



**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

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*  
TB

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

RECEIVED

OCT 28 1991

OIL CONSERVATION DIVISION

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 - 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)

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 <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> Injector		
2. Name of Operator Amoco Production Company		8. Well No. 233
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 G : 2245 Feet From The North Line and 2420 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.) 3612.5' GR	14. Kind & Status Plug. Bond	15. Drilling Contractor
		16. Approx. Date Work will start 11/6/91

**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:	Native/Spud
0 - 1600'	Saturated/Brine
1600' - 3800'	Salt Gel/Starch
3800' - TD*	

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.

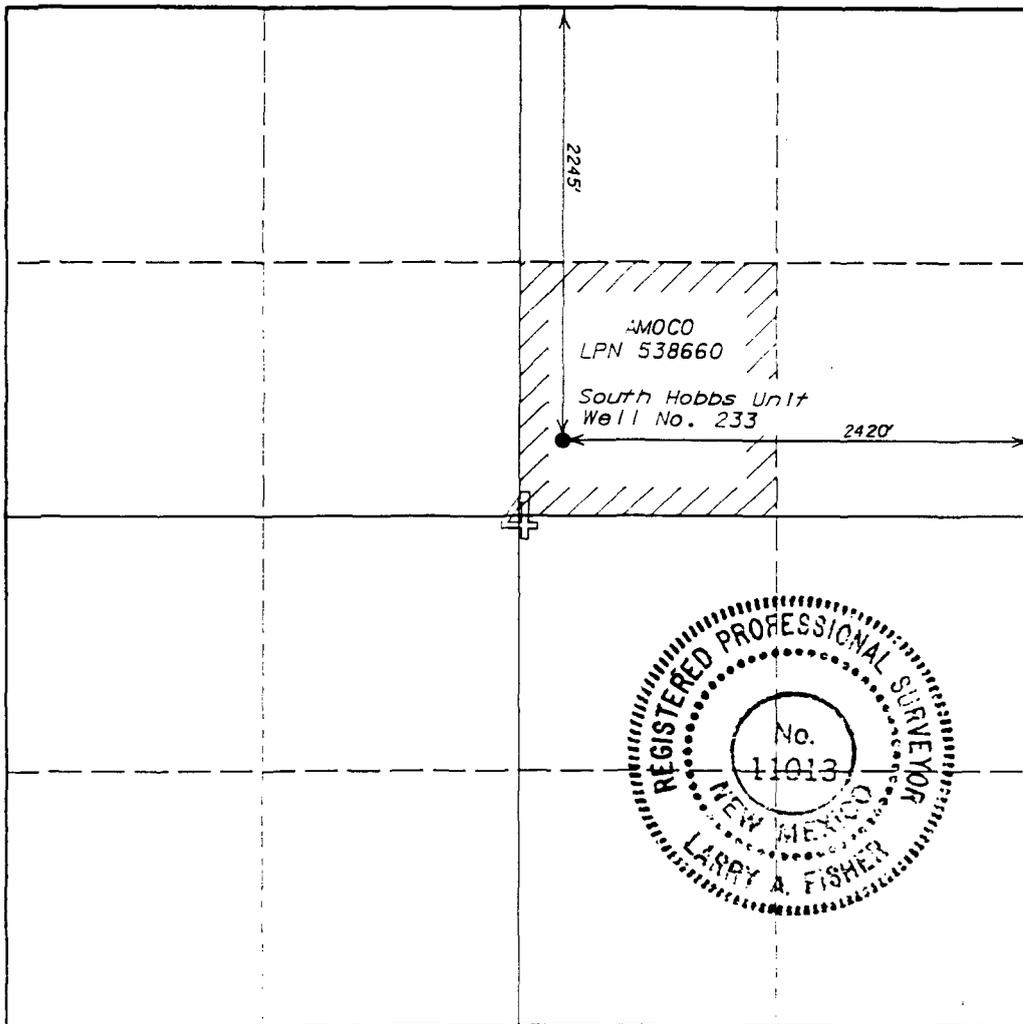
Operator <b>Amoco Production Company</b>		Lease <b>South Hobbs Unit</b>		Well No. <b>233</b>
Unit Letter <b>G</b>	Section <b>4</b>	Township <b>19 South</b>	Range <b>38 East</b>	County <b>Lea</b>
Actual Footage Location of Well: <b>2245'</b> feet from the <b>North</b> line and <b>2420'</b> feet from the <b>East</b> line				
Ground Level Elev. <b>3612.5'</b>	Producing Formation <b>San Andres</b>	Pool <b>Hobbs (G/SA)</b>	Dedicated Acreage <b>40</b> 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 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. Colvin*

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**



Submit to Appropriate District Office  
 State Lease - 6 copies  
 Fee Lease - 3 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

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 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

2. Name of Operator: Amoco Production Company

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

4. Well Location: Unit Letter G : 2245 Feet From The North Line and 2420 Feet From The East Line

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

8. Well No.  
 233

9. Pool name or Wildcat  
 Hobbs Grayburg S. Andres

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.): 3612.5' 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.

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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.

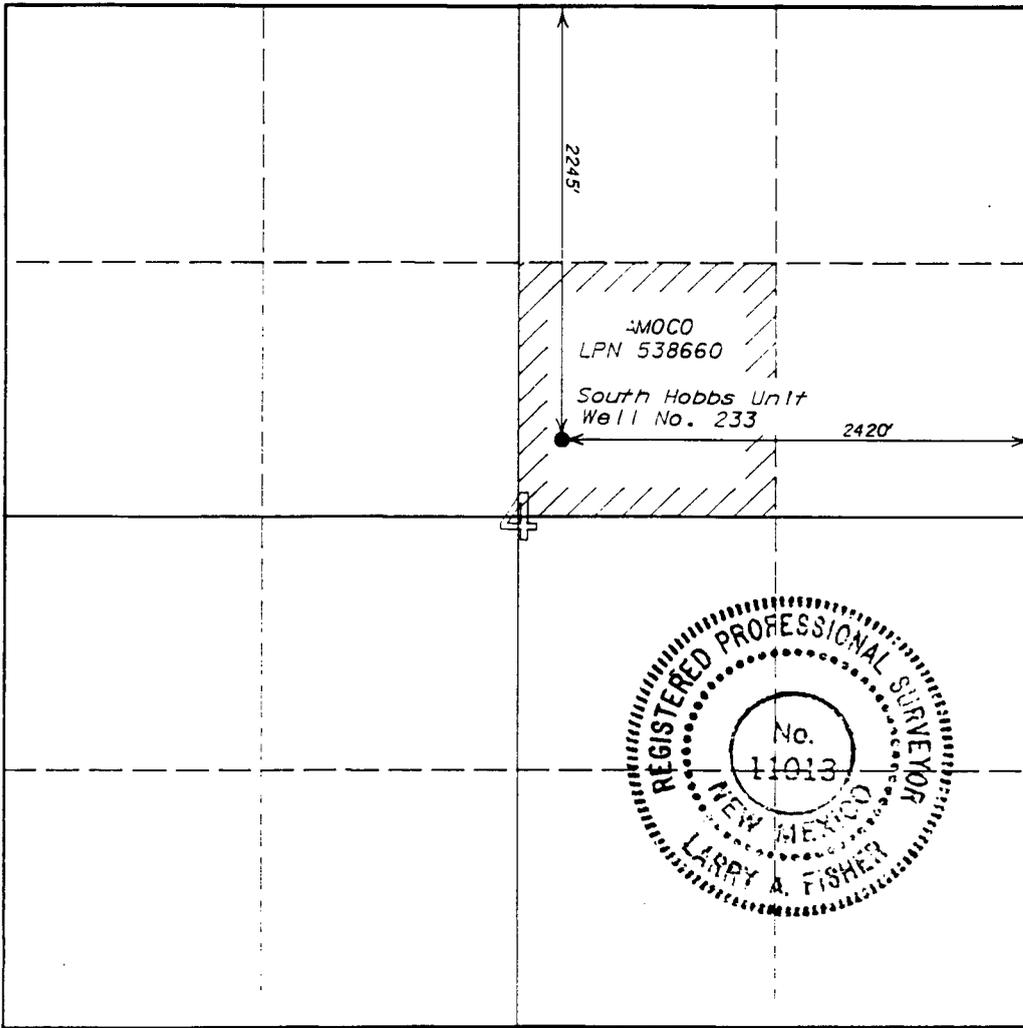
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>233</i>
Unit Letter <i>G</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>
Actual Footage Location of Well: <i>2245'</i> foot from the <i>North</i> line and <i>2420'</i> foot from the <i>East</i> line				
Ground Level Elev. <i>3612.5'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> 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 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. Colvin*  
 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

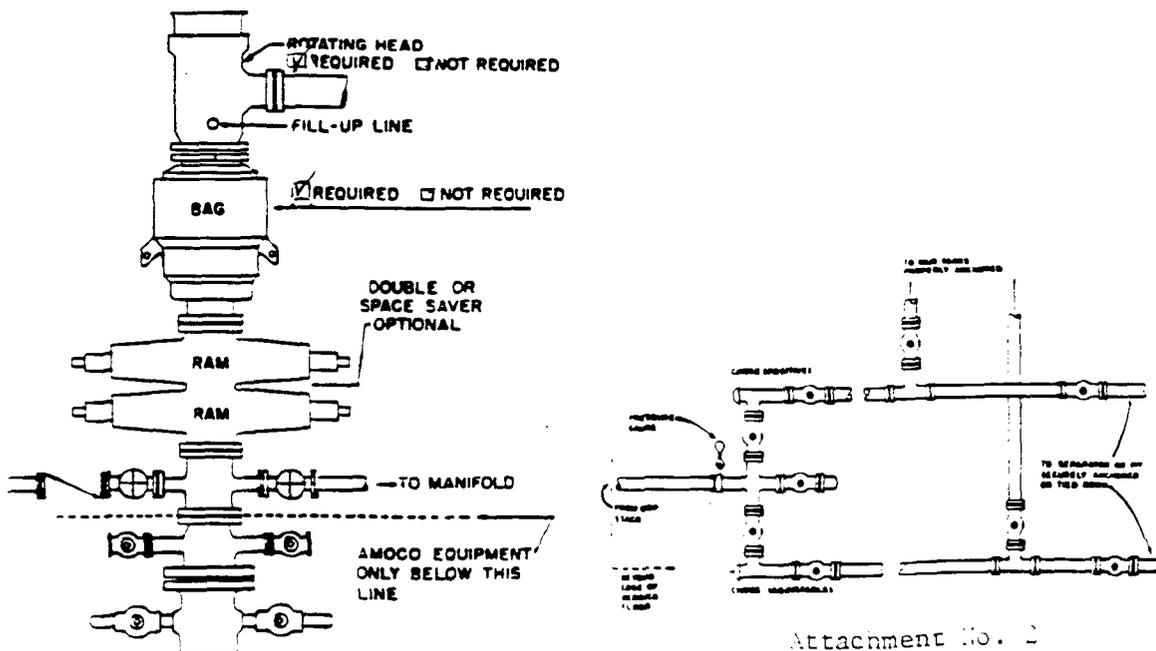
Certificate No. *11013*

**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.p. 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 H<sub>2</sub>S 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 nipling 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 B.O.P. EQUIPMENT.**

Submit to Appropriate District Office  
 State Lease - 6 copies  
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b. Type of Well:  
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 SINGLE ZONE  MULTIPLE ZONE

2. Name of Operator  
 Amoco Production Company

3. Address of Operator  
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Section 4 Township 19-S Range 38-E NMPM Lea County

7. Lease Name or Unit Agreement Name

South Hobbs (GSA) Unit

8. Well No.

233

9. Pool name or Wildcat  
 Hobbs Grayburg S. Andres

10. Proposed Depth  
 4350'

11. Formation  
 San Andres

12. Rotary or C.T.  
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APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

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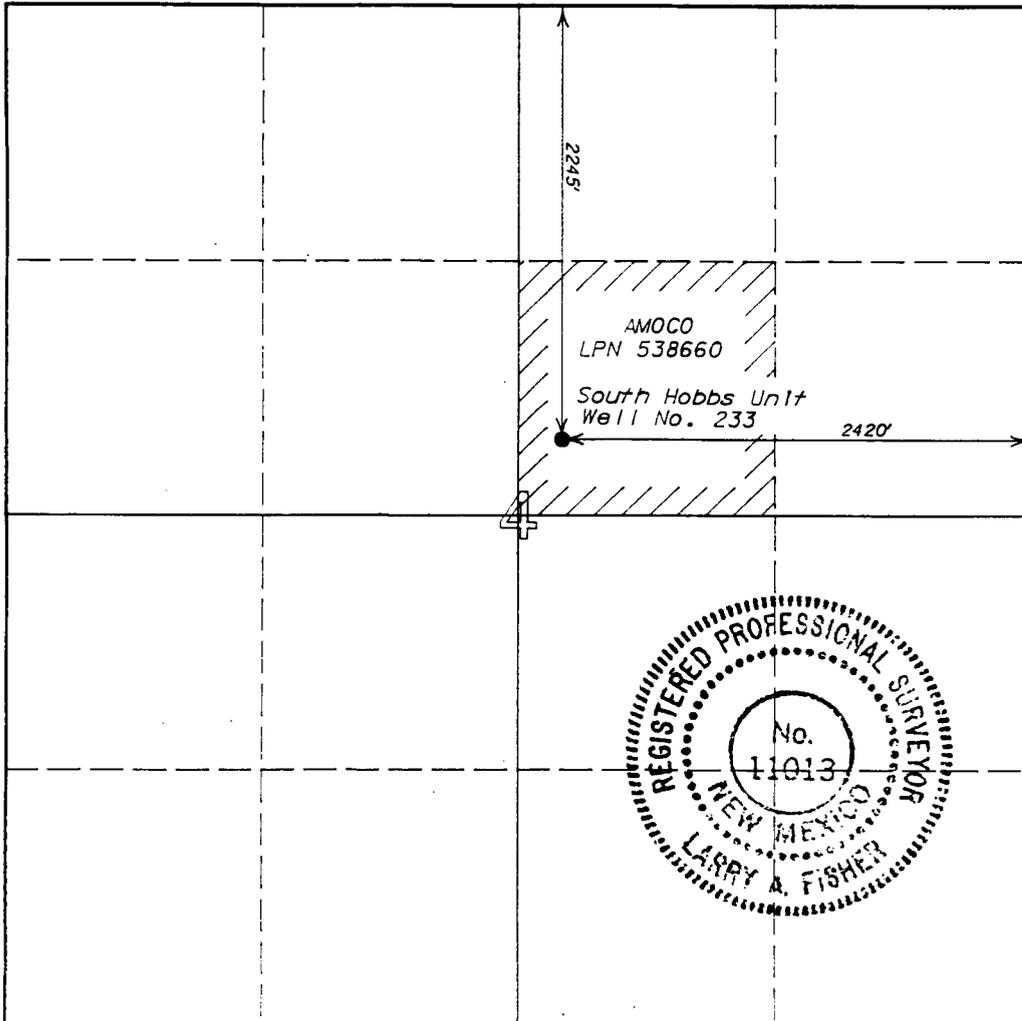
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Position  
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Company  
*Amoco Production Company*

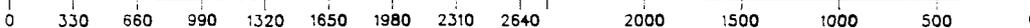
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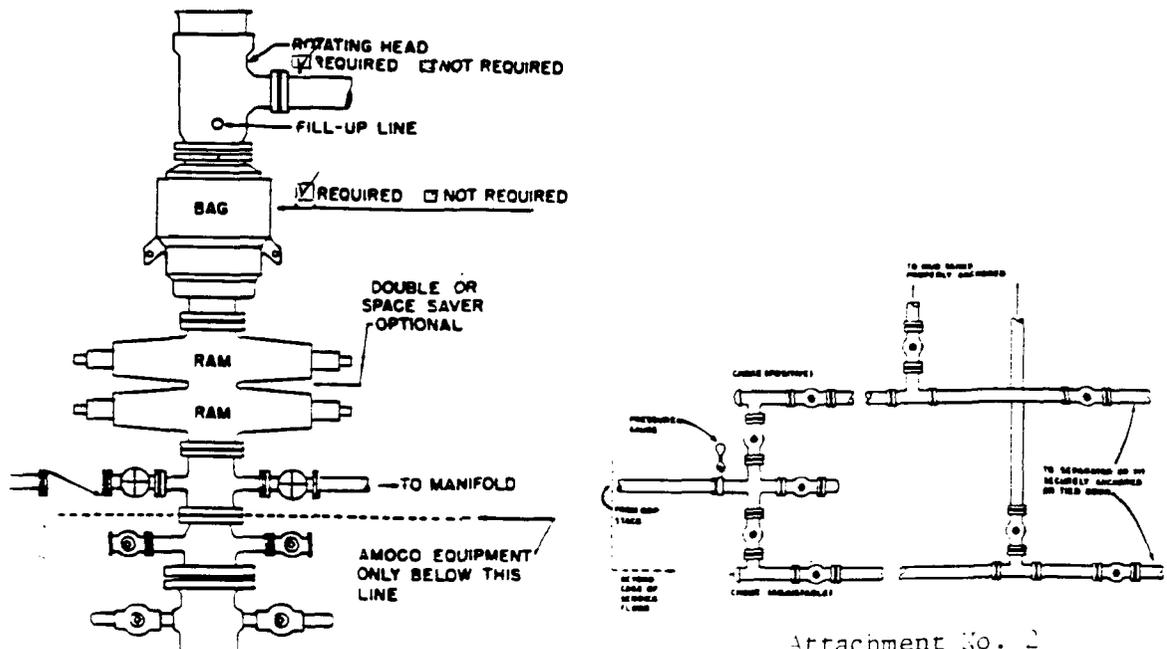
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 Injector

7. Lease Name or Unit Agreement Name

South Hobbs (GSA) Unit

2. Name of Operator

Amoco Production Company

8. Well No.

235

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 K : 2160 Feet From The South Line and 2414 Feet From The West Line

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

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San Andres

12. Rotary or C.T.

Rotary

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3607.3' GR

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11/6/91

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 1600' - 3800'  
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 Saturated/Brine  
 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.

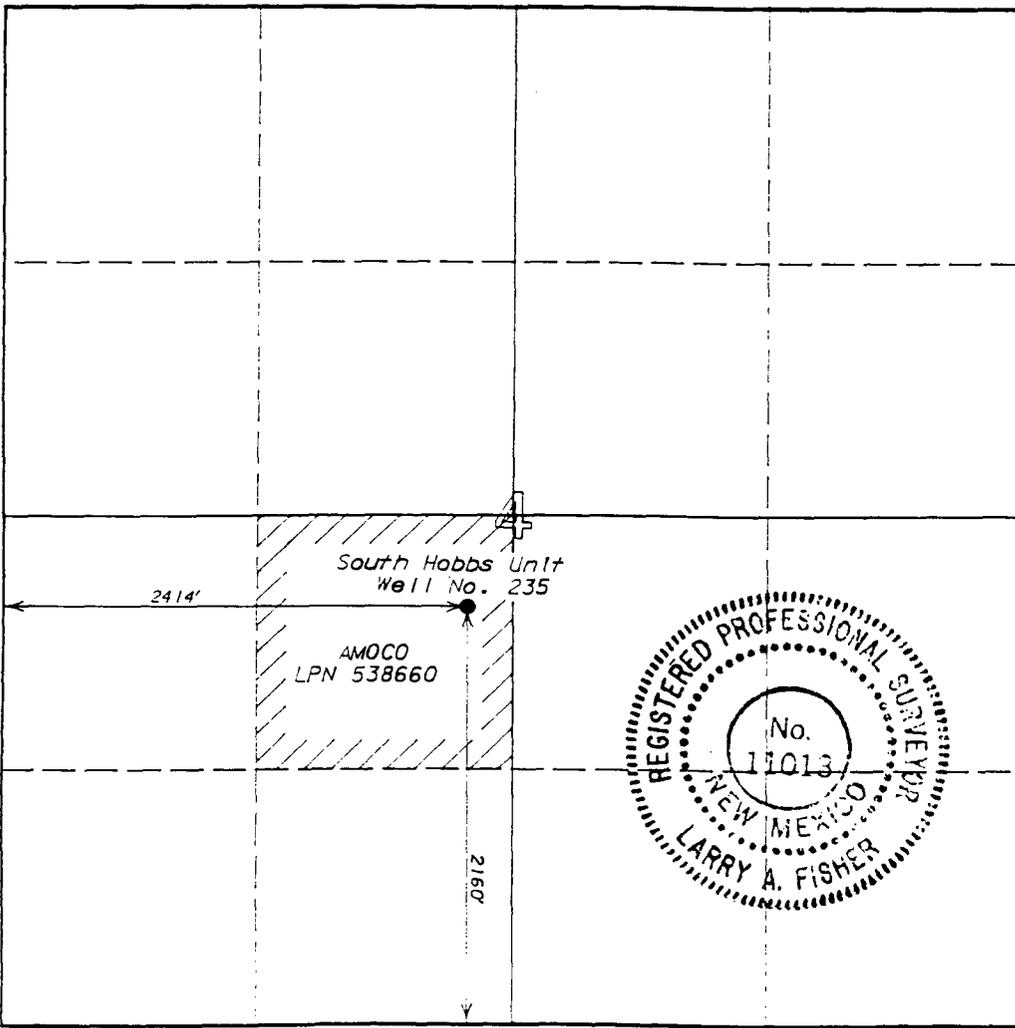
Operator <b>Amoco Production Company</b>		Lease <b>South Hobbs Unit</b>		Well No. <b>235</b>	
Unit Letter <b>K</b>	Section <b>4</b>	Township <b>19 South</b>	Range <b>38 East</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>2160'</b> feet from the <b>South</b> line and <b>2414'</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3607.3'</b>	Producing Formation <b>San Andres</b>	Pool <b>Hobbs (G/SA)</b>	Dedicated Acreage <b>40</b> 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.) \_\_\_\_\_

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CERTIFICATION

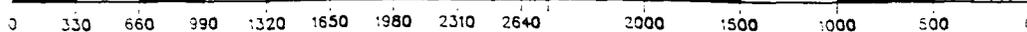
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Kim A. Colwin  
 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



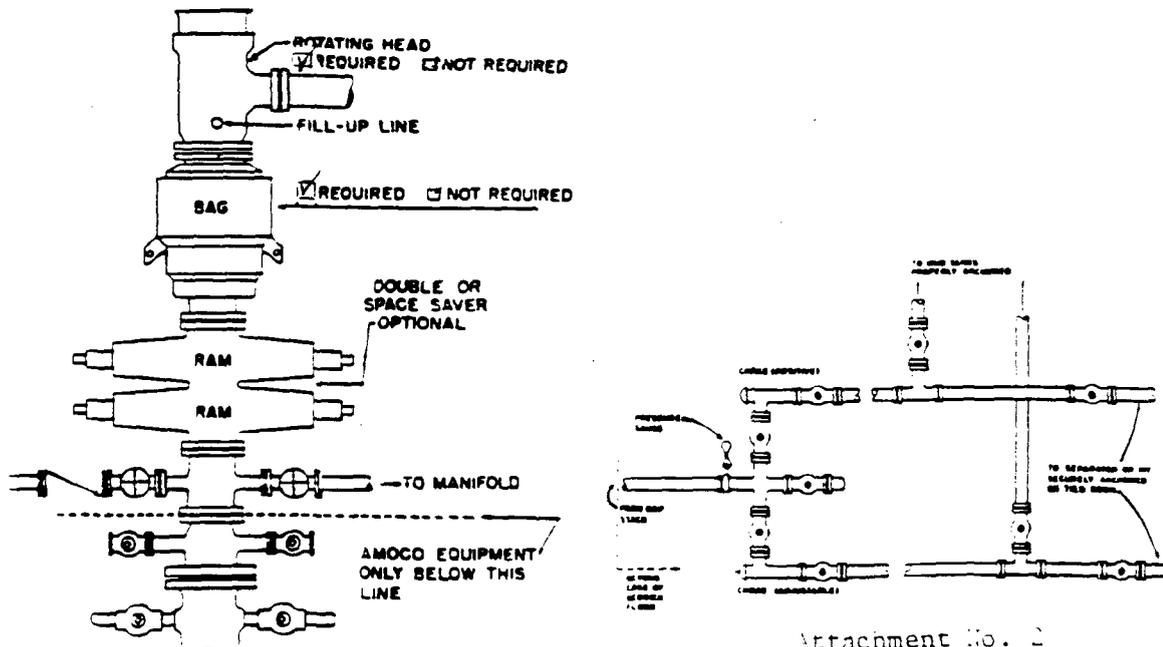
**ATTACHMENT  
3000# W.P. BOP STACK**

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.o. 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.o. 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 H<sub>2</sub>S service are (required) (not required). Chokes will be one positive and one adjustable.
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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 Appropriated  
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.  
235

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 K : 2160 Feet From The South Line and 2414 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.)  
3607.3' GR  
14. Kind & Status Plug. Bond  
15. Drilling Contractor  
16. Approx. Date Work will start  
11/6/91

**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.

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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 \_\_\_\_\_

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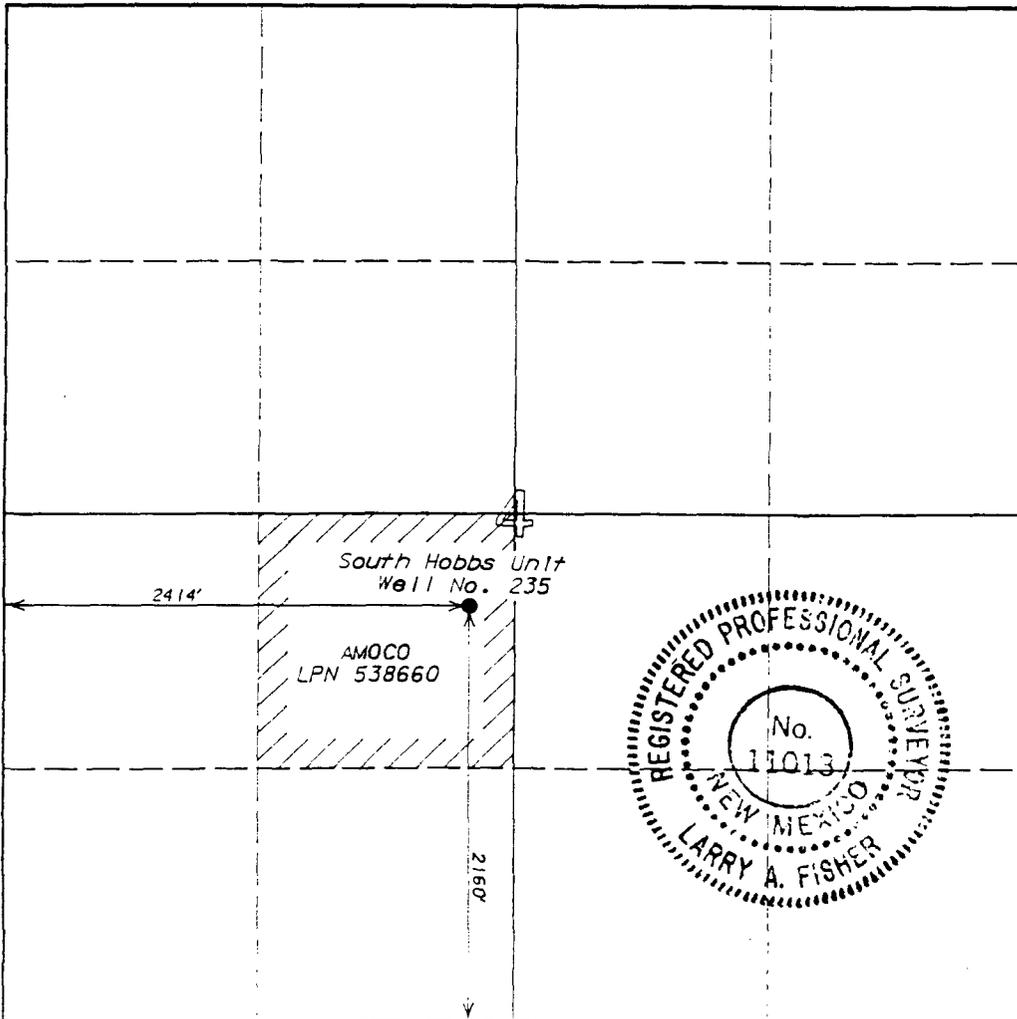
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>235</i>
Unit Letter <i>K</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well: <i>2160'</i> feet from the <i>South</i> line and <i>2414'</i> feet from the <i>West</i> line					
Ground Level Elev. <i>3607.3'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres		

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CERTIFICATION

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

Name: *Kim A. Colvin*  
 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*  
Larry A. Fisher

Certificate No. *11013*



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)

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  Injector  
 SINGLE ZONE  MULTIPLE ZONE

2. Name of Operator  
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3. Address of Operator  
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4. Well Location  
 Unit Letter K : 2160 Feet From The South Line and 2414 Feet From The West Line

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

7. Lease Name or Unit Agreement Name

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8. Well No.  
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10. Proposed Depth  
 4350'

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12. Rotary or C.T.  
 Rotary

13. Elevations (Show whether DF, RT, GR, etc.)  
 3607.3' GR

14. Kind & Status Plug. Bond

15. Drilling Contractor

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17. PROPOSED CASING AND CEMENT PROGRAM

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Native/Spud  
 Saturated/Brine  
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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 \_\_\_\_\_

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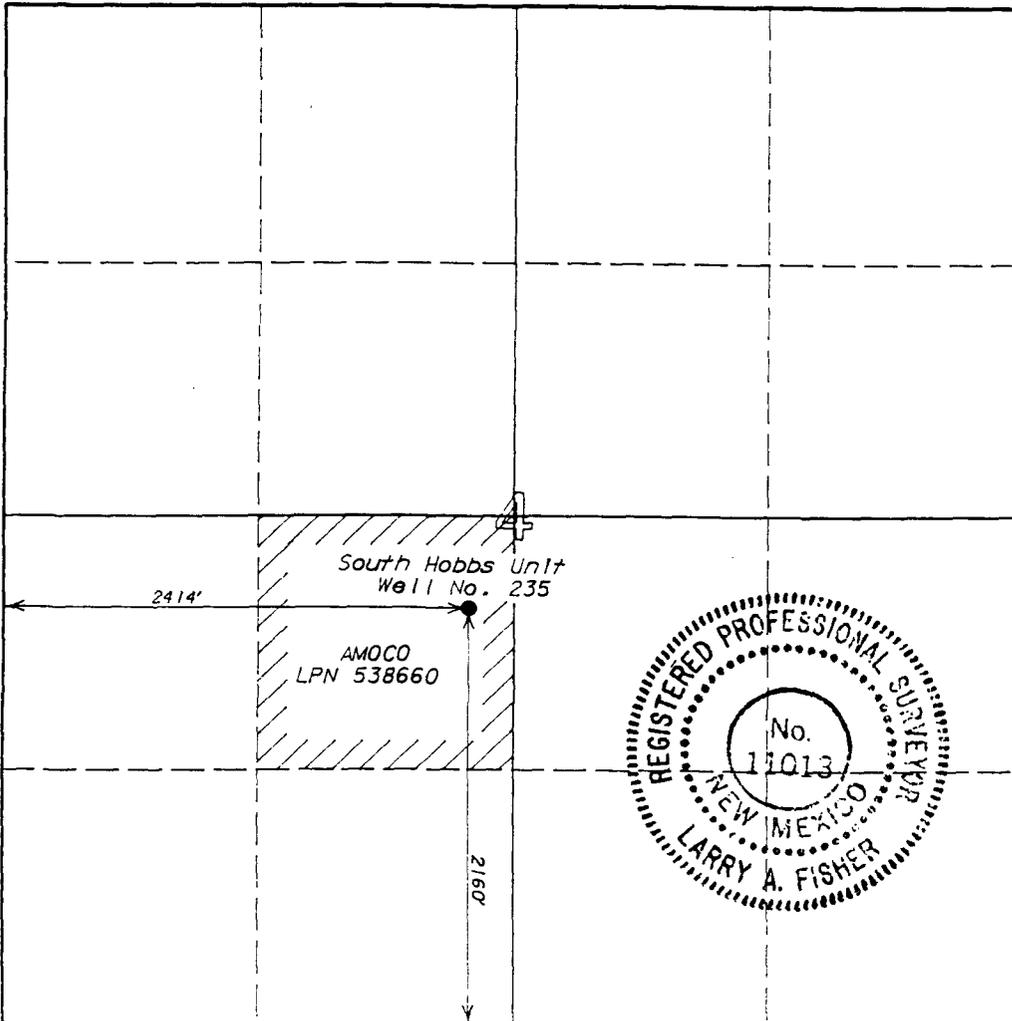
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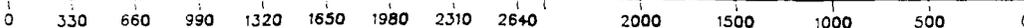
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 Position: *Asst. Admin. Analyst*  
 Company: *Amoco Production Company*  
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Date Surveyed: *October 2, 1991*

Registered Land Surveyor:  
*Larry A. Fisher*  
Larry A. Fisher

Certificate No. *11013*



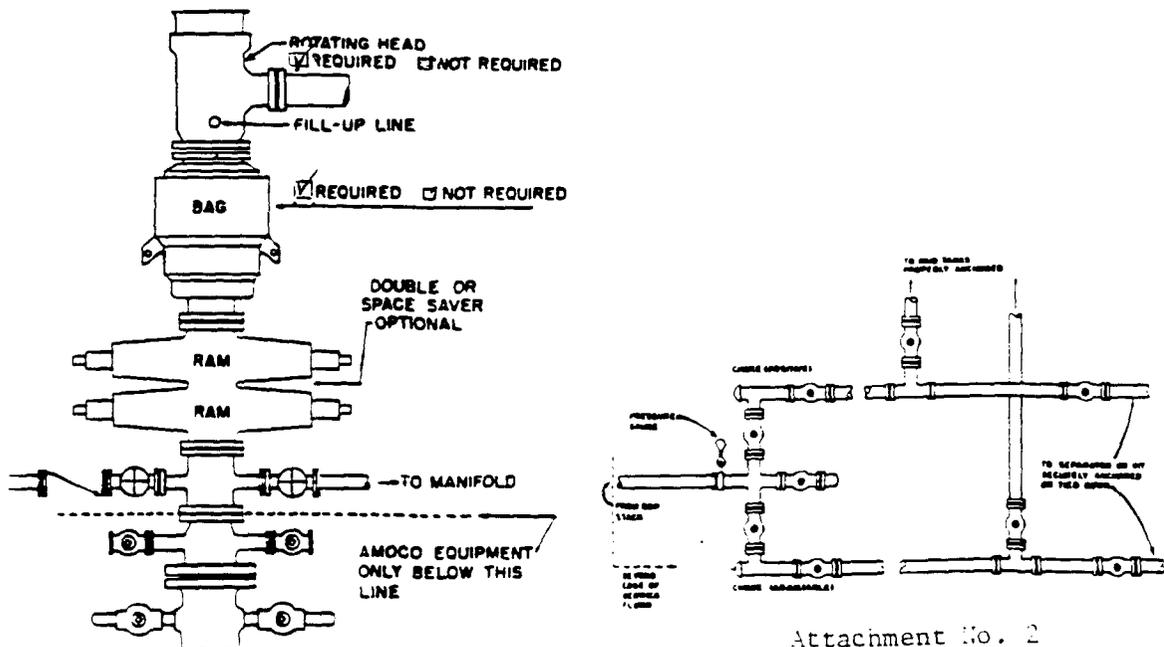
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State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-101  
 Revised 1-1-89

OIL CONSERVATION DIVISION  
 P.O. Box 2088  
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 Injector

7. Lease Name or Unit Agreement Name

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2. Name of Operator

Amoco Production Company

8. Well No.

238

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Hobbs Grayburg S. Andres

4. Well Location

Unit Letter 0 : 660 Feet From The South Line and 2610 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.

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

3606.0' GR

14. Kind & Status Plug. Bond

15. Drilling Contractor

16. Approx. Date Work will start

11/6/91

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

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

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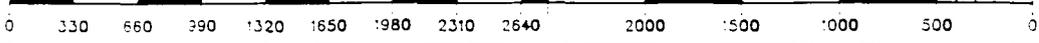
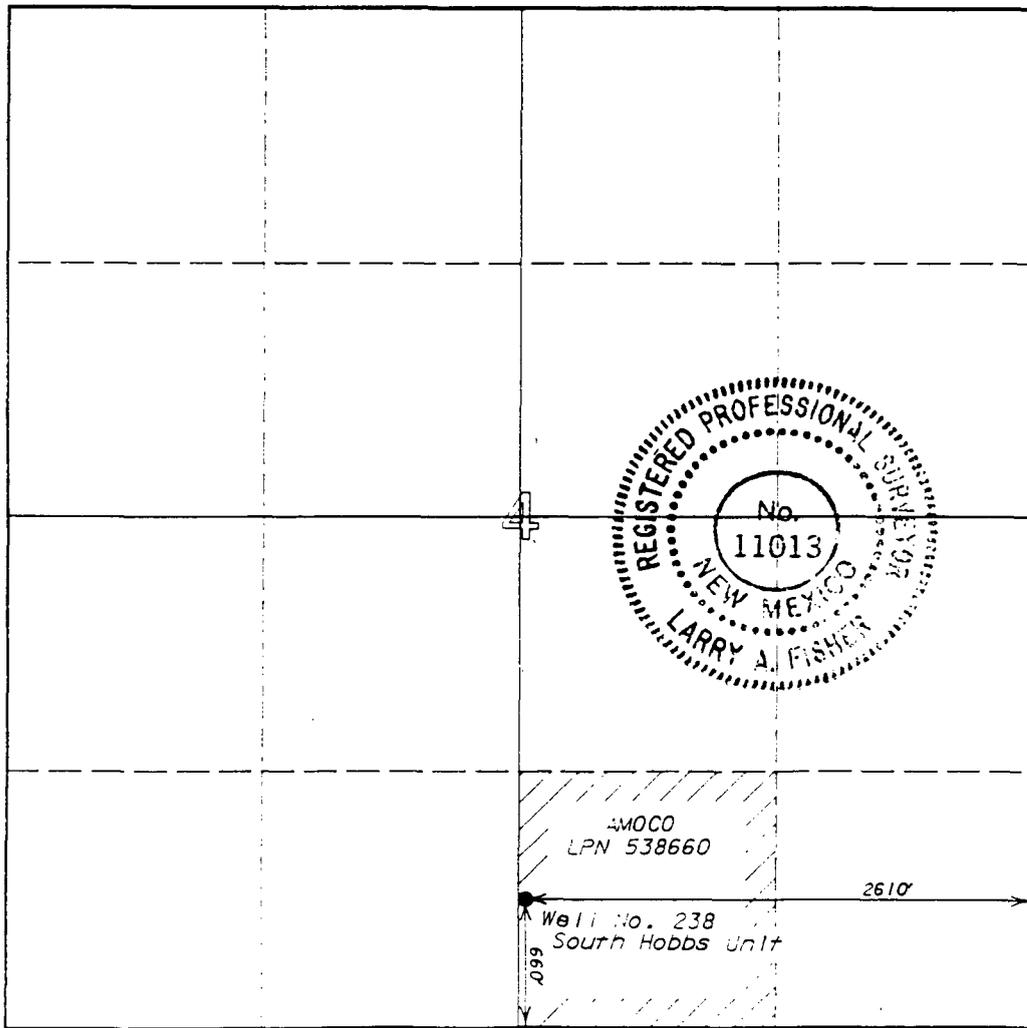
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CERTIFICATION

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

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Registered Land Surveyor  
*Larry A. Fisher*

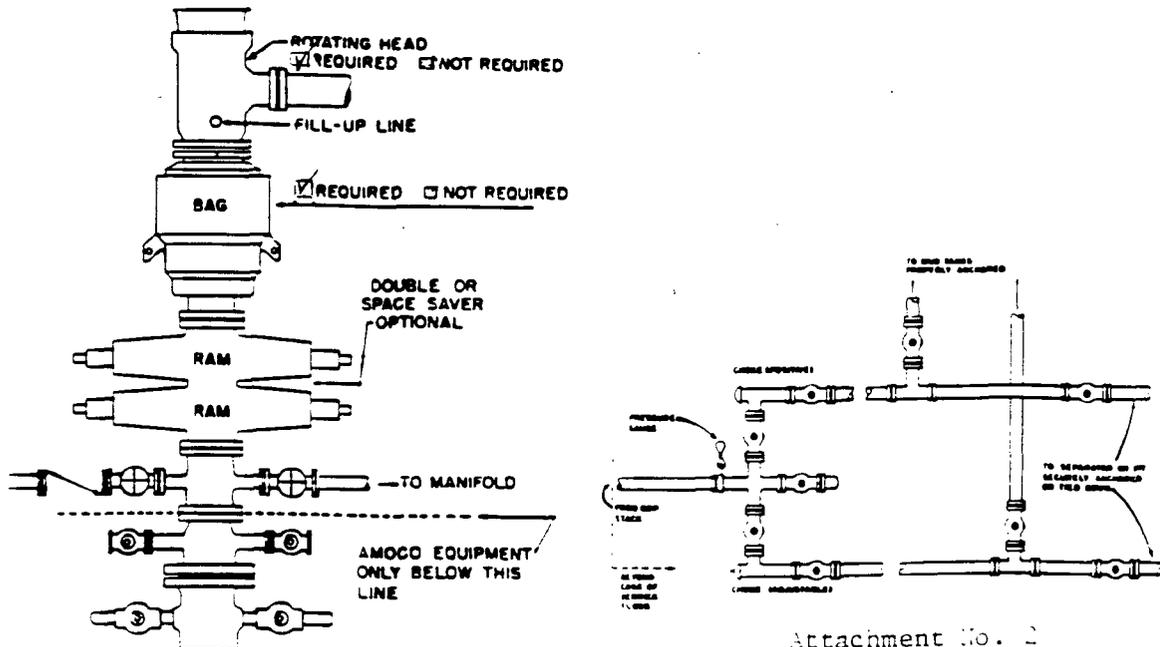
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7. Blowout preventer closing unit equipment to include accumulator capable of closing, opening and closing the bag and pipe rams with a minimum remaining pressure of 1200 psi. After closure, the remaining fluid volume will be at least 50 percent of 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)

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  INJECTOR

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

8. Well No. 238

9. Pool name or Wildcat  
Hobbs Grayburg S. Andres

2. Name of Operator  
Amoco Production Company

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

4. Well Location  
Unit Letter 0 : 660 Feet From The South Line and 2610 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.) 3606.0' GR

14. Kind & Status Plug. Bond

15. Drilling Contractor

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

**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.

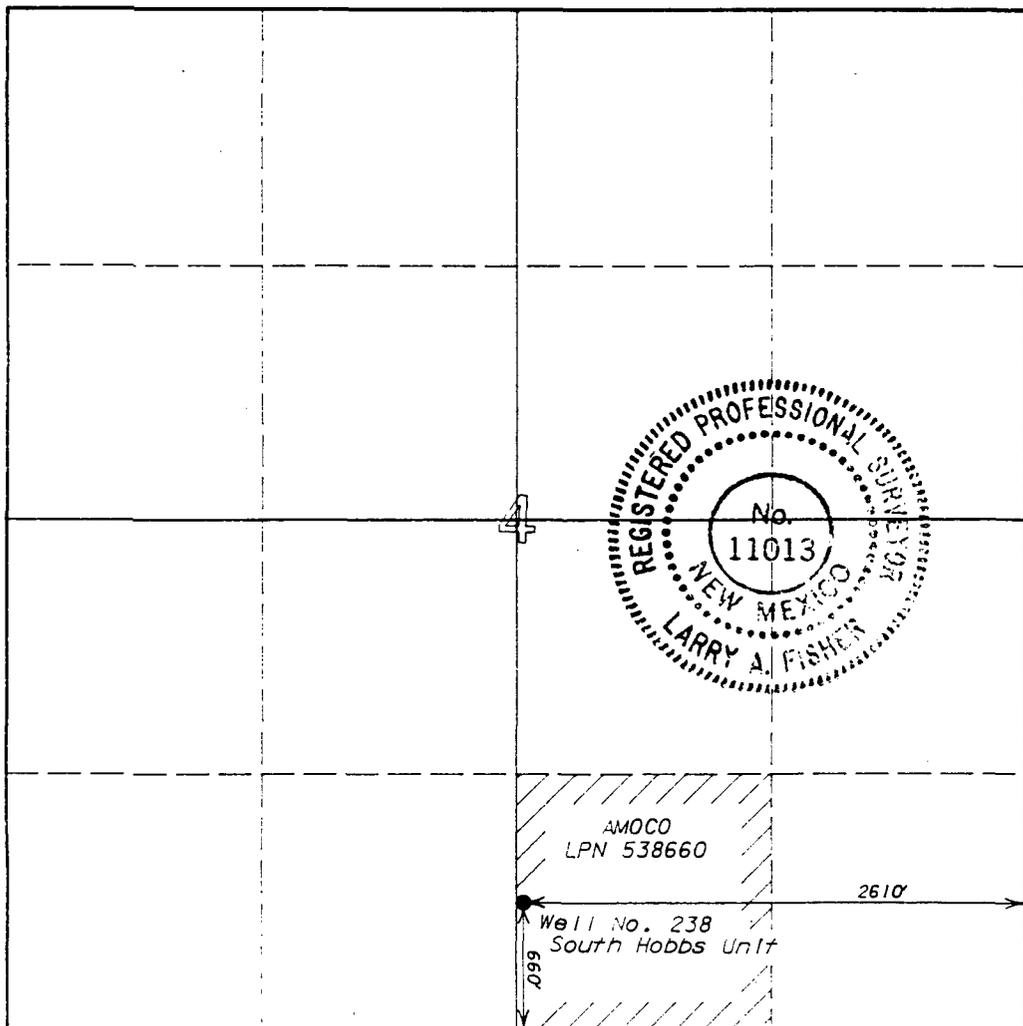
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>238</i>
Unit Letter <i>0</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>
Actual Footage Location of Well: <i>660'</i> foot from the <i>South</i> line and <i>2610'</i> foot from the <i>East</i> line				
Ground Level Elev. <i>3606.0'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> 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 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*  
 Larry A. Fisher

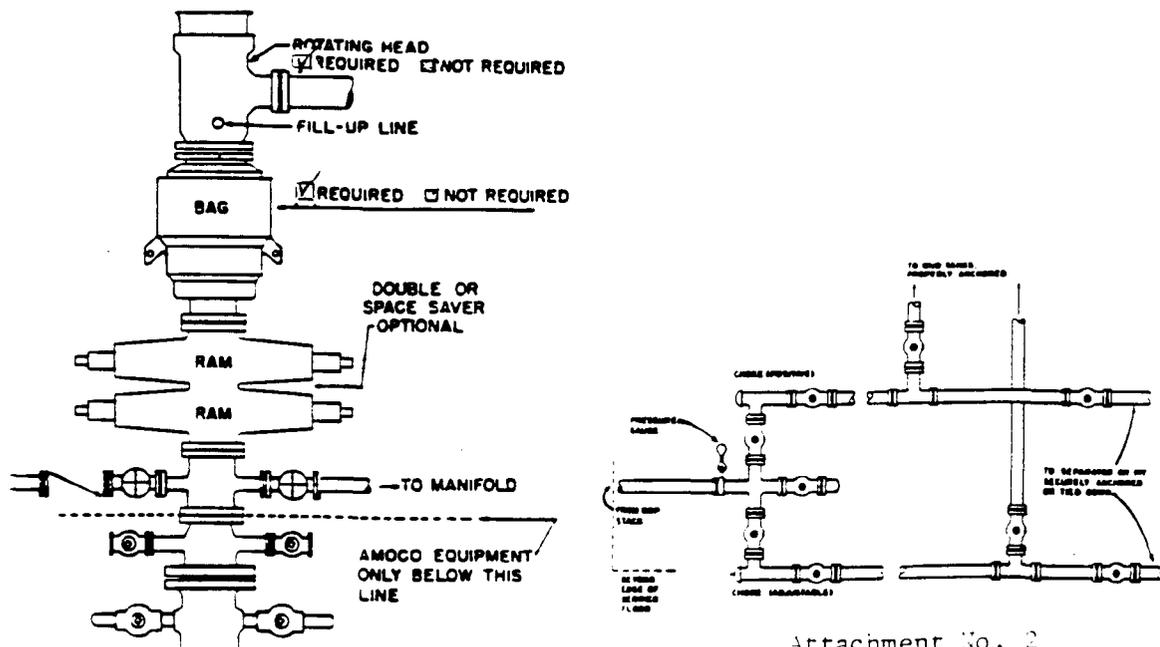
Certificate No. *11013*

**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.p. 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).
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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 B.O.P. EQUIPMENT**

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.

238

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 0 : 660 Feet From The South Line and 2610 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.)

3606.0' 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
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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'  
1600' - 3800'  
3800' - TD\*

Native/Spud  
Saturated/Brine  
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>238</i>
---------------------------------------------	----------------------------------	------------------------

Unit Letter <i>0</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>
-------------------------	---------------------	-----------------------------	-------------------------	----------------------

Actual Footage Location of Well:  
*660'* feet from the *South* line and *2610'* feet from the *East* line

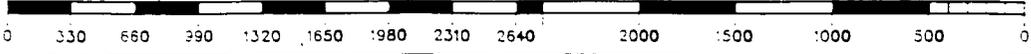
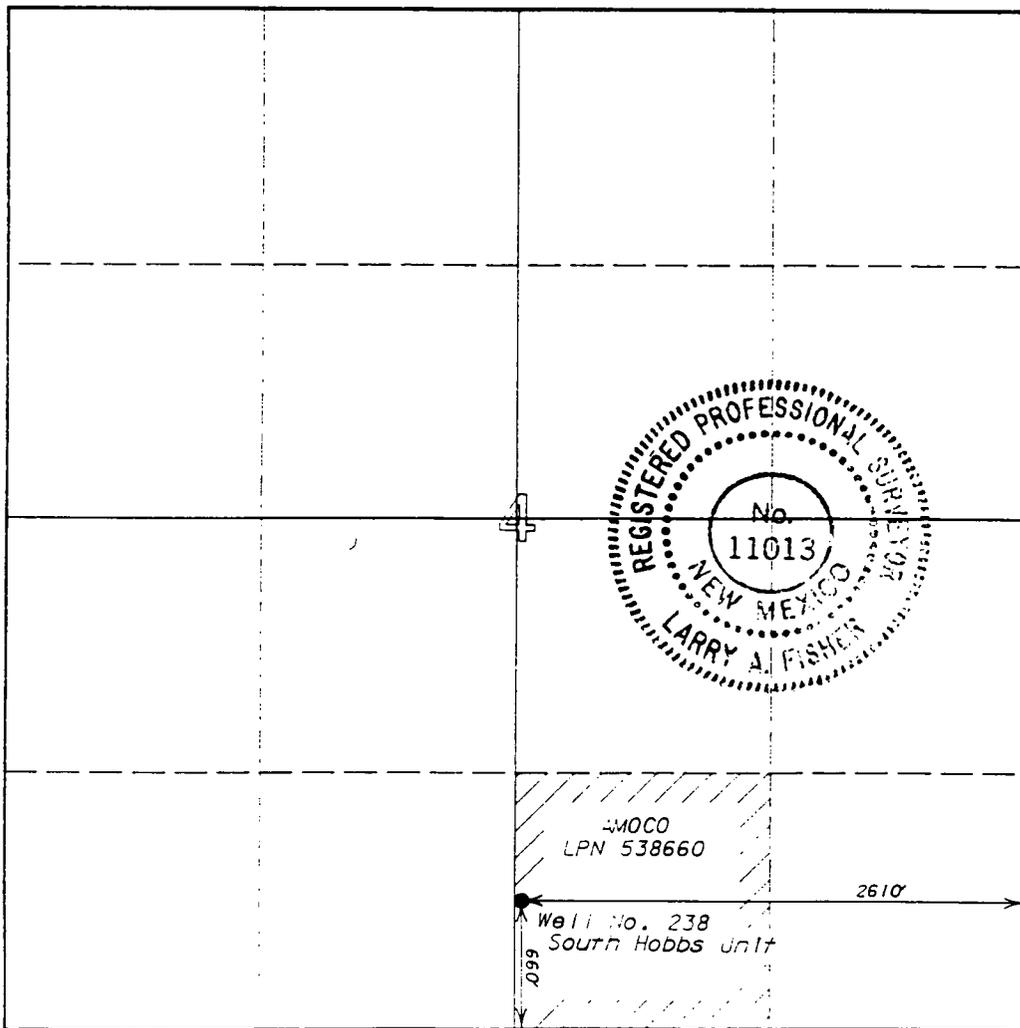
Ground Level Elev. <i>3606.0'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres
--------------------------------------	------------------------------------------	-----------------------------	--------------------------------------

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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. 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*  
 Larry A. Fisher

Certificate No. *11013*

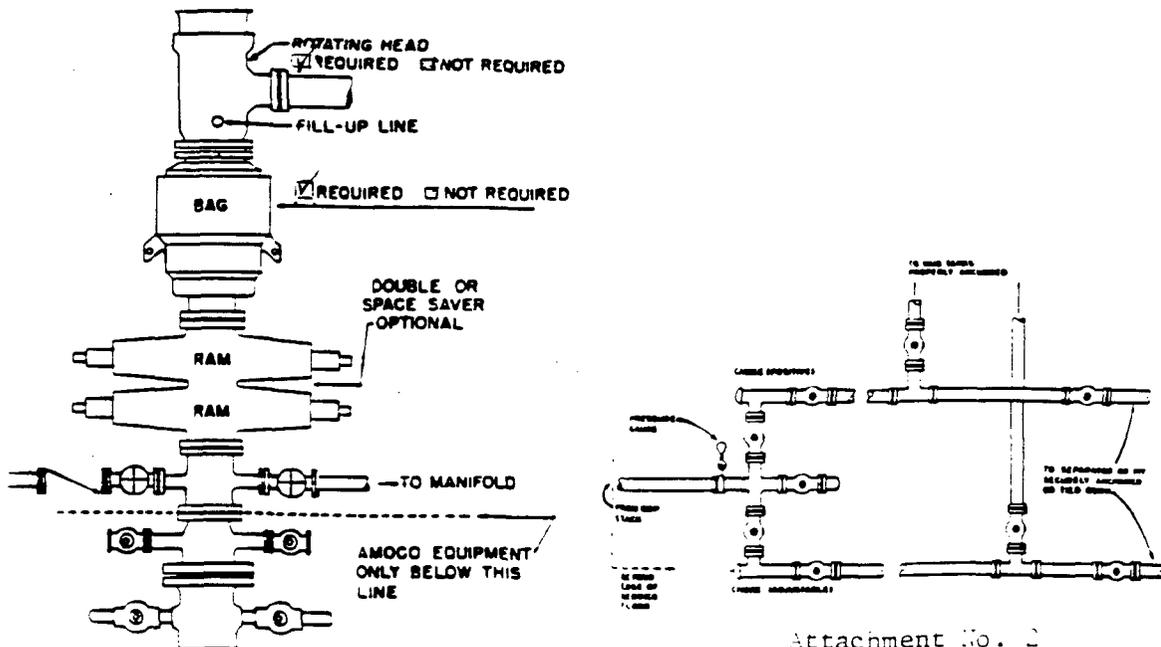
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3000# W.P. BOP STACK**

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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



**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-808-WF

Application for Administrative Approval of Unorthodox Locations  
South Hobbs (GSA) Unit No. ~~231, 232, 234, 236, 237~~  
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 without notice and hearing 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.)

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. 231	Producing	Unit F, 1562' FNL X 2100' FWL, Sec. 4, T-19-S, R-38-E	3614.8'
SHU No. 232	Producing	Unit G, 1710' FNL X 1630' FEL, Sec. 4, T-19-S, R-38-E	3614.1'
SHU No. 234	Producing	Unit F, 2480' FNL X 1800' FWL, Sec. 4, T-19-S, R-38-E	3607.4'
SHU No. 236	Producing	Unit K, 1403' FSL X 1746' FWL Sec. 4, T-19-S, R-38-E	3603.5'
SHU No. 237	Producing	Unit O, 1300' FSL X 1910' FEL Sec. 4, T-19-S, R-38-E	3610.2'

**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.

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)
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Amoco Production Company		8. Well No. 231
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 <u>F</u> : <u>1562</u> Feet From The <u>North</u> Line and <u>2100</u> Feet From The <u>West</u> Line Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> 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.) 3614.8' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.

Mud Program:  
 0 - 1600' Native/Spud  
 1600' - 3800' Saturated/Brine  
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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.

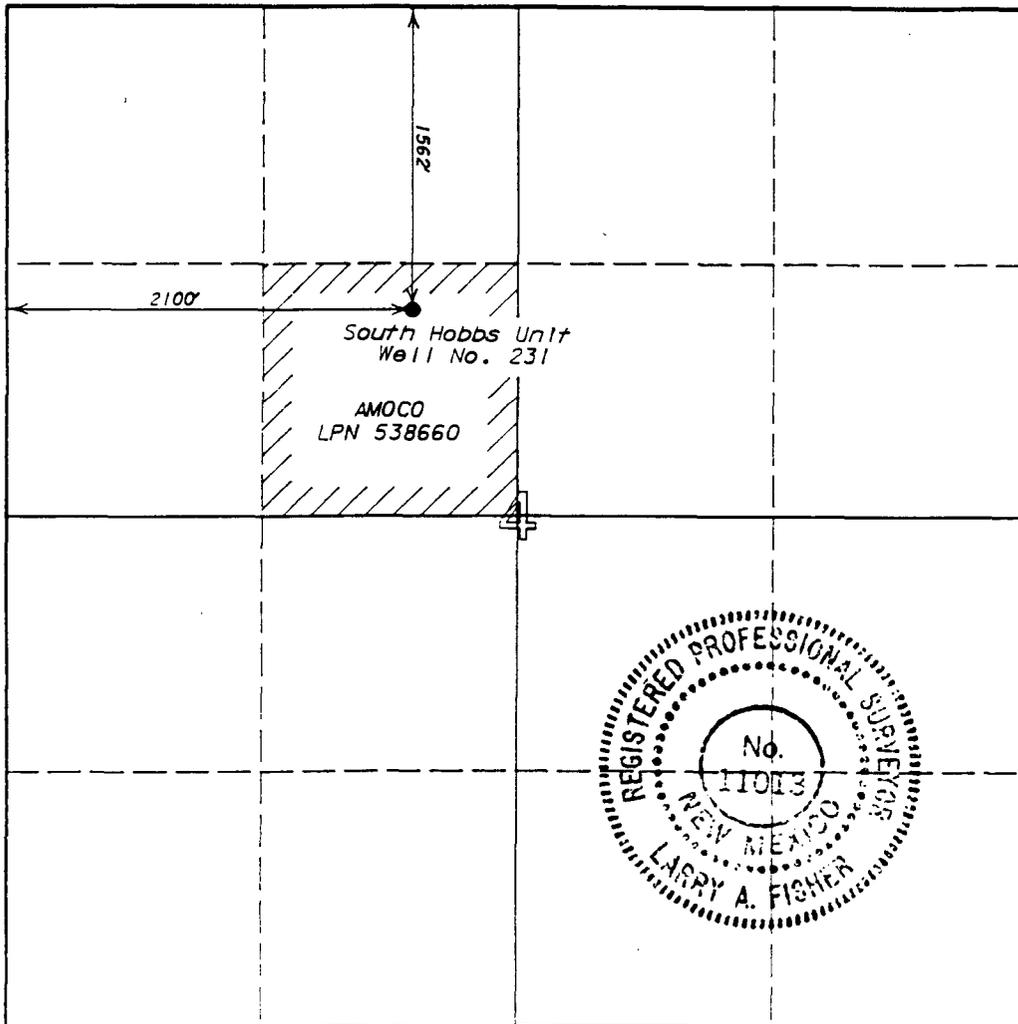
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>231</i>
Unit Letter <i>F</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>
Actual Footage Location of Well <i>1562'</i> feet from the <i>North</i> line and <i>2100'</i> feet from the <i>West</i> line				
Ground Level Elev. <i>3614.8'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

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If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

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CERTIFICATION

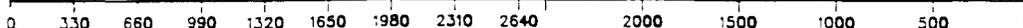
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

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

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Date Surveyed *October 2, 1991*  
 Registered Land Surveyor *Larry A. Fisher*  
 Larry A. Fisher

Certificate No. *11013*

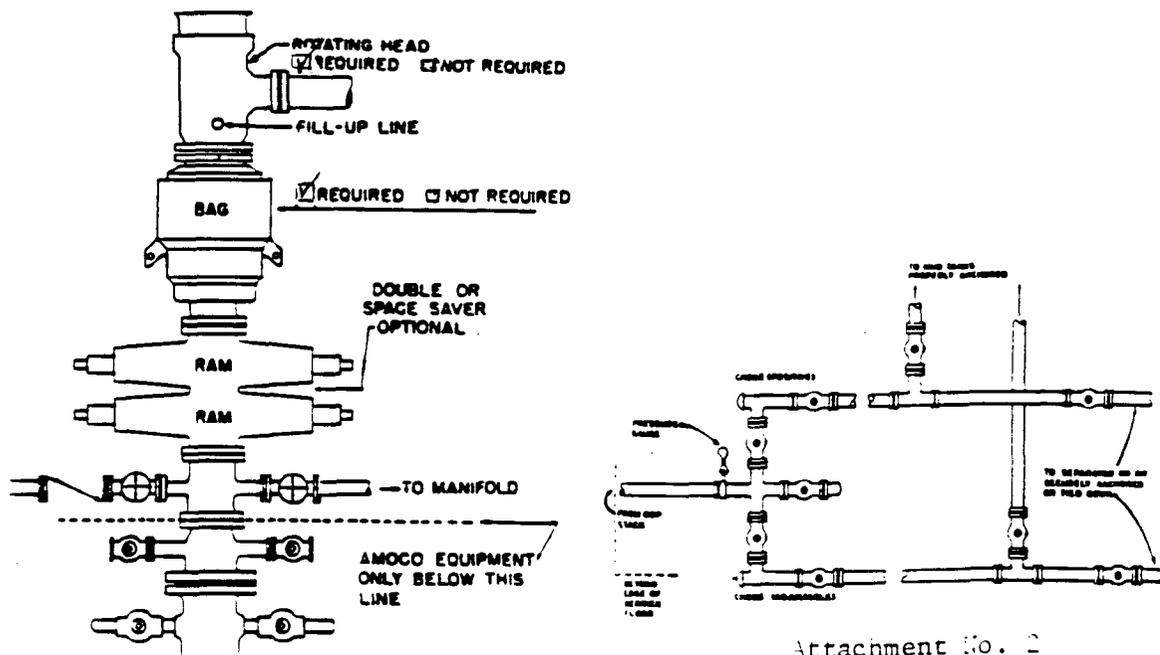


**ATTACHMENT  
3000# W.P. BOP STACK**

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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 H<sub>2</sub>S 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

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)

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

7. Lease Name or Unit Agreement Name

South Hobbs (GSA) Unit

2. Name of Operator  
 Amoco Production Company

8. Well No.  
 231

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 F : 1562 Feet From The North Line and 2100 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.)  
 3614.8' GR  
 14. Kind & Status Plug, Bond  
 15. Drilling Contractor  
 16. Approx. Date Work will start  
 11/6/91

**PROPOSED CASING AND CEMENT PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.

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.

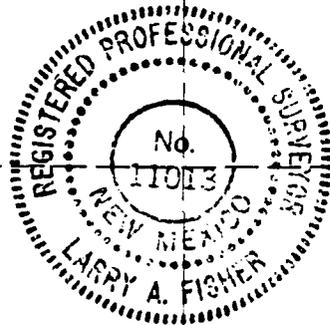
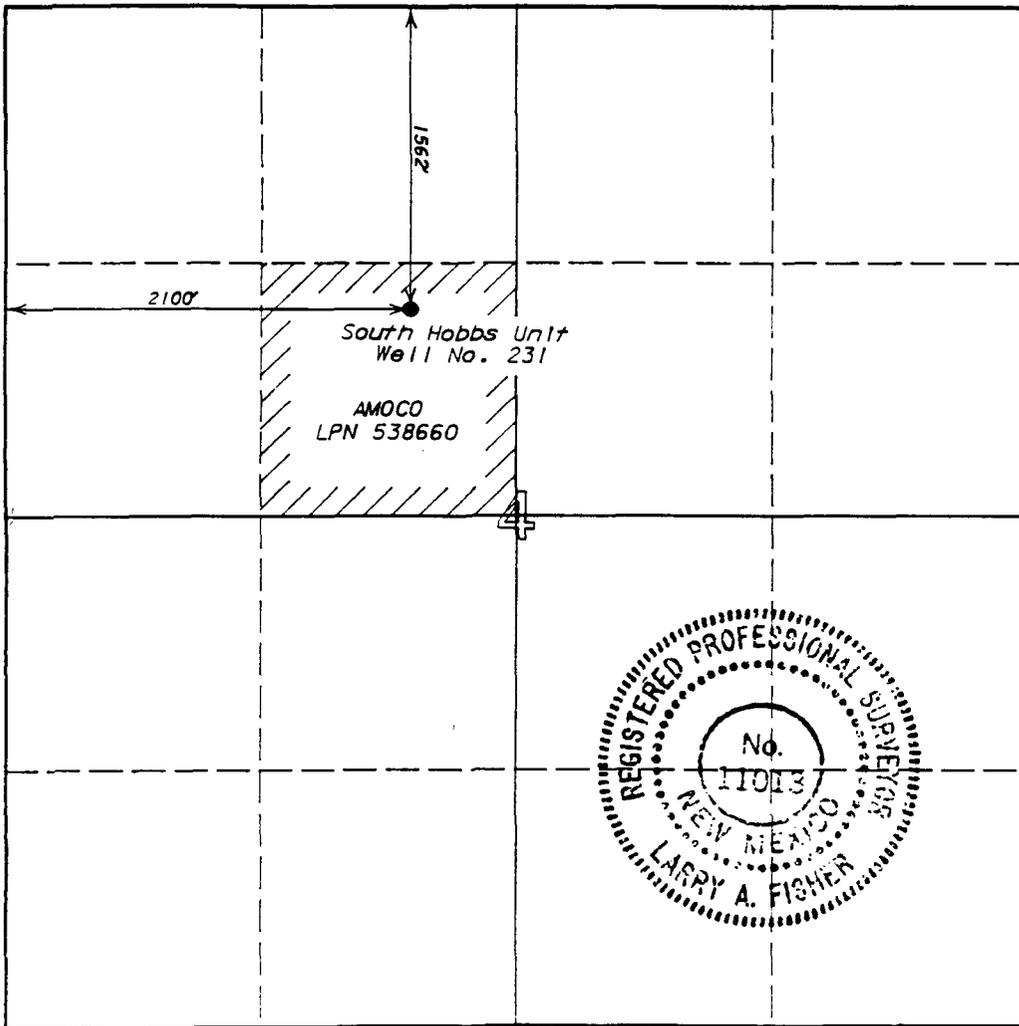
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>231</i>
Unit Letter <i>F</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>
Actual Footage Location of Well <i>1562'</i> feet from the <i>North</i> line and <i>2100'</i> feet from the <i>West</i> line				
Ground Level Elev. <i>3614.8'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> 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 communization, 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 communization, 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. Colvin*  
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*  
Larry A. Fisher

Certificate No. *11013*



Submit to Appropriate District Office  
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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 <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

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

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	

2. Name of Operator Amoco Production Company	8. Well No. 231
-------------------------------------------------	--------------------

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 <u>F</u> : <u>1562</u> Feet From The <u>North</u> Line and <u>2100</u> Feet From The <u>West</u> Line Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> NMPM <u>Lea</u> County
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

13. Elevations (Show whether DF, RT, GR, etc.) 3614.8' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.

Mud Program:  
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 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.

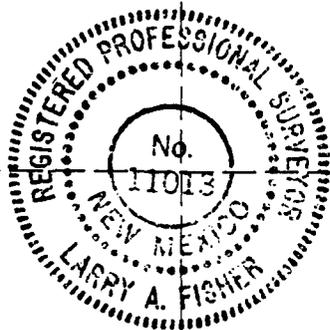
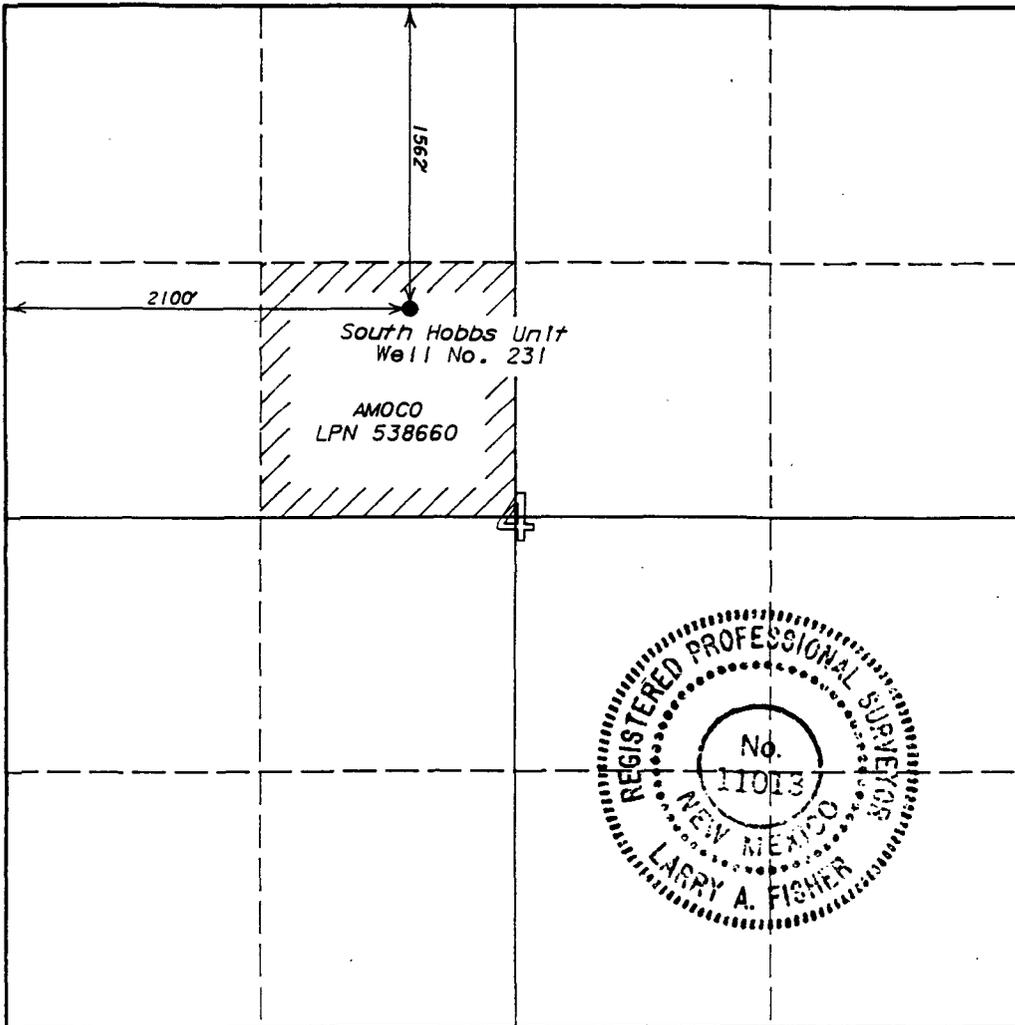
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>231</i>
Unit Letter <i>F</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well <i>1562'</i> foot from the <i>North</i> line and <i>2100'</i> foot from the <i>West</i> line					
Ground Level Elev. <i>3614.8'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> 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).
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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. Colvin*  
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*  
*Larry A. Fisher*

Certificate No. *11013*

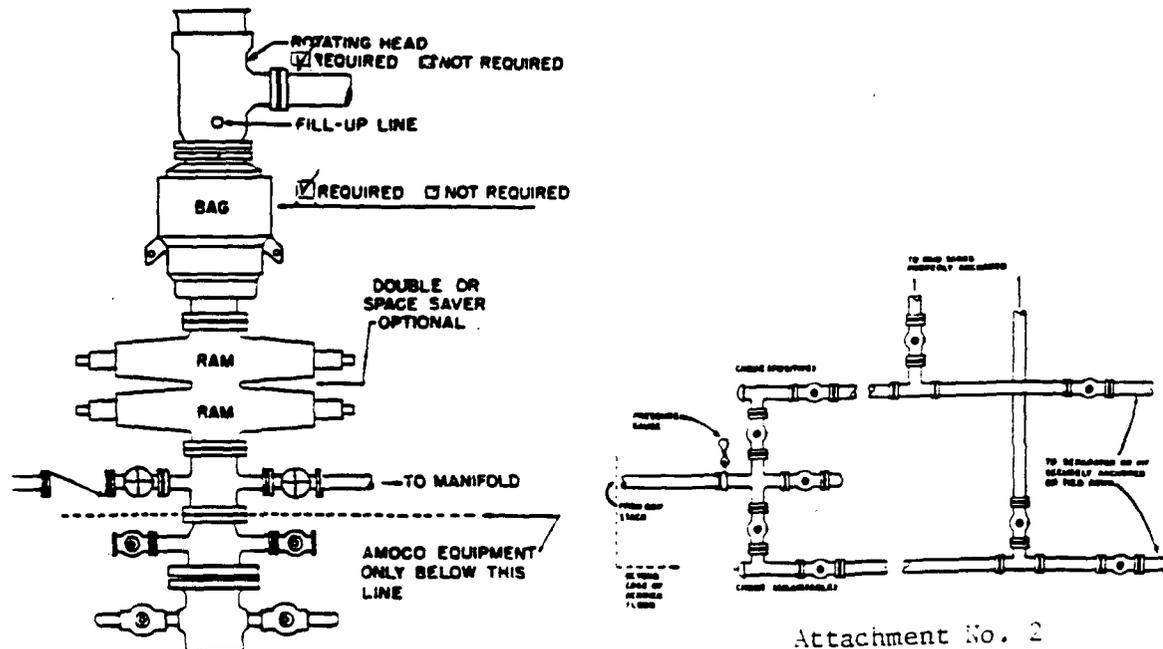
**ATTACHMENT  
3000# W.P. BOP STACK**

1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.p. 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 H<sub>2</sub>S 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. Extentions and hand wheels to be installed and braced at all times.



Attachment No. 2

**SUBSTRUCTURE HEIGHT OF RIG TO HAVE ADEQUATE CLEARANCE FOR  
ALL B.O.P. 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)
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

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

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	8. Well No. 232
2. Name of Operator Amoco Production Company	9. Pool name or Wildcat Hobbs Grayburg S-Andres
3. Address of Operator P. O. Box 3092, Houston, TX 77253	
4. Well Location Unit Letter <u>G</u> : <u>1710</u> Feet From The <u>North</u> Line and <u>1630</u> Feet From The <u>East</u> Line  Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> 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.) 3614.1' 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
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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 corner boundaries of the Section.

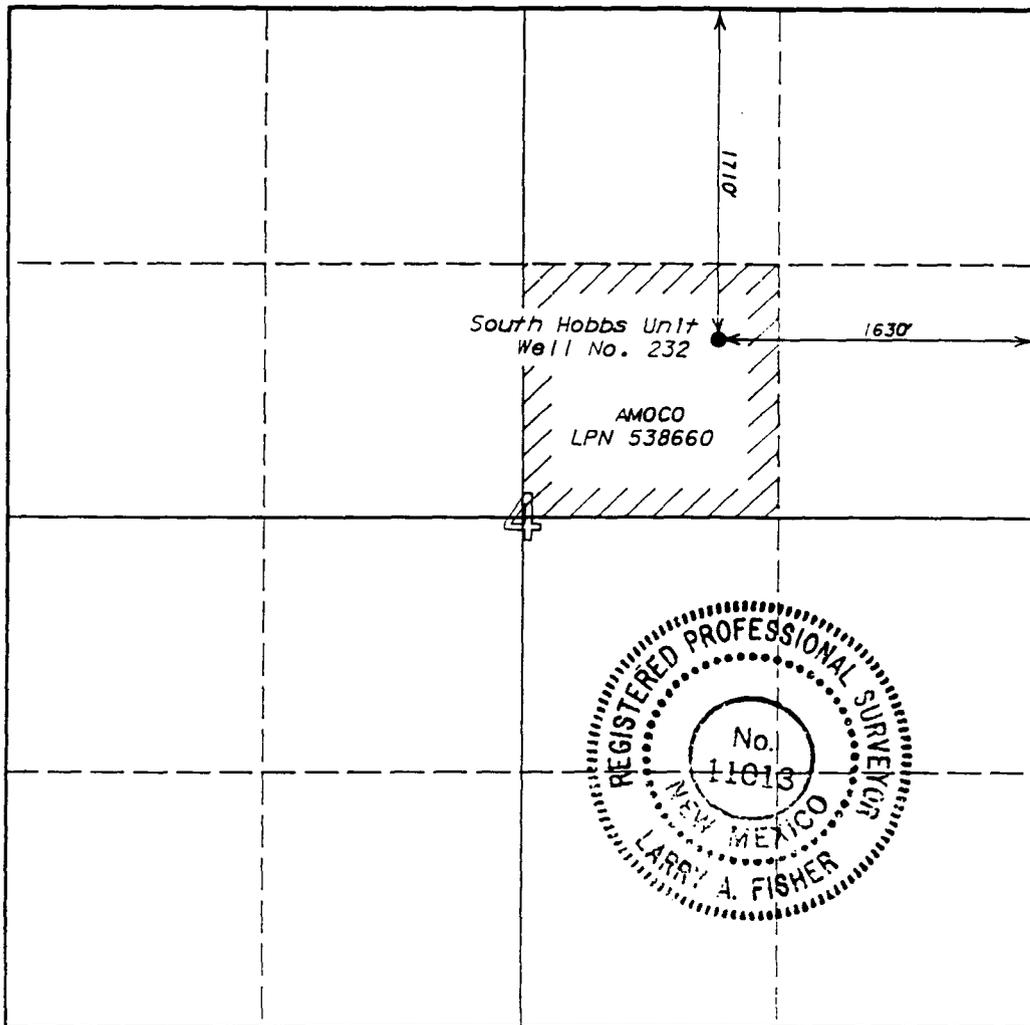
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>232</i>	
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CERTIFICATION

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

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Certificate No. *11013*

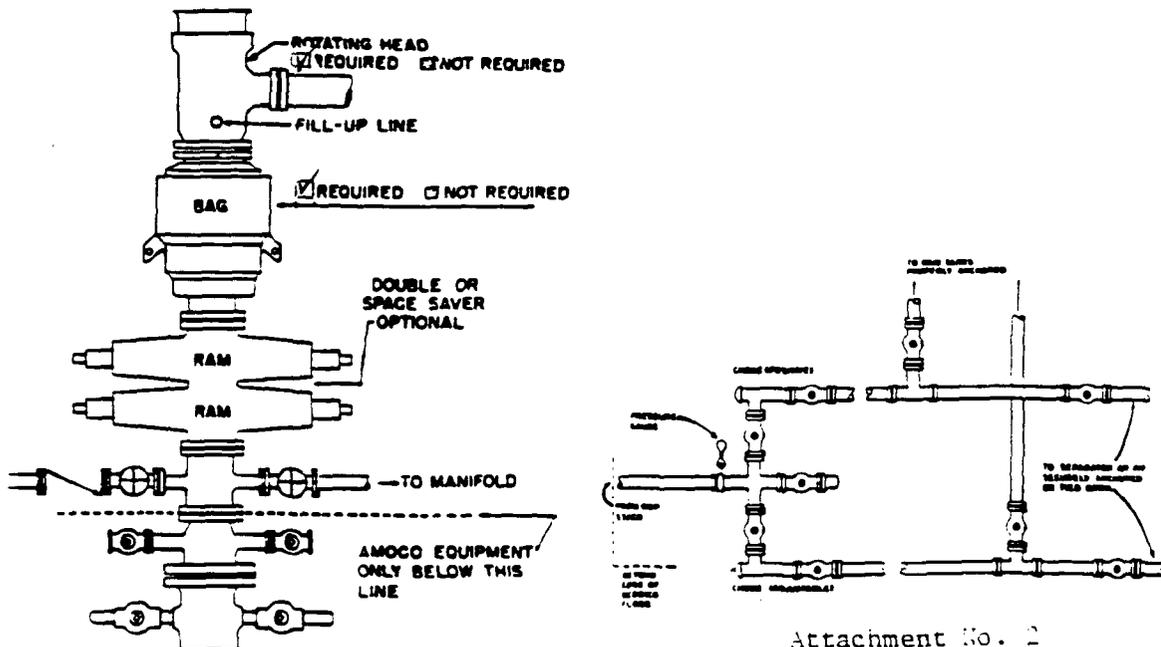


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State of New Mexico  
 Energy, Minerals and Natural Resources Department

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 Revised 1-1-89

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SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.  
 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.

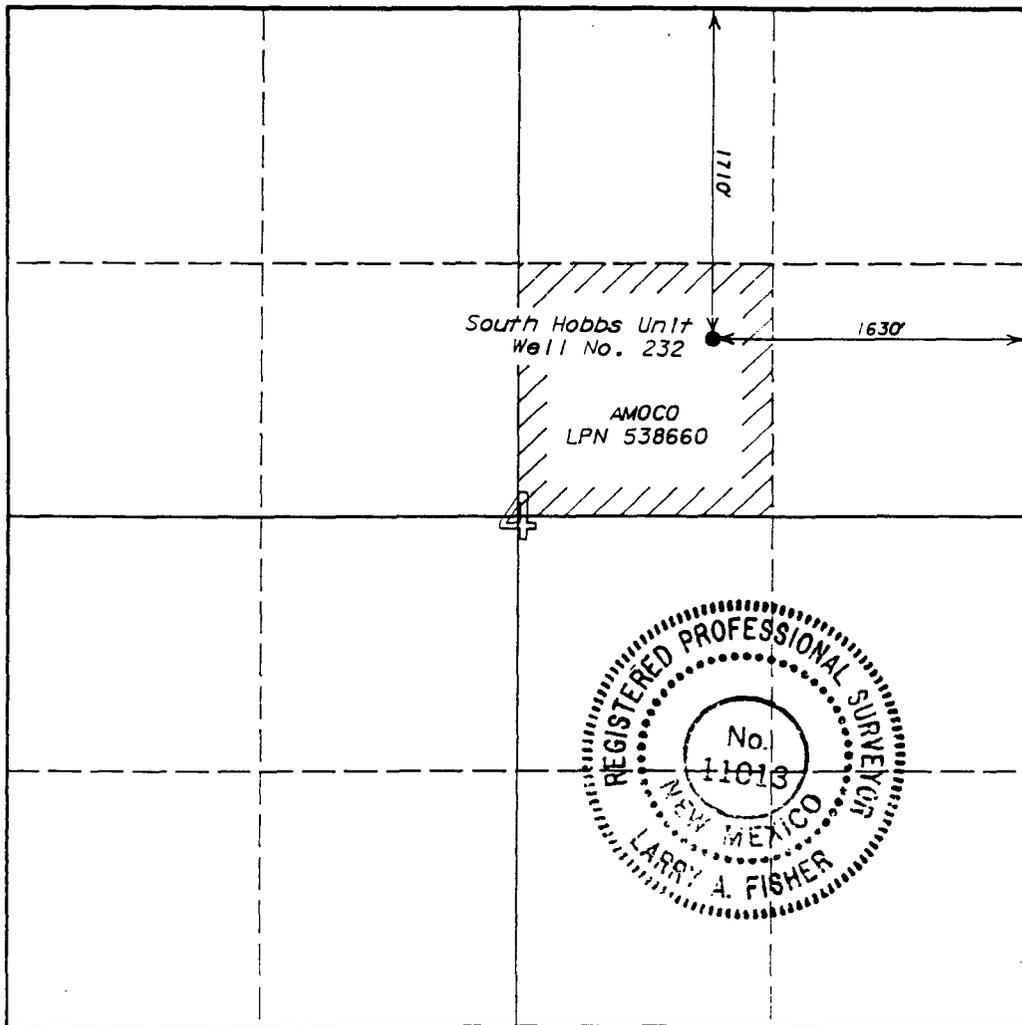
Operator <b>Amoco Production Company</b>		Lease <b>South Hobbs Unit</b>		Well No. <b>232</b>
Unit Letter <b>G</b>	Section <b>4</b>	Township <b>19 South</b>	Range <b>38 East</b>	County <b>Lea</b>
Actual Footage Location of Well <b>1710'</b> feet from the <b>North</b> line and <b>1630'</b> feet from the <b>East</b> line				
Ground Level Elev. <b>3614.1'</b>	Producing Formation <b>San Andres</b>	Pool <b>Hobbs (G/SA)</b>	Dedicated Acreage <b>40</b> 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 Division.



CERTIFICATION

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

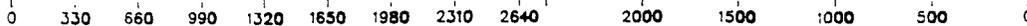
Name  
*Kim A. Colman*  
Position  
*Asst. Admin. Analyst*  
Company  
*Amoco Production Company*  
Date  
*10-14-91*

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*  
Larry A. Fisher

Certificate No.  
*11013*

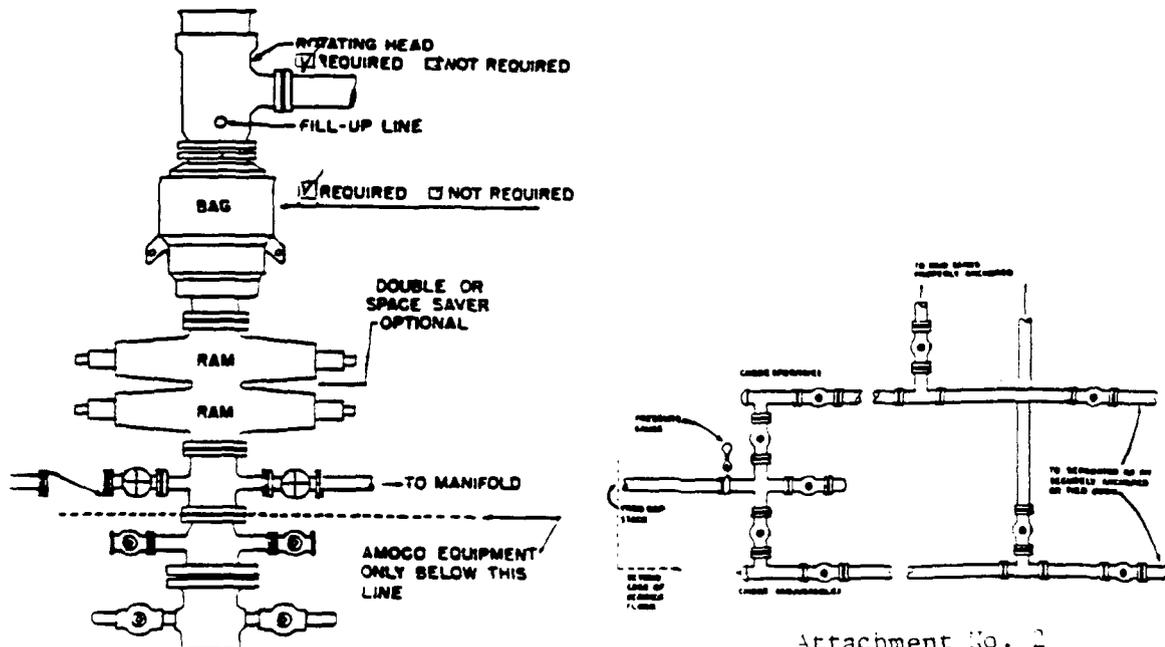


**ATTACHMENT  
3000# W.P. BOP STACK**

1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.p. 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 H<sub>2</sub>S 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 nipling 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

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)
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

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

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	8. Well No. 232
2. Name of Operator Amoco Production Company	9. Pool name or Wildcat Hobbs Grayburg S-Andres
3. Address of Operator P. O. Box 3092, Houston, TX 77253	
4. Well Location Unit Letter <u>G</u> : <u>1710</u> Feet From The <u>North</u> Line and <u>1630</u> Feet From The <u>East</u> Line  Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> NMPM <u>Lea</u> County	

10. Proposed Depth 4350'	11. Formation San Andres	12. Rotary or C.T. Rotary
13. Elevations (Show whether DF, RT, GR, etc.) 3614.1' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.

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.

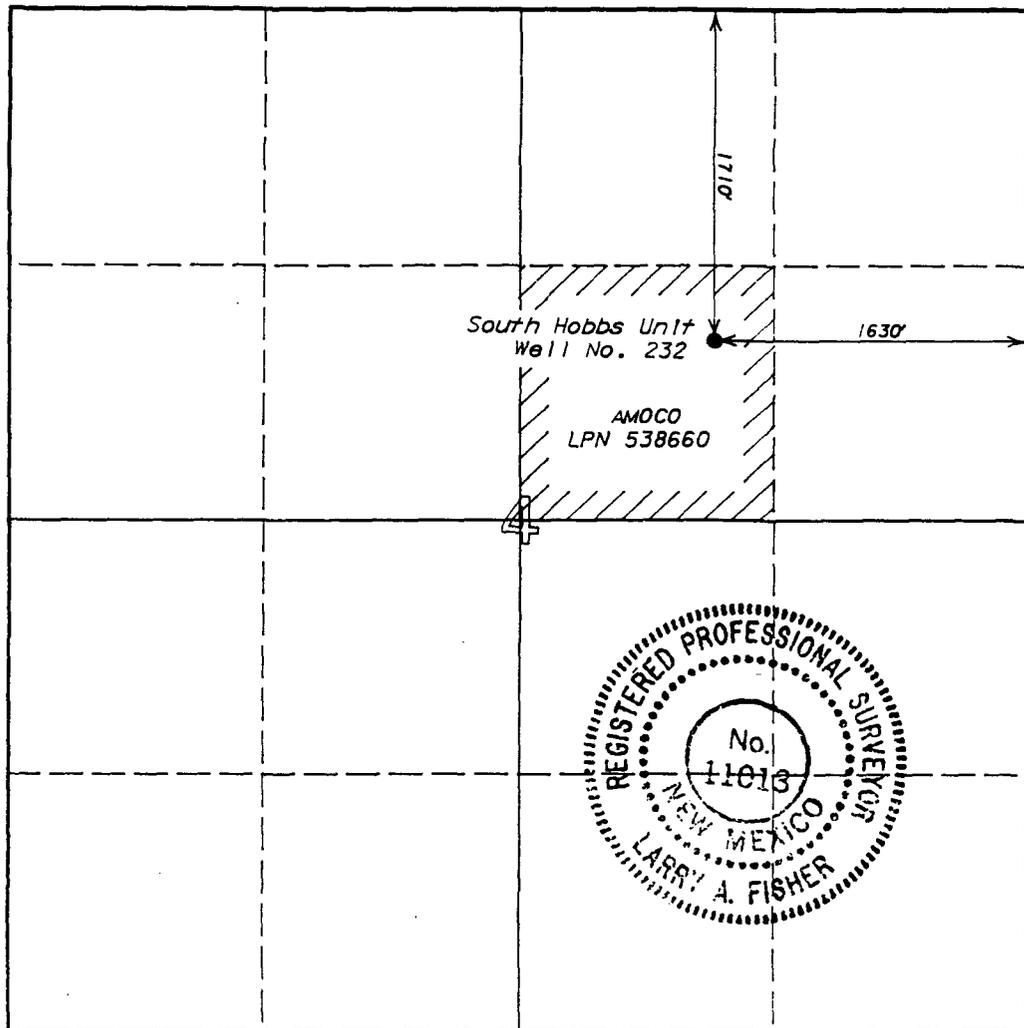
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>232</i>	
Unit Letter <i>G</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well <i>1710'</i> feet from the <i>North</i> line and <i>1630'</i> feet from the <i>East</i> line					
Ground Level Elev. <i>3614.1'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
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CERTIFICATION

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

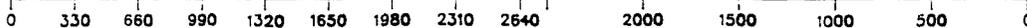
Name *Kim A. Colvin*  
 Position *Asst. Admin. Analyst*  
 Company *Amoco Production Company*  
 Date *10-14-91*

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*  
 Larry A. Fisher

Certificate No. *11013*

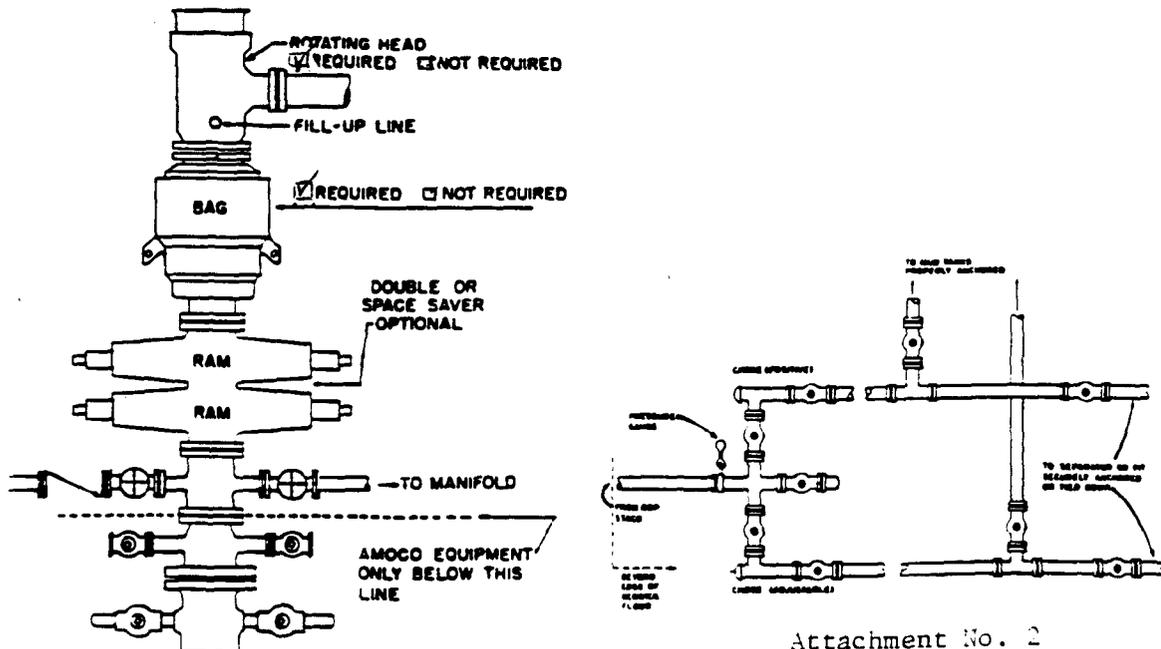


**ATTACHMENT  
3000# W.P. BOP STACK**

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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).
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11. Use rams in following positions: \*

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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 B.O.P. 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)

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

7. Lease Name or Unit Agreement Name

South Hobbs (GSA) Unit

2. Name of Operator  
 Amoco Production Company

8. Well No.  
 234

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 F : 2480 Feet From The North Line and 1800 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.)  
 3607.4' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
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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 owner boundaries of the Section.

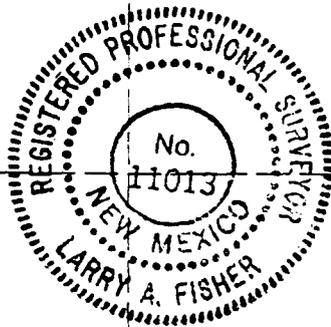
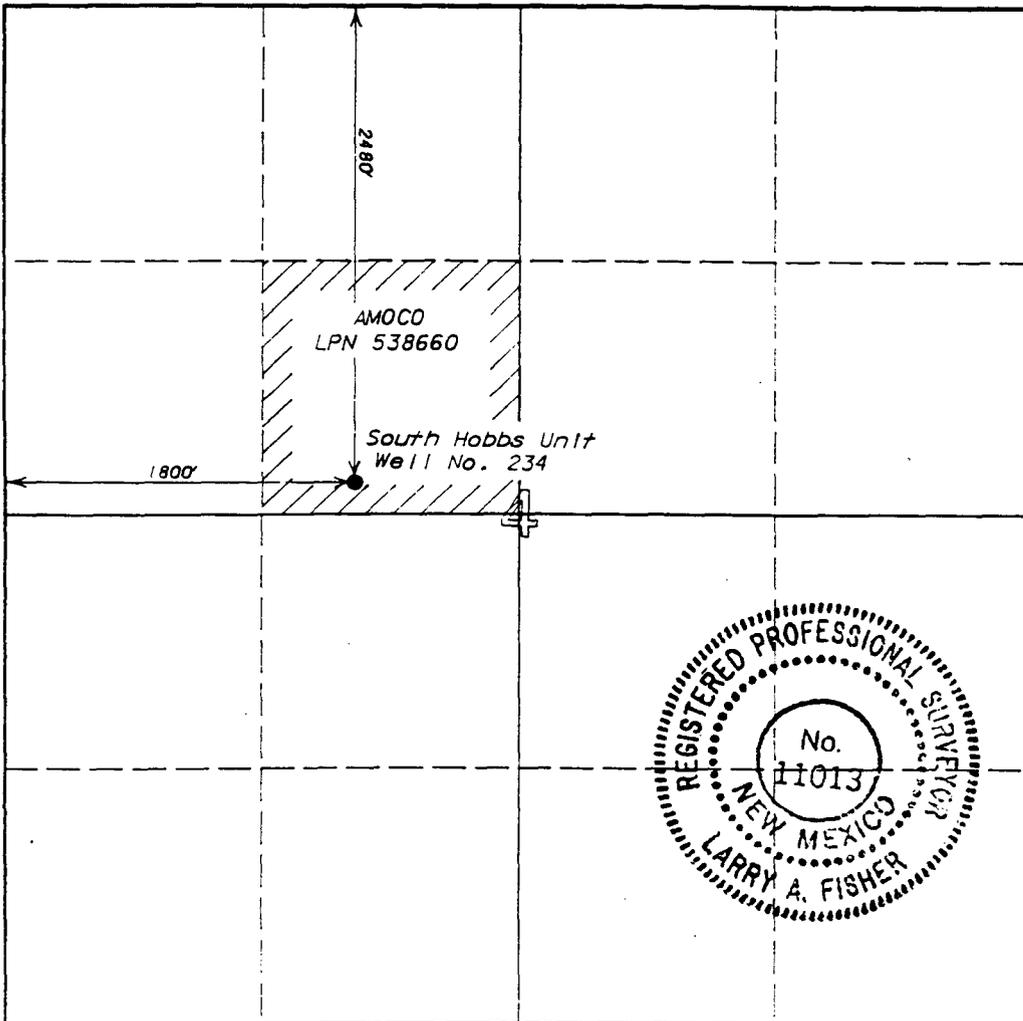
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>234</i>
Unit Letter <i>F</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well: <i>2480'</i> feet from the <i>North</i> line and <i>1800'</i> feet from the <i>West</i> line					
Ground Level Elev. <i>3607.4'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

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CERTIFICATION

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

Name *Kim A. Colvin*  
 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 25, 1991*  
 Registered Lead Surveyor *Larry A. Fisher*  
 Certificate No. *11013*

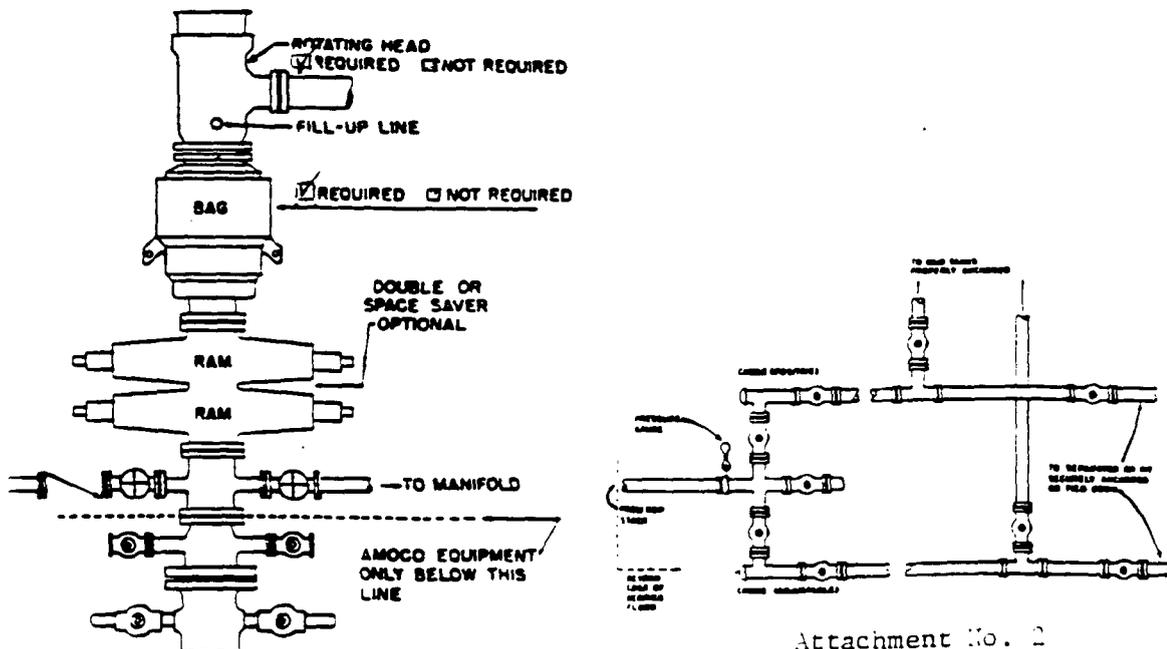
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SUBSTRUCTURE HEIGHT OF RIG TO HAVE ADEQUATE CLEARANCE FOR

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)

5. Indicate Type of Lease  
STATE  FEE

6. State Oil & Gas Lease No.

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

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DRILL  RE-ENTER  DEEPEN  PLUG BACK

b. Type of Well:

OIL WELL  GAS WELL  OTHER   
SINGLE ZONE  MULTIPLE ZONE

7. Lease Name or Unit Agreement Name

South Hobbs (GSA) Unit

2. Name of Operator

Amoco Production Company

8. Well No.

234

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 F : 2480 Feet From The North Line and 1800 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.)

3607.4' GR

14. Kind & Status Plug. Bond

15. Drilling Contractor

16. Approx. Date Work will start

11/6/91

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1600' - 3800'

Saturated/Brine

3800' - TD\*

Salt Gel/Starch

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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:

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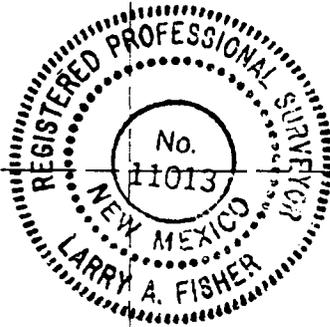
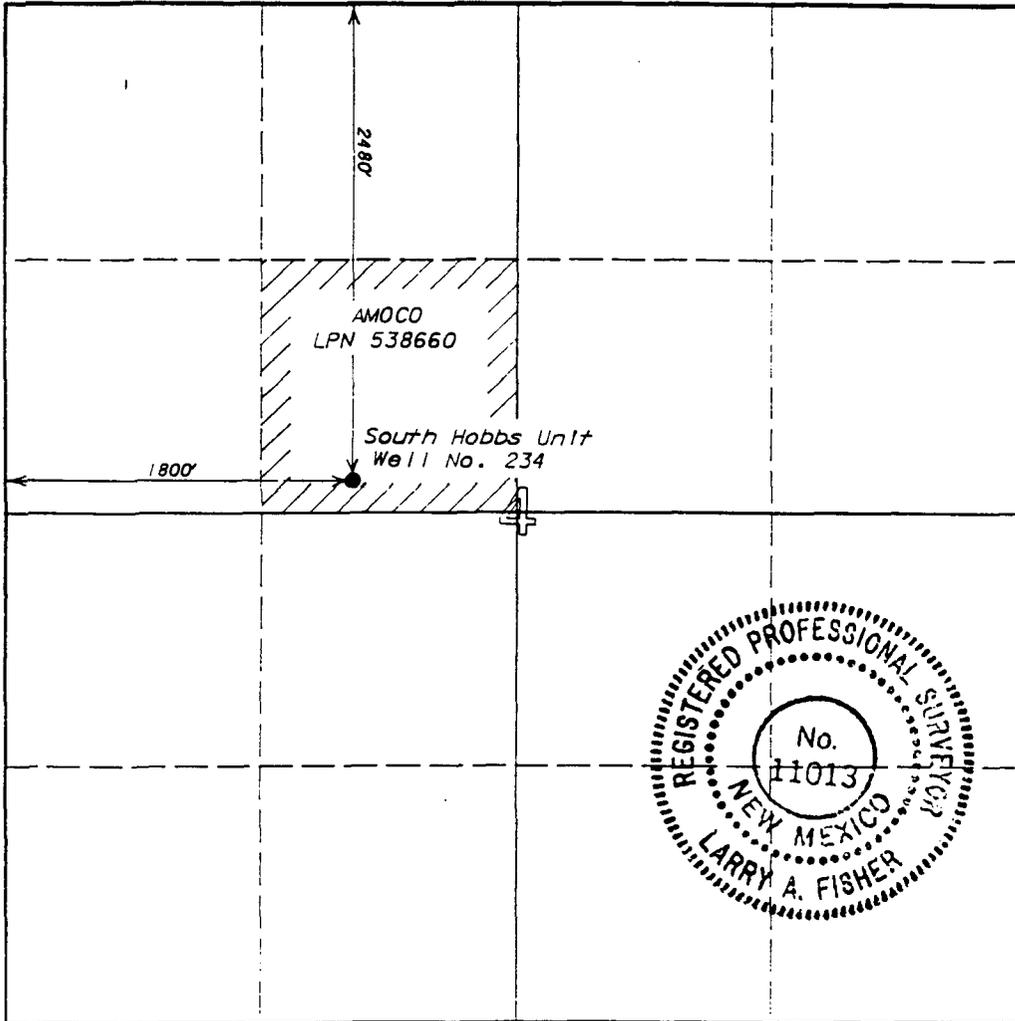
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>234</i>
Unit Letter <i>F</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well: <i>2480'</i> feet from the <i>North</i> line and <i>1800'</i> feet from the <i>West</i> line					
Ground Level Elev. <i>3607.4'</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 *September 25, 1991*  
 Registered Land Surveyor  
*Larry A. Fisher*  
 Certificate No. *11013*

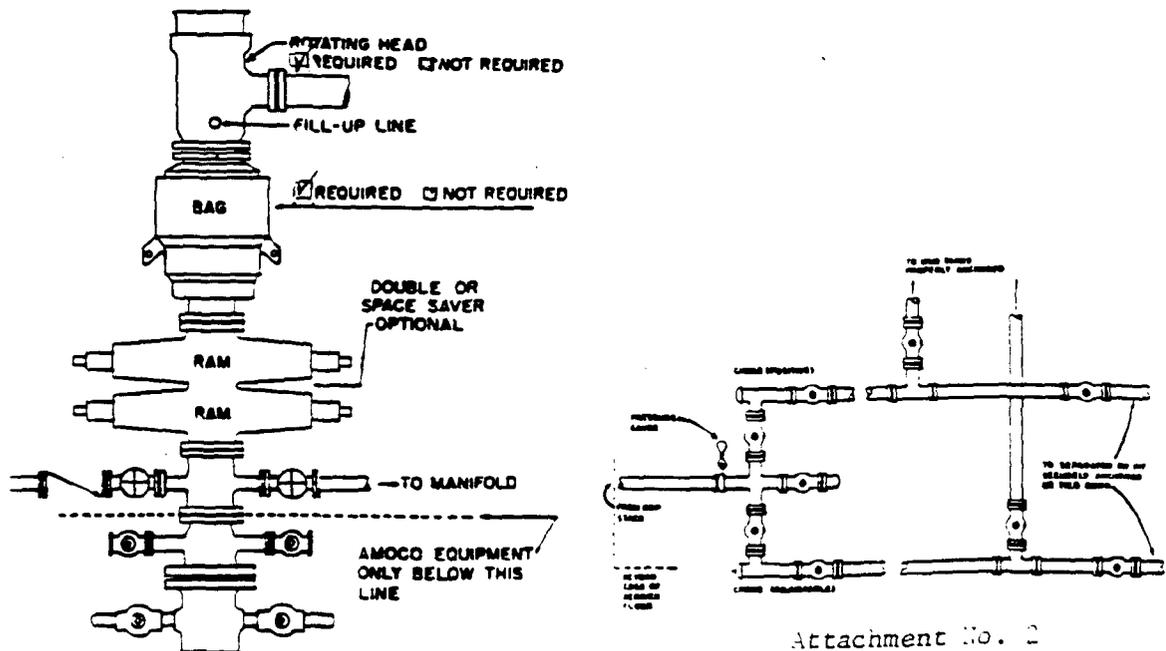
**ATTACHMENT  
3000# W.P. BOP STACK**

1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.p. 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 H<sub>2</sub>S 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

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)
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

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

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	8. Well No. 234
2. Name of Operator Amoco Production Company	9. Pool name or Wildcat Hobbs Grayburg S-Andres
3. Address of Operator P. O. Box 3092, Houston, TX 77253	
4. Well Location Unit Letter <u>F</u> : <u>2480</u> Feet From The <u>North</u> Line and <u>1800</u> Feet From The <u>West</u> Line Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> 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.) 3607.4' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.

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.

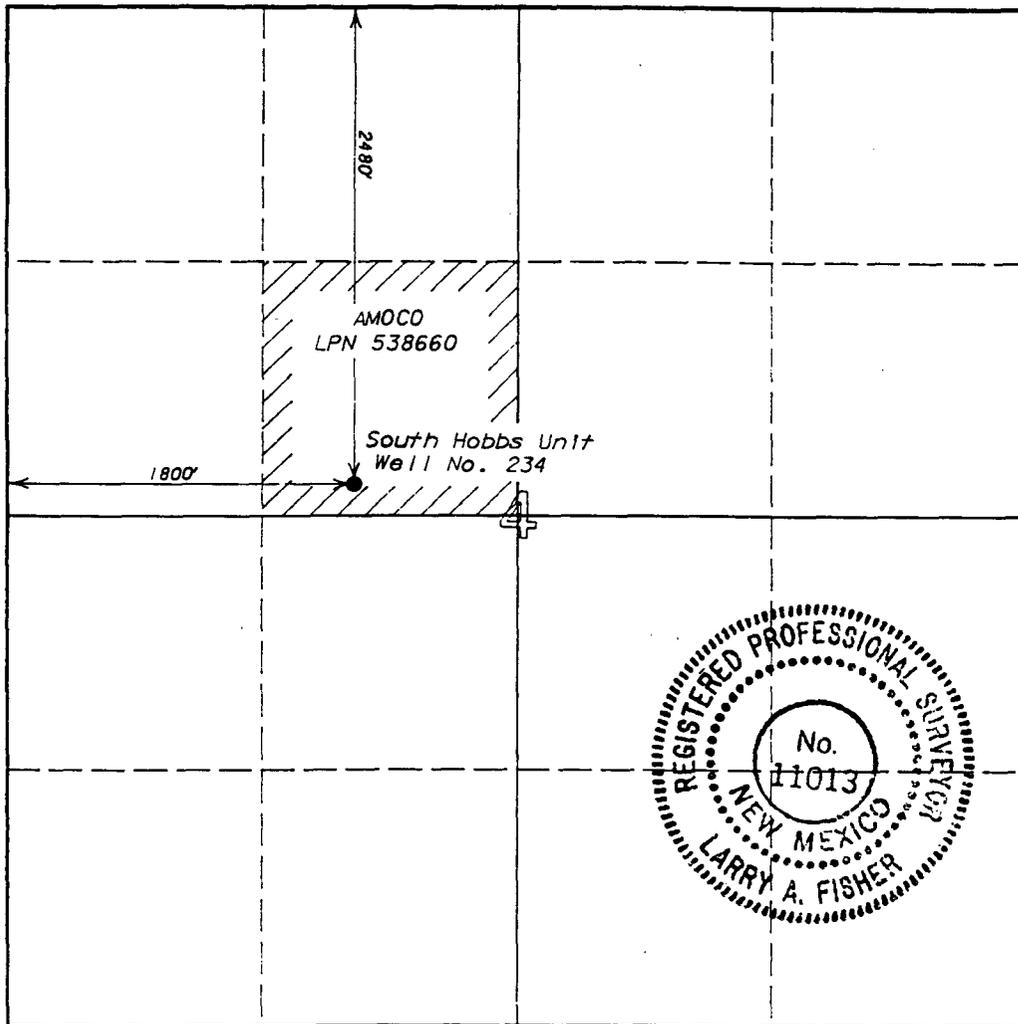
Operator <b>Amoco Production Company</b>			Lease <b>South Hobbs Unit</b>		Well No. <b>234</b>
Unit Letter <b>F</b>	Section <b>4</b>	Township <b>19 South</b>	Range <b>38 East</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>2480'</b> foot from the <b>North</b> line and <b>1800'</b> foot from the <b>West</b> line					
Ground Level Elev. <b>3607.4'</b>	Producing Formation <b>San Andres</b>		Pool <b>Hobbs (G/SA)</b>	Dedicated Acreage <b>40</b> Acres	

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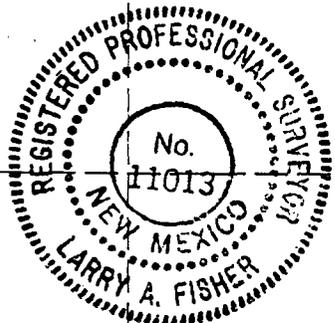
CERTIFICATION

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

Name Kim A. Colvin  
 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 25, 1991  
 Registered Land Surveyor Larry A. Fisher  
 Certificate No. 11013



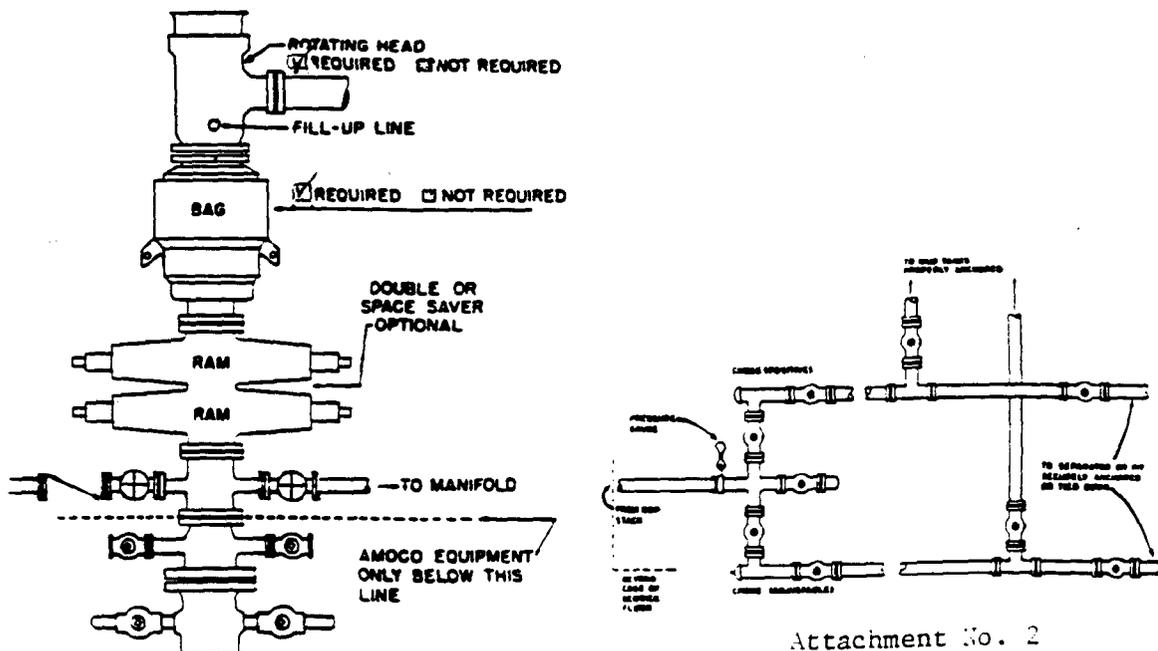
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Upper Ram	Drill Pipe	Casing
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\* Amoco District Manager may reverse location of rams.

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 B.O.P. 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)

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 <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Amoco Production Company		8. Well No. 236
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 <u>K</u> : <u>1403</u> Feet From The <u>South</u> Line and <u>1746</u> Feet From The <u>West</u> Line Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> NMPM Lea Country		

10. Proposed Depth 4350'		11. Formation San Andres	12. Rotary or C.T. Rotary
13. Elevations (Show whether DF, RT, GR, etc.) 3603.5' 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
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Propose to drill and equip well in San Andres formation. After reaching TD, logs will be run and evaluated. Perforate and/or stimulate as necessary in attempting commercial production.

\* Add mud materials as necessary in attempting commercial production.

Mud Program:  
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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 corner boundaries of the Section.

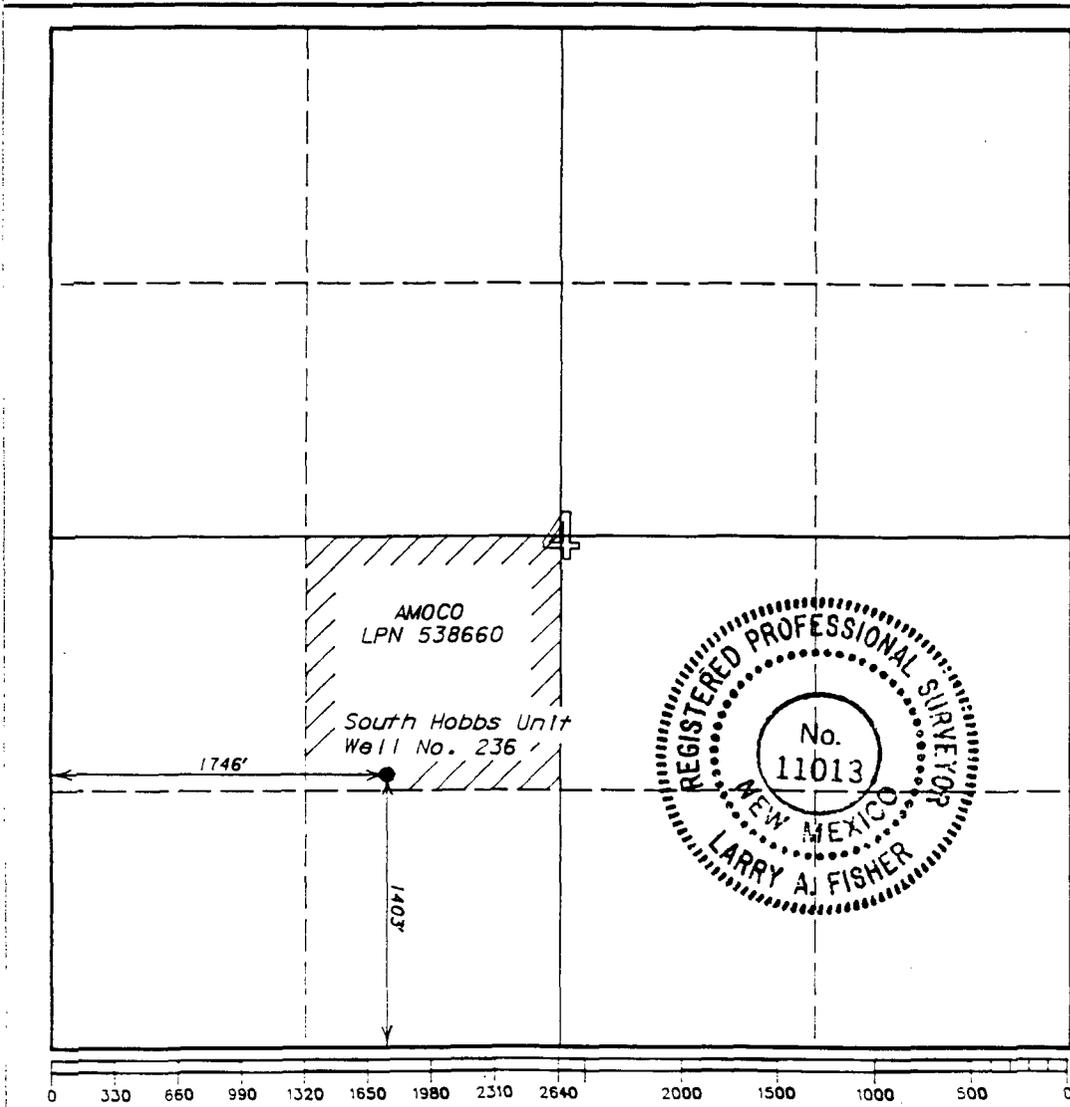
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>			Well No. <i>236</i>
Unit Letter <i>K</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well <i>1403'</i> feet from the <i>South</i> line and <i>1746'</i> feet from the <i>West</i> line					
Ground Level Elev. <i>3603.5'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

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CERTIFICATION

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---

Name *Kim A. Colvin*

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*  
Larry A. Fisher

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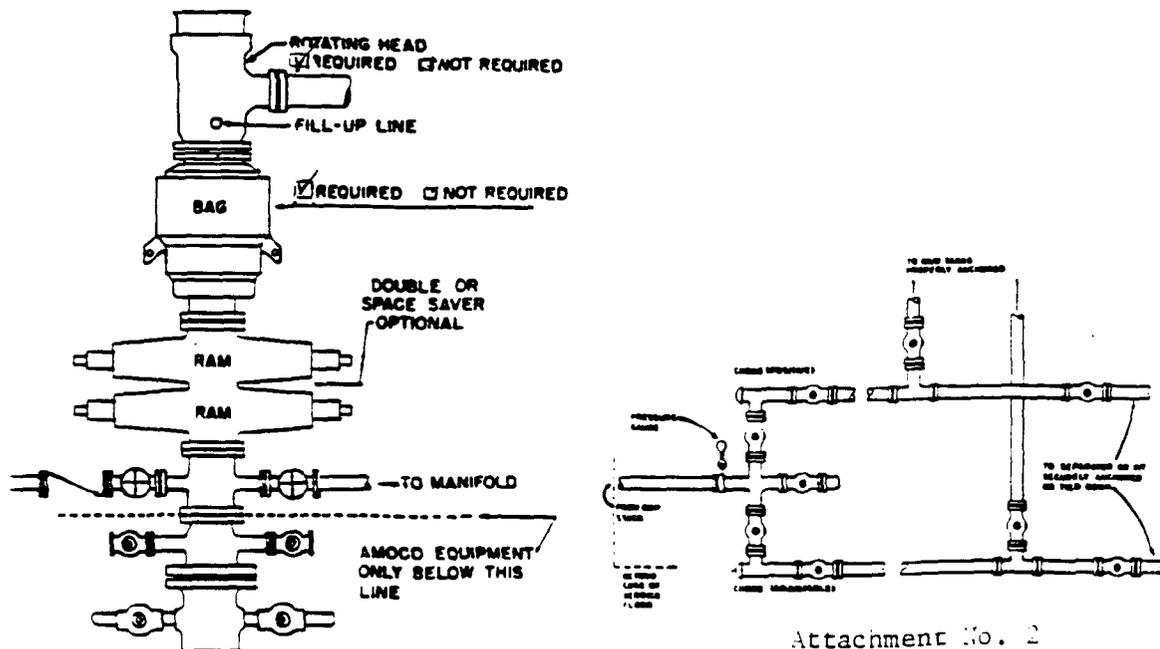
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Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

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)

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

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

2. Name of Operator  
Amoco Production Company

8. Well No.  
236

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 K : 1403 Feet From The South Line and 1746 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.) 3603.5' GR	14. Kind & Status Plug. Bond	15. Drilling Contractor	16. Approx. Date Work will start 11/6/91

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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 corner boundaries of the Section.

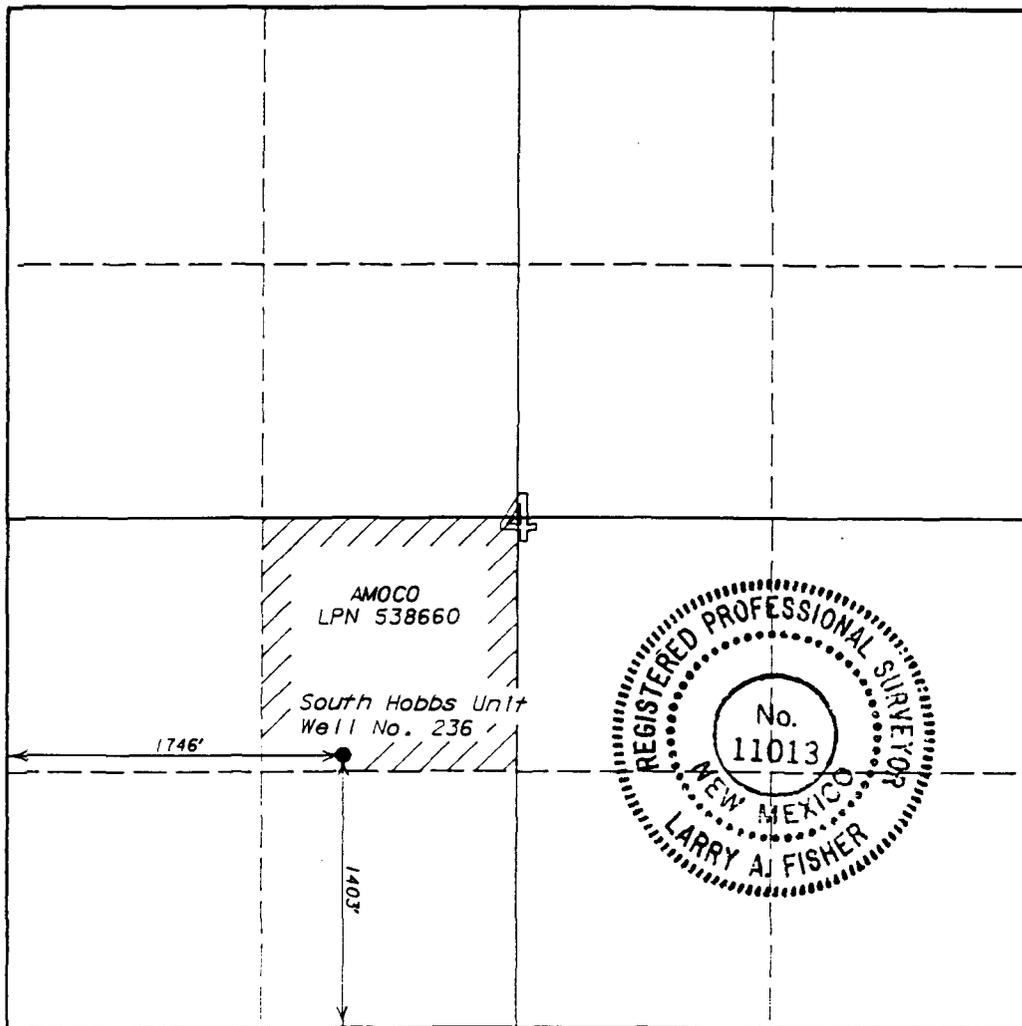
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Ground Level Elev. <i>3603.5'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres	

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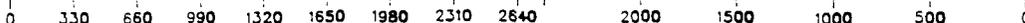
Name *Kim A. Colvin*  
 Position *Asst. Admin. Analyst*  
 Company *Amoco Production Company*  
 Date *10-14-91*

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*  
 Larry A. Fisher

Certificate No. *11013*

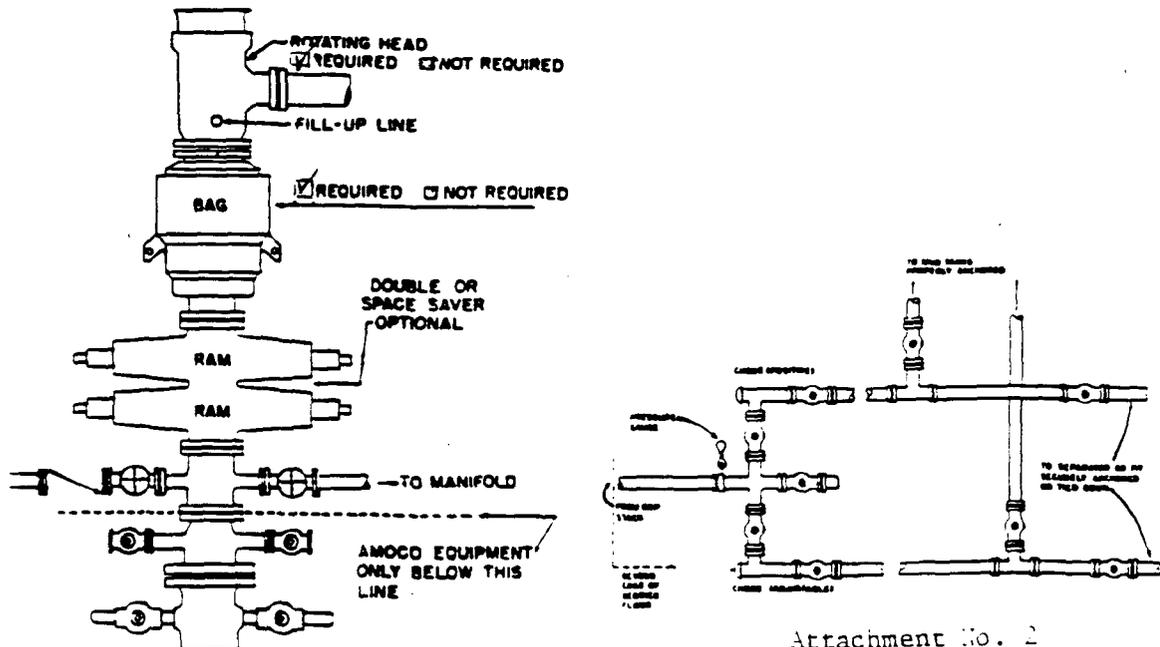


**ATTACHMENT  
3000# W.P. BOP STACK**

1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.p. 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 H<sub>2</sub>S 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. Extentions 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)

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

2. Name of Operator  
 Amoco Production Company

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

4. Well Location  
 Unit Letter K : 1403 Feet From The South Line and 1746 Feet From The West Line  
 Section 4 Township 19-S Range 38-E NMPM Lea County

7. Lease Name or Unit Agreement Name

South Hobbs (GSA) Unit

8. Well No.  
 236

9. Pool name or Wildcat  
 Hobbs Grayburg S-Andres

10. Proposed Depth  
 4350'

11. Formation  
 San Andres

12. Rotary or C.T.  
 Rotary

13. Elevations (Show whether DF, RT, GR, etc.)  
 3603.5' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.

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.

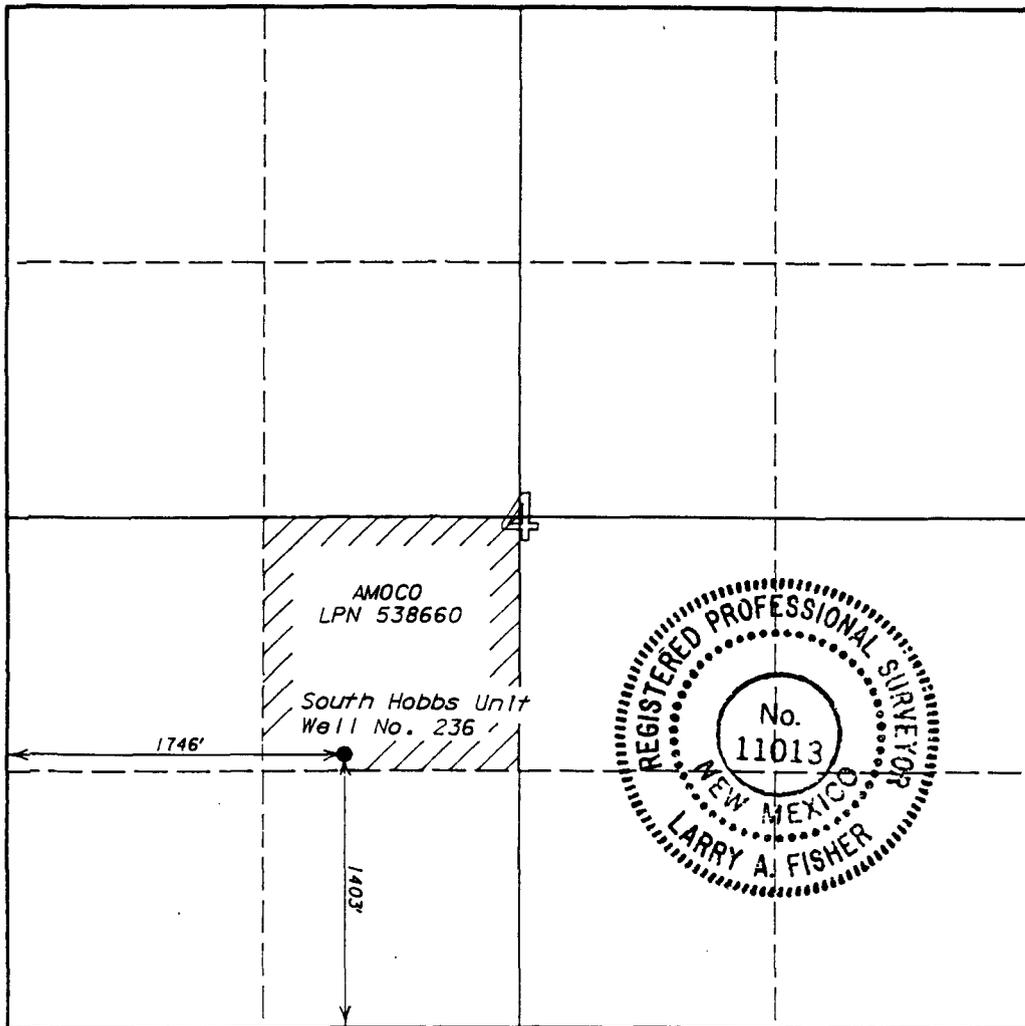
Operator <b>Amoco Production Company</b>		Lease <b>South Hobbs Unit</b>			Well No. <b>236</b>
Unit Letter <b>K</b>	Section <b>4</b>	Township <b>19 South</b>	Range <b>38 East</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>1403'</b> feet from the <b>South</b> line and <b>1746'</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3603.5'</b>	Producing Formation <b>San Andres</b>	Pool <b>Hobbs (G/SA)</b>	Dedicated Acreage <b>40</b> 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 Division.



CERTIFICATION

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

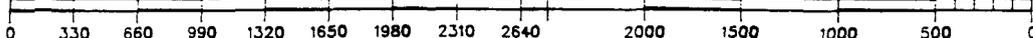
Name Kim A. Colvin  
 Position Asst. Admin. Analyst  
 Company Amoco Production Company  
 Date 10-14-91

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Date Surveyed October 2, 1991

Registered Land Surveyor  
Larry A. Fisher  
 Larry A. Fisher

Certificate No. 11013

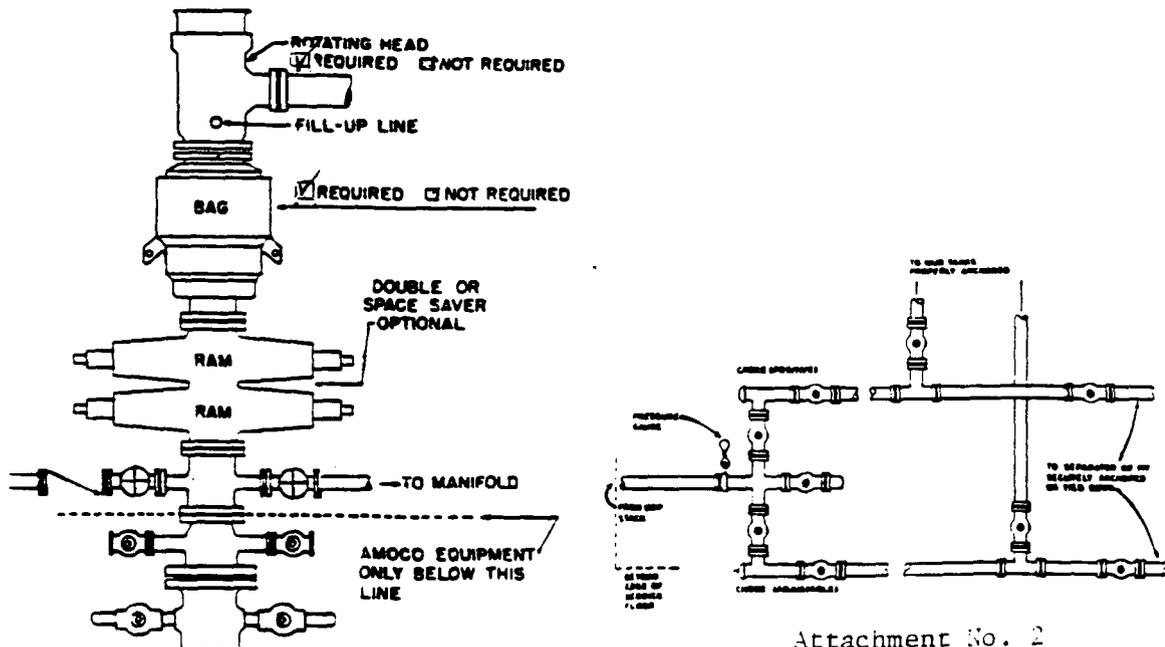


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1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.p. minimum.
2. Equipment through which bit must pass shall be at least as large as casing size being drilled through.
3. Upper kelly cock is required and shall be 3,000 psi w.p. minimum. Lower kelly cock is (required)(not required).
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11. Use rams in following positions: \*

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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

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)

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 <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Amoco Production Company		8. Well No. 237
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 <u>0</u> : <u>1300</u> Feet From The <u>South</u> Line and <u>1910</u> Feet From The <u>East</u> Line Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> 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.) 3610.2' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.  
 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.

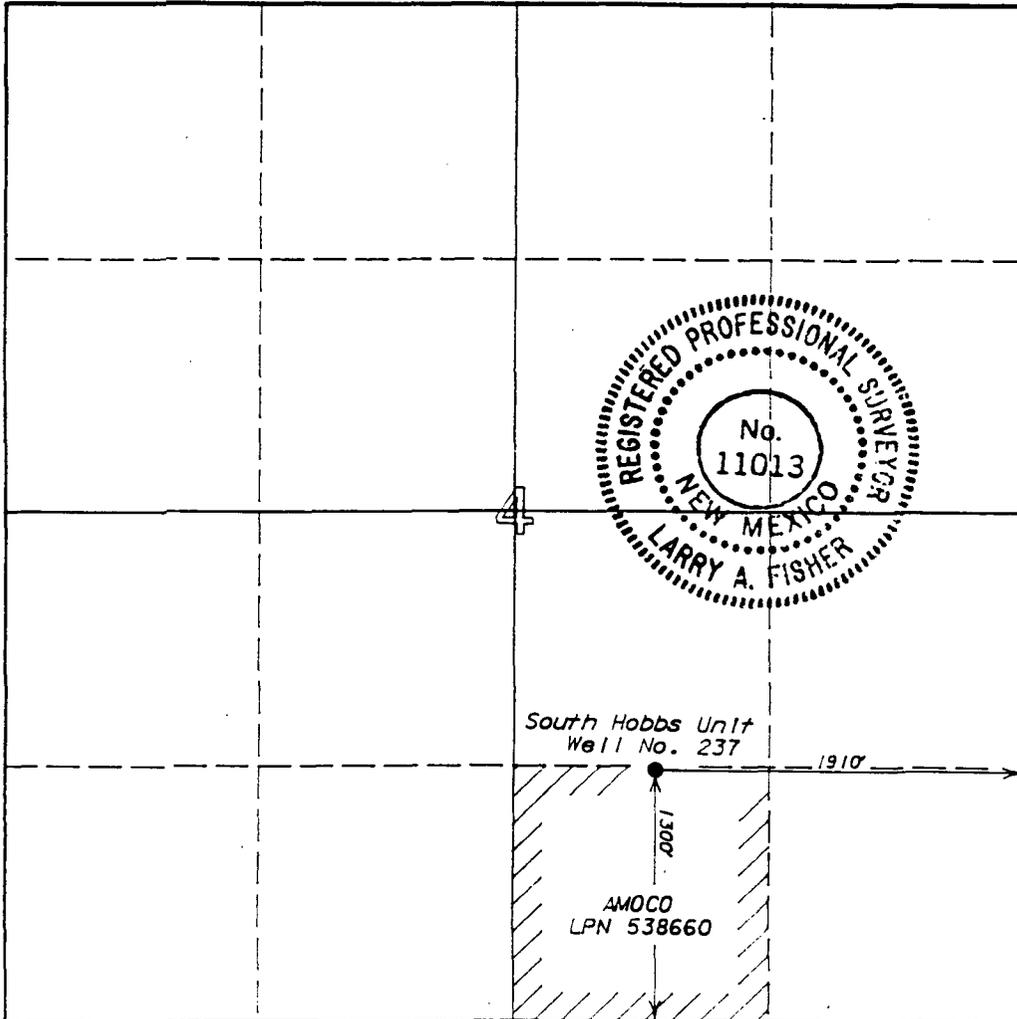
Operator <i>Amoco Production Company</i>		Lease <i>South Hobbs Unit</i>		Well No. <i>237</i>
Unit Letter <i>0</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>
Actual Footage Location of Well <i>1300'</i> feet from the <i>South</i> line and <i>1910'</i> feet from the <i>East</i> line				
Ground Level Elev. <i>3610.2'</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.
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Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

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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*  
 Larry A. Fisher

Certificate No. *11013*

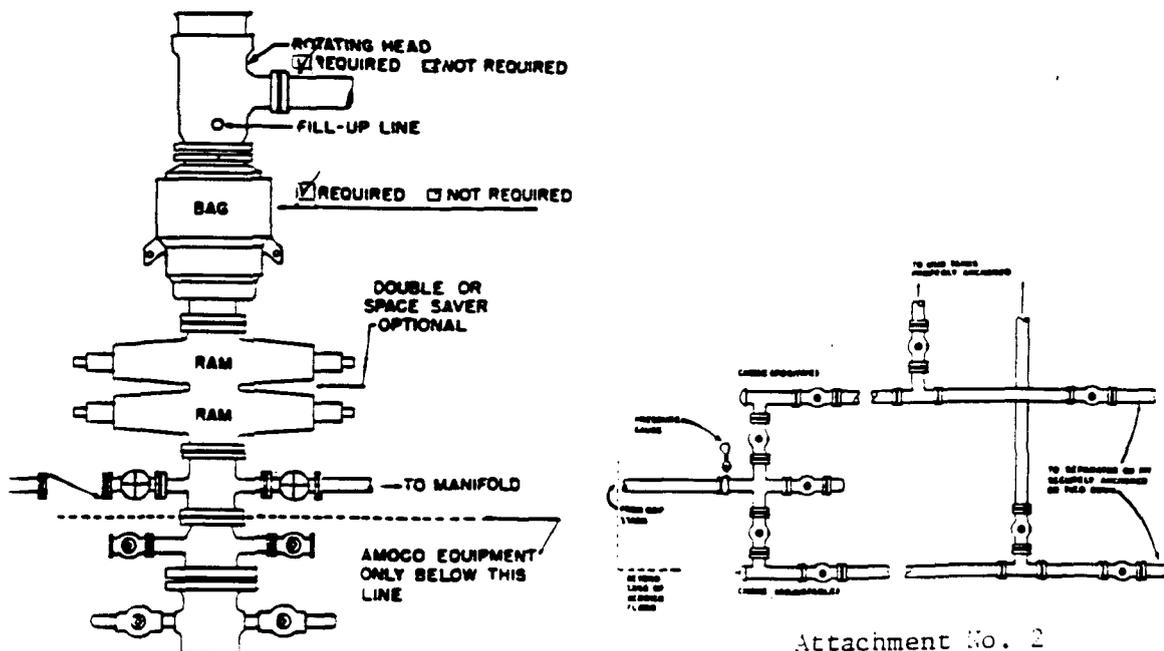
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3. Upper kelly cock is required and shall be 3,000 psi w.p. minimum. Lower kelly cock is (required)(not required).
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Attachment No. 2

SUBSTRUCTURE HEIGHT OF RIG TO HAVE ADEQUATE CLEARANCE FOR

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**  
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API NO. (assigned by OCD on New Wells)

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STATE  FEE

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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:  
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 SINGLE ZONE  MULTIPLE ZONE

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

2. Name of Operator  
 Amoco Production Company

8. Well No.  
 237

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 0 : 1300 Feet From The South Line and 1910 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.) 3610.2' 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
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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 \_\_\_\_\_

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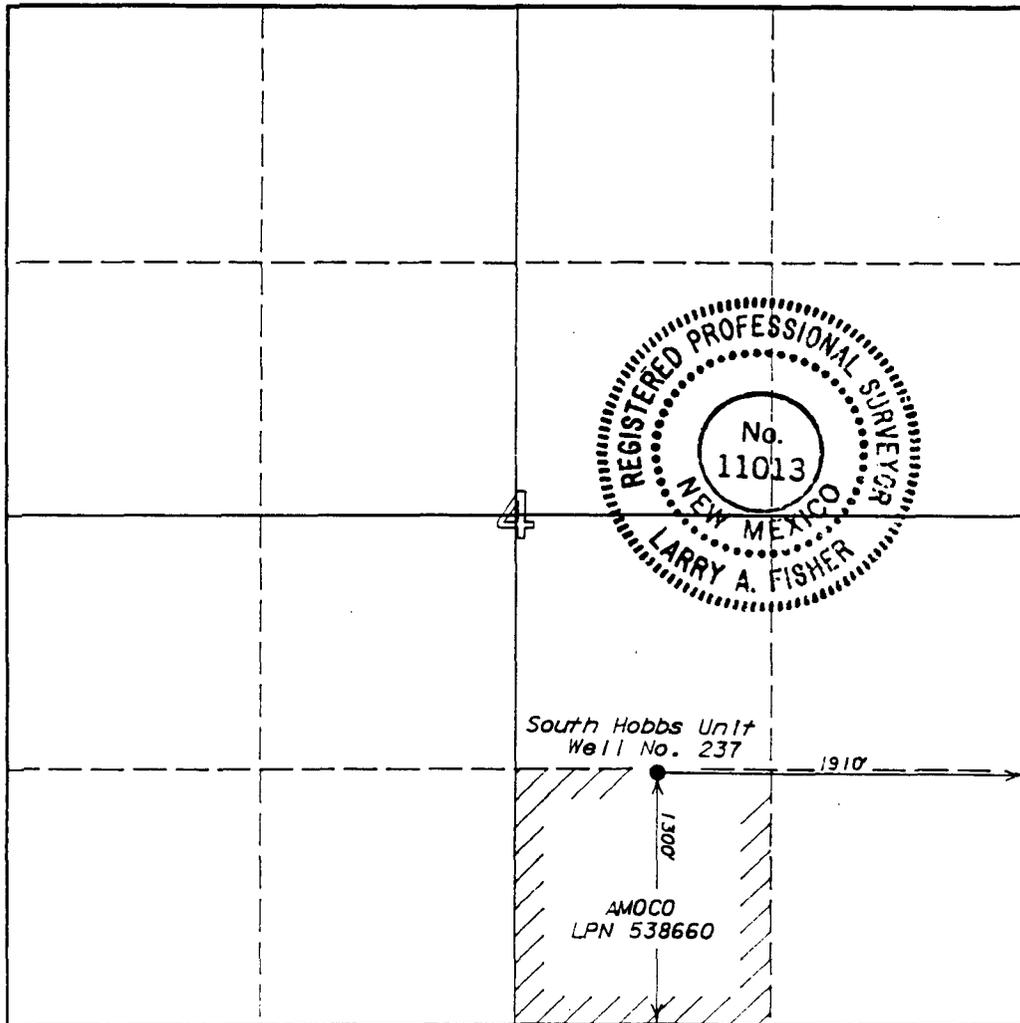
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Unit Letter <i>0</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>	
Actual Footage Location of Well <i>1300'</i> feet from the <i>South</i> line and		<i>1910'</i> feet from the		<i>East</i> line	
Ground Level Elev. <i>3610.2'</i>	Producing Formation <i>San Andres</i>	Pool <i>Hobbs (G/SA)</i>	Dedicated Acreage <i>40</i> Acres		

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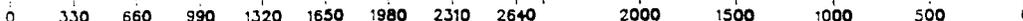
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*Larry A. Fisher*  
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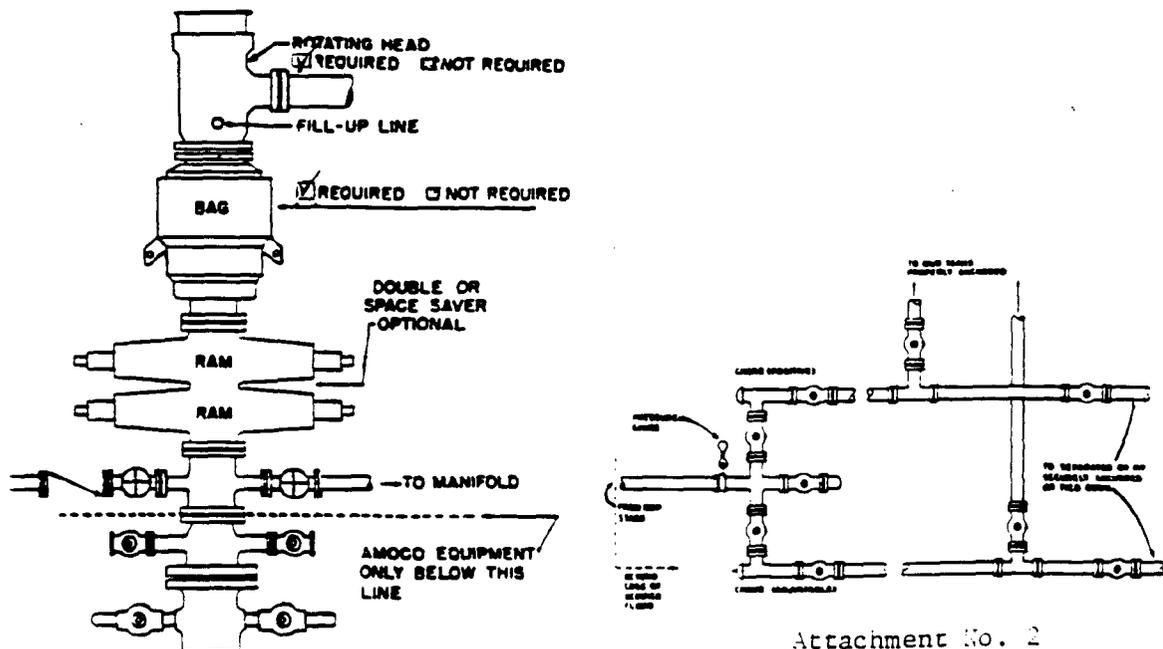


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7. Blowout preventer closing unit equipment to include accumulator capable of closing, opening and closing the bag and pipe rams with a minimum remaining pressure of 1200 psi. After closure, the remaining fluid volume will be at least 50 percent of 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

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)
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

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

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Lease Name or Unit Agreement Name  South Hobbs (GSA) Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Amoco Production Company		8. Well No. 237
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 <u>0</u> : <u>1300</u> Feet From The <u>South</u> Line and <u>1910</u> Feet From The <u>East</u> Line Section <u>4</u> Township <u>19-S</u> Range <u>38-E</u> 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.) 3610.2' 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
14-3/4"	10-3/4"	40.5# K-55	1600'	1100 sx	Surface
9-7/8"	7"	23# K-55	4350'	1300 sx	Surface

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

\* Add mud materials as necessary in attempting commercial production.  
 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.

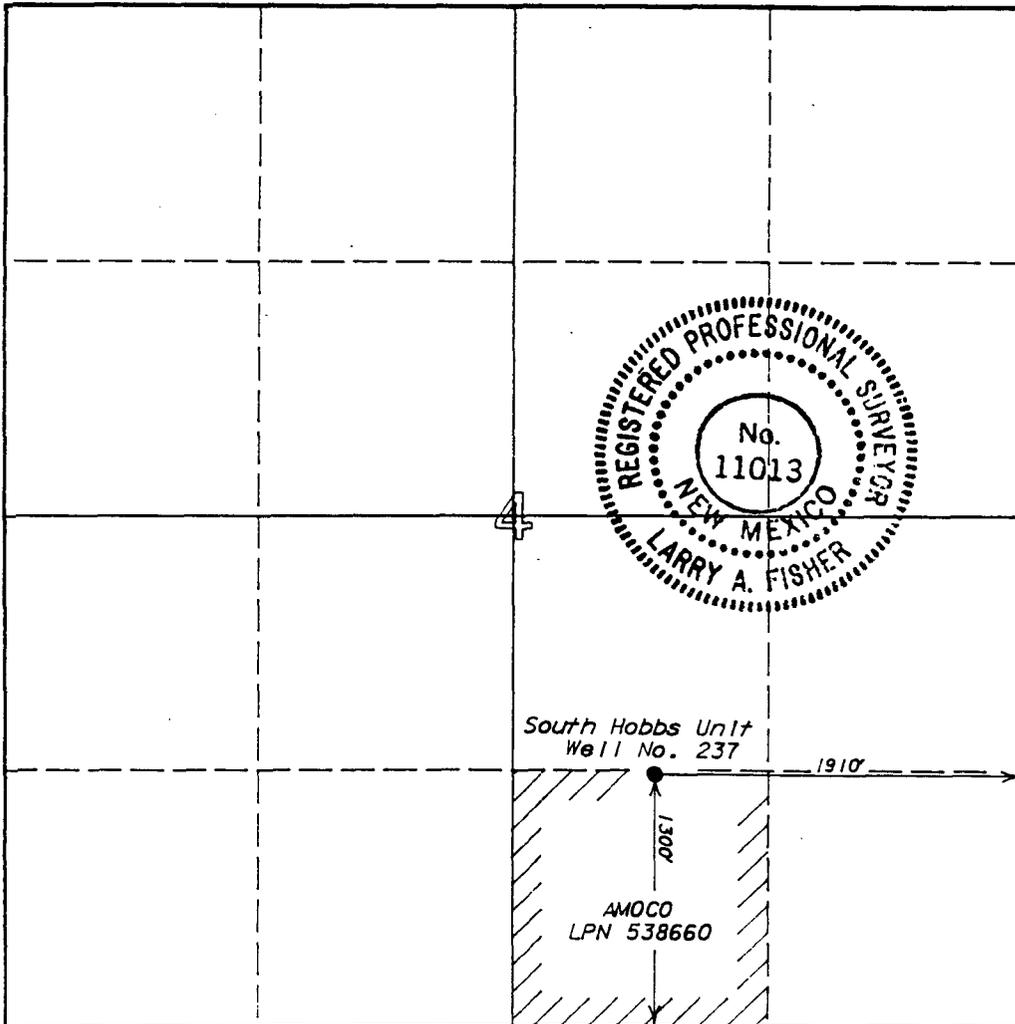
Operator <i>Amoco Production Company</i>			Lease <i>South Hobbs Unit</i>			Well No. <i>237</i>
Unit Letter <i>0</i>	Section <i>4</i>	Township <i>19 South</i>	Range <i>38 East</i>	County <i>Lea</i>		
Actual Footage Location of Well <i>1300'</i> feet from the <i>South</i> line and <i>1910'</i> feet from the <i>East</i> line						
Ground Level Elev. <i>3610.2'</i>	Producing Formation <i>San Andres</i>		Pool <i>Hobbs (G/SA)</i>		Dedicated Acreage <i>40</i> 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 communization, 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 communization, 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. Colson*  
 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*  
 Larry A. Fisher

Certificate No. *11013*

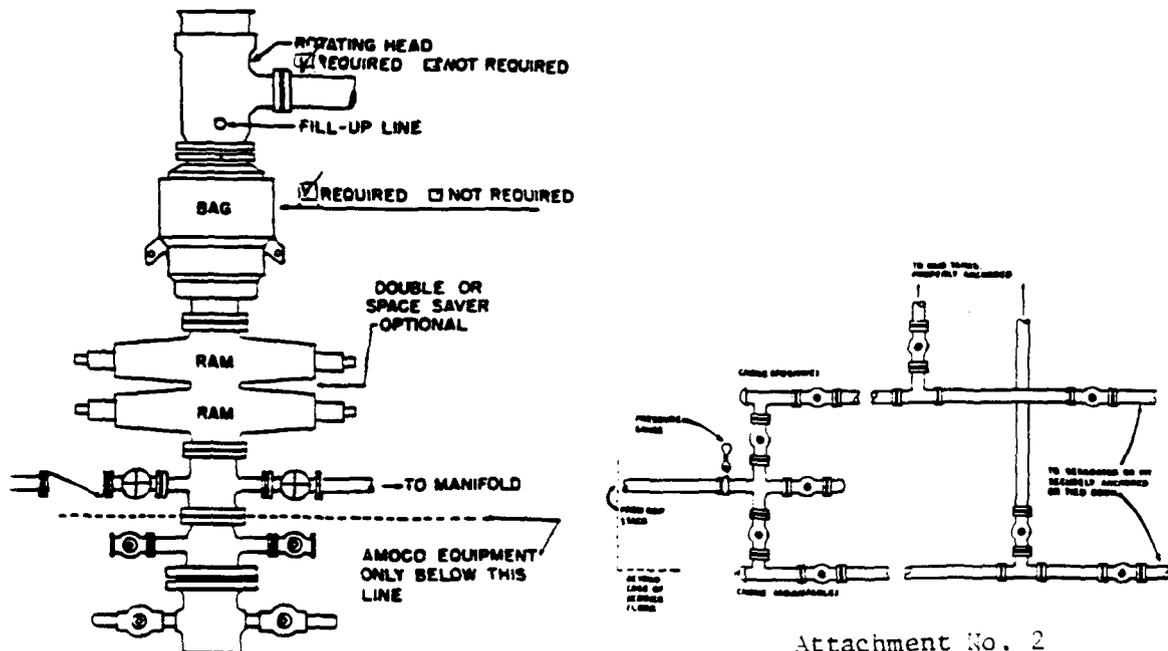


**ATTACHMENT  
3000# W.P. BOP STACK**

1. BOP's to be fluid operated. BOP's and all fittings must be in good condition and rated at 3,000 psi w.p. 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).
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**SUBSTRUCTURE HEIGHT OF RIG TO HAVE ADEQUATE CLEARANCE FOR**



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

OIL CONSERVATION DIVISION  
 RECEIVED  
 91 NOV 12 AM 10 28

11-1-91

BRUCE KING  
 GOVERNOR

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

NSL-3073

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

RE: Proposed:

MC \_\_\_\_\_  
 DHC \_\_\_\_\_  
 NSL X \_\_\_\_\_  
 NSP \_\_\_\_\_  
 SWD \_\_\_\_\_  
 WFX \_\_\_\_\_  
 PMX X \_\_\_\_\_

# 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-SA 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

/ed

