30-015-26880

Form 3160-3
(November 1983)
(formerly 9-331C)

NM OIL CONSERVATION COMMISSION
Drawer DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: LC-028793-C

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Burch-C Fed

9. WELL NO.: 48

10. FIELD AND POOL, OR WILDCAT: Grayburg/Jackson/7R/Q/GB/SA

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23, T-17-S, R-29-E

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [XX] GAS WELL [ ] OTHER — SINGLE ZONE [XX] MULTIPLE ZONE [ ]

RECEIVED
NOV - 8 1991
O. C. D.
ARTESIA, OFFICE

2. NAME OF OPERATOR: PHILLIPS PETROLEUM COMPANY

3. ADDRESS OF OPERATOR: 4001 Penbrook St., Odessa, Texas 79762

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: Unit O, 2070' FEL & 1310' FSL
At proposed prod. zone: Unit O, 2070' FEL & 1310' FSL

12. COUNTY OR PARISH: Eddy — 13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 4 miles West of Loco Hills, 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
1310'	1115.2 acres	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**
655'	3650'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3584.6' GL (unprepared)

22. APPROX. DATE WORK WILL START*: upon approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	350'	350 sacks "C" - circ. to surface
7-7/8"	5-1/2"	15.5#	3650'	Lead: 350 sk"C" TOC- surface Tail: 300 sk "C" Neat

Post ID-1
11-15-91
New Loc + API

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 for L. M. Sanders — TITLE Supervisor, Regulation & Proration — DATE 10/16/91
(915) 368-1667

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 11-6-91

CONDITIONS OF APPROVAL, IF ANY:
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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 1-1-89

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
Phillips Petroleum Company	Burch C Federal	48

Unit Letter	Section	Township	Range	County
O	23	17 South	29 East NMPM	Eddy

Actual Footage Location of Well:
2070 feet from the East line and 1310 feet from the South line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3584.6	Grayburg - Jackson	Grayburg/Jackson/7R/Q GB/SA	40 Acres

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

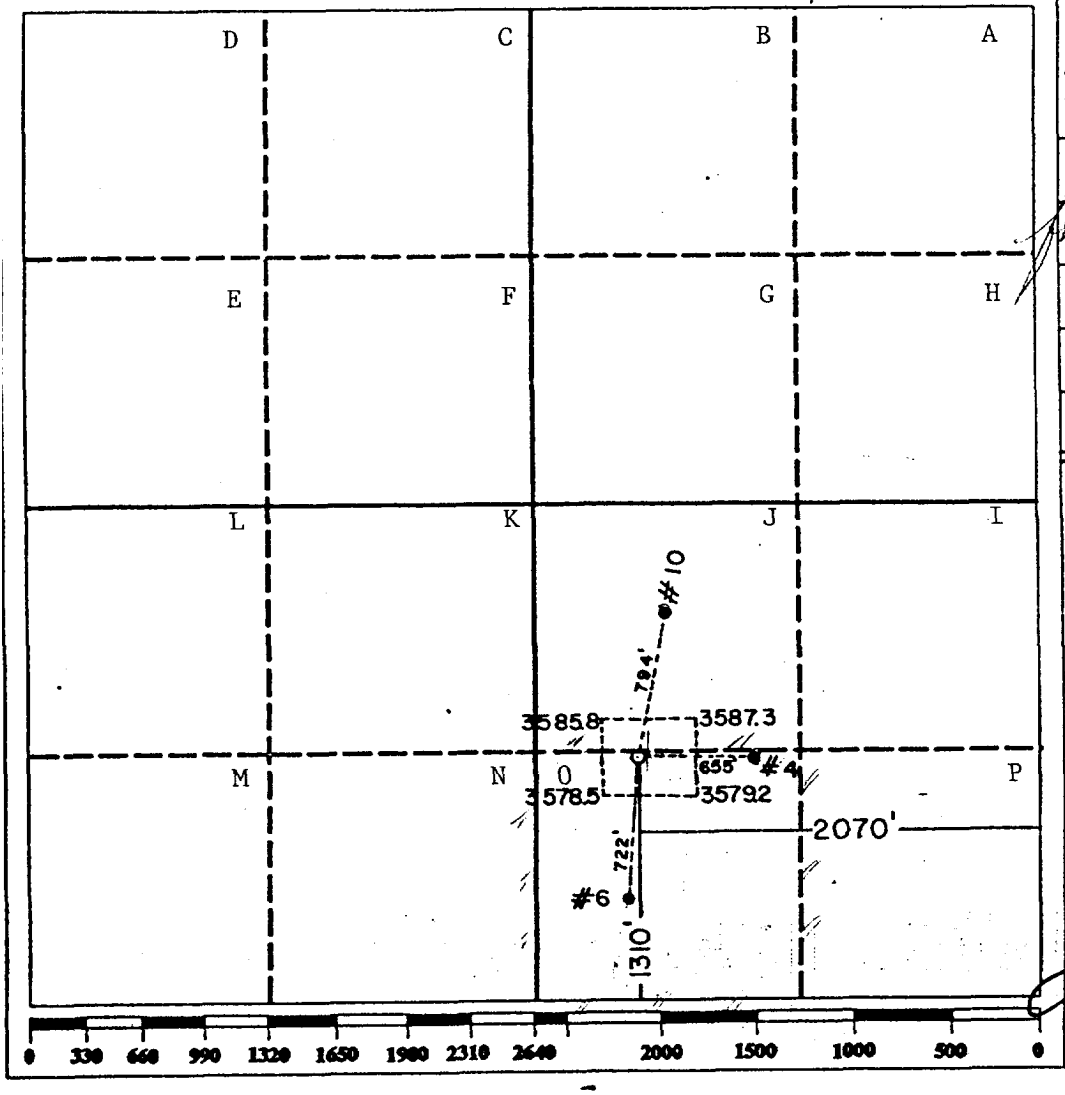
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the 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 in true and complete to the best of my knowledge and belief.

Signature: Ray Manders

Printed Name: L. M. Sanders

Position: Supervisor, Regulation & Proration

Company: Phillips Petroleum Co.

Date: 10/16/91

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: September 4, 1991

Signature & Seal of Professional Surveyor: John W. West

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

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 676 NEW MEXICO JOHN W. WEST

PROPOSED CASING & CEMENTING PROGRAM

BURCH C #48

8 5/8" 24 lb/ft K-55 Surface Casing Set at 350':

Circulate to surface with 350 sacks of Class "C" + 2% $CaCl_2$.

Slurry Weight:	14.8 ppg_3
Slurry Yield:	1.32 ft^3/sx
Water Requirement:	6.3 gals/sx

5 1/2" 15.5 lb/ft K-55 Production Casing Set at 3650':

Lead: 350 sx Class "C" 65/35 Poz + 6% Bentonite + 5% Salt.
TOC = Surface.

Slurry Weight:	13.2 ppg_3
Slurry Yield:	1.70 ft^3/sx
Water Requirement:	8.8 gals/sx

Tail: 300 sx Class "C" Neat.

Slurry Weight:	14.8 ppg_3
Slurry Yield:	1.32 ft^3/sx
Water Requirement:	6.3 gals/sx

PHILLIPS PETROLEUM COMPANY

BURCH C FED #48

DRILLING PROGNOSIS

1. Location of Proposed Well: 1310' FSL and 1970' FEL, SE/4 Sec. 23, T-17-S, R-29-E

2. Unprepared Ground Elevation: 3584.6'.

3. The geologic name of the surface formation is San Andres (Keely).

4. Type of drilling tools will be Rotary.

5. Proposed drilling depth is 3650'.

6. The estimated tops of important geologic markers are as follows:

Loco Hills	2300'	
Metex	2410'	
Premier	2520'	
Jackson	2690'	

7. The proposed casing program is as follows:

   Surface String 8-5/8" 24# K-55 set @ 350'

   Production String 5-1/2" 15.5# K-55 set @ 3650'.

8. Cement Program:

   Surface String = 8-5/8" set at 350', (12-1/4" hole). Circulate to surface with 350 sacks of Class "C" + 2% CaCl. (SOS)
   Slurry Weight 14.8 ppg
   Slurry Yield 1.32 ft^3/sk

   Production String = 5-1/2" set at 3300' (7-7/8" hole). Cemented with lead: 350 sx Class "C" 65/35 Po2 + 6% Bentonite + 5% salt. TOC surface. Slurry weight = 13.2 pps; slurry yield = 1.7 ft^3/sk. Tail: 300 sx Class "C" Neat. Slurry weight = 14.8 ppg, slurry yeild = 1.32ft^3/sk.

   Water Requirement = 6.3 gals/sk

9. 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.

10. The proposed mud program is attached.

11. The testing, logging, and coring programs are as follows:
    D.S.T.'s or cores: 7 cores = 25' above & 15' below each zone (San Andres, Keely, and Sub Keely zones).

    Logs: CNL (PF)/FDT; DLL/MLL; FWS; Spectralog

    Special Tests: _____

12. Anticipate no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low rick H_2S equipment will be used.

13. The anticipated starting date is immediately upon approval with duration of operations for approximately 30 days thereafter.

14. Water Supply: Hauled.

15. Caliche for road and pad construction to be obtained from Federal pit.

PHILLIPS PETROLEUM COMPANY

BLOWOUT PREVENTER REQUIREMENTS

Well Name: Burch C Fed #48

I. Blowout preventer equipment, installation, testing and responsibilities will be in accordance with Phillips Company's Blowout Preventer Standards.

II. Figure Nos. 7-9 or 7-10 (Drawing Attached): Casing String 8-5/8" , 5-1/2"
BOP Size 8-5/8" ; Working Pressure 3000 psi

III. Equipment to be furnished by Contractor:

A. Ram Type BOPs:
1. No. Required two
2. Acceptable Manufacturers & Types
   a. Cameron Iron Works: QRC; F; SS; U
   b. Shaffer Tool Works: B; E; LWS; LWP
   c. Hydril

B. Annular Type BOPs:
1. No. Required None
2. Acceptable Manufacturers & Types
   a. Hydril - GK
   b. Shaffer - Spherical
   c. Cameron - D

C. Preventer Operating Equipment
1. Hydraulic Pump - air, steam or electrically operated of sufficient volume and pressure capacity to close the largest ram type preventer in less than 30 seconds. Electrically operated pump must be equipped with explosion proof motor and controls.
2. Manifold with a control valve for each preventer.
3. A Hydril or equivalent regulator for each annular type preventer.
4. Accumulator of sufficient volume and pressure capacity to close all preventers in the assembly without recharging. If the pump in C.1. is incapable of recharging the accumulator in excess of 1500 psi, a separate pump capable of this is to be furnished.
5. Remote control panel with a station for each preventer control valve.
6. Steel piping to connect hydraulic closing units to preventers.
7. Choke manifold with seamless steel piping and flanged or clamp hub connections. Choke manifold assembly and piping sizes as specified, on the attached drawing. All working lines, except hydraulic closing lines, shall have flanged or clamp hub connections to preventers, spools and casing heads.
8. Full opening drill string safety valve (I.D. equal or larger than I. D. of tool joint in use). Working pressure to equal or exceed specified BOP working pressure. O.D. and configuration such that valve can be run in the hole with adequate clearance.
9. Full opening upper Kelly cock. Working pressure to equal or exceed specified BOP working pressure.

REG1,REQUIRE

III. C. (continued)

10. Hydraulic pump of sufficient pressure rating to test preventer assembly to rated working pressure with necessary hose and fittings to connect the pump to drill pipe box or safety valve pin.
11. Drilling spool for use wth single ram type preventers or with dual ram type preventers which do not have outlets between the rams.
12. Two valves on each side of drilling spool or dual preventers, one side for choke manifold connection and the other for kill line connection.
13. Hand wheels and extensions for manual operation of the ram type preventers. U-joints, extension guides, working platform(s) as necessary.
14. A 1" - 5000 psi WP plug valve on the closing side of the annular type preventer using a XXE 1" x 4" nipple.
15. Flowlines from choke manifold to pits.
16. Pressure gauge with pressure range at least equivalent to BOP WP.

IV. Equipment to be Furnished by Phillips:

A. Test plug to seat in casing head.

B. Remote controlled chokes, if installed.

C. Casinghead with valves on outlets.

D. Inside blowout preventer, if required.

E. Mud-gas separator, if required, and necessary piping.

V. Location of Equipment & Controls:

A. Remote control panel on the rig floor adjacent to drillers position and stairway exit from the floor.

B. Accumulator-Hydraulic Control Valve Unit to be placed minimum of 50 feet from well bore in easily accessible location.

C. Choke Manifold located 5 feet or more from the BOPs with minimum number of turns in the run.

D. Manual closing facilities installed so handwheels are outside the substructures in unobstructed location. U-joints, extension guides and working platforms installed as necessary for proper and safe operation.

E. Choke Manifold connection, where possible, is to be made between the two bottom ram type preventers through use of a drilling spool or by connecting between rams of dual type units with outlets so installed.
   1. On dual type preventers where outlets are not installed between rams, connection is to be made to a drilling spool installed between the ram type and annular type preventers.

REG1,REQUIRE1

V. (Continued)

F. Position and Type Rams will be as shown on the attached drawing.

G. Fill up line to be tied into the bell nipple above annular preventers.

H. Safety Valve, open with connections and/or subs available to fit any tool joint in use, shall be on the rig floor at all times.

VI. Testing

A. Initial Installation Test
Immediately after installation, each component part of the blowout preventer assembly including choke lines, valves and closing facilities will be tested individually by steps as outlined in the Blowout Preventer Testing Procedure section of Phillips' Blowout Preventer Standards. The test pressure will be at the working pressure specified in Item II. All components must be satisfactorily tested before drilling out.

B. Ram Change or Repair Test
1. After each ram change or when any component part of the preventer assembly, including lines and valves, is disturbed, the disturbed portion is to be tested to working pressure specified in Item II.
2. Installation of casing rams is not required for running casing.

C. Weekly Pressure Test
The first trip out of the hole after 12:01 AM, Tuesday, weekly test will be performed as outlined in the Blowout Preventer Testing Procedure which includes testing the entire assembly with water to 1/2 the specified working pressure for 10 minutes. The Kelly cock and safety valve are to be tested to the specified working pressure. The weekly test is not required where the test falls within three days after the initial installation test.

D. Operational Test
Each preventer unit is to be closed and opened on each trip or at least once each 48 hours (trip is not required just to actuate blind rams or pipe rams that do not fit top section of tapered string).

VII. Responsibilities

A. Contractor is to install and test the blowout preventer assembly as specified.

B. The driller is to check and record the accumulator pressure on the daily drilling report at the beginning of each tour.

C. Expense of rig time and pressure testing services for initial and weekly tests will be borne by:
1. Contractor while on footage contract.
2. Owner while on daywork contract.

REG1,REQUIRE2

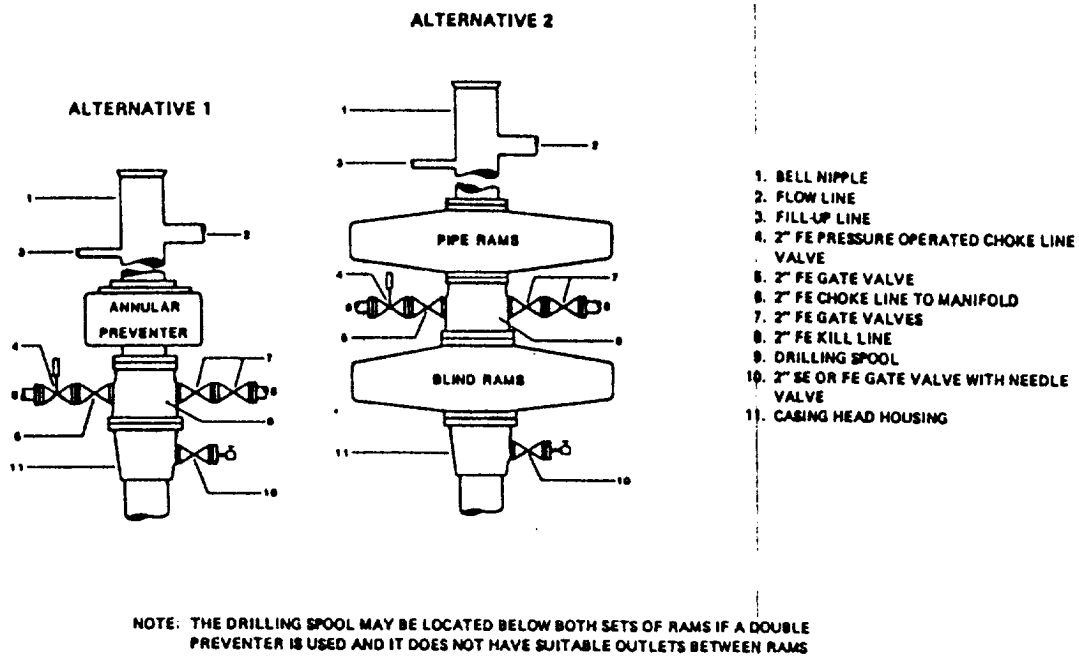
Surf - 350'	8.5-9.0 ppg	30-36 sec/1000 cc	-	-	-	Native Solids, Paper
350' - 1000'	10.0-10.2 ppg	29-32 sec/1000 cc	-	Saturated	-	Native Solids
1000' - 3650'	10.2 ppg or less	31-34 sec/1000 cc	10 cc or less	Saturated	-	Starch/Drispac+

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.



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

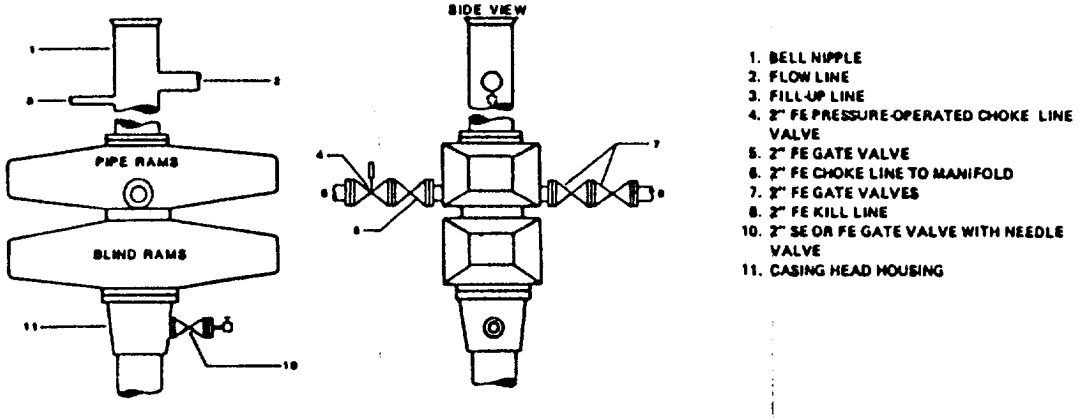


Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)

SURFACE USE PLAN

Phillips Petroleum Company, Burch C Fed Lease, Well No. 48, 1310' FSL & 2070' FEL, Section 23, T-17-S, R-29-E, Lea County, New Mexico. (Fed Lease No.LC-028793-C).

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 4 miles west of Loco Hills, 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. North and south 100' east of planned drilling site.

2. **Planned Access Roads**

   A. To run east and west to southwest corner of drilling pad. 60' of new road.
   B. **Turnouts:** none.
   C. **Drainage Design:** centerline 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:** #4 - 655' FSL & 2070' FSL, Sec. 23, T-17-S, R-29-E, Eddy County, New Mexico.

4. **Locations of Tank Batteries, Production Facilities, Production Gathering, and Service Lines:** The present tank battery is located in Section 19, T-17-S, R-29-E, Eddy County, New Mexico. Approx. 1500' of 2-7/8" steel flowline will be laid upon the ground surface along the access road to the satelite battery located in Unit O, Sec. 23, T-17-S R-29-E, Eddy County, NM.

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.

7. **Methods for Handling Waste Disposal:**

   Will be put in trash trailer. 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 Archeological Survey.
B. **Soil:** see Archeological Survey.
C. **Vegetation:** see Archeological Survey.
D. **Surface Use:** possible grazing.
E. **Ponds and Streams:** none.
F. **Water Wells:** none.
G. **Residences and Buildings:** 2 miles east of location.
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 Archeological Survey.

12. **Operator's Representative:** Field personnel who can be contacted concerning compliance of the "Surface Use Plan" are as follows:

Production and Drilling
R. C. Ainsworth
4001 Penbrook Street
Odessa, Texas 79762
Phone: 915-367-1261

or

Spencer Oden
1625 West Marland
Hobbs, New Mexico 88240
Phone: 505-393-5121

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.

for L. M. Sanders, Supervisor
Regulation and Proration

10/16/91
Date

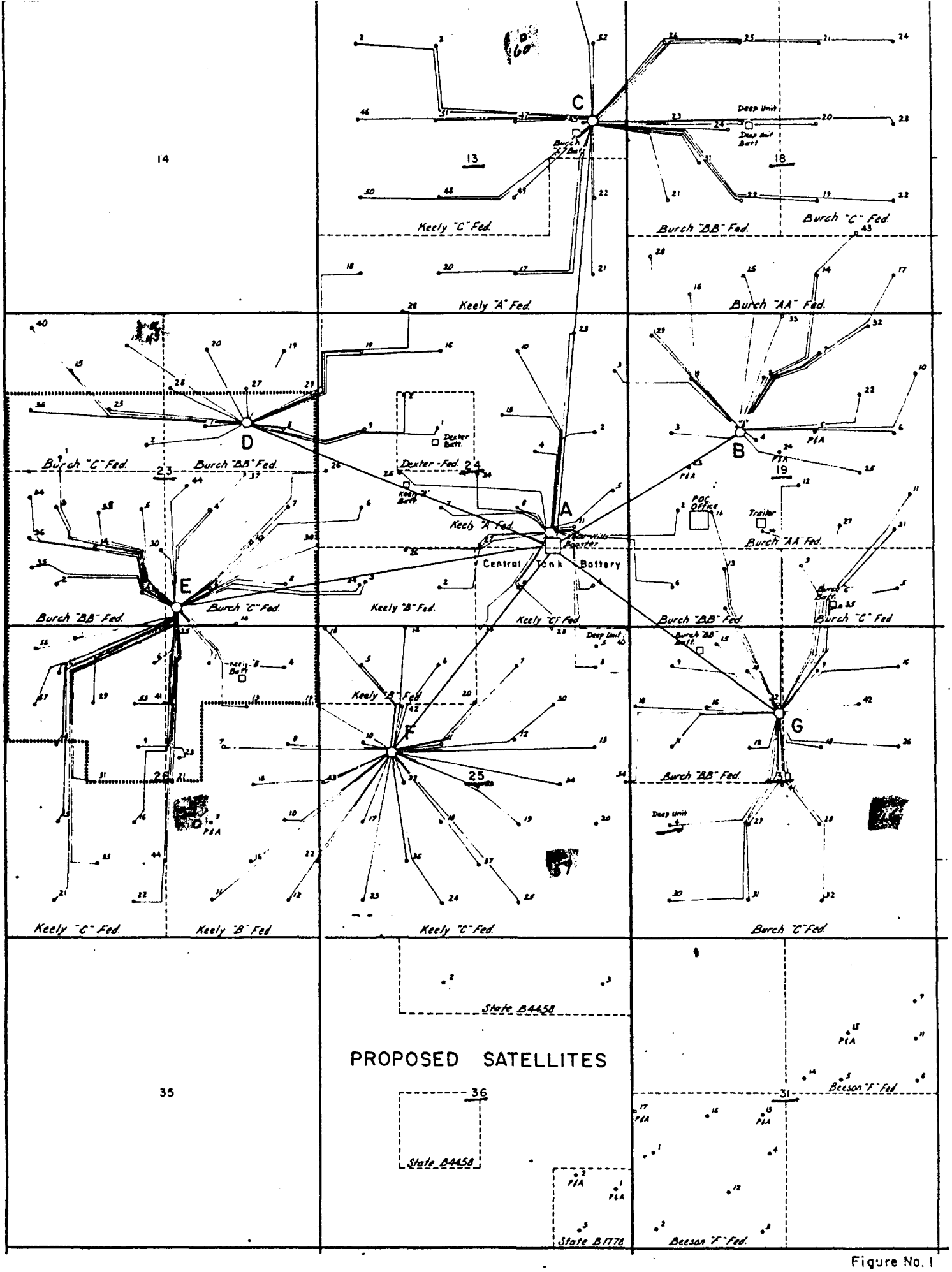
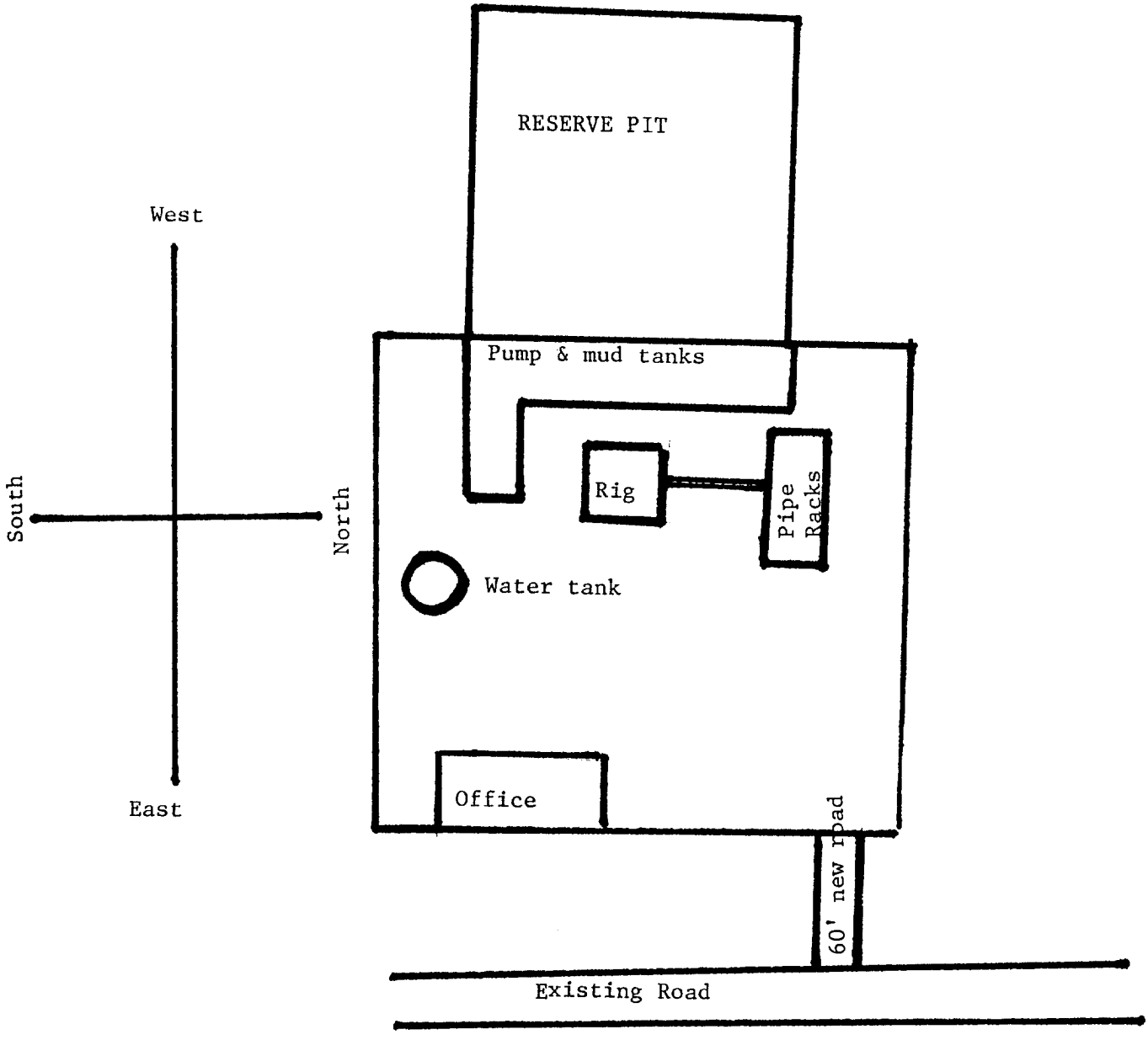

C
Deep Unit
Burch "C" Batt.
13
18
Keely "C" Fed.
Burch "BB" Fed.
Burch "C" Fed.
Keely "A" Fed.
Burch "AA" Fed.
D
Dexter Batt.
Dexter Fed.
24
B
P&A
19
Burch "C" Fed.
Burch "BB" Fed.
Keely "A" Fed.
A
Central Tank Battery
POC Office
Trailer
Burch "AA" Fed.
E
Burch "BB" Fed.
Burch "C" Fed.
Keely "B" Fed.
Keely "C" Fed.
Burch "BB" Fed.
Burch "C" Fed.
F
Keely "B" Fed.
25
G
Burch "BB" Fed.
Deep Unit
26
P&A
Keely "C" Fed.
Keely "B" Fed.
Keely "C" Fed.
Burch "C" Fed.
State B4458
PROPOSED SATELLITES
35
36
State B4458
P&A
State B1778
Beeson "F" Fed.
31
Beeson "F" Fed.

Figure No. 1

PHILLIPS PETROLEUM COMPANY



BURCH C FED WELL NO. 48