



United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

NOV 28 1980

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

Gentlemen:

Your Application for Permit to Drill well No. 1 Federal "BU" in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ section 27, T. 19 S., R. 33 E., N.M.P.M., Lea County, New Mexico, lease NM 34850, to a depth of 13,700 feet to test the Morrow formation in the Oil Potash area, is hereby approved, as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the District Supervisor, Geological Survey, Hobbs, New Mexico, in sufficient time for a representative to witness all cementing operations.

Sincerely yours,

(ORIG. SCD.) JACK WILLOCK

FOR

Deputy Conservator Manager
Oil and Gas

Enclosure

cc:
✓ NMOC, Hobbs (2) (w/enclosures)
CM, SCR
DCM-Mining (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY(Other instructions on
reverse side)30-025-27175
5. LEASE DESIGNATION AND SERIAL NO.
NM 000041 NM 34850
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

P. O. Box 68, Hobbs, NM 88240

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

At surface

At proposed prod. zone

1980' FSL & 1980' FEL, Sec. 27
(Unit J, NW/4, SE/4)

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

32.5 miles west of Hobbs, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

13700'

20. ROTARY OR CABLE TOOLS

Rotary

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

3585.7' GL

22. APPROX. DATE WORK WILL START*

11-1-80

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	500'	Circulate CIRCULATE
12-1/4"	9-5/8"	40#	5400'	Circulate CIRCULATE
8-3/4"	5-1/2"	20#, 17#	13700'	Plug back to 9-5/8" CIRCULATE

Propose to drill and equip Well in the Morrow formation. After reaching TD, logs will be run and evaluated. Perforate and stimulate as necessary in attempting commercial production.

MUD PROGRAM: 0'-500' Native mud and fresh water
500'-5100' Commercial mud and fresh water
5100'-TD Commercial mud and brine with minimum properties for safe hole conditions. Reduce water loss prior to Morrow penetration.

BOP Program Attached
Archaeological Survey Attached
Gas is not dedicated

0+6-USGS, H 1-Hou 1-Susp 1-LBG 1-W. Stafford, Hou

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

Asst. Administrative Analyst

DATE

10-10-80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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

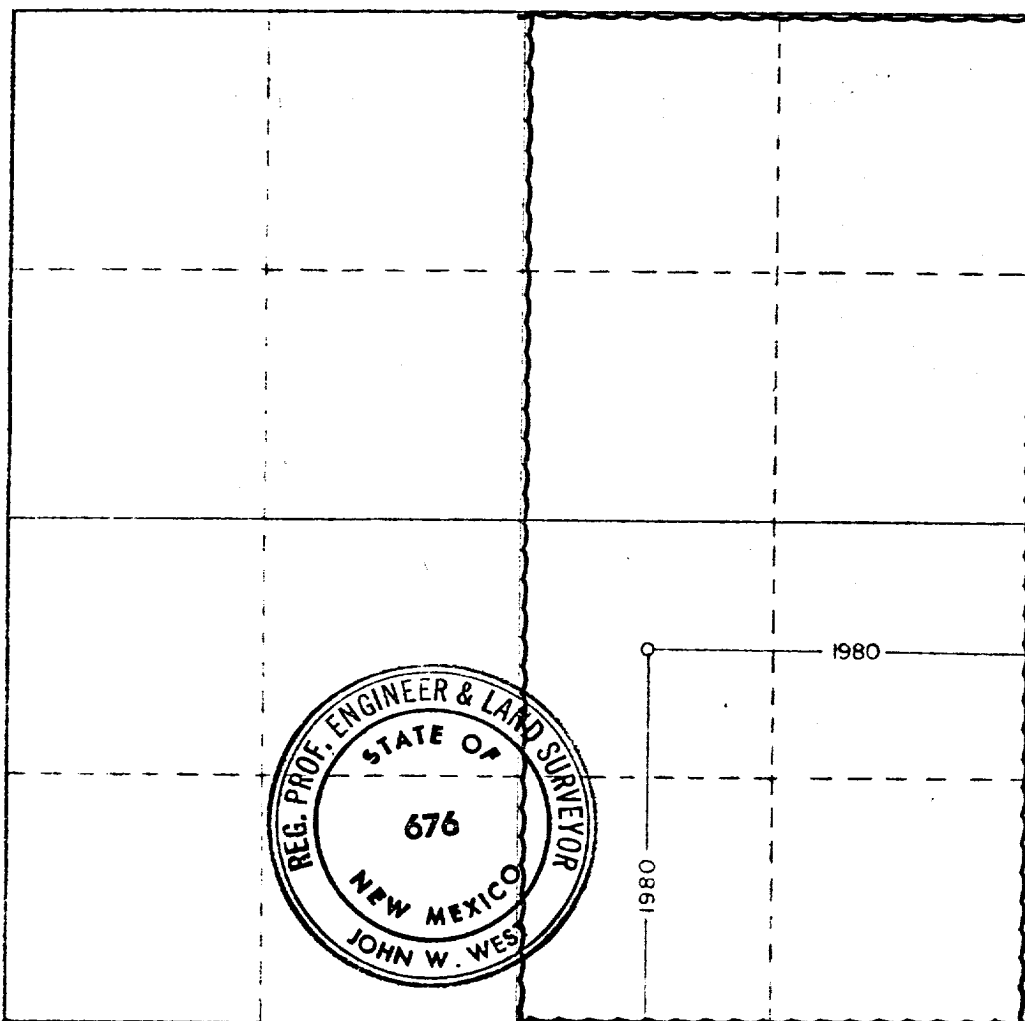
Operator Amoco Production Co.			Lease Federal B U		Well No. 1
Unit Letter J	Section 27	Township 19 south	Range 33 east	County Lea	
Actual Footage Location of Well: 1980 feet from the south line and 1980 feet from the east line					
Ground Level Elev. 3585.7	Producing Formation Morrow		Pool East Gem Morrow		Dedicated Acreage: 320 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 Benton Green
Position
Asst. Administrative Analyst
Company
Amoco Production Company
Date
10-10-80

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
9-29-80
Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6683
Ronald J. Eidson 3239

Attachment to "Application for Permit to Drill", Form 9-331 C

Federal BU No. 1
1980' FNL & 1980' FWL, Sec. 27
T-19-S, R-33-E, Lea County, NM
AMOCO PRODUCTION COMPANY

1. Location

See attached Form C-102

2. Elevation

See attached Form C-102

3. Geologic name of surface formation.

Quaternary

4. Type of drilling tools and associated equipment to be utilized.

See Form 9-331 C

5. Proposed drilling depth.

See Form 9-331 C

6. Estimated tops of important geologic markers.

Tansill	2900'	Bone Springs	7960'	Morrow	12950'
Yates	3110'	Wolfcamp	10830'	Mississippian	13650'
Seven Rivers	3470'	Strawn	12100'		
Delaware	5350'	Atoka	12350'		

7. Estimated depths at which anticipated water, oil, gas or other mineral-bearing formations are expected to be encountered.

Morrow 13000'

8. Proposed casing program, including size, grade, and weight of each string and whether it is new or used.

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>New or Used</u>
500'	13-3/8"	48#	H-40	New
5400'	9-5/8"	40#	K-55	New
13700'	5-1/2"	20#, 17#	N-80	New

9. Proposed cementing program.

13-3/8" - Circulate
9-5/8" - Circulate
5-1/2" - Tie back to 9-5/8"

~~Circulate~~
~~Circulate~~

10. Blowout Preventer Program is attached.
11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling, and the quantities and types of mud and weighting material to be maintained.
- 0'- 500' Native mud and fresh water
 - 500'-5100' Commercial mud and fresh water
 - 5100'-TD Commercial mud and brine with minimum properties for safe hole conditions. Reduce water loss prior to Morrow penetration
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.
- Compensated neutron formation density 5400'-TD
 - Dual laterolog w/Micro SFL 5400'-TD
13. Any anticipated abnormal pressure or temperatures expected to be encountered or potential hazards, such as hydrogen sulfide gas, along with plans for mitigating such hazards.

None anticipated

14. Anticipated starting date and duration of operation.

11-1-80 12-15-80

15. Other facets of the proposed operation operator wishes to point out for the Geological Survey's consideration of the application.

Request exemptions from the painting stipulations of Sec. 102 (a) (8) of the "Federal Land Policy and Management Act of 1976" to paint any tanks, separators, and treaters required for the production of this well; Amoco's standard gray color. If a pumping unit is required for the continued production of this well, it will be painted black with orange safety color coding which conforms with your current painting guidelines.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐
2. NAME OF OPERATOR
Amoco Production Company
3. ADDRESS OF OPERATOR
P.O. Box 68, Hobbs, NM 88240
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1980' FSL & 1980' FEL, Sec. 27
AT TOP PROD. INTERVAL: (Unit J, NW/4, SE/4)
AT TOTAL DEPTH:
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) change mud program	<input type="checkbox"/>		<input type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, 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.)*

Propose to change mud program per the following:

0-500' Native mud and fresh water

500-TD Commercial mud and brine with minimum properties for safe hole conditions. Reduce water loss prior to Morrow penetration.

0+5-USGS, H 1-Hou 1-Susp 1-LBG 1-W. Stafford, Hou

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Benton Green TITLE Ast. Adm. Analyst DATE 11-20-80

(This space for Federal or State office use)

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

5. LEASE NM-34850	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME Federal BU	
9. WELL NO. 1	
10. FIELD OR WILDCAT NAME East Gem Morrow	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-19-33	
12. COUNTY OR PARISH Lea	13. STATE NM
14. API NO.	
15. ELEVATIONS (SHOW DF, KDB, AND WD) 3585.7' GL	

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

RECEIVED
NOV 20 1980
U.S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO