

OPERATIONS PLAN

OPERATOR: Pioneer Production Corp.
WELL NAME: Redfern #4E
FIELD: Basin Dakota
LOCATION: 1850' FSL - 810' FWL Section 16 T28N R11W San Juan County, NM
ELEVATION: 5643' GR

EXPECTED FORMATION TOPS:	Ojo Alamo	415'	Point Lookout	4042'
	Kirtland	565'	Mancos	4412'
	Fruitland	1525'	Gallup	5291'
	Pictured Cliffs	1692'	Greenhorn	6060'
	Lewis	1829'	Graneros	6157'
	Cliff House	3282'	Dakota	6227'
	Menefee	3385'	Total Depth	6575'

LOGGING PROGRAM: IES

SAMPLES: Catch samples in 10' intervals beginning at 6200'

CASING PROGRAM

<u>Hole Size</u>	<u>Depth</u>	<u>Csg Size, Wt, Grade, & Condition</u>	<u>Cementing Program</u>
12-1/4"	200'	8-5/8" 24# J-55 New	Cement surface w/125 sx class "B" neat plus 2% CaCl
7-7/8"	6575'	4-1/2" 10.5# K-55 New	Cement 1st stage w/200 sx 65-35 plus 12% gel and 150 sx class "B" all with 1/4# flocele per sx. Total slurry 650 cu ft. Cement 2nd stage through stage tool @ 4060' w/500 sx 65-35 plus 12% gel and 100 sx w/4% gel Total slurry 1430 cu ft. TOTAL SLURRY 2080 cu ft

WELLHEAD EQUIPMENT

8-5/8" x 10" 600 Bradenhead	New
10" 600 x 6" 600 series Christmas tree	New

Office	-	325-0238
Tom Dugan		325-5694
Jim Jacobs		325-8353
Kurt Fagrelus		334-3381
Bill Donovan		325-5692
James Hazen		

DEVELOPMENT PLAN

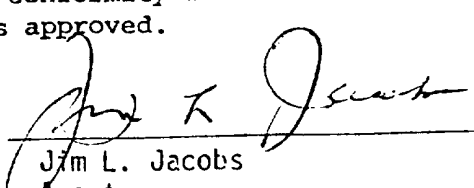
Pioneer Production Corp.

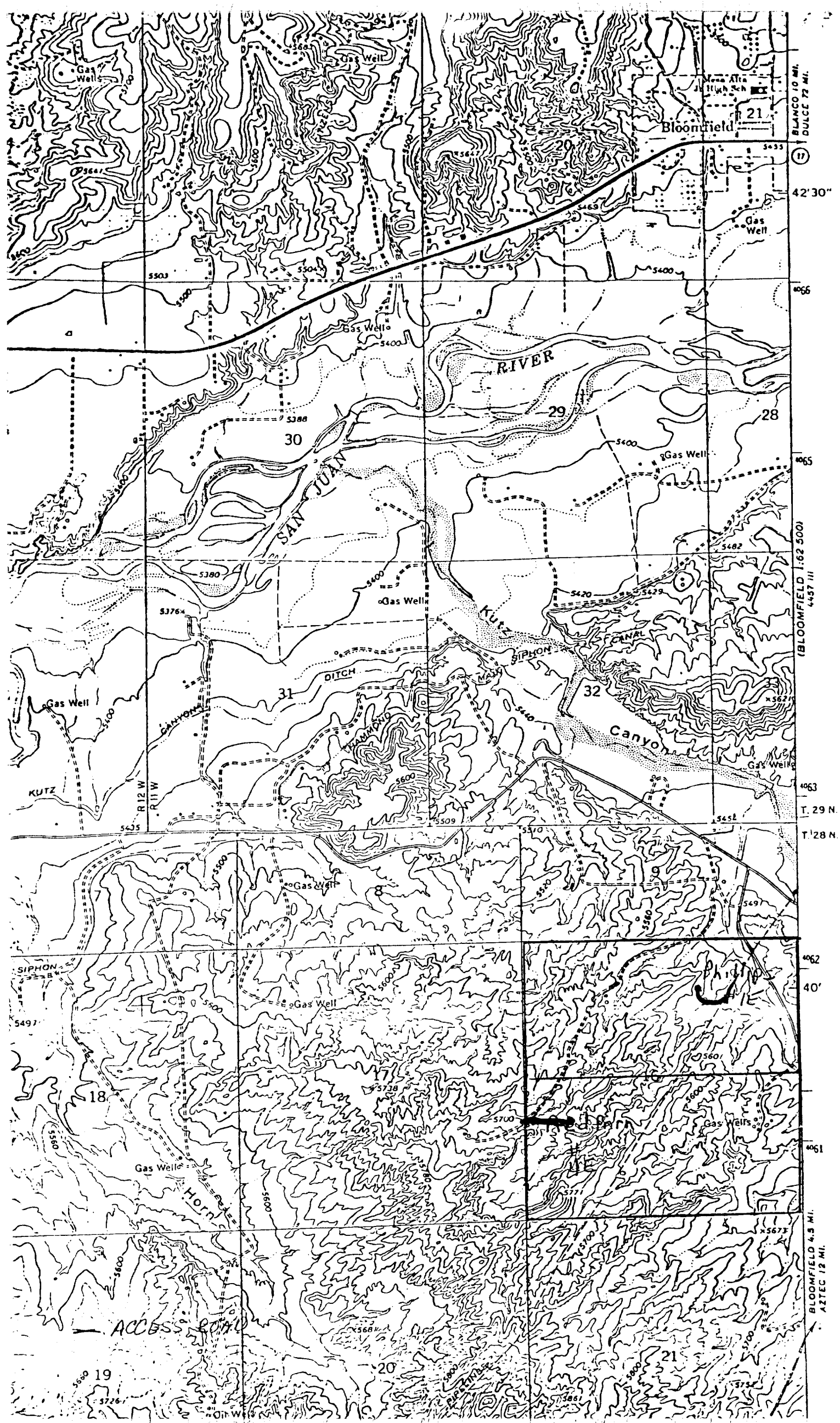
Redfern #4E

1. Existing roads and existing wells are shown on attached plat.
2. Planned access from existing road approximately 600' to new location. Will leave natural grass and small vegetation on roadway. Will remove large brush or trees from road. Do not plan to make road grade or bar ditches. Will bottom-out any arroyo we cross and not install culverts.
3. Location of well: 1850' FSL - 810' FWL
Sec 16 T28N R11W
San Juan County, NM
4. No additional well(s) planned on this lease at this time.
5. Separator and flow line will be located within 50' of wellhead.
6. Water will be secured from San Juan River.
7. Waste materials will be buried on location or in reserve pit.
8. No permanent camp is planned; trailer house will be used on location while drilling.
9. Do not plan to build airstrip.
10. See attached plat for proposed location layout.
11. A general description of the topography, soil characteristics, geologic features, flora and fauna; other surface-use activities and surface ownership of involved lands, proximity of water, occupied dwellings, archeological, historical or cultural sites can be found in the archeologist's report.
12. Geologic name of surface formation: Recent Blow Sand.
13. Estimated tops of important geologic markers:
See Operations Plan
14. Estimated depths of anticipated water, oil, gas, or other mineral bearing formations which are expected to be encountered: water - Ojo Alamo 415'
gas 1692' PC, Pt. Lookout 4042', GA 5291', DK 6227'
15. We do not anticipate to encounter any abnormal pressures or temperatures or any potential hazards such as those associated with hydrogen sulfide.
16. Will clean up location, fill and level pits, level ruts in road, reseed location and road with Seed Mixture #2 and paint equipment with sandstone brown.
17. Operator's Representative:
Jim L. Jacobs
Box 208
Farmington, NM 87401
18. Certification: The following statement must be signed by the lessee's or operator's field representative who is identified in Item #17 of the Plan:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Pioneer Production Corp. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

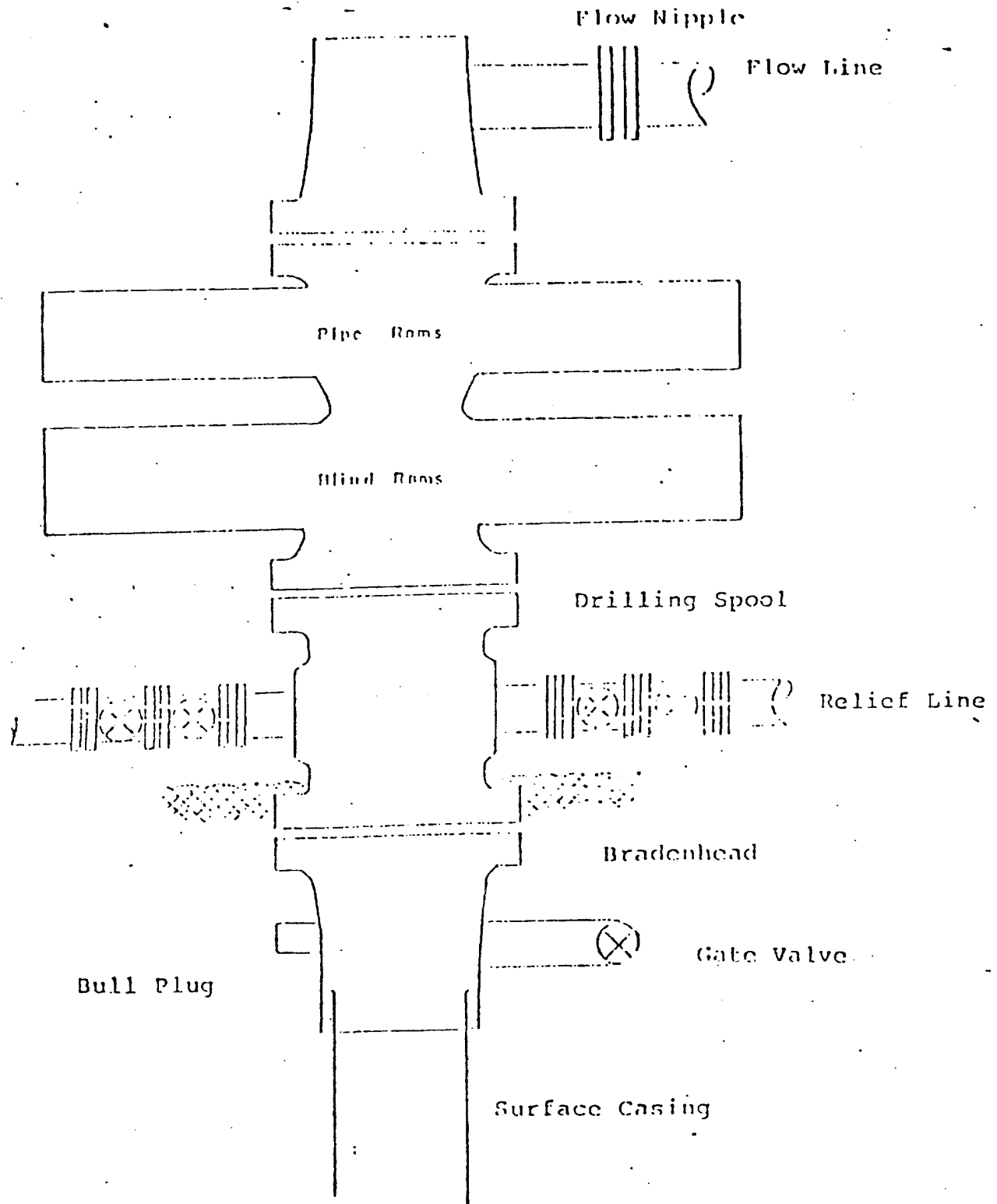
Date: 11-16-79


Jim L. Jacobs
Agent



TYPICAL BOP INSTALLATION

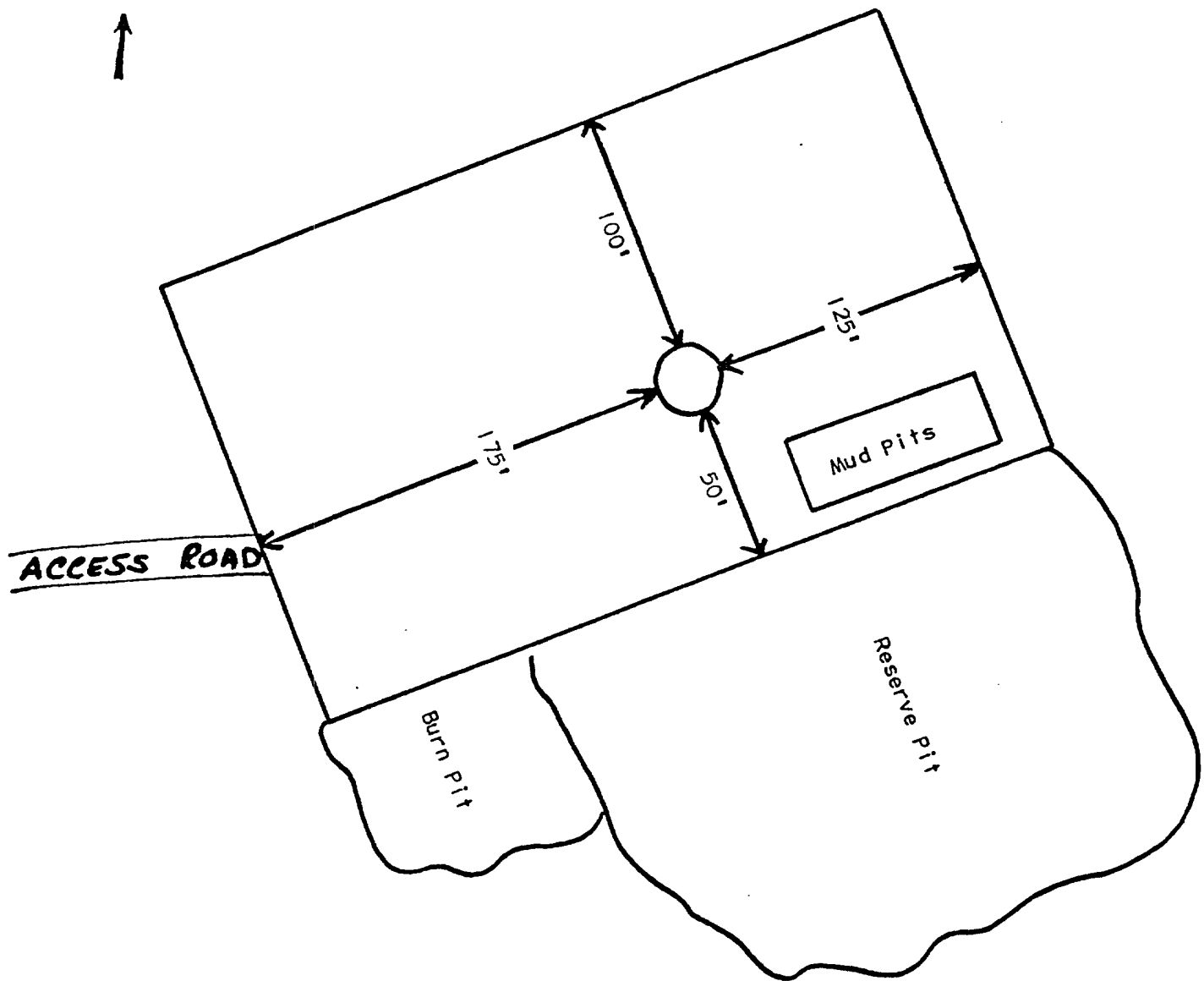
FOR DAKOTA WELL



Series 900 Double Gate BOP, rated
at 3000 psi Working Pressure

When gas drilling operations begin a Shaffer type
50 or equivalent rotating head is installed on top of
the flow nipple and the flow line is converted into
a blowie line.

Pioneer Production Corp.
Redfern #4E
PROPOSED LOCATION LAYOUT



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-23994

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

Pioneer Production Corp.

3. ADDRESS OF OPERATOR

Box 208, Farmington, NM 87401

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

At surface

1850' FSL - 810' FWL

At proposed prod. zone

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

2 miles southeast of Bloomfield

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

810'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED
TO THIS WELL

5/320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

6575'

20. ROTARY OR CABLE TOOLS

Rotary

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

5643' GR

22. APPROX. DATE WORK WILL START*

Dec. 15, 1979

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#	200'	125 sx
7-7/8"	4-1/2"	10.5#	6575'	350 sx 1st stage
				600 sx 2nd stage

Plan to drill with mud to test Basin Dakota Fm. Plan to run IES log to TD.
If productive, will set 4-1/2" casing, cement in two stages, selectively perforate,
frac, clean out after frac, run 1-1/2" tbg and complete well.

Plan to use BOP furnished by rig while drilling (10" 3000 psi hydraulic)

Plan to use BOP rental while completing (6" 3000 psi double gate manual)

Gas Dedicated: El Paso Natural Gas Co.

RECEIVED

NOV 19 1979

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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

Jim L. Jacobs

TITLE

Agent

DATE

11-16-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

*See Instructions On Reverse Side
ADDITIONAL WELL NEEDED PURSUANT TO NEW MEXICO ORDER R-1670-V.
U.S.G.S. RATIFICATION DATED JUNE 8, 1979.

**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.

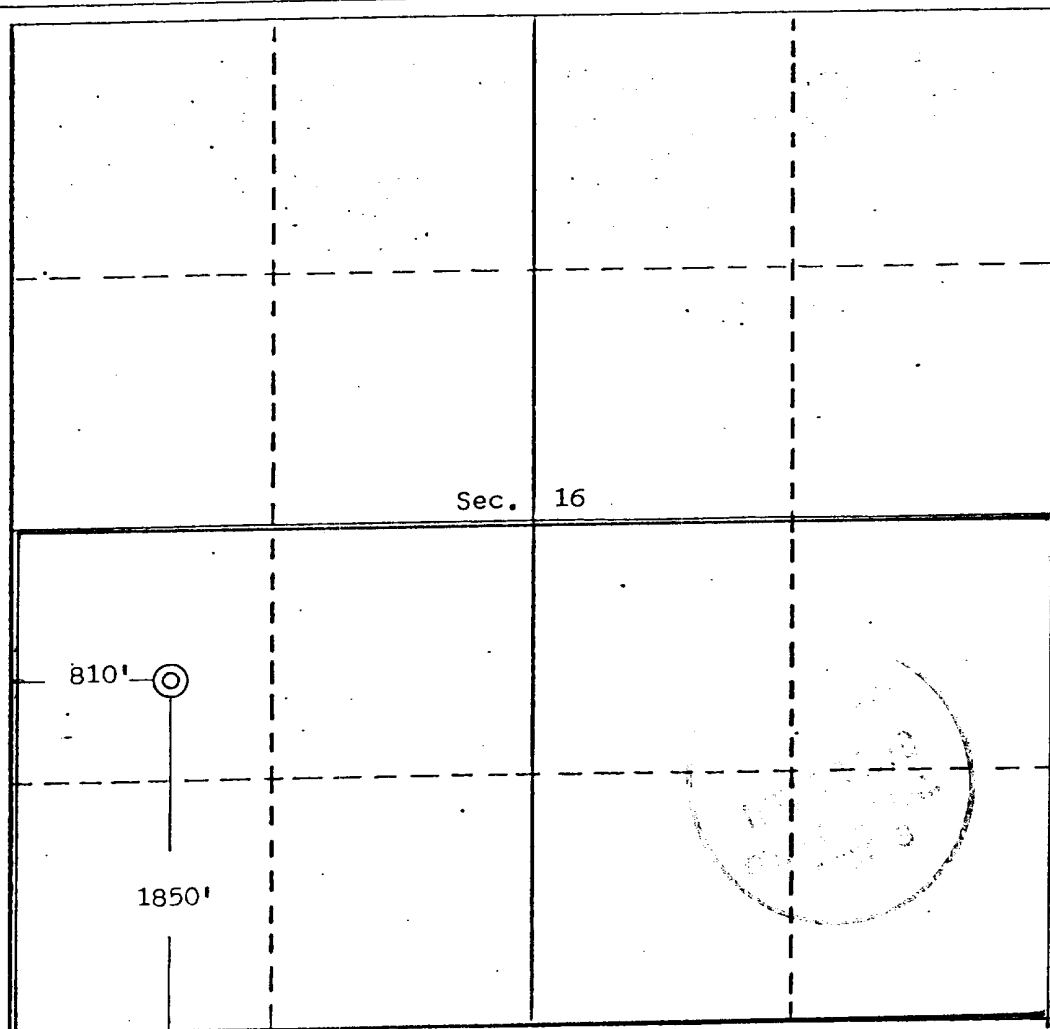
Operator Pioneer Production Corporation			Lease Redfern		Well No. 4E
Unit Letter L	Section 16	Township 28 North	Range 11 West	County San Juan	
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> 1850 feet from the South line and 810 feet from the West line </div>					
Ground Level Elev. 5643	Producing Formation Dakota	Pool Basin	Dedicated Acreage: 320 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 14-08-0001 - 6420

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.

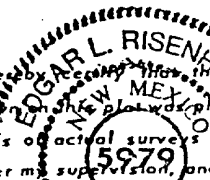
Jim L. Jacobs
Name

Jim L. Jacobs
Position
Agent

Pioneer Production Corp.
Company

11-16-79
Date

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.



November 8, 1979
Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

Edgar L. Risenhoover
Certificate No. 5979

Edgar L. Risenhoover, L.S.