

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22123

5. LEASE DESIGNATION AND SERIAL NO.

87-678769

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Rosa Unit

8. FARM OR LEASE NAME

Rosa Unit

9. WELL NO.

48

10. FIELD AND POOL, OR WILDCAT

Dakota

11. SEC., T., R., M., OR BLK.

SW/4 SW/4 Section 17,
T-31-N, R-5-W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

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

AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

501 Airport Drive, Farmington, NM 87401

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

At surface

1850' FWL & 790' FWL, Section 17, T31N, R5W

At proposed prod. zone

Rosa

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

49.0 miles northeast of Elmore, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

790'

16. NO. OF ACRES IN LEASE

2360.00

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

3000'

19. PROPOSED DEPTH

8054'

17. NO. OF ACRES ASSIGNED

TO THIS WELL

W/ 320

20. ROTARY OR CABLE TOOLS

Rotary

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

6311' GL

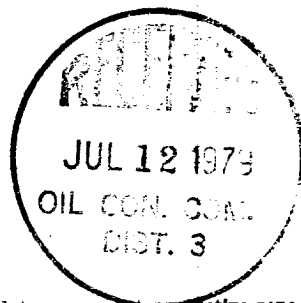
22. APPROX. DATE WORK WILL START*

As soon as permitted

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	300'	300 cu yd
7-7/8"	4-1/2"	13.3#	8054'	1600 cu yd

The above well is being drilled to develop the Dakota formation. Completion interval and stimulation program to be determined from study of open hole logs. The average is not dedicated to a gas sales contract.



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

B. E. Jackell

TITLE

District Engineer

DATE

July 10, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

JUL 11 1979

CONDITIONS OF APPROVAL, IF ANY:

U. S. GEOLOGICAL SURVEY
FEDERAL BUREAU OF REVENUE

ok Bunk
No. 611-104 for 300 cu yd - 1600 cu yd State

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

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

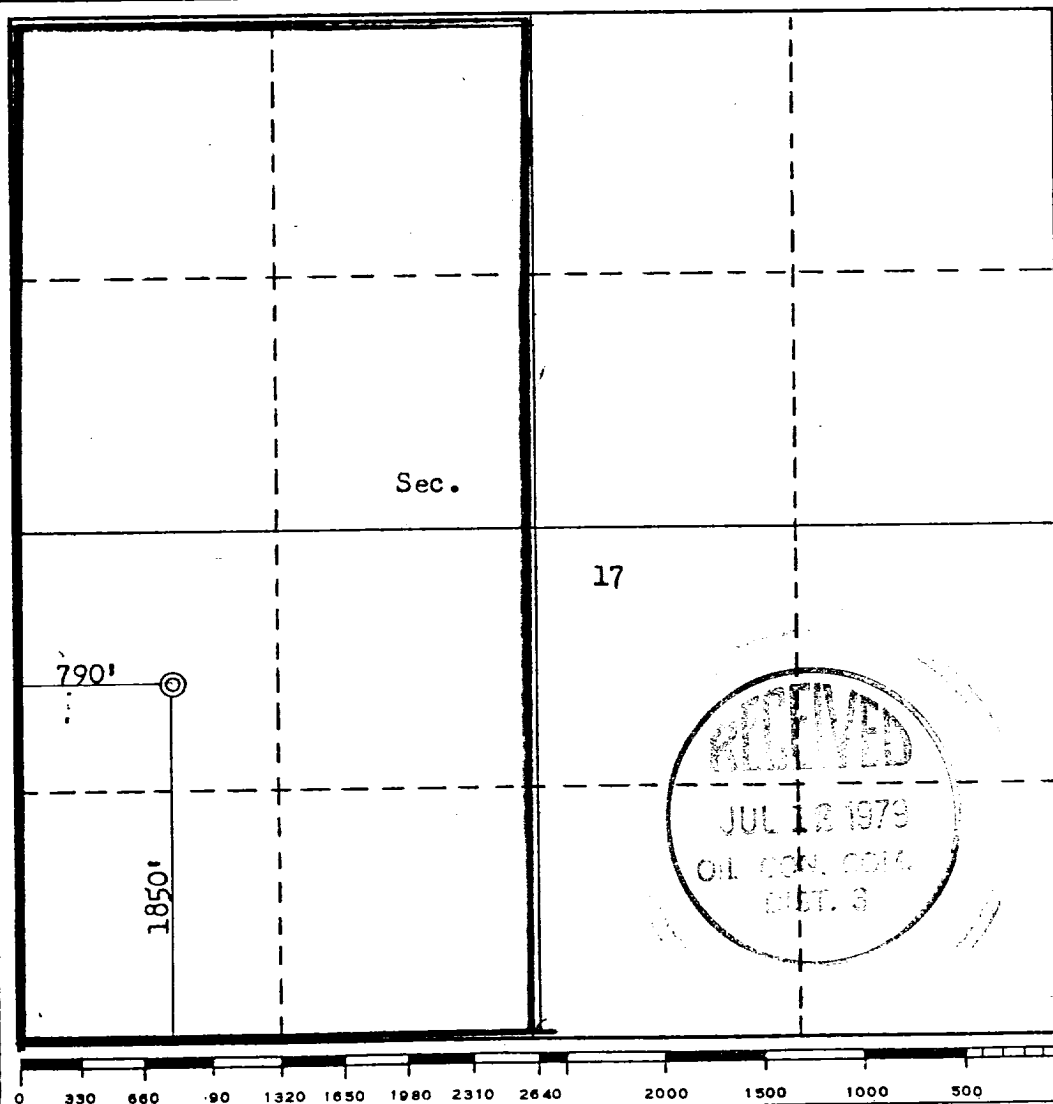
Operator AMOCO PRODUCTION COMPANY			Lease ROSA UNIT			Well No. 68
Unit Letter L	Section 17	Township 31N	Range 5W	County Rio Arriba		
Actual Footage Location of Wells: 1850 feet from the South line and 790 feet from the West line						
Ground Level Elev. 6311	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 320 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.

B. E. Fackrell

Name

B. E. FACKRELL

Position

DISTRICT ENGINEER

Company

AMOCO PRODUCTION COMPANY

Date

JULY 10, 1979

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

July 9, 1979

Registered Professional Engineer
and/or Land Surveyor*Fred B. Kerr Jr.*

Certificate No.

3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C
REQUIRED BY NTL-6
ROSA UNIT NO. 68
1850' FSL & 790' FWL, SECTION 17, T31N, R5W
RIO ARriba COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary San Jose.

The estimated tops of important geological formations bearing hydrocarbons are:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Pictured Cliffs	3164'	+3160'
Mesaverde	5413'	+ 911'
Dakota	7884'	-1560'

TD 8054'

Estimated KB elevation is 6324'

The casing program to be used will include all new casing:

<u>EST. DEPTH</u>	<u>CSG. SIZE</u>	<u>WEIGHT</u>	<u>HOLE SIZE</u>	<u>SACKS CEMENT</u>	<u>TYPE</u>
300'	8-5/8"	24#	12-1/4"	300 sx Class "B" 2% CaCl ₂	
8054'	4-1/2"	13.5#	7-7/8"	1400 sx Class "B" 50:50 Poz, 6% Gel 200 sx Class "B" Neat	

Amoco's standard blowout prevention will be employed; see attached drawing of our blowout preventer design.

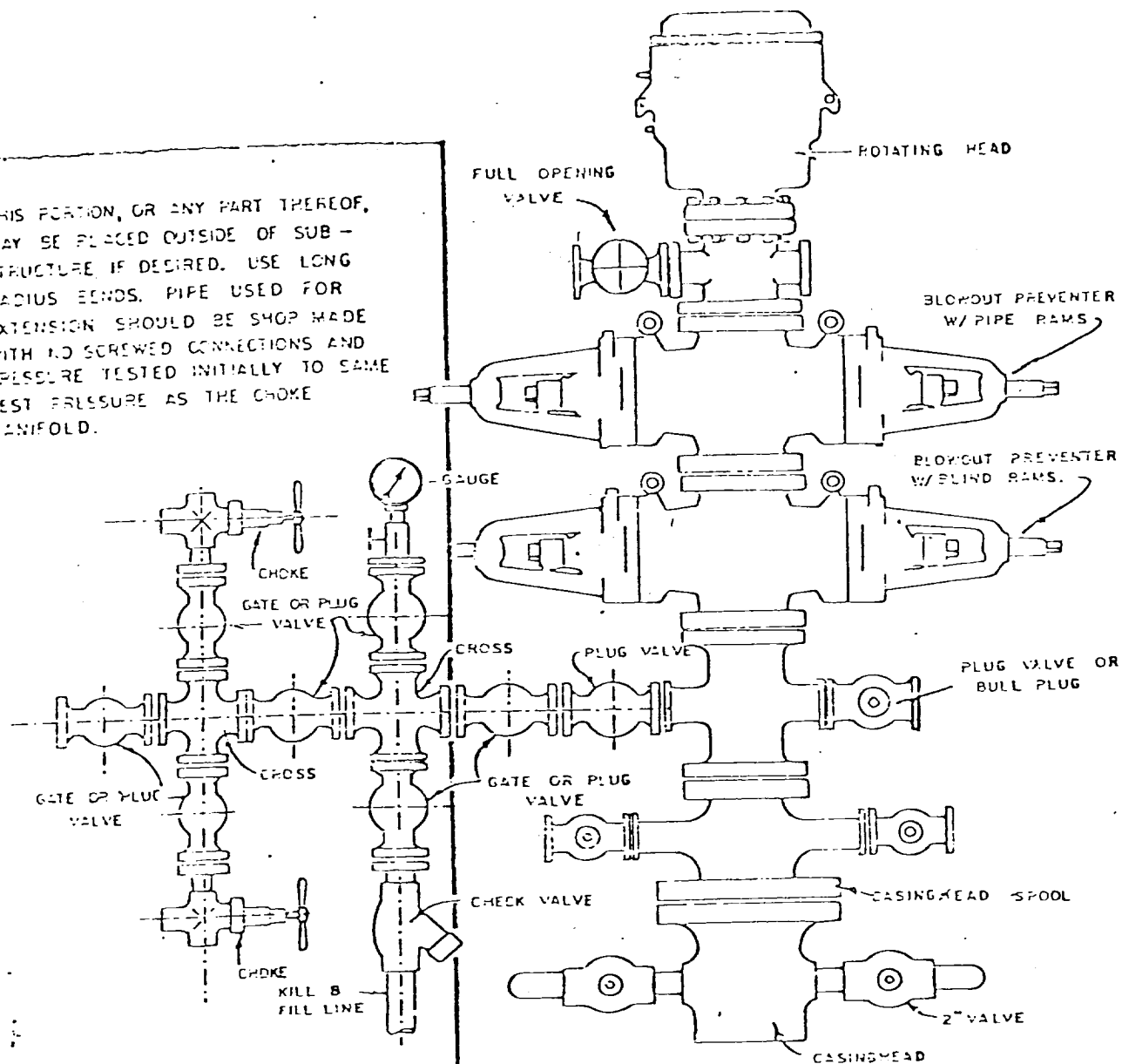
Drilling fluid to TD will be a low solids non-dispersed mud system.

Amoco will run an Induction Electric Survey from TD to 300' and a Density-Gamma Ray Log from TD to surface. No cores or drill stem tests will be taken.

In the past, drilling in this area has shown that no abnormal pressures, temperatures, nor hydrogen sulfide gas will be encountered.

We will start operations as soon as well is permitted, and a three-week operation is anticipated.

THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOME MANIFOLD.

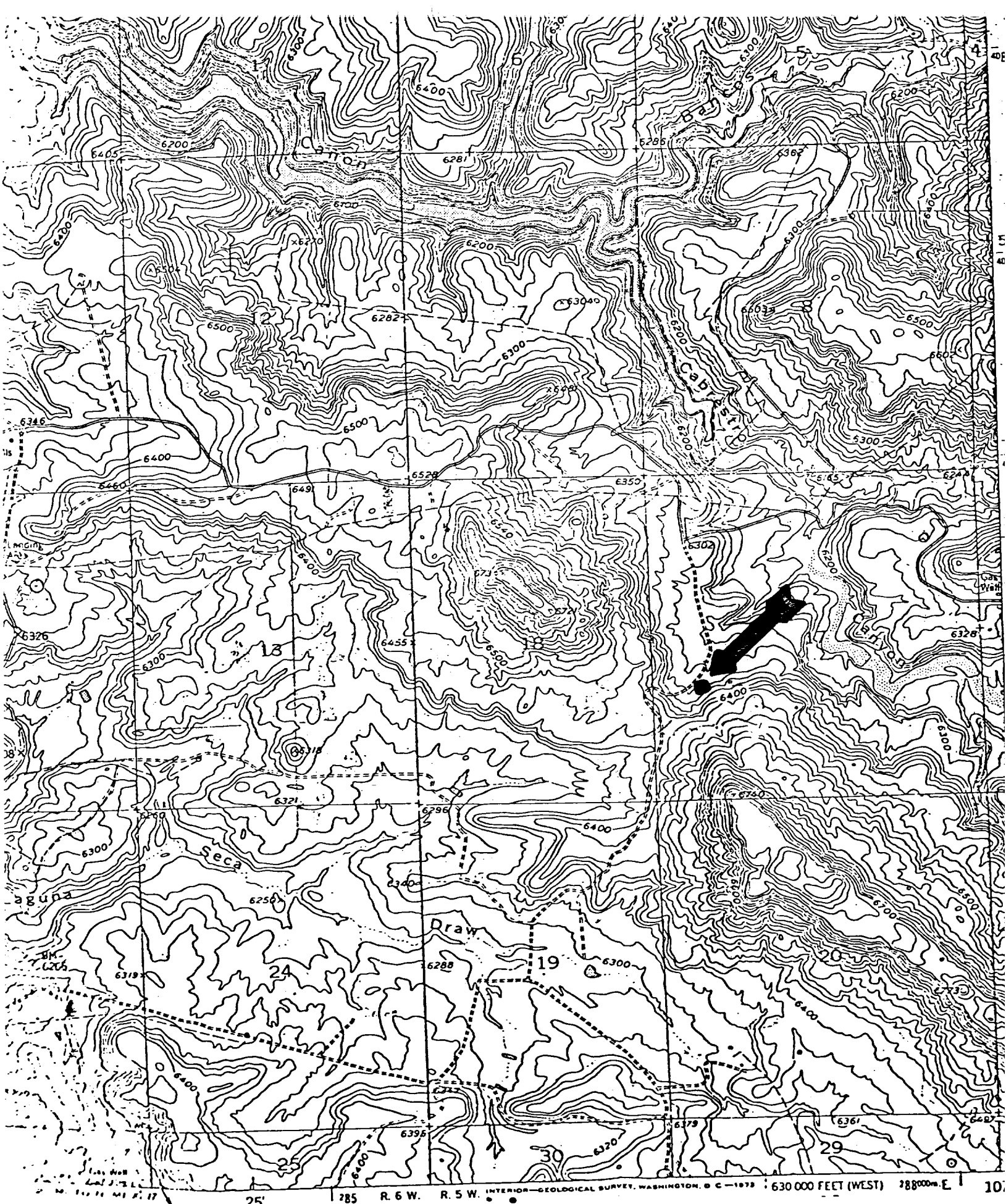


BLOWOUT PREVENTER HOOKUP

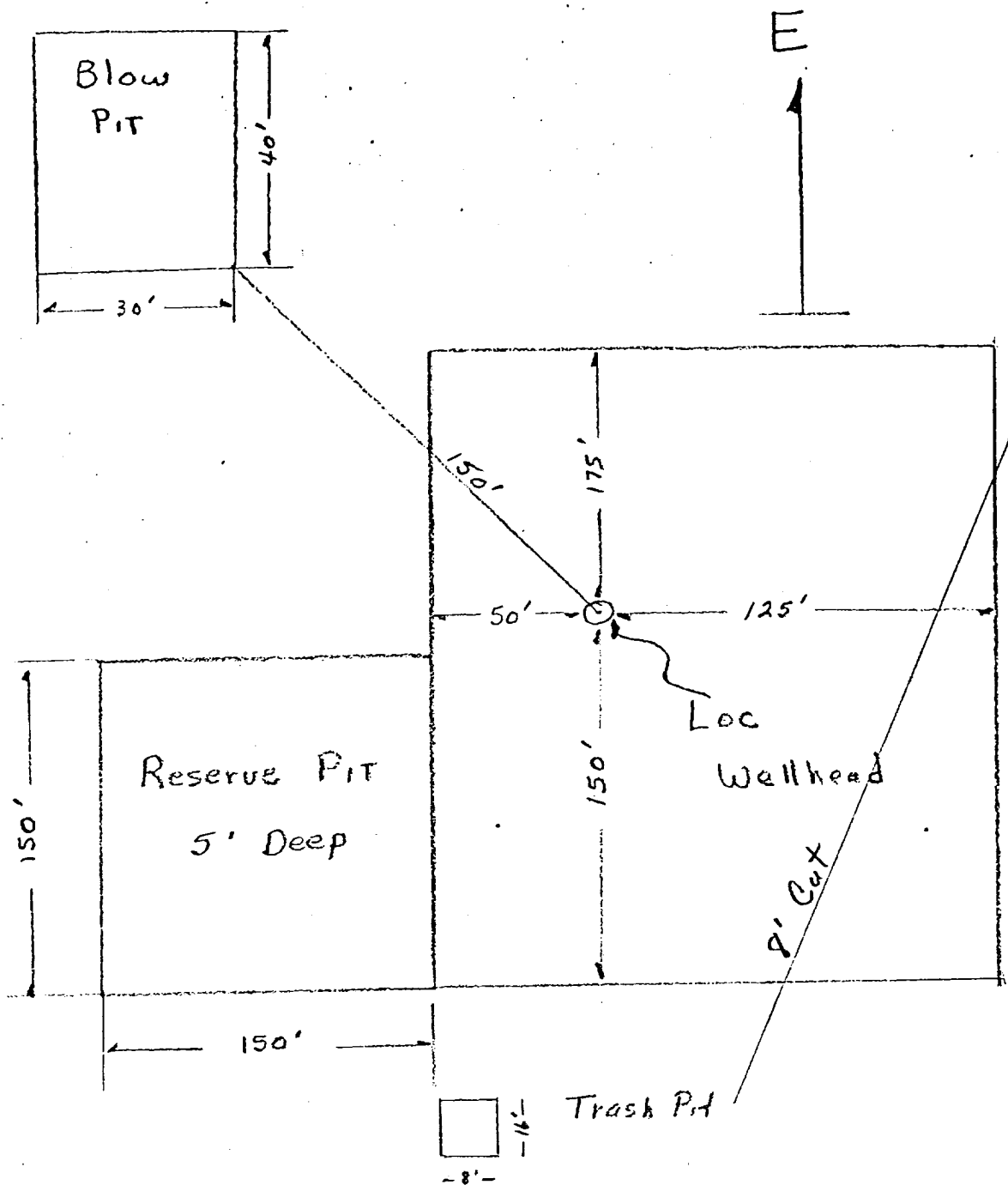
MULTI-POINT SURFACE USE PLAN
ROSA UNIT NO. 68
1850' FSL & 790' FWL, SECTION 17, T31N, R5W
RIO ARriba COUNTY, NEW MEXICO

1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. See plat attached.
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 an existing pipeline one-half mile north-northwest of the location.
5. Water will be hauled from Amoco's water holes located in Cabresto Wash.
6. No construction materials will be hauled in for this location. Will use existing material at location.
7. A 150' x 150' pit will be constructed on location to hold all drilling waste. Upon completion of well, all waste and liquid will be pumped out and fluids will be bladed into roads.
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. Drilling mud will be hauled away and the reserve pit back filled. Reseeding of the site will be carried out as detailed in the attached seeding plan.
11. The general topography and soil characteristics are a very rocky terrain and soil with the site covered with cedar and pinon trees and sagebrush.

Representatives of the U. S. Geological Survey's Durango Office and Bureau of Land Management's Farmington Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.
12. A Certification Statement by Amoco's representative is included.



Vicinity Map for
AMOCO PRODUCTION CO. #68 ROSA UNIT
1850' FSL & 790' FWL, Sec 17-T31N-R5W
RIO ARriba COUNTY, NEW MEXICO



Approximately 1.2 Acres

Amoco Production Company	SCALE: <i>NONE</i>
Drilling Location Specs. ROSA UNIT No. 68	DRG. NO.

BLM SEEDING REQUIREMENTS
IN THE FARMINGTON RESOURCE AREA

1. SEED MIXTURE 1

2. TIME:

All seeding will take place between July 1 and September 15.

3. EQUIPMENT:

Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, not up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

4. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE SEED PER ACRE:

CRESTED WHEATGRASS (<u>Agropyron desertorum</u>)	2½ lbs.
SMOOTH BROME (<u>Bromus inermis</u>)	2½ lbs.
FOURWING SALTBUSH (dewinged) (<u>Atriplex conescens</u>)	½ lb.
NOMAD ALFALFA (<u>Medicago sitiva</u>)	1 lb.

ROSA UNIT NO. 68
1850' FSL & 790' FWL, SECTION 17, T31N, R5W
RIO ARriba COUNTY, NEW MEXICO

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.

July 10, 1979

Date

 District Supt.

Name and Title

Amoco Production Company's Representative:

R. W. Schroeder

Phone: Office: 505-325-8841; Home: 505-325-6164

Address: 501 Airport Drive
Farmington, NM 87401