

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL ☒ DEEPEN ☐ PLUG BACK ☐		5. LEASE DESIGNATION AND SERIAL NO. 30-045-20976 ST-077092-B 078199
b. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico 87401		8. FARM OR LEASE NAME Houck Gas Co. "D"
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 920' FWL & 890' PNL, Section 6, T-29N, R-9W At proposed prod. zone Same		9. WELL NO. 1
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 9 miles east of Asteac, New Mexico		10. FIELD AND POOL, OR WILDCAT Blanco Pictured Cliffs
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 890'	16. NO. OF ACRES IN LEASE 172	17. NO. OF ACRES ASSIGNED TO THIS WELL 172
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. No other wells on lease	19. PROPOSED DEPTH 2400'	20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) Will report later		22. APPROX. DATE WORK WILL START* June 1972

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#	200'	200 sz. circ. Surface
7-7/8"	4-1/2"	9.5#	2400'	600 sz. circ. Surface

It is intended to drill the above Blanco Pictured Cliffs well to a TD of 2400' with rotary tools and drilling mud whereupon casing will be run to TD. Completion procedure will be based on log analysis. A copy of the Location and Acreage Dedication Plat is attached. A copy of the logs will be sent upon completion.

Please refer to Case No. 4032, Order No. R-3069 dated January 30, 1969.

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 _____

TITLE **Area Engineer**DATE **May 26, 1972**

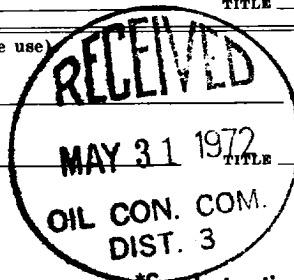
(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY 
CONDITIONS OF APPROVAL, IF ANY:

DATE _____



*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.

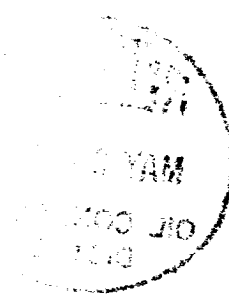
Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

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 plat, 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-126
Effective 1-1-65

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

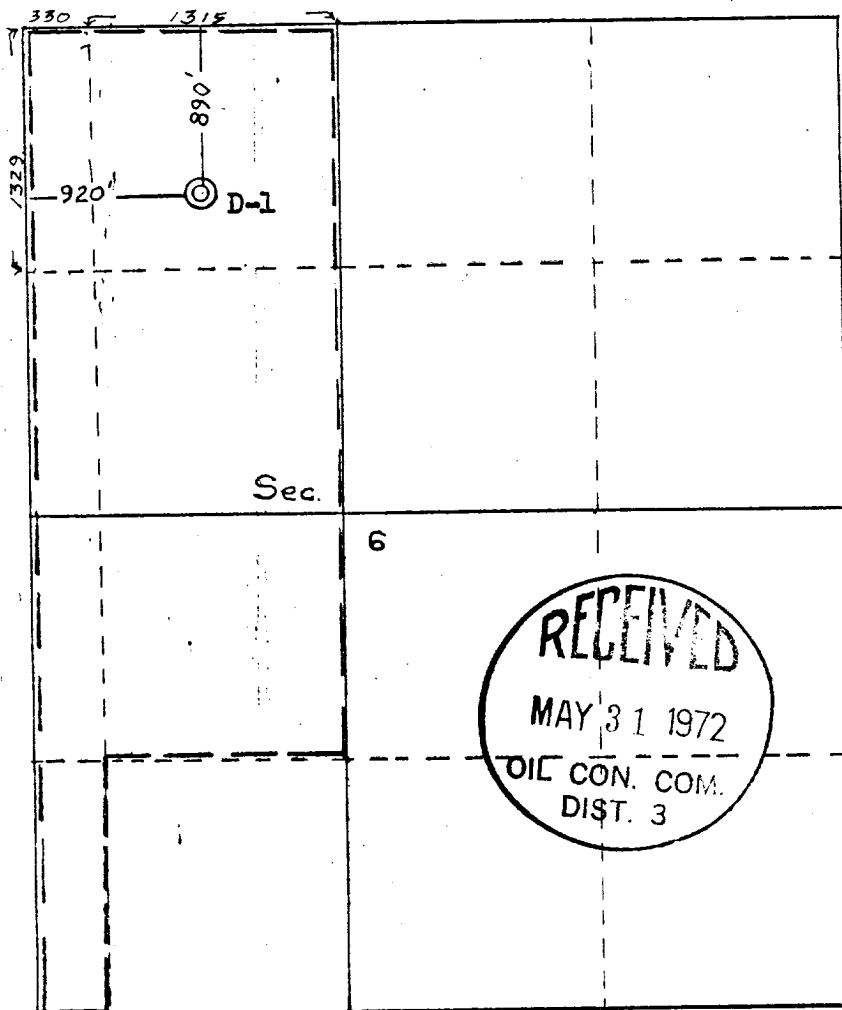
Operator Amoco Production Company			Lease Houck Gas Com "D"		Well No. -1
Unit Letter C (Lot 8)	Section 6	Township 29N	Range 9W	County San Juan	
Actual Footage Location of Well: 890 feet from the North line and 920 feet from the West line					
Ground Level Elev. 5728 gr	Producing Formation Pictured Cliffs	Pool Blanco Pictured Cliffs		Dedicated Acreage: 172 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.

J. Arnold Snell
 Name
J. Arnold Snell
 Position
Area Engineer
 Company
AMOCO PRODUCTION COMPANY
 Date
May 26, 1972

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
May 23, 1972
 Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
 Certificate No.
3950

**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.

SY 078199

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Houck Gas Com "D"

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Blanco Pictured Cliffs

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

**NE/4 NW/4 Section 6,
T-29-N, R-9-W**

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

AMCO 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

920 FWL & 890 FWL, Section 6, T-29N, R-9W

14. PERMIT NO.

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

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 and set casing** ☒

REPAIRING WELL ☐

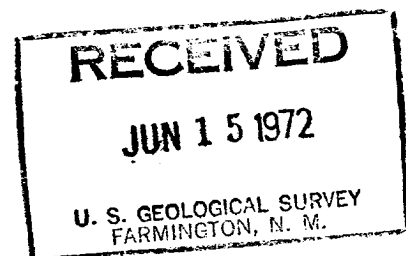
ALTERING CASING ☐

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.)*

A 12-1/4" hole was spudded June 7, 1972 and drilled to 218'. The 8-5/8" casing was set at 217' and cemented with 200 sacks Type "A" with 2% CaCl₂. The cement circulated.



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

SIGNED Original Signed by
J. ARNOLD SHELL

TITLE Area Engineer

DATE June 13, 1972

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

Instructions

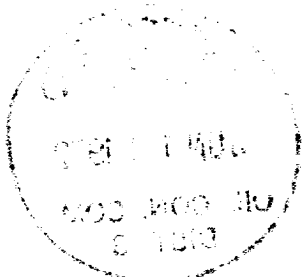
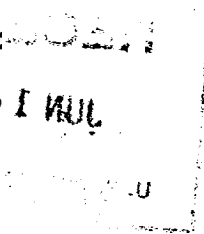
General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, 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.

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-685229

847 - 485



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

ST 078199

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Houck Gas Con "B"

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Blanco Pictured Cliffs

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

**NE/4 NW/4 Section 6,
T-29N, R-9W**

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

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

920' FNL & 890' FNL, Section 6, T-29N, R-9W

14. PERMIT NO.

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

Gr. 5729'

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 ☐

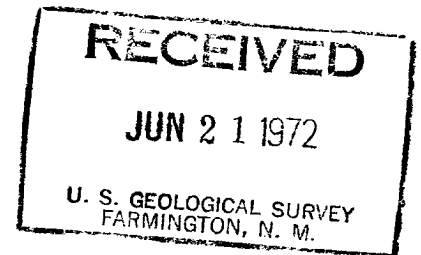
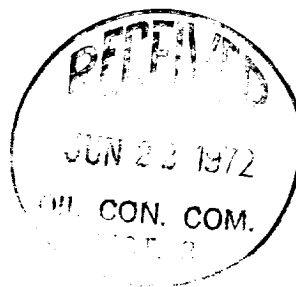
ABANDONMENT* ☐

(Other) **Set 4-1/2" casing** ☒

(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.)*

The 4-1/2" casing was set at 2397' with 550 sacks 50-50 Fox with 6% Gel and 2 pounds Tuf Plug per sack and 100 sacks "C" Neat cement. The cement circulated. The casing was tested with 2500 psi for 1/4 hour OK.



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

SIGNED L. O. Spout, Jr.

TITLE Area Superintendent

DATE June 20, 1972

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Houck Gas Com "B"

9. WELL NO.

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10. FIELD AND POOL, OR WILDCAT

Blanco Pictured Cliffs

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

**NE/4 NW/4 Section 6,
T-29-N, R-9-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

920' FNL & 890' FNL, Section 6, T-29N, R-9W

14. PERMIT NO.

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

5729' GL

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)

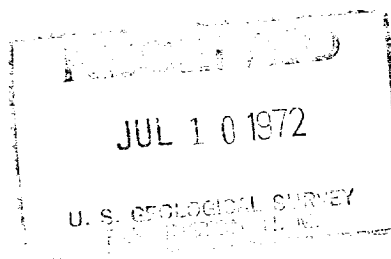
Perf & Frac

X

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

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The Houck Gas Com "B" No. 1 was perforated 2282-87' and 2292-2314' with 1 SPV. The hole was circulated with water treated with 1% KCl and 350 gallons 15% HCl was spotted on the perfs. The well was sand-water fraced with 5,000 pounds 20-40 sand, 20,000 pounds 10-20 sand, 7,500 pounds 8-12 sand and 32,500 gallons water. Break-down pressure was 1600 psi. Maximum treating pressure was 1800 psi and the average was 1700 psi. Average injection rate was 47 BPM.



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

Original Signed by

SIGNED **J. ARNOLD**

TITLE **Area Engineer**

DATE **July 7, 1972**

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Instructions

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