

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐ DEC 14 1983PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

2. NAME OF OPERATOR

Amoco Production Company

3. ADDRESS OF OPERATOR

501 Airport Drive, Farmington, N.M. 87401

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

At surface

1790' FSL x 900' FEL

At proposed prod. zone same

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

21 miles NW of Gobernador, N.M.

15. DISTANCE FROM PROPOSED*

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

900'

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

6028'

16. NO. OF ACRES IN LEASE

2507.3

19. PROPOSED DEPTH

8000'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E 320/160

20. ROTARY OR CABLE TOOLS

Rotary

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

6415 GL

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLETION OF JOB WITH ATTACHED
"GENERAL REQUIREMENTS"

22. APPROX. DATE WORK WILL START*

As soon as permitted

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	"GENERAL" QUANTITY OF CEMENT
17 1/2"	13 3/8"	48# H40	400'	834 cu ft Class G w/2% CaCl ₂ .
7 7/8"	4 1/2"	11.6# K55	8000'	Circ. to surf.
				1) 670 cu ft Class G 50:50 POZ cement. 2) 1500 cu ft Class G 65:35 POZ cement. Tail in both stages with 118 cu ft Class G neat. DV tool set at 5735'.

Amoco proposes to drill the above well to further develop the Basin Dakota and Undes. Gallup reservoirs. The well will be drilled to the surface casing point using native mud. The well will then be drilled to TD with a low solids non-dispersed mud system. Completion design will be based on open hole logs. Copies of all logs will be filed upon completion. Amoco's standard blowout prevention will be employed; see attached drawing for blowout preventer design.

Upon completion, the well location will be cleaned and the reserve pit filled and leveled.

Gas produced from this well is not dedicated.

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

D.D. LARSON

TITLE Dist. Adm. Supervisor

(This space for Federal or State office use)

PERMIT NO.

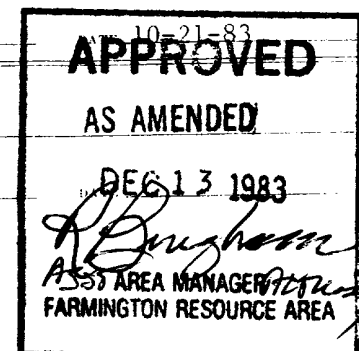
APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

NMOCC



All distances must be from the outer boundaries of the Section.

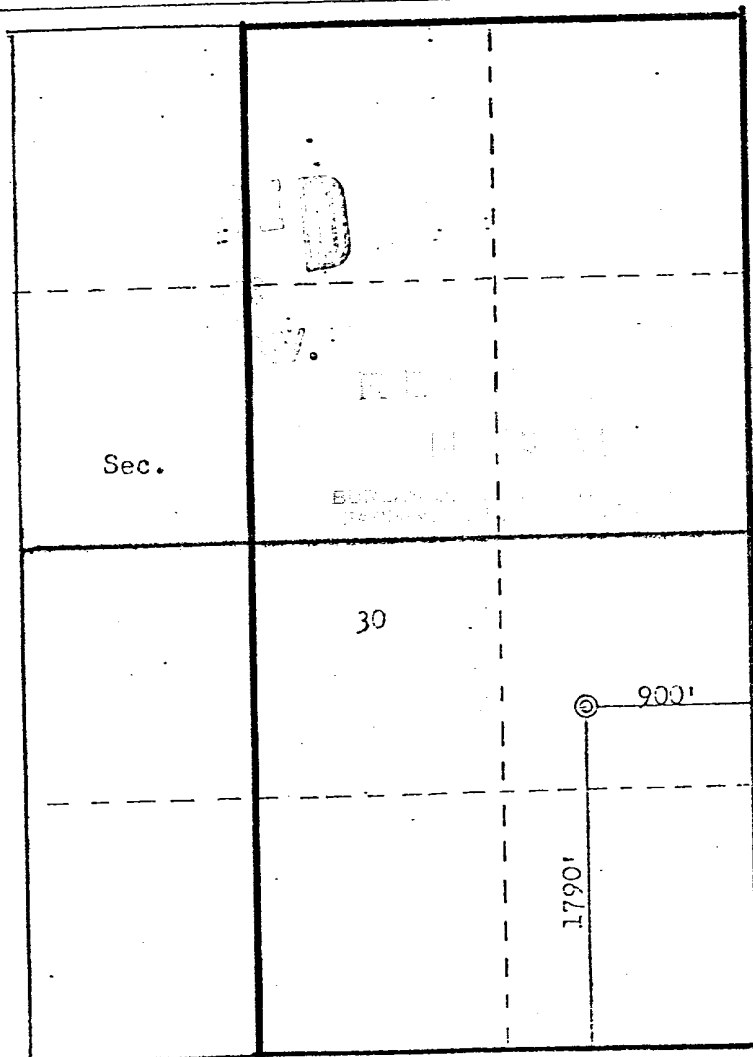
Operator: AMOCO PRODUCTION COMPANY		Lease: Rosa Unit		Well No. 102
Unit Letter I	Section 30	Township 31N	Range 5W	County Rio Arriba
Actual Footage Location of Well:				
1790	feet from the South	line and 900	feet from the East	line
Ground Level Elev: 6415	Producing Formation Dakota-Gallup	Pool Basin Dakota-Undes. Gallup	Dedicated Acreage: 320/160 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.

Name
Darrell D. Lawson
Position
District Administrative
Company
Supervisor
Amoco Production Co.
Date
December 20, 1983

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
October 4, 1983
Registered Professional Engineer and Land Surveyor
Fred B. Kern Jr.
Certificate No. **4122**


Rosa Unit 102
MULTI-POINT SURFACE USE PLAN
1790' FSL, 900' FEL, Sec. 30, T31N-R5W
Rio Arriba County, N.M.

1. The attached topographic map shows the proposed route to the location.
2. A road, approximately 1000' in length and bar ditched on one side, will be built.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
4. There is a well and facilities at the Rosa Unit 13-31 (NWPL) approximately $\frac{1}{2}$ mile South.
5. Water will be hauled from Cabresto and Bancos water holes (Section 25, T31N, R5W and Section 14, T31N, R4W).
6. No construction materials will be hauled in for this location.
7. A 125' by 125' pit, fenced on 3 sides, will be built on location to hold all drilling waste and upon completion of the well, the 4th side will be fenced. Drilling mud will be allowed to evaporate. Sanitary facilities and a steel mesh portable trash container will remain on location throughout drilling operations and will then be trucked to a designated disposal area.
8. There are neither airstrips nor camps in the vicinity.
9. The well site layout, reserve, burn and trash pits are shown on the attached Drill Site Specification Sheet.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Reseeding of the site will be carried out as instructed by the Bureau of Land Management.
11. The general topography is sloping, sandy loam with sage, juniper, pine and native grasses.
12. Representatives of the Bureau of Land Management inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

Operator's Representative: S. D. Blossom
Office Phone: (505) 325-8841
Address: 501 Airport Drive, Farmington, NM 87401

Certification: 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 AMOCO PRODUCTION COMPANY and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date October 20, 1983


S. D. Blossom - District Superintendent

SUPPLEMENTAL INFORMATION TO FORM 9-331C

Rosa Unit No. 102
NE/SE Section 30, T31N, R5W
Rio Arriba County, New Mexico

The geological name of the surface formation is the San Jose.

Estimated tops of important potential hydrocarbon bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Pictured Cliffs	3190'	+3210'
Gallup	6465'	-65'
Dakota	7690'	-1290'

TD	8000'	-1600'
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Estimated KB elevation: 6428'.

Drilling fluid to TD will be a low solids non-dispersed mud system. Open hole logging program will include logs from TD to below surface casing:

DIL-SP-GR
CNL-FDC-GR

Completion design will be based on these logs. No cores or drill stem tests will be taken.

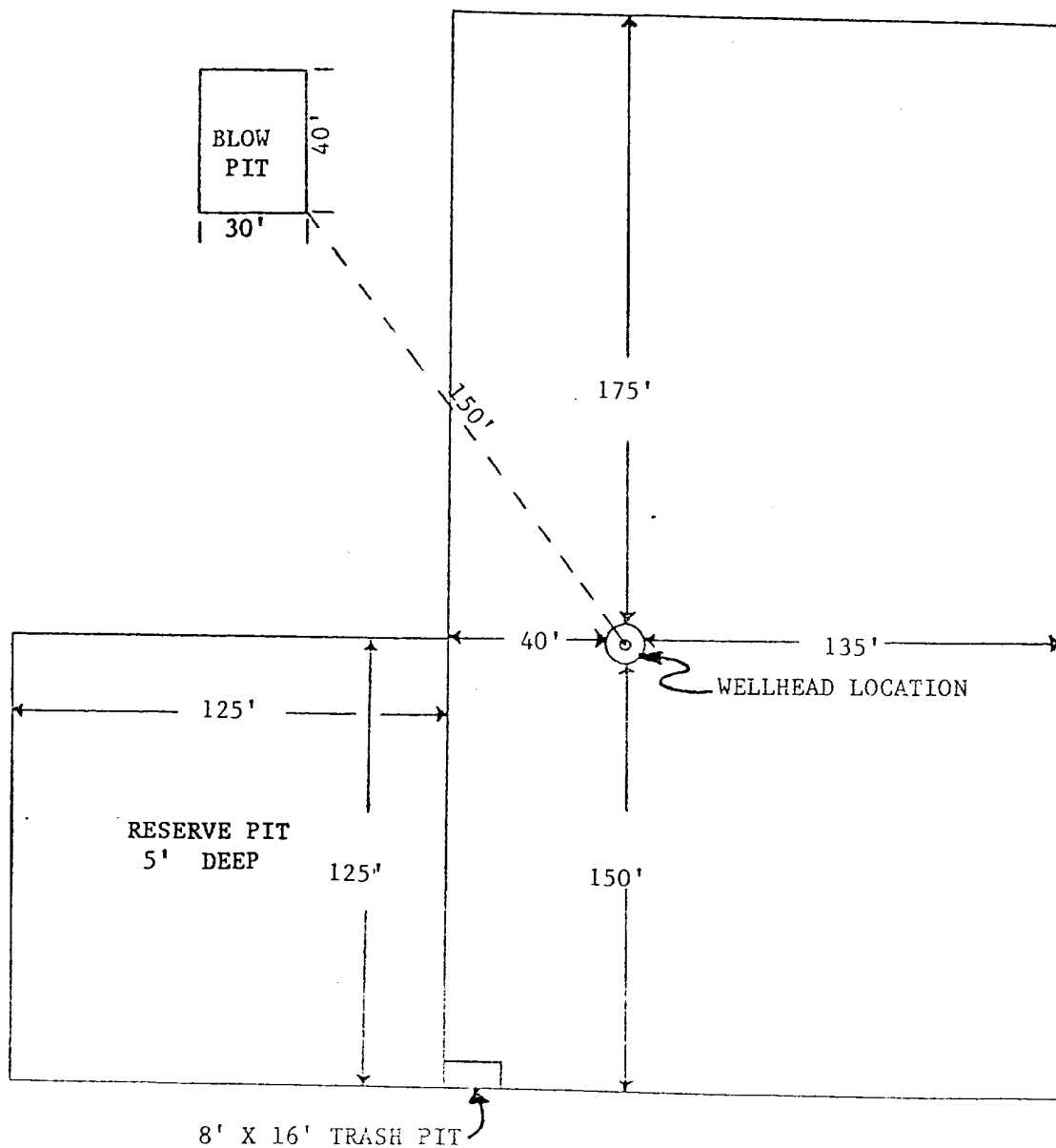
Operations will commence when permitted and last approximately 5 weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

Remarks:
6' cut on South

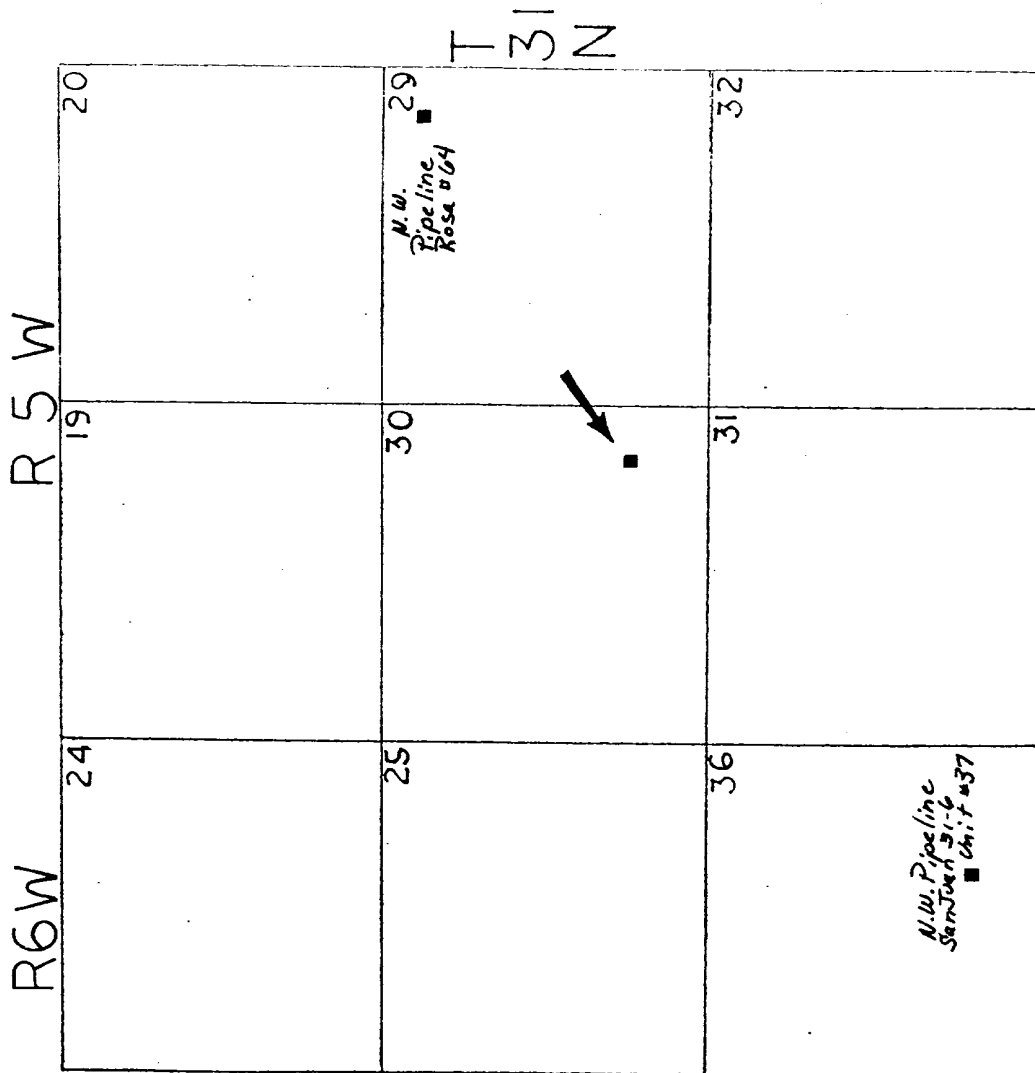


E



APPROXIMATELY 1.2 ACRES

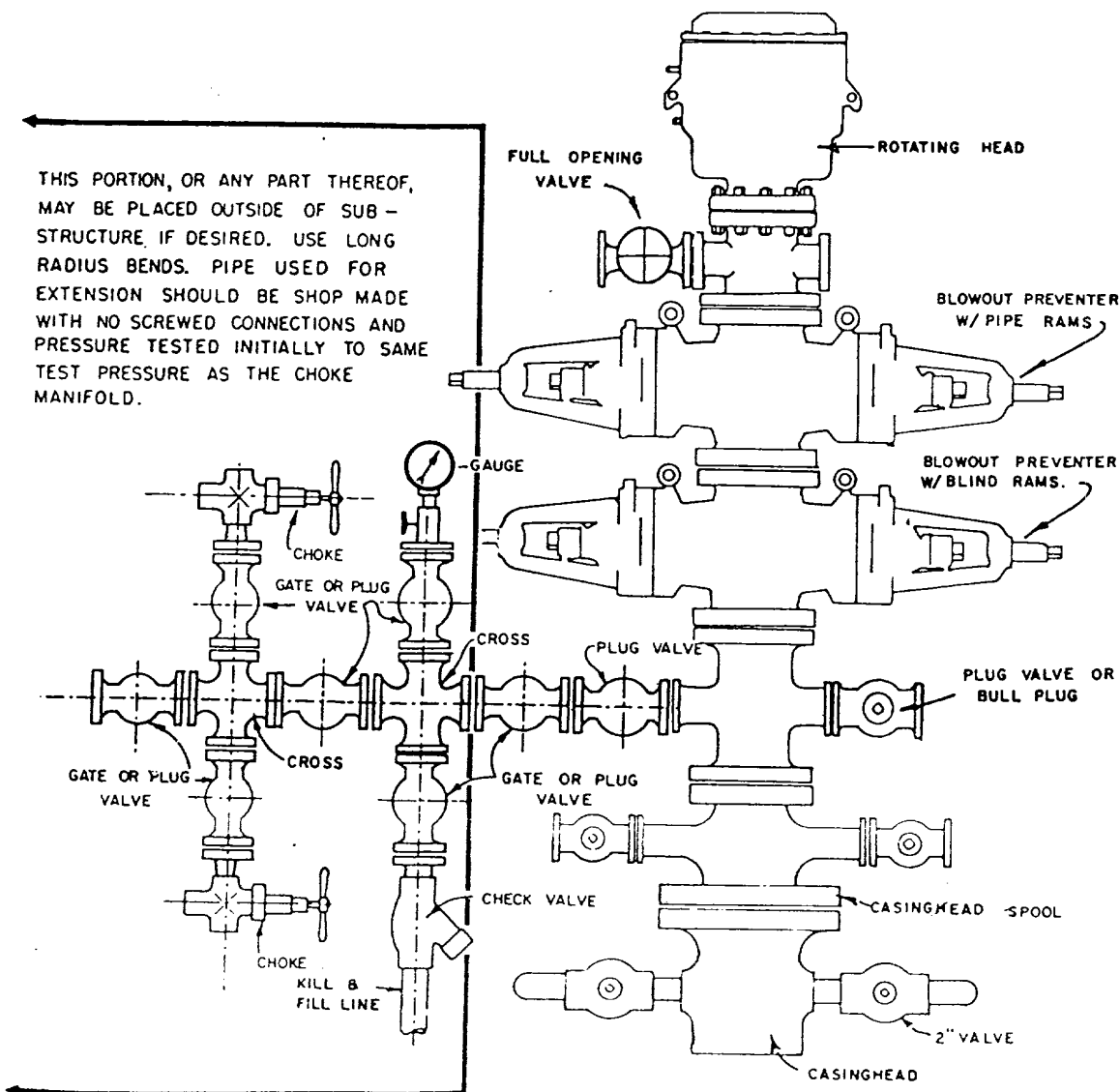
Amoco Production Company		SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS		
Rosa Unit 102		DRG. NO.



■ BASIN DAKOTA WELLS

NO UNDES GALLUP WELLS

1. Blowout Preventers and Master Valve to be fluid operated, and all fittings must be in good condition.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above Blowout Preventer shall be same size or larger than BOP being drilled through.
4. All fittings to be flanged.
5. Omsco or comparable safety valve must be available on rig floor at all times with proper connection or sub. The I.D. of safety valve should be as great as I.D. of tool joints of drill pipe, or at least as great as I.D. of drill collars.



BLOWOUT PREVENTER HOOKUP

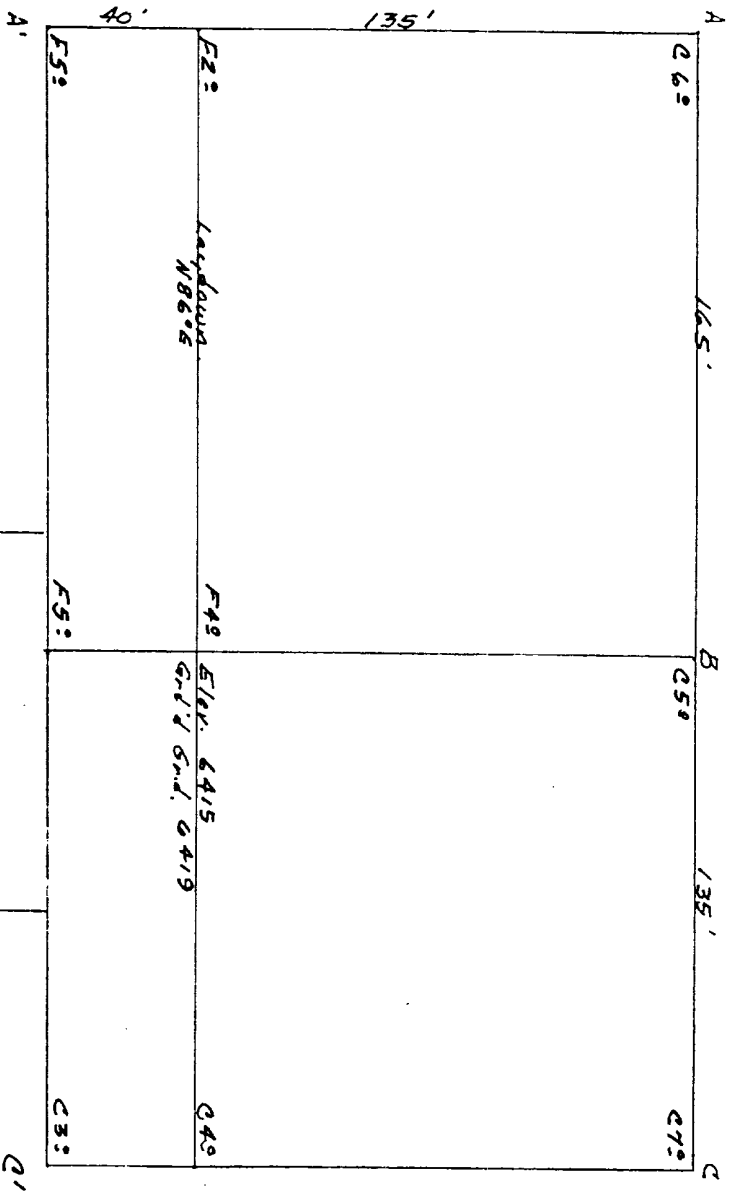
API Series # 900

EXHIBIT D-4

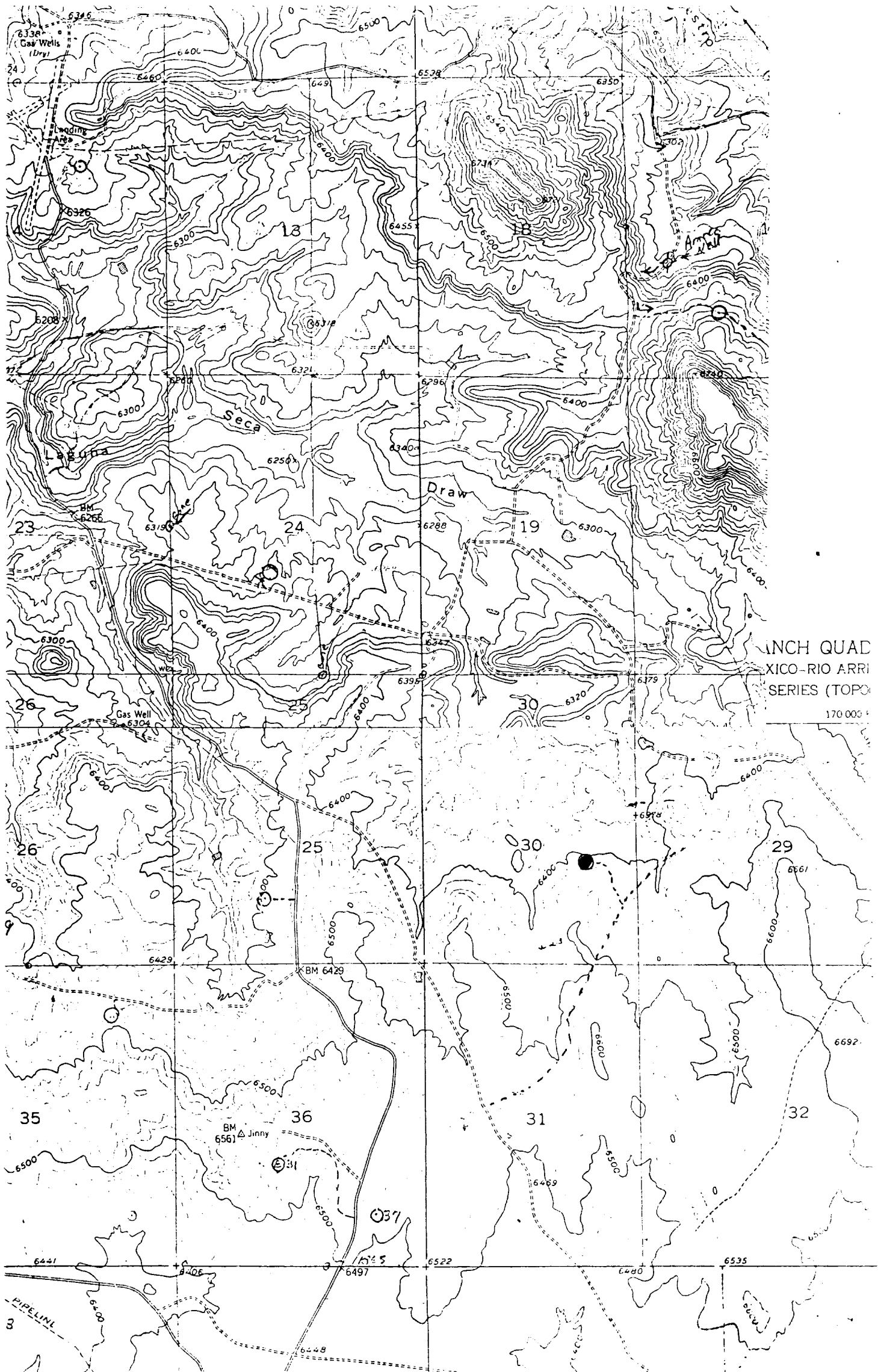
OCTOBER 16, 1969

Operation of BOP by closing both pipe and blind rams will be tested each trip or, on long bit runs, pipe rams will be closed once each 24 hours.

Profile for
 AMOCO PRODUCTION COMPANY
 1790' FSL 900' FEL Sec. 30-
 RIO ARRIBA COUNTY, NEW ME



Scale: 1" = 50'



ANCH QUAD
XICO-RIO ARRI
SERIES (TOPO

170 000'

Vicinity Map for
AMOCO PRODUCTION COMPANY #
1790'FSL 900'FEL Sec. 30-T31N-R5W
RIO ARRIBA COUNTY, NEW MEXICO