



Amoco Production Company

501 WestLake Park Boulevard
Post Office Box 3092
Houston, Texas 77253

October 24, 1991

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Attention: W. J. LeMay, Director

File: KWB-810-WF

Application for Administrative Approval of Unorthodox Locations
South Hobbs (GSA) Unit No. 229, 230, 233, 235, 238
Hobbs Grayburg - San Andres Pool
Lea County, New Mexico

RECEIVED
OCT 28 1991
OIL CONSERVATION DIVISION

Amoco Production Company, as operator of the South Hobbs (Grayburg-San Andres) Unit, Lea County, New Mexico, hereby applies for administrative approval to drill the subject wells at the attached unorthodox locations. These wells are being drilled in order to permit the completion of an efficient production and injection pattern within our secondary recovery project. (See Attachment I for location.)

Required notice of this application has been served by certified mail to each operator of proration or spacing unit offsetting the unit for which these exceptions are requested. Each party shown on the attached service list has been furnished a copy of this letter complete with all attachments.

If there are any questions concerning this application, please contact Kim Colvin (713/596-7686).

Yours very truly,

K. W. Brand
HB

K. W. Brand
Administrative Services Manager

KAC/avd

Attachments

cc: State of New Mexico
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

ATTACHMENT I

<u>Well Name</u>	<u>Type of Well</u>	<u>Surface Location</u>	<u>Elevation (Ground Level)</u>
SHU No. 229	Injection	Unit C , 1088' FNL X 1977' FWL, Sec. 4, T-19-S, R-38-E	3618.9'
SHU No. 230	Injection	Unit B , 1100' FNL X 2220' FEL, Sec. 4, T-19-S, R-38-E	3617.8'
SHU No. 233	Injection	Unit G, 2245' FNL X 2420' FEL, Sec. 4, T-19-S, R-38-E	3612.5'
SHU No. 235	Injection	Unit K, 2160' FSL X 2414' FWL, Sec. 4, T-19-S, R-38-E	3607.3'
SHU No. 238	Injection	Unit O, 660' FSL X 2610' FEL, Sec. 4, T-19-S, R-38-E	3606.0'

NOTE: The purpose of the unorthodox locations is the establishment of an efficient pattern for production and injection to maximize ultimate recovery from the reservoir.

NOTICE REQUIREMENTS

South Hobbs, (GSA) Unit

Well Nos. 229 & 230

Shell Western E & P, Inc.
P. O. Box 576
Houston, TX 77001-0576

Submit to Appropriate District Office
 State Lease - 0 copies
 Fee Lease - 5 copies

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-101
 Revised 1-1-89

OIL CONSERVATION DIVISION
 P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
 P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

API NO. (assigned by OCD on New Wells)

5. Indicate Type of Lease
 STATE FEE

6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
 DRILL RE-ENTER DEEPEN PLUG BACK
 b. Type of Well:
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE
 Injector

7. Lease Name or Unit Agreement Name
 South Hobbs (GSA) Unit

2. Name of Operator
 Amoco Production Company

8. Well No.
 229

3. Address of Operator
 P. O. Box 3092, Houston, TX 77253

9. Pool name or Wildcat
 Hobbs Grayburg S. Andres

4. Well Location
 Unit Letter C : 1088 Feet From The North Line and 1977 Feet From The West Line
 Section 4 Township 19-S Range 38-E NMPM Lea County

10. Proposed Depth 4350'
 11. Formation San Andres
 12. Rotary or C.T. Rotary

13. Elevations (Show whether DF, RT, GR, etc.) 3618.9' GR
 14. Kind & Status Plug. Bond
 15. Drilling Contractor
 16. Approx. Date Work will start 11/6/91

17. **PROPOSED CASING AND CEMENT PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	8-5/8"	32# K-55	1600'	1100 sx	Surface
7-7/8"	5-1/2"	15.5# K-55	4350'	1300 sx	Surface

Propose to drill & equip well in San Andres formation. After reaching TD, logs will be run and evaluated. Perforate and/or stimulate as necessary in attempting reservoir injection.

* Add mud materials as necessary in attempting reservoir injection.
 Mud Program:
 0 - 1600' Native/Spud
 1600' - 3800' Saturated/Brine
 3800' - TD* Salt Gel/Starch

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.
 SIGNATURE Kim A. Colvin TITLE Asst. Admin. Analyst DATE 10/15/91
 TYPE OR PRINT NAME Kim. A. Colvin TELEPHONE NO. 713/596-7686

(This space for State Use)
 APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

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

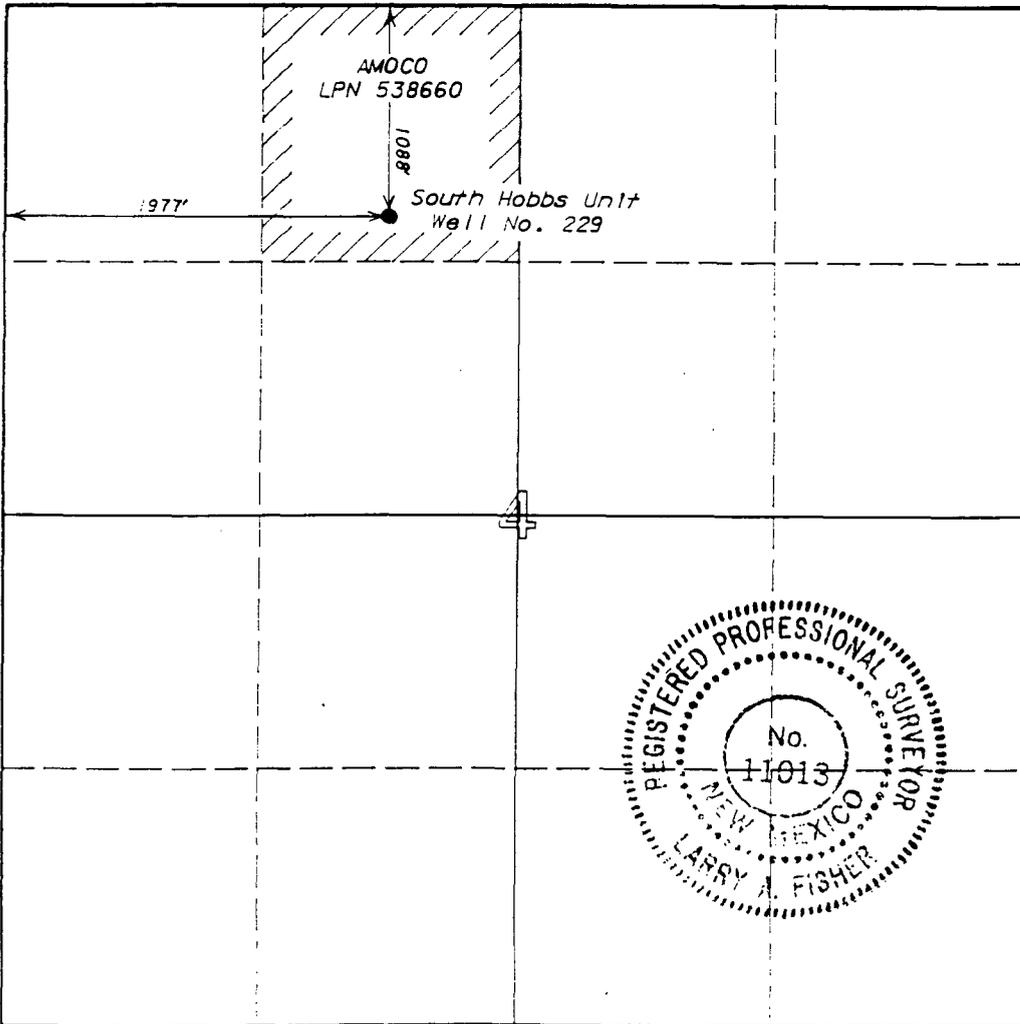
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>229</i>
Unit Letter <i>C</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well: <i>1088'</i> feet from the <i>North</i> line and <i>1977'</i> feet from the <i>West</i> line					
Ground Level Elev. <i>3618.9'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 Division.



CERTIFICATION

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

Name
Kim A. Colman

Position
Asst. Admin. Analyst

Company
Amoco Production Company

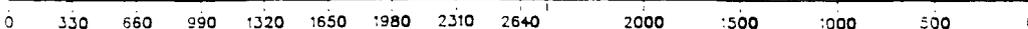
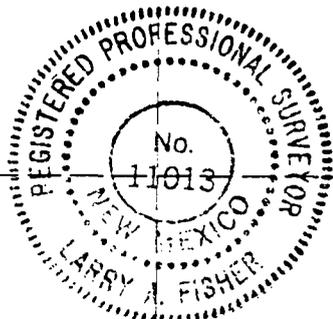
Date
10-14-91

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
October 2, 1991

Registered Land Surveyor
Larry A. Fisher

Certificate No.
11013



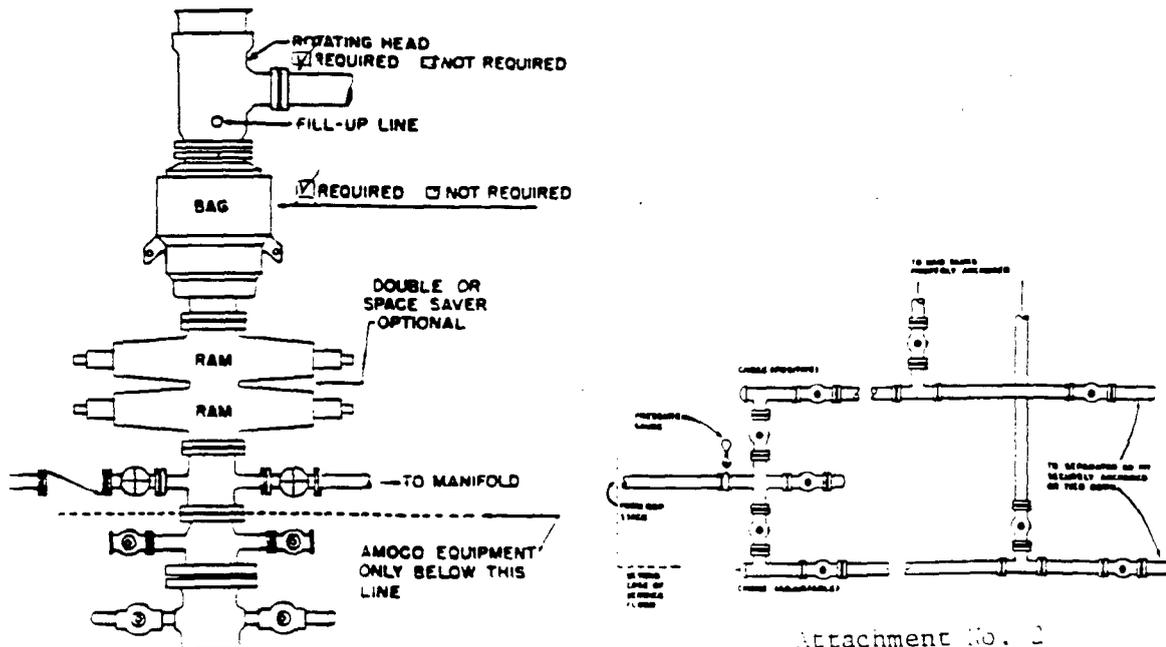
**ATTACHMENT
3000# W.P. BOP STACK**

1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.o. minimum.
2. Equipment through which bit must pass shall be at least as large as casing size being drilled through.
3. Upper kelly cock is required and shall be 3,000 psi w.p. minimum. Lower kelly cock is (required)(not required).
4. Hydril or comparable safety valve shall be available on rig floor with connection or subs to fit any tool joint in the string. Valve to be full bore 3,000 psi w.p. minimum.
5. Hydril or equivalent drill pipe back pressure valve is (required)(not required).
6. All equipment upstream of chokes, including kill line equipment shall be flanged or clamped and of a test pressure no less than that of the blowout preventer. All valves upstream of choke shall be 3" or 4" gate valves Cameron Type "F" or equivalent. All equipment downstream of chokes may be flanged or screw end gate or plug. Pressure gauge will be Cameron or equivalent. Line from spool to manifold cross and chokes to be a minimum of 3", straight and short as possible with minimum bends. Choke manifold must be positioned outside of substructure. Manifold, header and all lines must be adequately supported and properly anchored. Two inch (2") lines and valves are permitted downstream of chokes and on the kill line. All valves designated for H₂S service are (required) (not required). Chokes will be one positive and one adjustable.
7. Blowout preventer closing unit equipment to include accumulator capable of closing, opening and closing the bag and pipe rams with a minimum remaining pressure of 1200 psi. After closure, the remaining fluid volume will be at least 50 percent of original volume. Two independent sources of pump power are required on each closing unit installation and shall meet all IADC specifications. Operating time for closing unit shall not be greater than one minute with charging pump shut down. Time test must be witnessed by Amoco representative while nipping up and test results reported on IADC report. Failure to meet these conditions will necessitate corrective action by contractor and retesting all at contractor's expense.
8. The accumulator must be located at least 50 feet from the well. Blowout preventer controls must be properly labeled. Floor control valves are (required)(not required).
9. Fluid lines from accumulator to BOP's and all remote control fluid lines (if applicable) shall be steel, and rated at or above maximum accumulator pressure. Lines shall be routed in bundles and adequately protected from damage.
10. Fill up line must be steel. Kill line cannot be used for fill up line.
11. Use rams in following positions: *

	<u>Drilling</u>	<u>Running Casing</u>
Upper Ram	Drill Pipe	Casing
Lower Ram	Blind	Blind

* Amoco District Manager may reverse location of rams.

12. Extensions and hand wheels to be installed and braced at all times.



Attachment No. 2

**SUBSTRUCTURE HEIGHT OF RIG TO HAVE ADEQUATE CLEARANCE FOR
ALL BOP EQUIPMENT**

Submit to Appropriate District Office
 State Lease - 6 copies
 Fee Lease - 5 copies

State of New Mexico
 Energy, Minerals and Natural Resources Department

Form C-101
 Revised 1-1-89

OIL CONSERVATION DIVISION
 P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
 P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

API NO. (assigned by OCD on New Wells)

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APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
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b. Type of Well:
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE
 Injector

2. Name of Operator
 Amoco Production Company

3. Address of Operator
 P. O. Box 3092, Houston, TX 77253

7. Lease Name or Unit Agreement Name
 South Hobbs (GSA) Unit

8. Well No.
 230

9. Pool name or Wildcat
 Hobbs Grayburg S. Andres

4. Well Location
 Unit Letter B : 1100 Feet From The North Line and 2220 Feet From The East Line

Section 4 Township 19-S Range 38-E NMPM Lea County

10. Proposed Depth
 4350'

11. Formation
 San Andres

12. Rotary or C.T.
 Rotary

13. Elevations (Show whether DF, RT, GR, etc.)
 3617.8' GR

14. Kind & Status Plug. Bond

15. Drilling Contractor

16. Approx. Date Work will start
 11/6/91

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3800' - TD*	

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

SIGNATURE Kim A. Colvin TITLE Asst. Admin. Analyst DATE 10/15/91

TYPE OR PRINT NAME Kim. A. Colvin TELEPHONE NO. 713/596-7686

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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

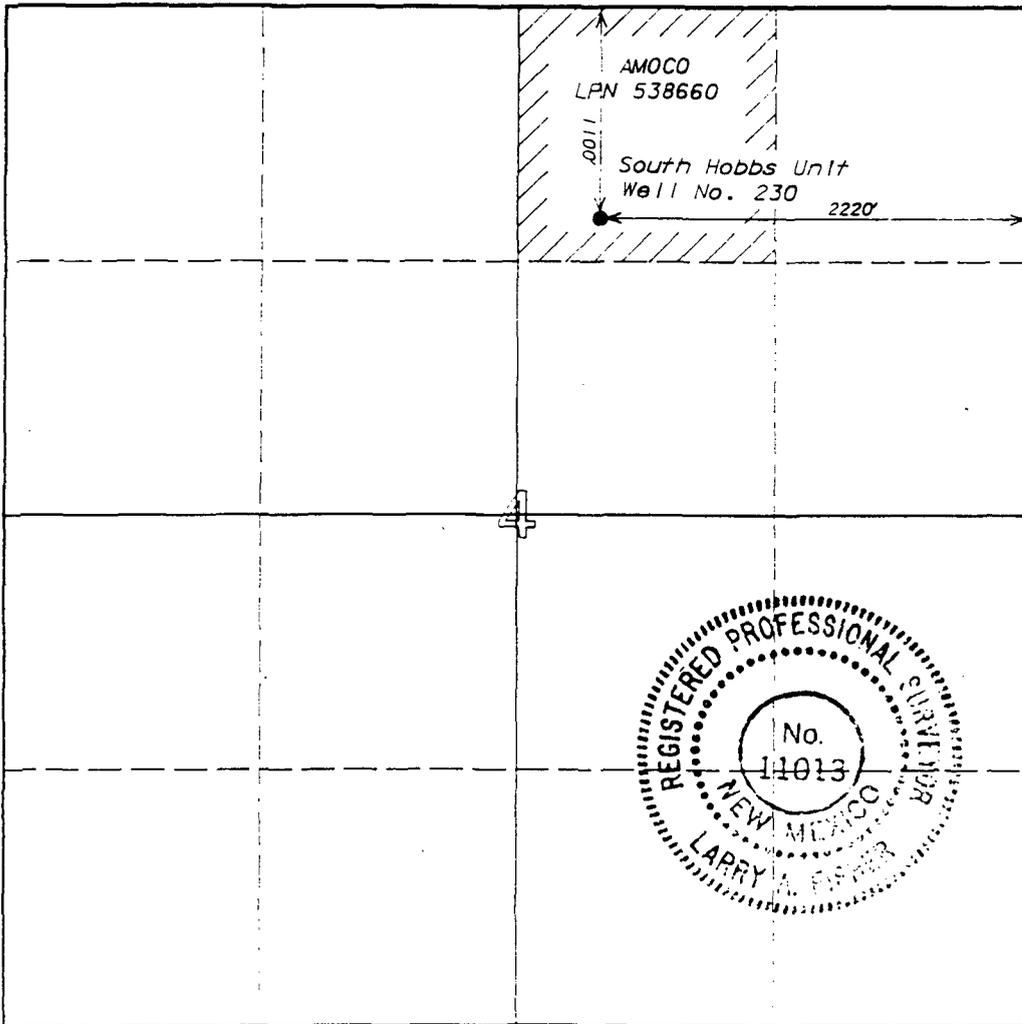
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>230</i>
Unit Letter <i>B</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well: <i>1100'</i> feet from the <i>North</i> line and <i>2220'</i> feet from the <i>East</i> line					
Ground Level Elev. <i>3617.8'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

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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 Division.



CERTIFICATION

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

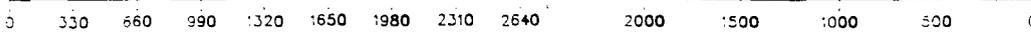
Name *Kim A. Calum*
 Position *Asst. Admin. Analyst*
 Company *Amoco Production Company*
 Date *10-14-91*

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 *September 24, 1991*

Registered Land Surveyor
Larry A. Fisher
 Larry A. Fisher

Certificate No. *11013*





OIL CONSERVATION DIVISION
RECEIVED

'91 NOV 12 AM 9 06

Amoco Production Company

501 West Lake Park Boulevard
Office Box 3092
Houston, Texas 77253

October 24, 1991

Shell Western E&P, Inc.
P. O. Box 576
Houston, TX 77001-0576

Attention: Frank Falbo, Rm. 4434

File: KWB-811-WF

Request for Waiver to Drill Subject Wells in Unorthodox Location
South Hobbs (GSA) Unit No. 229 & 230
Lea County, New Mexico

Amoco Production Company, as operator of the South Hobbs (GSA) Unit, hereby notifies you that we have applied to the NMOCD for administrative approval to drill the subject wells at the attached unorthodox locations.

If you have no objections to the drilling locations of these wells, please sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Hobbs, one copy to this office, and retain a copy for your file. Addressed, stamped envelopes have been provided for your convenience.

If there are any questions concerning this application, please contact Kim Colvin at 713/596-7686.

Yours very truly,

K.W. Brand
HB

K. W. Brand
Administrative Service Manager

KAC:avd

Attachments

APPROVAL

Company: SHELL WESTERN E & P INC.

By: *F. E. Falbo* F. E. FALBO

Date: 11/1/91

ATTACHMENT I

<u>Well Name</u>	<u>Type of Well</u>	<u>Surface Location</u>	<u>Elevation (Ground Level)</u>
SHU No. 229	Injection	Unit C, 1088' FNL X 1977' FWL, Sec. 4, T-19-S, R-38-E	3618.9'
SHU No. 230	Injection	Unit B, 1100' FNL X 2220' FEL, Sec. 4, T-19-S, R-38-E	3617.8'

NOTE: The purpose of the unorthodox locations is the establishment of an efficient pattern for production and injection to maximize ultimate recovery from the reservoir.



STATE OF NEW MEXICO
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION
 HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION
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 91 NOV 12 AM 10 28

11-1-91

BRUCE KING
 GOVERNOR

POST OFFICE BOX 1980
 HOBBS, NEW MEXICO 88241-1980
 (505) 393-6161

OIL CONSERVATION DIVISION
 P. O. BOX 2088
 SANTA FE, NEW MEXICO 87501

RE: Proposed:

- MC _____
- DHC _____
- NSL _____
- NSP _____
- SWD _____
- WFX _____
- PMX _____

- # 229-C 4-19-38
- # 230-B 4-19-38
- # 233-D 4-19-38
- # 235-K 4-19-38
- # 238-O 4-19-38

Gentlemen:

I have examined the application for the:

Amoco Production Co. South Hobbs GB-BA Unit
 Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK JS

Yours very truly,

Jerry Sexton
 Jerry Sexton
 Supervisor, District 1

NSL-3076

/ed