

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐DE. PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE ZONE ☐ MULTIPLE ZONE ☒

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

1760' FSL x 1850' FWL

At proposed prod. zone same

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

12 miles NW Gobernador, N.M.

15. DISTANCE FROM PROPOSED*

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

1760'

16. NO. OF ACRES IN LEASE

2518.04

18. DISTANCE FROM PROPOSED LOCATION*

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

5539'

19. PROPOSED DEPTH

7950'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

W/320/160

20. ROTARY OR CABLE TOOLS

Rotary

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

6303' GL

DRILLING WORK AND LOGS ARE
SUBJECT TO THE ATTACHED
PROPOSED CASING AND CEMENTING PROGRAM

22. APPROX. DATE WORK WILL START*

As soon as permitted
This action is subject to administrative
appeal pursuant to 30 CFR 290.

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"	48# H40	400'	834 cu ft Class G w/2% CaCl ₂ .
7 7/8"	4 1/2"	11.6# K55	7950'	Circ. to surf.
				1) 755 cu ft Class G 50:50 POZ cement. 2) 1998 cu ft Class G 65:35 POZ cement. Tail in both with 118 cu ft Class G neat. DV tool set at 5700'.

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.

3. ABOVE STATE 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 prevention program, if any.

24. SIGNED _____ TITLE Dist. Adm. Supervisor

(This space for Federal or State office use)

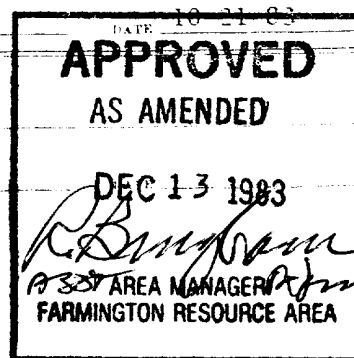
PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY



NMOCC

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-107
Revised 10-3-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

Operator AMOCO PRODUCTION COMPANY		Lease Rosa Unit		Well No. 101	
Unit Letter K	Section 24	Township 31N	Range 6W	County Rio Arriba	
Actual Footage Location of Well: 1760 feet from the South line and 1850 feet from the West line					
Ground Level Elev: 6303	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 hachure marks on the plat below.

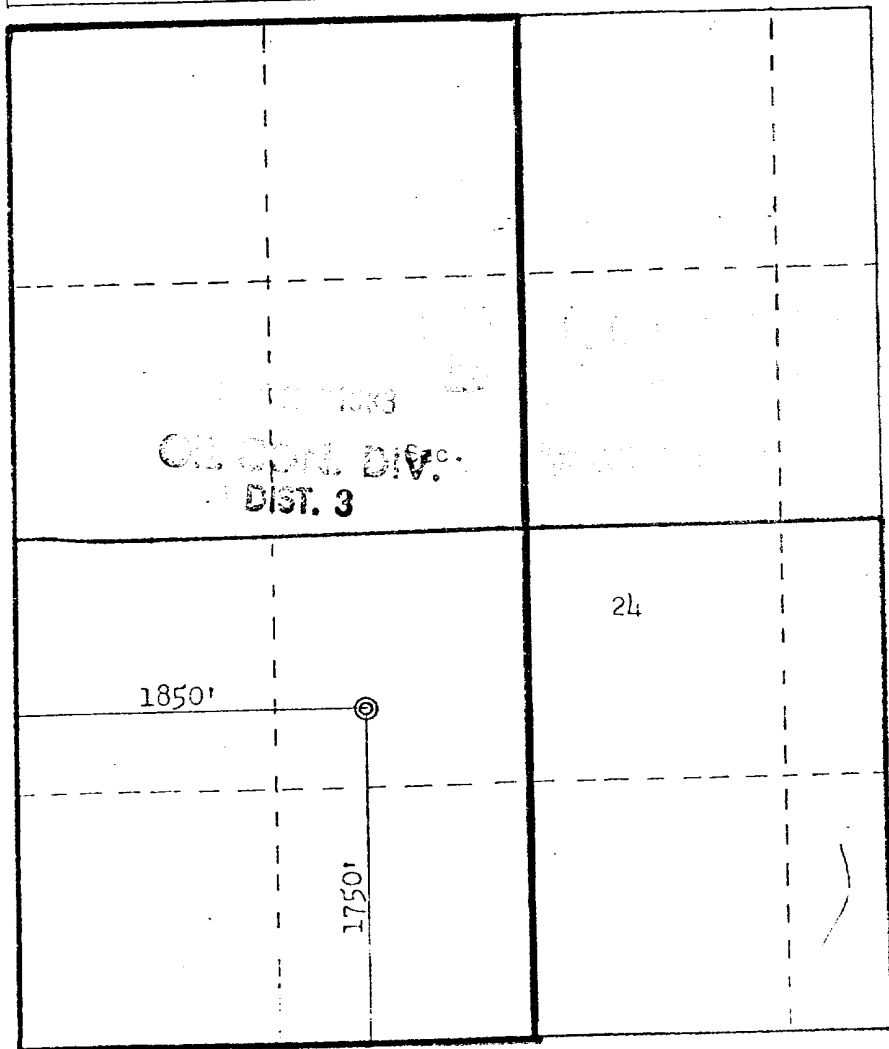
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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 11, 1983

Registered Professional Engineer
and Land Surveyor
Fred B. Berry Jr.

Certificate No. 1050

Rosa Unit #101
MULTI-POINT SURFACE USE PLAN

1760' FSL, 1850' FWL, Sec. 24, T31N-R6W
Rio Arriba County, N.M.

1. The attached topographic map shows the proposed route to the location.
2. No road 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 19-24 (NWPL), approximately 300' 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 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. 101
NE/SW Section 24, T31N, R6W
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	3140'	+3180'
Gallup	6415'	-95'
Dakota	7640'	-1320'

TD	7950'	-1630'
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Estimated KB elevation: 6316'.

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
FDC-CNL-GR-Caliper

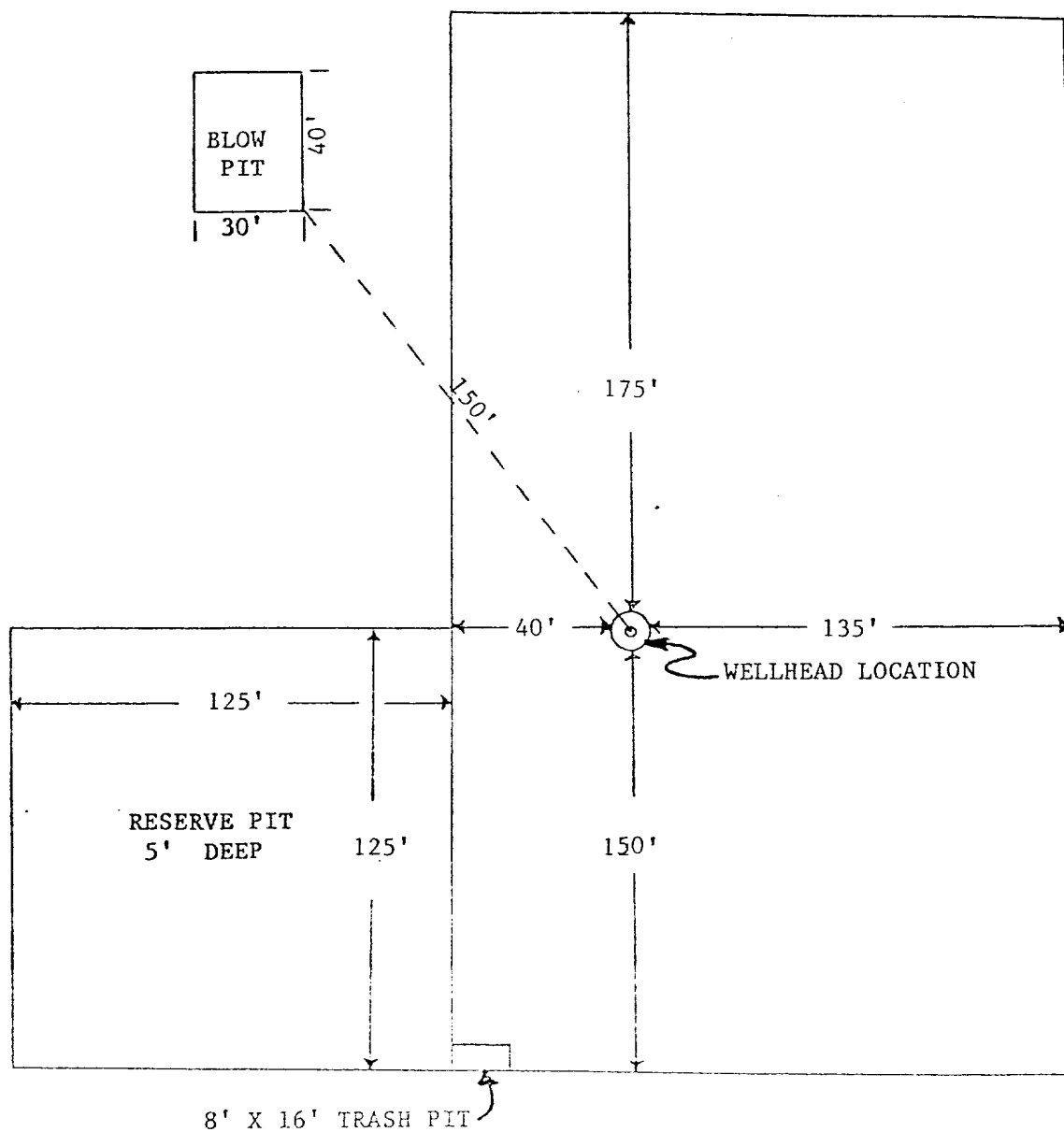
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 4 weeks.

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

Remarks:
3' cut off top

SSE

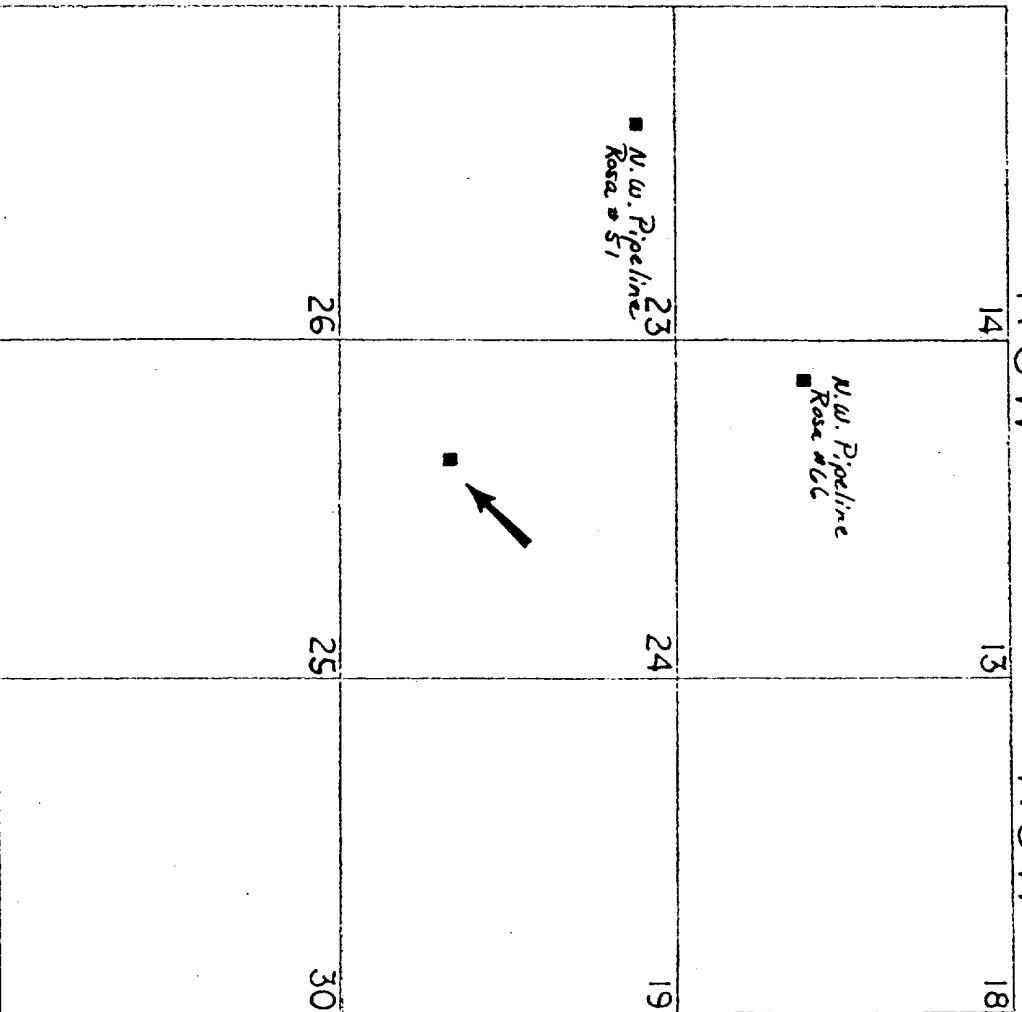


APPROXIMATELY 1.2 ACRES

Amoco Production Company		SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS		DRG. NO.
Rosa Unit #101		

R6W

R5W

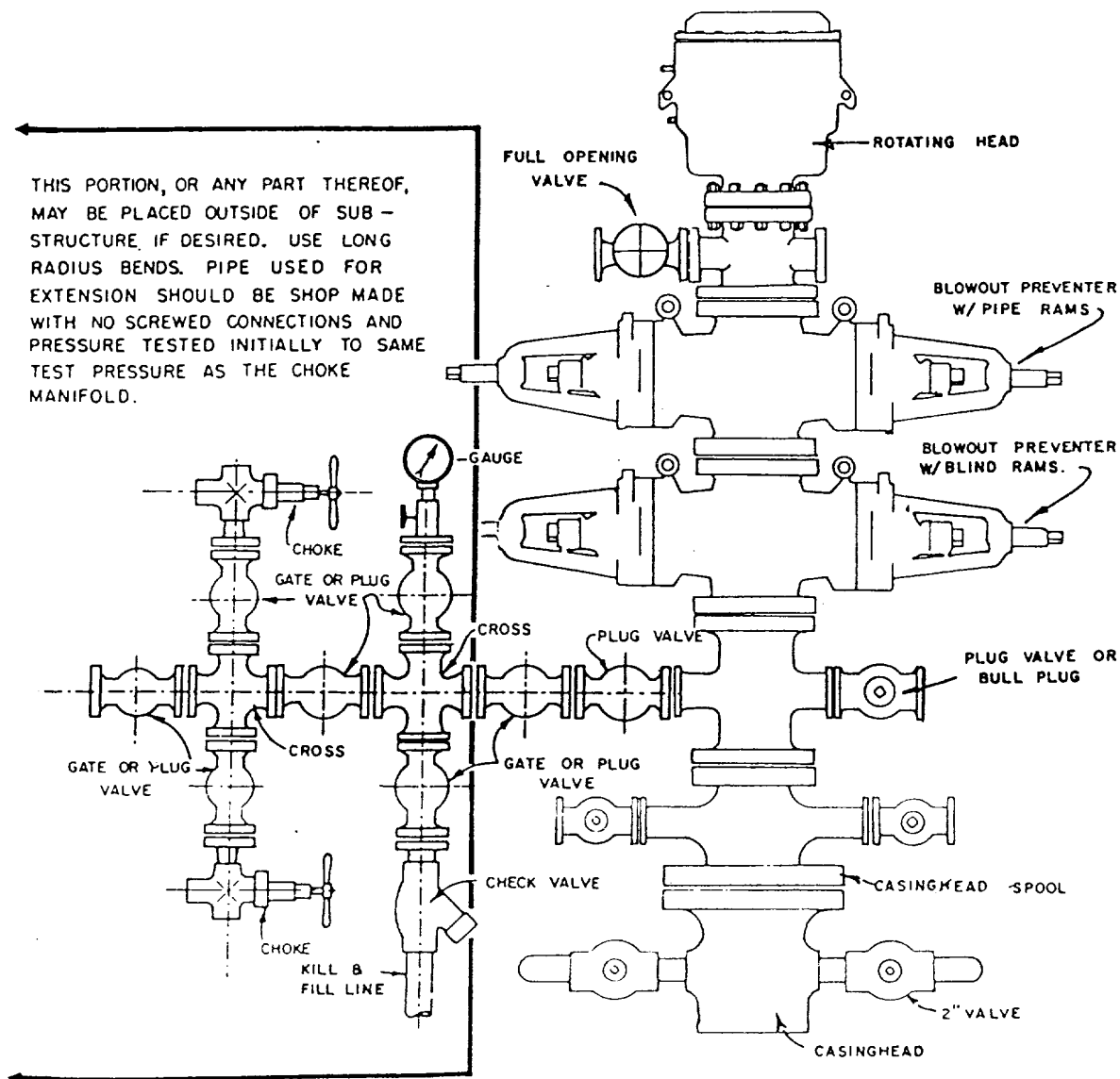


T 31 N

■ EXISTING 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

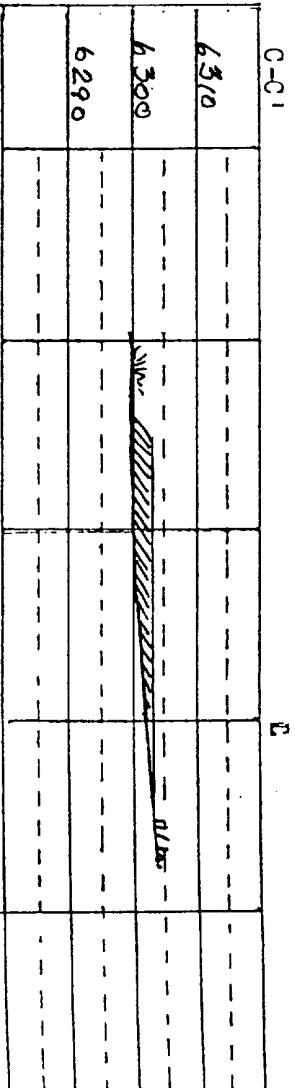
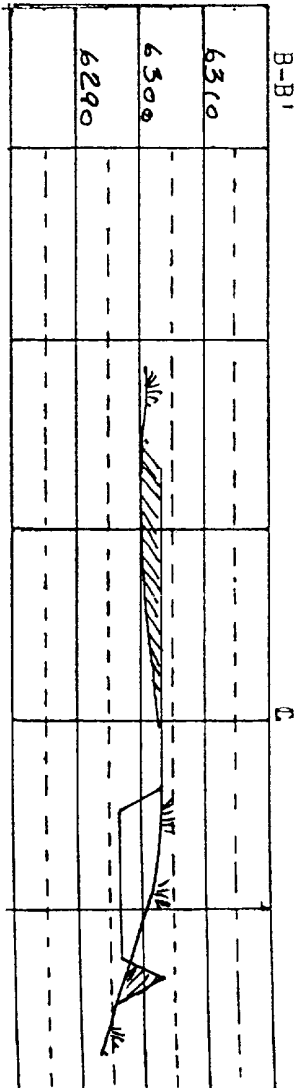
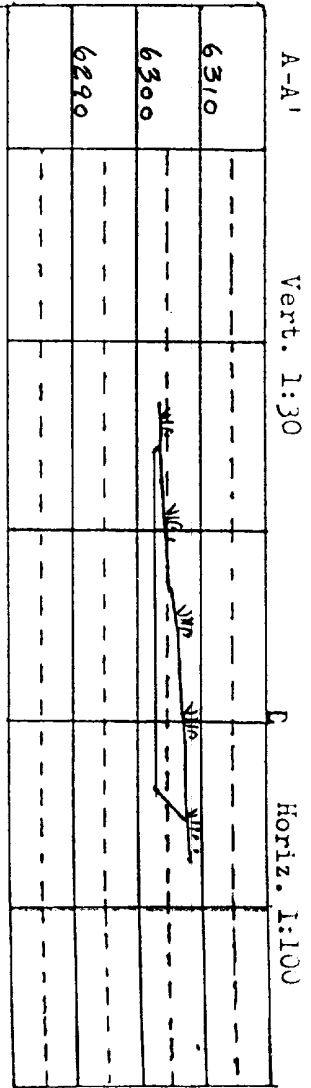
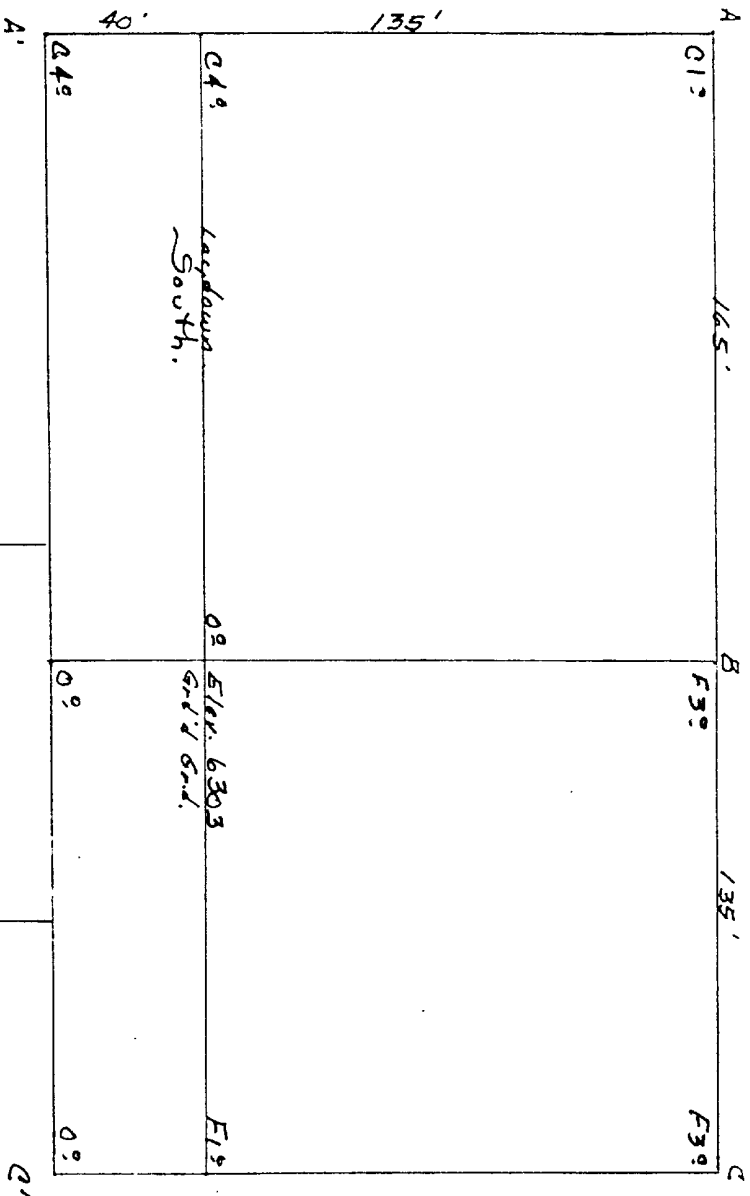
API Series # 900

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
 AHOCO PRODUCTION COMPANY # 101 Resa Unit
 1760' FSL 1850' FAL Sec. 24-T31N-R6W
 RIO ARriba COUNTY, NEW MEXICO



Scale: 1" = 50'

