

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.

**I-89-IND-58**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**Havaje**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**USC Section 19**

9. WELL NO.

**36**

10. FIELD AND POOL, OR WILDCAT

**Hogback Dakota**

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

**SW/4 NE/4 Section 19,  
T-29-N, R-16-W**

12. COUNTY OR PARISH

**San Juan**

13. STATE

**New Mexico**

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

**2210' FHL & 1855' FHL**

14. PERMIT NO.

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

**5117' CL**

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) **Spud & set casing** ☒

REPAIRING WELL ☐

ALTERING CASING ☐

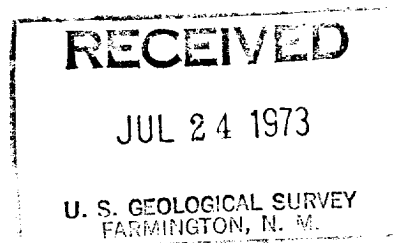
ABANDONMENT\* ☐

(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.)\*

An 11" surface hole was spudded at 1:30 p.m., July 13, 1973 and drilled 70'. The 7-5/8" casing was set at 70' with 100 sacks Class "A" cement with 2% CaCl<sub>2</sub>. The cement circulated. The hole was reduced to 6-3/4" at 70' and drilling continued.

The 5-1/2" casing was set at 753' with 100 sacks Class "A" cement with 2% CaCl<sub>2</sub> on July 16, 1973. The cement circulated.



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

SIGNED **J. ARNOLD SNELL**

TITLE **Area Engineer**

DATE **July 23, 1973**

(This space for Federal or State office use)


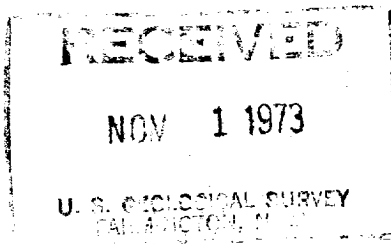
APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

<b>1a. TYPE OF WORK</b> <div style="display: flex; justify-content: space-around;"><span>DRILL <input type="checkbox"/></span><span>DEEPEN <input type="checkbox"/></span><span>PLUG BACK <input checked="" type="checkbox"/></span></div> <b>b. TYPE OF WELL</b> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> <div style="display: flex; justify-content: space-around;"><span>SINGLE ZONE <input type="checkbox"/></span><span>MULTIPLE ZONE <input type="checkbox"/></span></div>		<b>5. LEASE DESIGNATION AND SERIAL NO.</b> <b>I-89-IND-58</b> <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b> <b>Navajo</b> <b>7. UNIT AGREEMENT NAME</b>  <b>8. FARM OR LEASE NAME</b> <b>USC Section 19</b> <b>9. WELL NO.</b> <b>36</b> <b>10. FIELD AND POOL, OR WILDCAT</b> <b>Hogback Dakota</b> <b>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b> <b>SW/4 NE/4 Section 19,</b> <b>T-29-N, R-16-W</b> <b>12. COUNTY OR PARISH</b> <b>13. STATE</b> <b>San Juan</b> <b>New Mexico</b>														
<b>2. NAME OF OPERATOR</b> <b>AMOCO PRODUCTION COMPANY</b>																
<b>3. ADDRESS OF OPERATOR</b> <b>501 Airport Drive, Farmington, New Mexico 87401</b>																
<b>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*</b> At surface <b>2210' FEL &amp; 1855' PNL</b> At proposed prod. zone <b>Same</b>																
<b>14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*</b> <b>9 miles southeast of Shiprock, New Mexico</b>																
<b>15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)</b> <b>950'</b>	<b>16. NO. OF ACRES IN LEASE</b> <b>4160</b>															
<b>18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.</b> <b>310'</b>	<b>17. NO. OF ACRES ASSIGNED TO THIS WELL</b> <b>40 (Joint)</b>															
<b>20. ROTARY OR CABLE TOOLS</b>																
<b>21. ELEVATIONS (Show whether DF, RT, GR, etc.)</b> <b>5116' GL</b>																
<b>22. APPROX. DATE WORK WILL START*</b> <b>November 1973</b>																
<b>23. PROPOSED CASING AND CEMENTING PROGRAM</b>																
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 15%;">SIZE OF HOLE</th><th style="width: 15%;">SIZE OF CASING</th><th style="width: 15%;">WEIGHT PER FOOT</th><th style="width: 15%;">SETTING DEPTH</th><th style="width: 40%;">QUANTITY OF CEMENT</th></tr></thead><tbody><tr><td>11"</td><td>7-5/8"</td><td>24#</td><td>70'</td><td>100 sx (circ. cnt.)</td></tr><tr><td>6-3/4"</td><td>5-1/2"</td><td>15.5#</td><td>753'</td><td>100 sx (circ. cnt.)</td></tr></tbody></table>		SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	11"	7-5/8"	24#	70'	100 sx (circ. cnt.)	6-3/4"	5-1/2"	15.5#	753'	100 sx (circ. cnt.)
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT												
11"	7-5/8"	24#	70'	100 sx (circ. cnt.)												
6-3/4"	5-1/2"	15.5#	753'	100 sx (circ. cnt.)												
<p>Amoco proposes to run Gamma Ray-Neutron logs from TD 765' to surface, set a 5-1/2" cement retainer at 600', squeeze with 35 sacks of cement below retainer, perforate 284-90' and 300-310' and test Gallup. Dakota formation is not commercial as last test was 1 BOPB and 63 MWPD.</p> <div style="display: flex; justify-content: space-around; align-items: center;"><div style="text-align: center;"></div><div style="text-align: center;"></div></div>																
<p>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.</p>																
<b>24. Original Signed by</b> <b>SIGNED J. ARNOLD SNELL</b> <b>TITLE Area Engineer</b> <b>DATE October 30, 1973</b>																
<b>(This space for Federal or State office use)</b>																
<b>PERMIT NO.</b> _____ <b>APPROVAL DATE</b> _____																
<b>APPROVED BY</b> _____ <b>TITLE</b> _____ <b>DATE</b> _____																
<b>CONDITIONS OF APPROVAL, IF ANY:</b>																

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**1-89-IND-58**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**Navajo**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**USG Section 19**

9. WELL NO.

**36**

10. FIELD AND POOL, OR WILDCAT

**Undesignated Gallup**11. SEC. T., R., M., OR BLK. AND  
SURVEY OR AREA**SW/4 NE/4 Section 19,  
T-29-N, R-16-W**

12. COUNTY OR PARISH

**San Juan**

13. STATE

**New Mexico**

## 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 <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	
2. NAME OF OPERATOR <b>AMOCO PRODUCTION COMPANY</b>	
3. ADDRESS OF OPERATOR <b>501 Airport Drive, Farmington, New Mexico 87401</b>	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>2210' FWL &amp; 1855' FWL</b>	
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>5116' GL</b>

## 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) **Plug Back - Gallup**

REPAIRING WELL

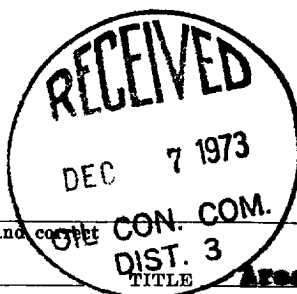
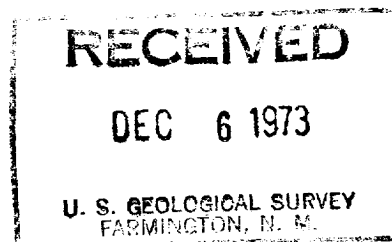
ALTERING CASING

ABANDONMENT\*

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

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.)\*

A service unit was moved in 11-29-73 to commence plugging back operations on the subject well. A 5-1/2" cement retainer was set at 592' and the hole circulated clean. Tested the casing with 1000 psi OK, stung into retainer and pressured backside to 200 psi. Squeezed open hole 553-763' with 35 sacks Class "A" Neat cement. AIR 2 MPH at 1000 psi. Maximum pressure 3000, final 700. Reversed out 3 sacks cement. Swabbed hole dry. Perforated intervals 288-294' and 305-315' with 4 SPV. Ran 2-3/8" tubing to 315'. Swabbed well dry in two hours and then shut in 17 hours with no fluid entry. Squeezed with 50 barrels oil. Breakdown pressure 2600 and AIR 7 MPH with 1200 psi. Alternately swabbing and flowing well to recover lead oil.



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

Original Signed by

SIGNED **J. ARNOLD SWEET**TITLE **Area Engineer**DATE **December 4, 1973**

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**I-89-IND-58**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**Navajo**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**USC Section 19**

9. WELL NO.

**36**

10. FIELD AND POOL, OR WILDCAT

**Undesignated Gallup**11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA**SW/4 NE/4 Section 19,****T-29-N, R-16-W**

12. COUNTY OR PARISH

**San Juan****New Mexico****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

**301 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**2210' FEL & 1833' FEL**

14. PERMIT NO.

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

**3116' GL**

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

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☐

PULL OR ALTER CASING

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☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
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REPAIRING WELL

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☐

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(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.)\*

Due to the failure of the subject well to produce commercial quantities of hydrocarbons, we propose to abandon the well as follows:

1. Pump 20 sacks Class "A" Neat cement into formation.

2. Fill 5-1/2" casing to surface with Class "A" Neat cement.

3. Cut off wellhead, erect P&amp;A marker and clean up location.

**RECEIVED****APR 4 1974****OIL CON. COM.  
DIST. 3****RECEIVED****APR 3 1974****U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.**

Verbal approval to abandon well received in telephone conversation March 29, 1974, between Mr. M. L. Seelinger, U.S.G.S., and Mr. R. K. Kobbe, Amoco Production Co.

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

SIGNED

**J. ARNOLD SWELL**

TITLE

**Area Engineer**

DATE

**April 2, 1974**

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

Form approved.  
Budget Bureau No. 42-R355.5.

**\*(See Instructions and Spaces for Additional Data on Reverse Side)**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on reverse side)

Form approved,  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**I-89-IND-88**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**Navajo**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**USC Section 19**

9. WELL NO.

**36**

10. FIELD AND POOL, OR WILDCAT

**Undesignated Gallup**

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

**SW/4 NE/4 Section 19,  
T-29-N, R-16-W**

12. COUNTY OR PARISH 13. STATE

**San Juan**

**New Mexico**

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

**2210' FNL & 1855' FNL, Section 19, T-29-N, R-16-W**

14. PERMIT NO.

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

**5116' GL**

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\* ☒

(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.)\*

**Due to the failure to find commercial quantities of hydrocarbons, the USC Section 19 No. 36 was plugged and abandoned on April 6, 1974 as follows:**

- 1. Squeezed 20 sacks Class "A" Neat cement into formation.**
- 2. Filled the 3-1/2" casing to surface with 36 sacks Class "A" Neat cement.**
- 3. Cut off wellhead and erected P&A marker.**
- 4. Cleaned up location for inspection.**



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

Original Signed by

SIGNED **G. L. HARTON**

TITLE **Area Adm. Super.**

DATE **May 7, 1974**

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_