can be contacted concerning compliance of the "Surface Use Plan" is as follows:
- | | | |
|-------------------------|----|-------------------------|
| Production and Drilling | or | D. J. Fisher |
| P. D. Appel | | 1625 West Marland |
| 4001 Penbrook Street | | Hobbs, New Mexico 88240 |
| Odessa, Texas 79762 | | Phone: 505-393-5121 |
| Phone: 915-367-1411 | | |
13. Certification:
I hereby certify that I, or persons under my direct supervision, have inspected the 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 Phillips Petroleum Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.



J. L. Maples, Assistant
Regulation and Proration
(915) 367-1411

May 14, 1990
Date

PHILLIPS PETROLEUM COMPANY
Livingston Ridge Well No. 7
Eddy County, New Mexico

DRILLING PROGNOSIS

1. Location of Proposed Well: 1980' FNL & 1980' FWL, Section 1, T-22-S, R-30-E, Eddy County, New Mexico
2. Unprepared Ground Elevation: 3314'
3. The geologic name of the surface formation is See Archaeological Survey
4. Type of drilling tools will be rotary.
5. Proposed drilling depth is 7700'.
6. The estimated tops of important geologic markers are as follows:

<u>Rustler</u>	<u>315'</u>	<u>Brushy Canyon</u>	<u>5980'</u>
<u>Salado</u>	<u>620'</u>	<u>Bone Springs</u>	<u>7650'</u>
<u>Delaware Mt.</u>	<u>3780'</u>		
<u>Cherry Canyon</u>	<u>4600'</u>		

7. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Oil: Brushy Canyon 5980'

8. The proposed casing program is as follows:

Surface String 13-3/8", 48#, set at 475'
Intermediate String 8-5/8", 24#, set at 3700'.
Production String 5-1/2", 14#, 15.5# set at 7700'.

9. Cement Program:

Surface String - Cement to surface with 650 sacks Class C cement.

Intermediate String - Cemented to surface with 1200 sacks Class C.
Production String - Cement with 900 sacks C - estimated top of cement 3500'.

10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are attached.
11. The proposed mud program is attached (see Drilling Specialties mud letter).
12. The testing, logging, and coring programs are as follows:

D.S.T.'s or cores None

Logs DIL-TD-3700±

Neutron Density TD - 3700'

Neutron Gamma Ray 0-TD

Dipmeter - Selective

Special Tests: None

13. Anticipate no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H₂S equipment will be used.
 14. The anticipated starting date is immediately upon approval with duration of operations for approximately 30 days thereafter.
 15. Water Supply: Hauled
 16. Caliche for road and pad construction to be obtained from Federal pit from Section 11.
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PROPOSED MUD PROGRAM
LIVINGSTON RIDGE WELL NO. 7

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	CL PPM	% SOLIDS	ADDITIVES
Surf - 475'	8.3-9.0 ppg	28-36 sec/1000 cc	-	-	-	Native Solids
475' - 3700'	10.0 ppg	29-32 sec/1000 cc	-	Saturated	-	Native Solids
3700' - 5700'	8.3-9.5 ppg	28-36 sec/1000 cc	-	-	-	
5700' - 7700'	8.5-9.0 ppg	32-38 sec/1000 cc	20 cc or less	-	-	Gel/Drispac Plus

Remarks: Use DBX dripped into flowline 10-15' upstream from lower end if extra settling of solids is desired while circulating the reserve.

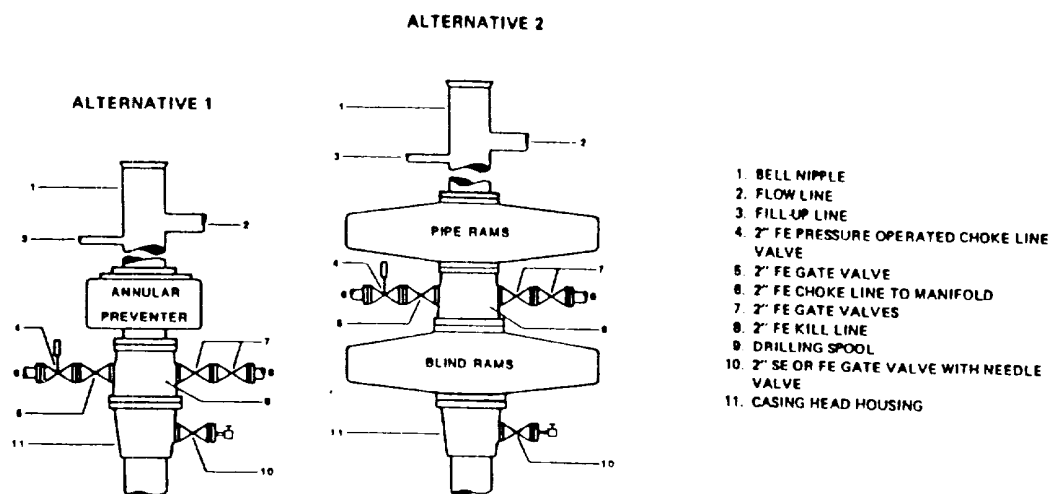
The Mud Engineer shall include on each test report the materials used for the previous 24 hr. period. Twice weekly mail copies of the test reports to:

A. C. Sewell
4001 Penbrook
Odessa, Texas 79762

Send two copies of the Well Recap (Final Cost & Engineering Summaries) to A. C. Sewell at the above address.

regpro/jmap1/mudprog1

FIELD PRACTICES AND STANDARDS



NOTE: THE DRILLING SPOOL MAY BE LOCATED BELOW BOTH SETS OF RAMS IF A DOUBLE PREVENTER IS USED AND IT DOES NOT HAVE SUITABLE OUTLETS BETWEEN RAMS

Figure 7-9. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 1

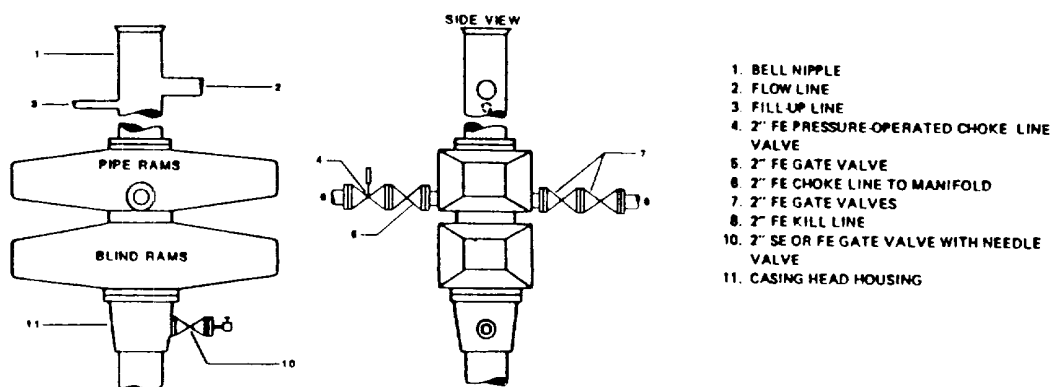


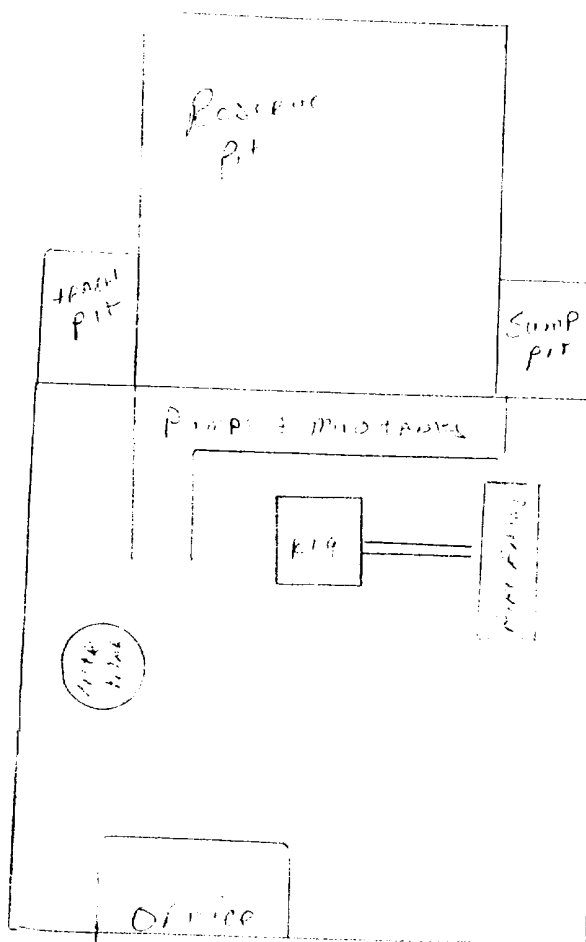
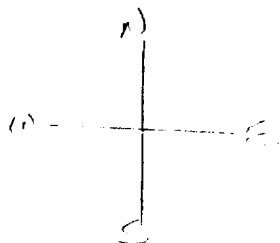
Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)



PHILLIPS PETROLEUM COMPANY

HOBBS, NEW MEXICO 88240
1625 WEST MARLAND

EXPLORATION AND PRODUCTION GROUP



580' new land

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LIVINGSTON RIDGE WELL NO. 7

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	CL PPM	% SOLIDS	ADDITIVES
Surf - 475'	8.3-9.0 ppq	28-36 sec/1000 cc	-	-	-	Native Solids
475' - 3700'	10.0 ppq	29-32 sec/1000 cc	-	Saturated	-	Native Solids
3700' - 5700'	8.3-9.5 ppq	28-36 sec/1000 cc	-	-	-	
5700' - 7700'	8.5-9.0 ppq	32-38 sec/1000 cc	20 cc or less	-	-	Gel/Driscap Plus

Remarks: Use DBX dripped into flowline 10-15' upstream from lower end if extra settling of solids is desired while circulating the reserve.

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regpro/jmap1/mudprog1

FIELD PRACTICES AND STANDARDS

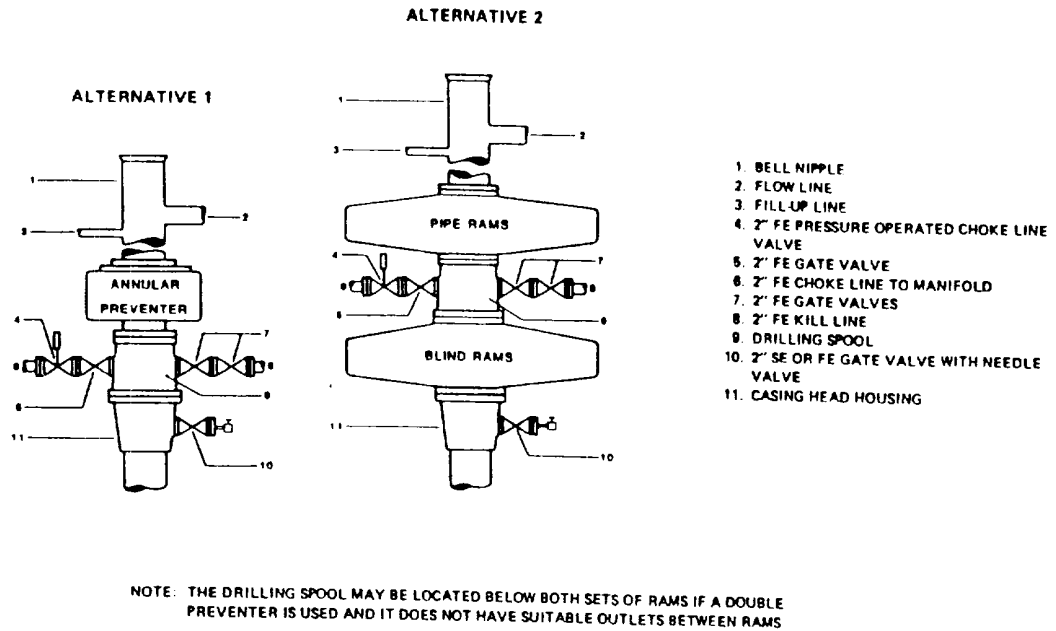


Figure 7-9. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 1

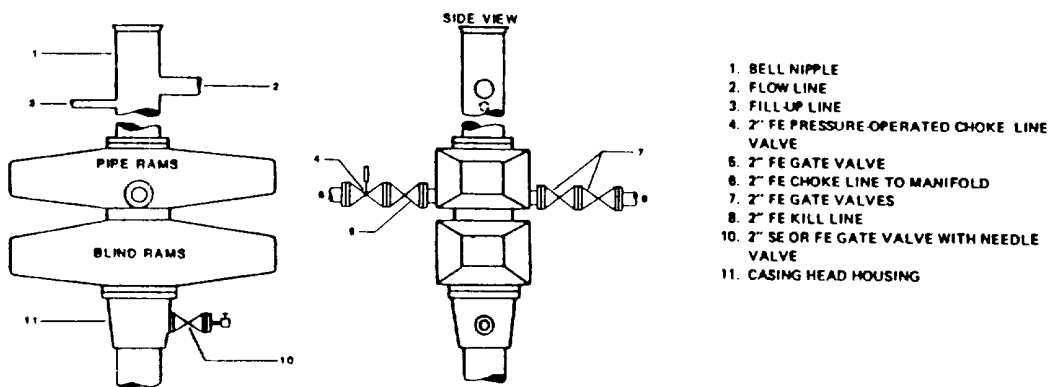


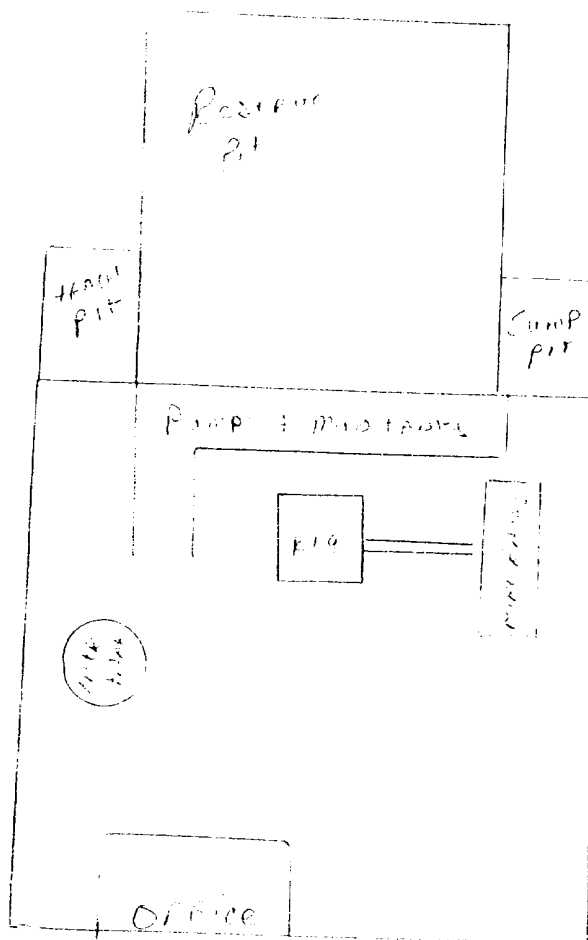
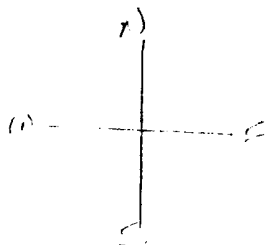
Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)



PHILLIPS PETROLEUM COMPANY

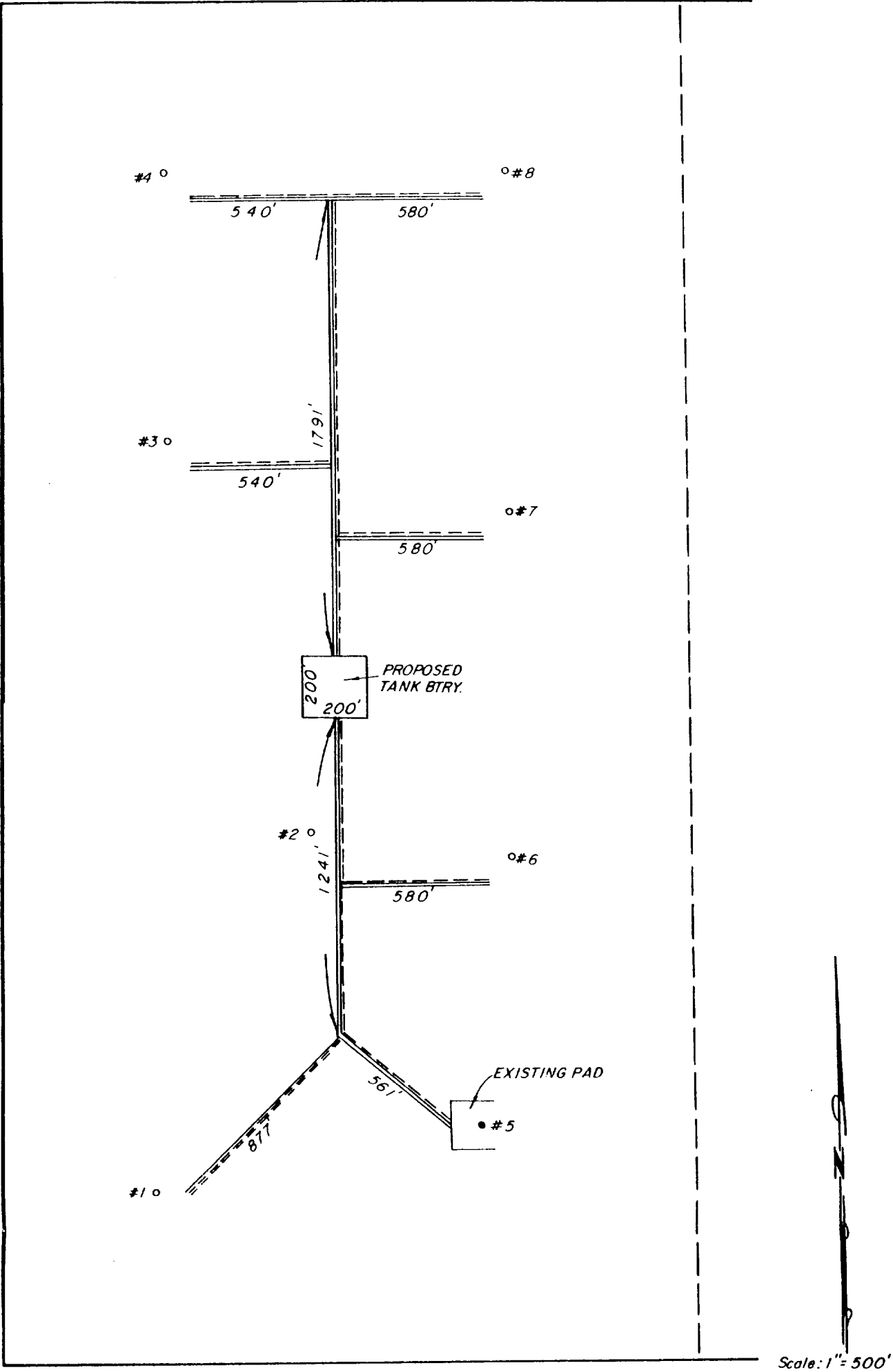
HOBBS, NEW MEXICO 88240
1625 WEST MARLAND

EXPLORATION AND PRODUCTION GROUP



580' Reservoir

W/2 SEC.1, T-22-S, R-30-E, N.M.P.M., EDDY CO., NEW MEXICO



-LEGEND-

- #1 PROPOSED WELL
- ===== PROPOSED LSE. ROAD
- PROPOSED FLOW LINE, ONE FOR EACH WELL

PHILLIPS PETROLEUM COMPANY
Odessa, Texas

PROPOSED LEASE EXPANSION IN:
W/2 Sec.1, T-22-South, R-30-East, N. M. P. M.
Eddy County, New Mexico

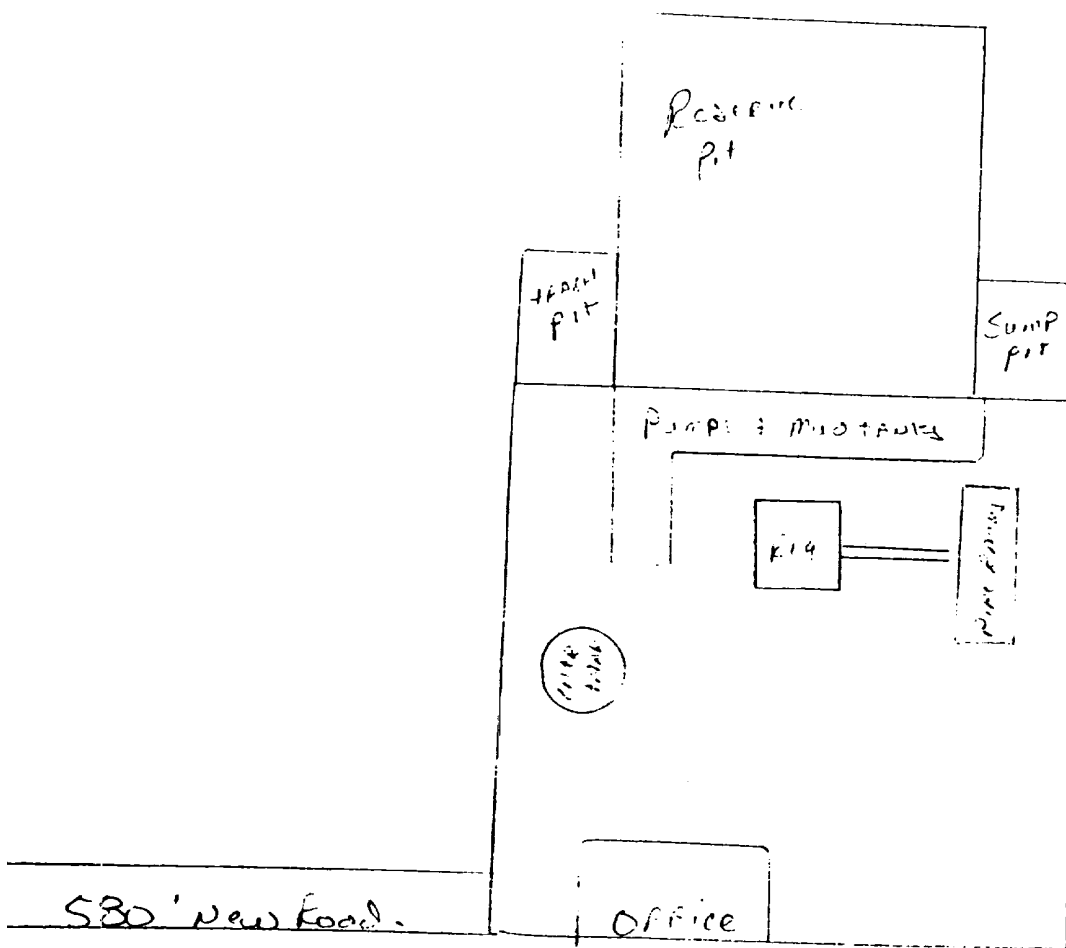
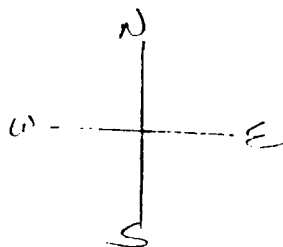
RICHARD B. DUNIVEN & CO. INC.
REGISTERED PUBLIC SURVEYORS
P. O. Box 80276 APRIL 3, 1990 915-687-0231
Midland Texas 79709



PHILLIPS PETROLEUM COMPANY

HOBBS, NEW MEXICO 88240
1625 WEST MARLAND

EXPLORATION AND PRODUCTION GROUP



Livingston Ridge # 7

Fig. 3. USGS LIVINGSTON RIDGE QUADRANGLE, 7.5 Minute Series, 1:24,000, 1985, Prov. Ed., showing PHILLIPS PETROLEUM COMPANY's proposed Livingston Ridge Well No. 7, 1980' FWL, and access road, Section 1, T22S, R30E, NMPM, Eddy County, NM

