

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF 032123 018768	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		7. UNIT AGREEMENT NAME Rosa Unit	
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico 87401		8. FARM OR LEASE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 1020' FWL & 1820' FWL, Section 25, T-31-N, R-5-W At proposed prod. zone Same		9. WELL NO. 58	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 55 miles northeast of Blanco, New Mexico		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1020' FWL 1020'		11. SEC., T., R., M., OR BLK. NE/4 NW/4 Section 25, T-31-N, R-5-W	
16. NO. OF ACRES IN LEASE 1920		12. COUNTY OR PARISH Rio Arriba	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320		13. STATE New Mexico	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 7959'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6606' est. GL		22. APPROX. DATE WORK WILL START* Within 90 days	

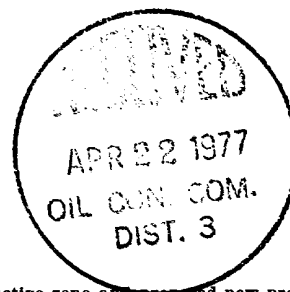
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13"	10-3/4"	40.3#	300'	300 sz - circ.
9-7/8"	7-5/8"	26.4#	3800'	600 sz - circ.
6-3/4"	4-1/2"	11.6#	8250'	600 sz - circ.

Well to be drilled to develop Dakota formation. Completion interval and stimulation program to be determined from study of open hole logs.

Copies of Location Plat, Development Plan, Topo Map, location and transportation sketch, and Amoco's blowout prevention hookup for this well are attached. The Forest Permit is being prepared.

The gas purchaser will be Northwest Pipeline Corporation.



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 prevention program, if any.

24. SIGNED [Signature] TITLE Area Engineer DATE April 12, 1977

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

[Signature]

*See Instructions On Reverse Side

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.

**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.

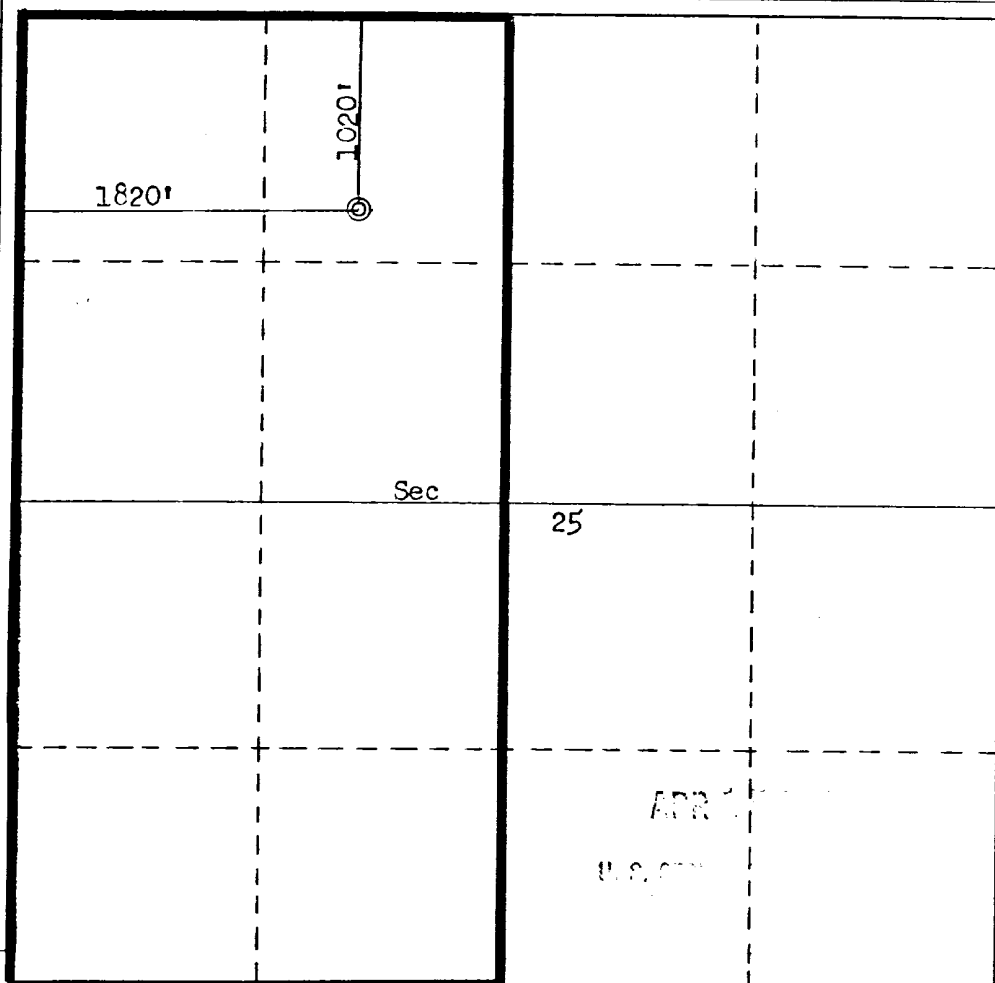
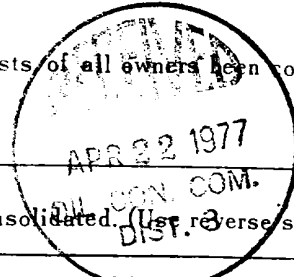
Operator Amoco Production Company			Lease Rosa Unit		Well No. 58
Unit Letter C	Section 25	Township 31N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1020 feet from the North line and 1820 feet from the West line					
Ground Level Elev. 6606 est.	Producing Formation Dakota		Pool Basin Dakota		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 _____

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.



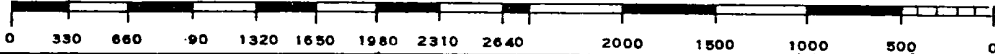
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name H. D. Montgomery
 Position Area Engineer
 Company AMOCO PRODUCTION COMPANY
 Date April 12, 1977

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.

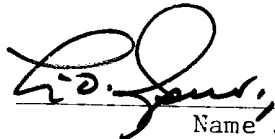
Date Surveyed March 30, 1977
 Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
 Certificate No. 3950



ROSA UNIT NO. 58
1020' FNL & 1820' FWL, SECTION 25, T31N, R10W
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.

April 12, 1977
Date

 Area Supt.
Name and Title

APR 12 1977

U.S. G.P.

DEVELOPMENT PLAN
ROSA UNIT NO. 58
1020' FNL & 1820' FWL, SECTION 25, T31N, R10W
RIO ARriba COUNTY, NEW MEXICO

The proposed location is in Carson National Forest, a pinon-juniper forest. The ground cover on the location is pinon and cedar with a little sagebrush. The geological name of the surface location is the Tertiary San Jose. Access will require 500' of new road. The location is fairly level; material from high points will be used to level the location for proper drilling and no construction materials will be used for building the location.

Preliminary approval has been obtained from the U. S. Forest Service and formal approval is presently being sought. Preliminary archaeological clearance of the drill site has been obtained from Mrs. Mary Thul, Archaeologist. The U.S.G.S. has granted preliminary approval.

We anticipate hauling water from a proposed water hole in a wash approximately 1000' southeast of the location (map attached). In the event of rejection of this approval by the U. S. Forest Service, we will make arrangements to haul water by truck from the Gomez water hole at La Jara Wash over permanent existing roads (about 13 miles). Water will be used to drill the first 300', gel mud from 300' to 3800' and gas from 3800' to TD (8250'). A 150' x 150' pit will be built on location to hold all drilling waste and other trash, trees, and brush. Upon completion all waste liquids will be hauled by truck and bladed into existing roads and the pit will be covered. All pits will be covered; the location pits and drilling site will be cleaned and reseeded according to U. S. Forest Service Specifications (seeding plan attached).

There are no airstrips or camps in the vicinity. The estimated tops of important geological formations bearing hydrocarbons are:

<u>Formation</u>	<u>Depth</u>	<u>Elevation</u>
Fruitland-Pictured Cliffs	3000-3300'	+3500-3200'
Mesaverde	5500'	+1000'
Dakota	8050'	-1500'

Estimated KB elevation: 6619'

<u>Est. Depth</u>	<u>Csg. Size</u>	<u>Weight</u>	<u>Hole Size</u>	<u>Sacks Cement</u>	<u>- Type Cement</u>
300'	10-3/4"	40.5#	15"	300	- Class "B", 2% CaCl ₂ .
3800'	7-5/8"	26.4#	9-7/8"	600	- Class "B", 50:50 Poz, 6% Gel.
8250'	4-1/2"	11.6#	6-3/4"	600	- Class "B", 50:50 Poz, 6% Gel.

Amoco's standard blowout preventer will be employed, see attached drawing for blowout preventer design.

APR 1961

U.S.G.S.

Amoco plans to run the following logs: From 0 to 300' - Induction, Compensated Density. From 3800' to TD - Induction Gamma Ray, Formation Density. No cores or drill stem tests will be taken.

In past drilling in this area, no abnormal temperatures or hydrocarbon gas were encountered.

We anticipate the starting date to be in early June and expect a two week operation.

APPENDIX

U.S. GEOLOGICAL SURVEY

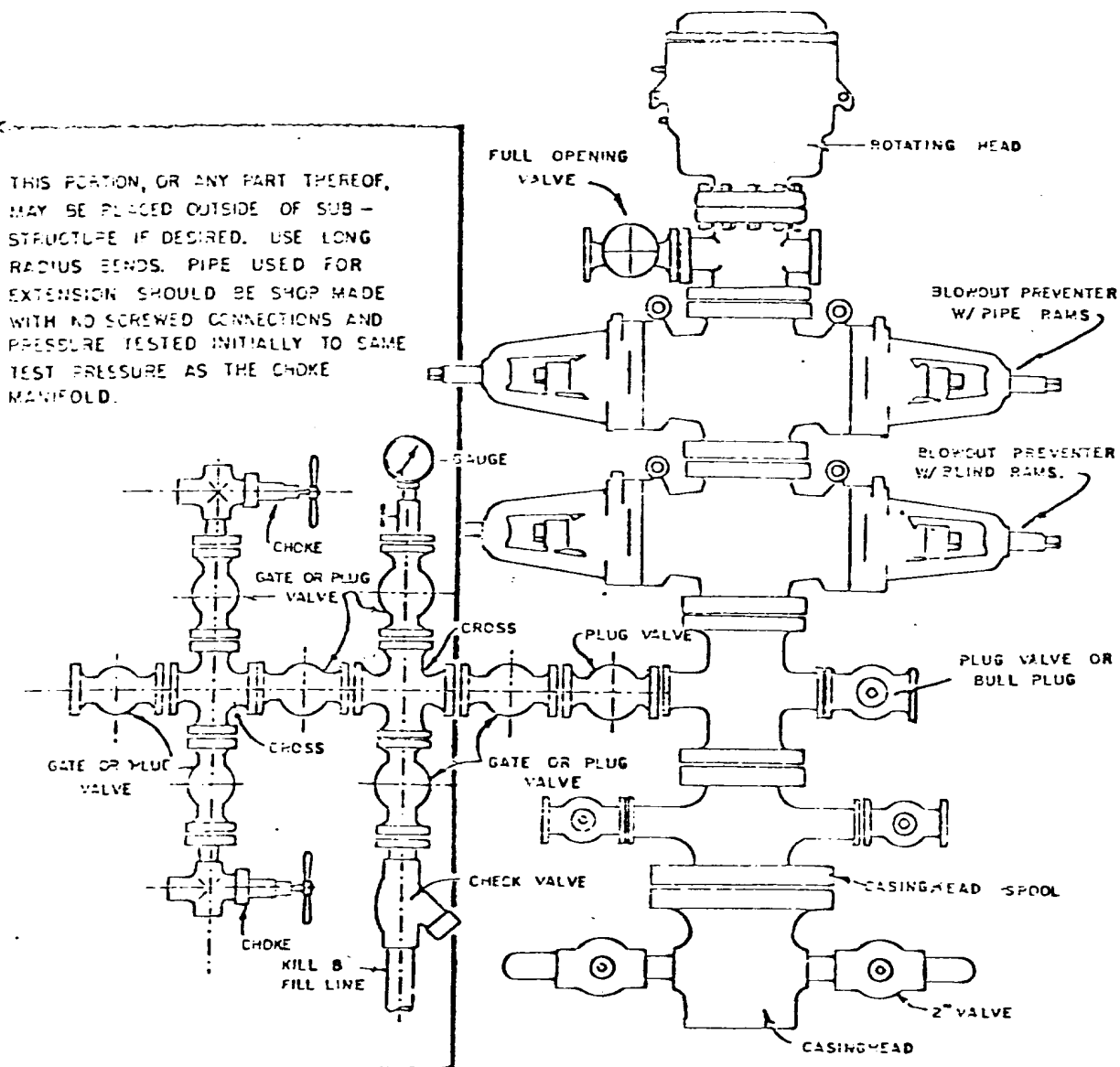
SEEDING PLAN
FOREST LANDS

4 lbs./acre
6 lbs./acre
1 lb./acre
1 lb./acre

Crested Wheatgrass
Pubescent Wheatgrass
Ranger Alfalfa
Weeping Lovegrass

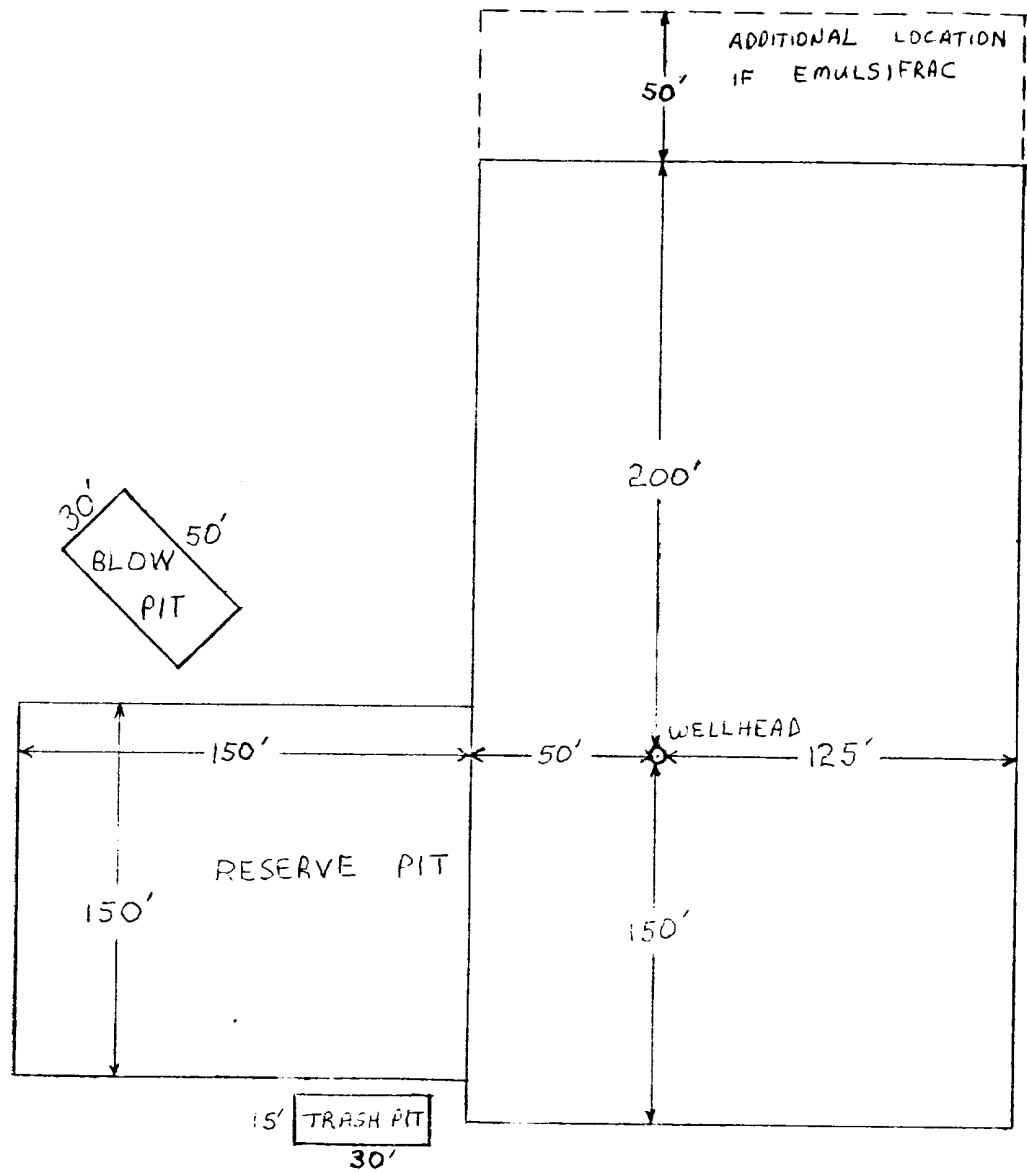
FOR
U.S.

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 CHOKE MANIFOLD.



BLOWOUT PREVENTER HOOKUP

W
↑

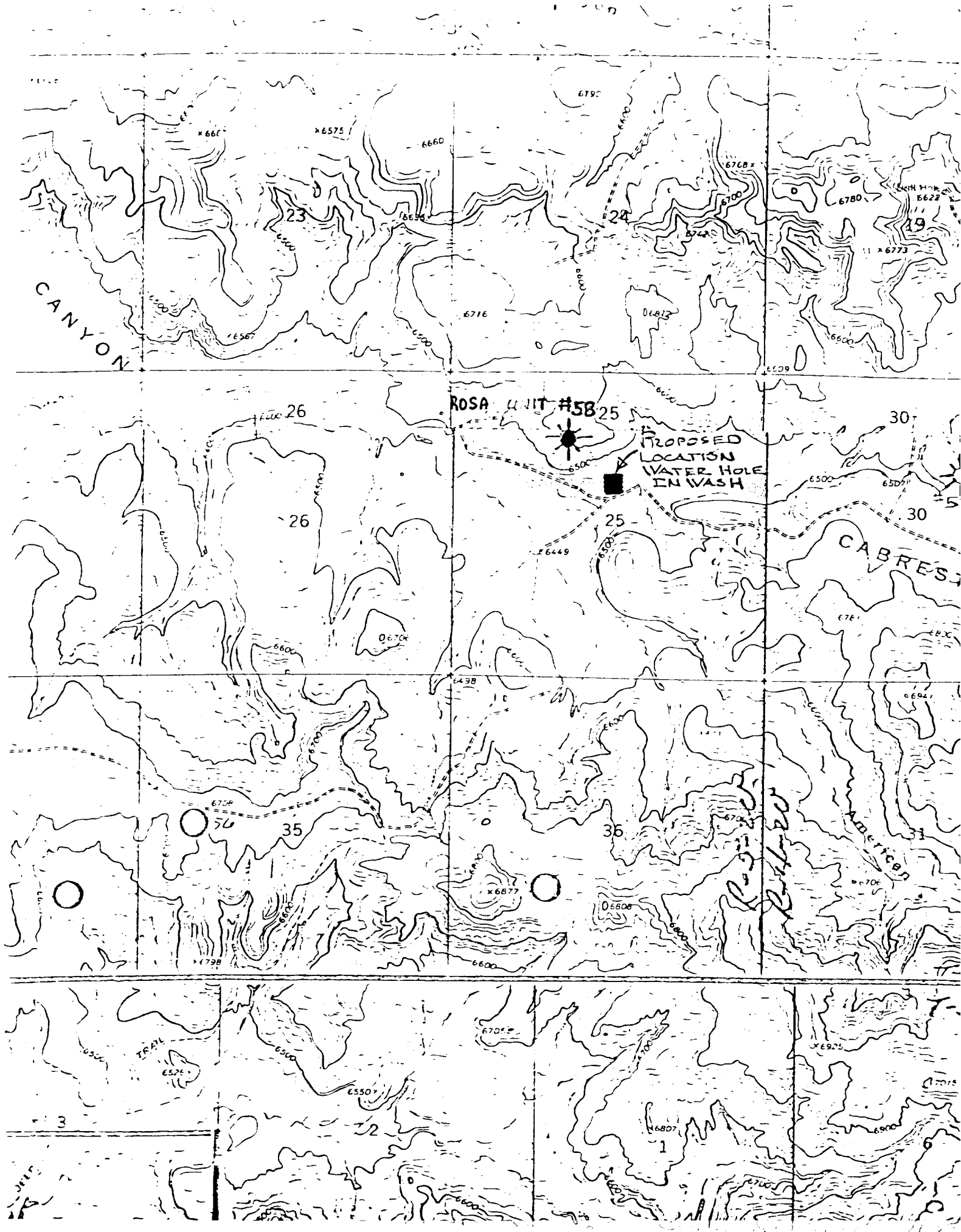


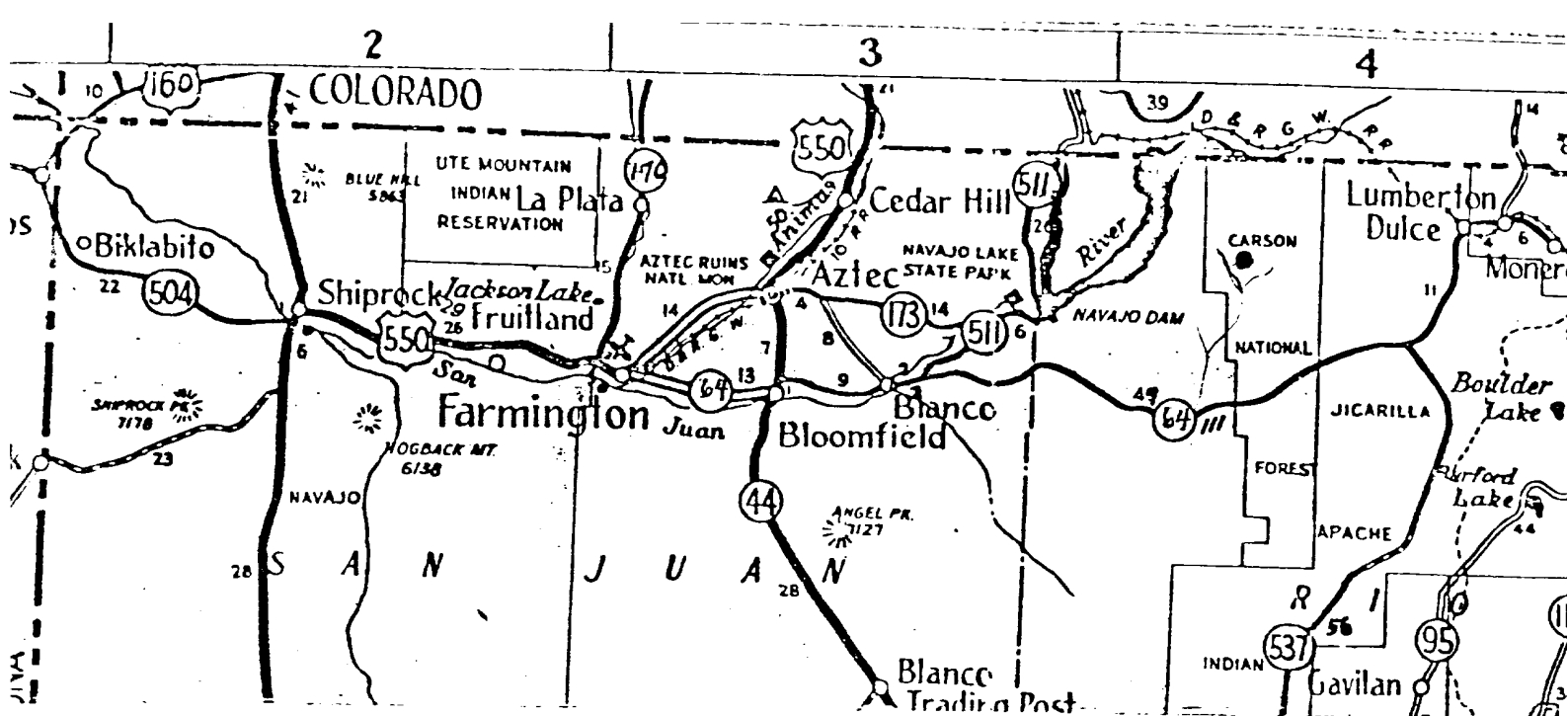
Amoco Production Company

SCALE: NONE

DRILLING LOCATION SKETCH: ROSA UNIT # 58

DRG.
NO.

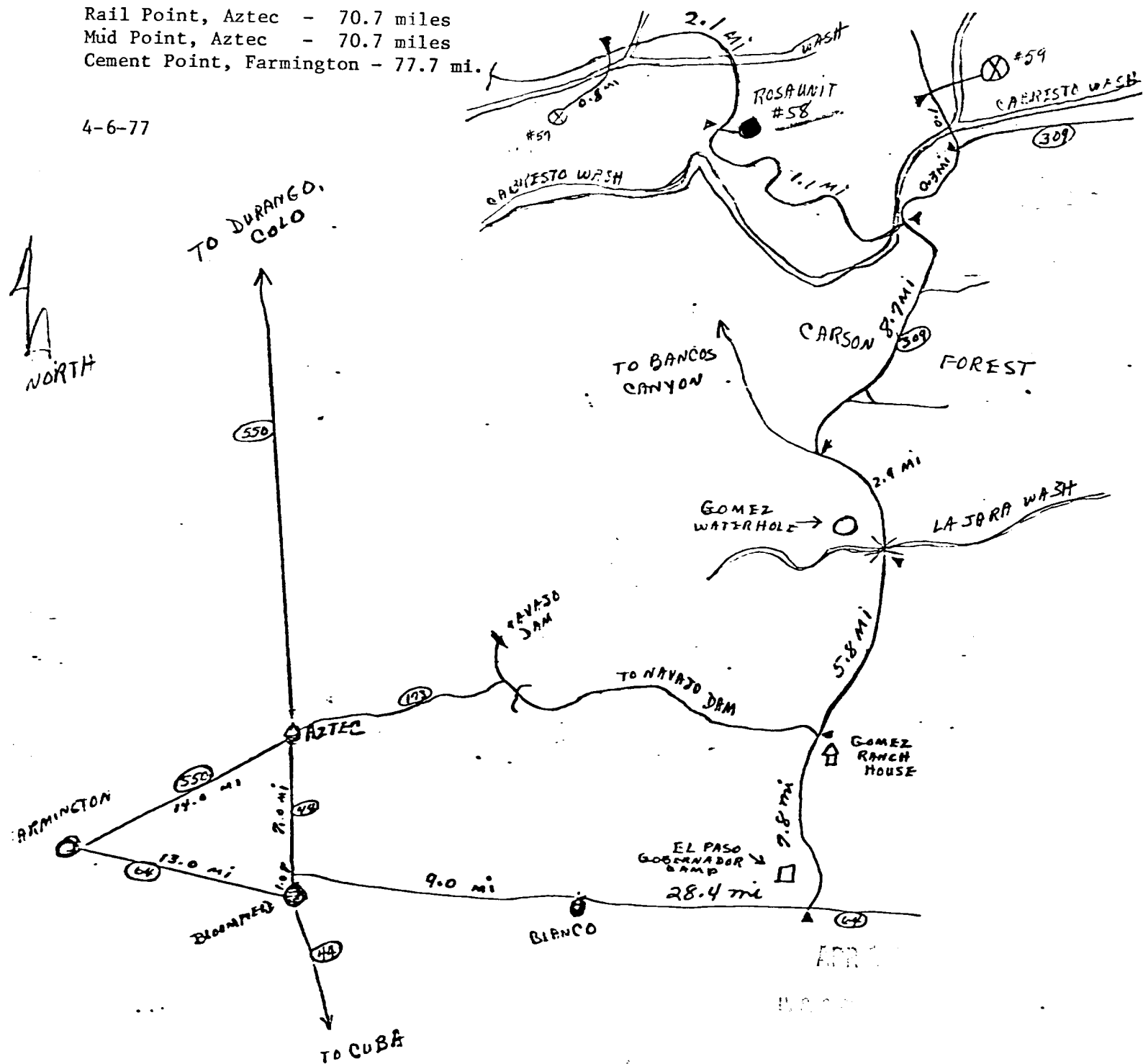


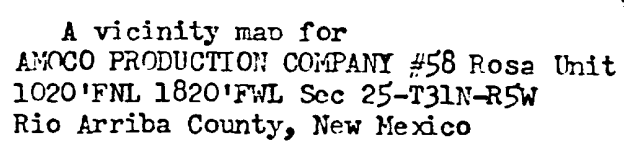


FARMINGTON AREA TRAFFIC SKETCH
 DENVER DIVISION
 Rosa Unit Well No. 58
 Rio Arriba County, New Mexico
 Amoco WI: 50%

Rail Point, Aztec - 70.7 miles
 Mud Point, Aztec - 70.7 miles
 Cement Point, Farmington - 77.7 mi.

4-6-77





A vicinity map for
AMOCO PRODUCTION COMPANY #58 Rosa Unit
1020'FNL 1820'FWL Sec 25-T31N-R5W
Rio Arriba County, New Mexico

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078773 078768

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL ☐ GAS ☒ OTHER ☐
WELL WELL

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

1020' FNL & 1820' FWL, Section 25, T-31-N, R-5-W

14. PERMIT NO.

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

6606' GL

7. UNIT AGREEMENT NAME

Rosa Unit

8. FARM OR LEASE NAME

9. WELL NO.

62

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

NE/4 NW/4 Section 25,
T-31-N, R-5-W

12. COUNTY OR PARISH 13. STATE

Rio Arriba New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐ PULL OR ALTER CASING ☐
FRACTURE TREAT ☐ MULTIPLE COMPLETE ☐
SHOOT OR ACIDIZE ☐ ABANDON* ☐
REPAIR WELL ☐ CHANGE PLANS ☐
(Other) ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐ REPAIRING WELL ☐
FRACTURE TREATMENT ☐ ALTERING CASING ☐
SHOOTING OR ACIDIZING ☐ ABANDONMENT* ☐
(Other) Change Name Number ☒
(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent
to this work.)*

This is notification of a name change from the Rosa Unit No. 58 to the Rosa Unit No. 62
to prevent duplication of name with Northwest Pipeline Corporation.

18. I hereby certify that the foregoing is true and correct

SIGNED Ed Montgomery
(This space for Federal or State office use)

TITLE Area Engineer

DATE April 29, 1977

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE MAY 2 1977

*See Instructions on Reverse Side

U. S. GEOLOGICAL SURVEY
BUREAU OF OILS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078768

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Rosa Unit

8. FARM OR LEASE NAME

Rosa Unit

9. WELL NO.

62

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

NE/4 NW/4 Sec. 25

T-31-N, R-5-W

12. COUNTY OR PARISH 13. STATE

Rio Arriba

NM

1.

OIL ☐ GAS ☒ OTHER ☐
WELL WELL

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.*

See also space 17 below.)
At surface

1020' FNL & 1820' FWL, Section 25, T-31-N, R-5-W

14. PERMIT NO.

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

6606' GL est.

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

Spud & Set Casing x

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spudded 15" hole on 8/3/77. Drilled to 324' and set 10-3/4" H-40 casing at 322' with 330 sx Class "B" cement with 2% CaCl₂. Circulated 35 sx cement. WOC and pressure tested casing with 800 psi, 30 minutes, OK. Drilled to 3850' and reamed tight spot from 3480' to 3860'. Set 7-5/8" H-40 casing at 3860' with 1100 sx, Class "B" 50:50 Poz, 6% Gel and 2# Mad Tuf Plug per sx followed by 100 sx Class "B" Neat. Circulated 30 barrels good cement. WOC and pressure tested with 800 psi for 30 minutes. Continued drilling to 8169' and cut Core No. 1 from 8169-8229'. Recovered 59'. Drilled to TD of 8375'. Set 4-1/2" N-80 casing at 8375' with 750 sx Class "B" cement with 50:50 Pozmix, 6% Gel, 2# Mad Tuf Plug per sx, 6% Friction Reducer and 0.4% WLA. Cement did not circulate.



18. I hereby certify that the foregoing is true and correct

SIGNED

E. Svoboda

TITLE

Area Adm. Supvr.

DATE

9/13/77

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

RECEIVED

*See Instructions on Reverse Side

SEP 14 1977

U.S. GEOLOGICAL SURVEY
FARMINGTON, NM

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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 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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.