Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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 WELL ☐ GAS WELL ☒ OTHER

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
1585' FSL & 1575' FWL

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

9. WELL NO.
54

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NE/4 SW/4 Section 36, T-31-N, R-5-W

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
6800' GL

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☒	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☒	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) **Perf & Sq. Cement**			☒
(Other)			☐	(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.) *

8-4-74 drilled DV tool and cement to PBD 8514'.
8-5-74 circulated hole clean and tested casing to 1000 psi OK. Ran Cement Bond Log, GR-Correlation and Temperature Base Logs. Tested BOP, casing and spool to 4900 psi OK. Perfed 4 holes at 8470'. Set a packer at 8443' and pressured annulus to 1500 psi. Broke down perfs with 3800 psi and pumped 1-1/2 BPM at 3950 psi & 1-1/2 BPM at 4500 psi. Spotted 250 gallons 7-1/2% acid and pumped 1.5 BPM at 3500 psi and let soak. Pumped 2 BPM at 3900 psi and overflushed with 10 BW. Released packer and set cement retainer at 8460'. Squeezed below retainer with 50 sacks Class "A" with 0.4% HR7. Pumped cement at 2 BPM and 3800 psi with maximum squeeze pressure 4500 psi. Reversed out 6 barrels cement with 4 barrels cement in formation. Pulled tubing and perfed 4 holes at 8328'. Set packer at 8287'. Pressured annulus to 1500 psi and pumped acid 1.5 BPM at 1800 psi and 3 BPM at 3800 psi. Pulled packer and set cement retainer at 8228'. Squeezed below retainer with 100 sacks Class "A" cement with 0.4% HR7. Pumped 2 BPM at 2400 psi and reversed out 40 sacks cement. Maximum squeeze pressure 3000 and final squeeze pressure 3000 psi. WOC and drilled cement retainer at 8228' and drilled hard cement to 8335' and fell out cement. Tagged cement retainer at 8460'. Tested BOP and casing to 1000 psi OK, and circulated hole clean. Ran Cement Bond Log with good bond 8320-38' and poor bond 8320'. Perfed 8316' with 2 shots. Pressured casing to 3000 psi and unable to breakdown. Set a retrievable packer at 8282' and spotted 250 gallons 7-1/2% HCl. Pressured to 3000 psi and dropped to 2750 psi in 3 minutes. Washed acid by holes. Pressured to 3000 psi and dropped to 2650 psi. Unable to breakdown. Pressured to 3750 psi and dropped to 2500 psi in 3 minutes. Let soak 6 minutes and pressure dropped

(Continued on attached sheet)

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

SIGNED B. L. Hamilton TITLE **Area Adm. Supvr.** DATE **September 18, 1974**

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

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.

G.P.O. : 1973- 780-622 /VIII- 148

ATTACHMENT NO. 1
ROSA UNIT NO. 54

to 2250 psi. Unable to pump in at 3000 psi. Pressured to 3800 psi and dropped to 2500 psi. Pumped all acid away at 3900 psi. Flushed with 10 barrels water at 1-1/2 to 2 BPM. Pulled packer and set cement retainer at 8200'. Pressured annulus to 2000 psi. Squeezed below retainer with 100 sacks Neat cement. Maximum pressure 4000 psi. Pumped 1-1/2 BPM at 3800 psi. Reversed out 66 sacks cement. Drilled cement retainer at 8200' and cement to 8317'. Hole clear to 8460' PBD. Tested casing with 1000 psi OK.

8-12-74 perfed zones 8417-35', 8390-98', 8368-84' and 8328-38' with 1 SPF. Set a retrievable bridge plug at 8450' with packer at 8354'. Washed 2 barrels 15% HCl over perfs 8368-8435'. Breakdown pressure 1800 psi and pumped 1-1/2 barrels 15% HCl in formation. Washed 2 barrels 15% acid over perfs 8328-38'. Reset bridge plug at 8358' and packer at 8324'. Pumped 1-1/2 barrels 15% acid into formation. Breakdown pressure 2300 psi. Tripped to bottom and reversed acid out of hole.

Ran DST tool and packer at 8305' and 8320'. Opened tool and had fair blow instantly. Initial flow period 3-1/2 hours and shut in 3 hours. Second flow period 3 hours with second shut in period 5 hours. Second flow period gauged thru 1" line and 3/4" choke: 10 min. 66 MCF, 13 min. 51 MCF, 15 min. 36 MCF, 20 min. 32 MCF, 23 min. gas TSTM. Released packer and recovered 900' water. 3-1/2 hour IFP 185, FFP 344. 3 hour ISIP 2980, second 3 hour flow period IFP 320, FFP 423. FBHPSI 3303, Hyp. in 3560, Hyp. out 3427. Pulled DST tool.

Set a retrievable bridge plug at 8450' and packer at 8408'. Pressured annulus to 500 psi. Acidized perfs 8417-35' with 500 gallons 15% HCl. Breakdown pressure 1750 psi. Pumped 2 barrels acid water into formation and communicated. Flushed with 5 barrels water. Released packer and set at 8445' and pressured to 1000 psi to test packer. Set bridge plug at 8408' and packer at 8387'. Acidized perfs 8390-98' with 500 gallons 15% HCl. BDP 2200 and pumped acid 1 BPM. Reset bridge plug at 8387' and packer at 8360'. Acidized perfs 8368-84' with 500 gallons 15% acid. BDP 2100 psi and pumped in acid at 2 BPM and 2100 psi. Did not communicate above packer. Reset bridge plug 8350' with packer 8325'. Acidized perfs 8328-38' with 500 gallons 15% HCl. BDP 2800 psi. Injected 1-1/4 BPM at 2800 psi. Flushed with 9 barrels water. Released packer.

8-23-74 rigged up to Emulsifrac well. All frac fluid contained 66-2/3% condensate, 33-1/3% water, 1% KCl, 50 lbs. Guar gum and 8 gallons Emulsifrac per 1000 gallons. Fraced down 4-1/2" casing as follows: Pumped 29,400 gallons emulsion pad with no breakdown. Pumped 1 stage of 4200 gallons emulsion with 2 lbs. per gal. 100 mesh sand followed with 6300 gals. emulsion spacer. Pumped 1 stage of 4200 gals. emulsion and 3 lbs. per gal. 100 mesh sand followed with 6300 gals. emulsion spacer. Pumped 2 stages consisting of 4200 gals. emulsion and 4 lbs. per gal. 100 mesh sand followed with 6300 gals. emulsion spacer, Pumped 4 stages of 6300 gals. emulsion and 4 lbs. per gal. 100 mesh sand followed with 6300 gals. emulsion spacer. Pumped 4 stages of 6300 gals. emulsion and 4 lbs. per gal. 20-40 sand followed with 6300 gals. emulsion spacer. Pumped 4 stages of

Perfs. 8328-8435 - acidized. Sand frac.
~~8408-~~
~~8417-8~~

of 8400 gals. emulsion and 4 lbs. per gal. 20-40 sand followed with 6300 gals. emulsion spa cer. Pumped 3 stages of 8400 gals. emulsion and 4 lbs. per gal. 10-20 sand followed with 150 gals. emulsion spacer. Flushed to perfs with 130 gals. KCl water. Maximum pressure 4900, minimum 3500, and average pressure 4230 psi. AIR 23 BPM. During 5th stage of 100 mesh sand injection rate increased 9.5 to 17 BPM. Ran temperature survey. Pressure broke back during frac after approximately 1700 barrels fluid in formation. Temperature survey indicated majority of frac fluid went out DV tool.

Cleaned out sand to 8460' P BD. Set a retrievable bridge plug at 6363' with packer at 6330'. Pressured bridge plug to 3000 psi OK. Reset packer at 6320' and pressured with 2000 psi. Pumped in below packer thru DV tool at 4 BPM at 2500 psi. Set a cast iron bridge plug at 8135' and packer at 6390'. Tested with 3000 psi OK. Reset packer at 6000' and pressured backside to 1000 psi. Squeezed DV tool with 150 sacks Class "A" cement with 0.4% HR4. Maximum and final squeeze pressure 3000 psi. Released packer, drilled bridge plug at 8135' and cleaned out to PBD. Circulated hole with 1% KCl water and set packer at 8257'. Swabbed well and well kicked off. Well is now recovering load fluid.