

May 13, 1985  
File: LRS-1024-WF  
Page 2

Further, Amoco has notified each offset operator, by certified mail, of this application, as evidenced by the attached copies of the certified mail receipts.

If you should require additional information regarding this matter, contact Nevin Gates at (505) 393-1781, Extension 250.

NLG/sh  
AFIN01-K

Attachments

cc: State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 1980  
Hobbs, NM 88240

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**(McMILLAN-MORROW GAS POOL - Cont'd.)**

South, Range 26 East, and all of Sections 7 and 18, Township 20 South, Range 27 East, NMPM, Eddy County, New Mexico.

(2) That temporary Special Rules and Regulations for the McMillan-Morrow Gas Pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE  
McMILLAN-MORROW GAS POOL**

**RULE 1.** Each well completed or recompleted in the McMillan-Morrow Gas Pool or in the Morrow formation within one mile thereof, and not nearer to or within the limits of another designated Morrow gas pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

**RULE 2.** Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section.

**RULE 3.** The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey, or the following facts exist and the following provisions are complied with:

(a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.

(b) The non-standard unit lies wholly within a governmental section and contains less acreage than a standard unit.

(c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

**RULE 4.** Each well shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

**RULE 5.** The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no

objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

**IT IS FURTHER ORDERED:**

(1) That the locations of all wells presently drilling to or completed in the McMillan-Morrow Gas Pool or in the Morrow formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia District Office of the Commission in writing of the name and location of the well on or before July 1, 1965.

(2) That each well presently drilling to or completed in the McMillan-Morrow Gas Pool or in the Morrow formation within one mile thereof shall receive a 320-acre allowable until a Form C-102 dedicating 640 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the McMillan-Morrow Gas Pool, at which time the operators in the subject pool may appear and show cause why the McMillan-Morrow Gas Pool should not be developed on 320-acre spacing units.

(4) That the first operator to obtain a pipeline connection for a well in the McMillan-Morrow Gas Pool shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for reopening this case.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

**DONE** at Santa Fe, New Mexico, on the day and year hereinabove designated.

**NONOMBRE-UPPER PENNSYLVANIAN POOL  
NONOMBRE-LOWER PENNSYLVANIAN POOL  
Lea County, New Mexico**

Order No. R-2929, Creating and Adopting Temporary Operating Rules for the Nonombre-Upper Pennsylvanian and Nonombre-Lower Pennsylvanian Pools, Lea County, New Mexico, June 15, 1965.

Order No. R-2929-A, July 27, 1966, makes permanent the temporary rules adopted in Order No. R-2929.

Application of Midwest Oil Corporation for the Creation of Two New Oil Pools, and for Special Pool Rules, Lea County, New Mexico.

CASE NO. 3259  
Order No. R-2929

**ORDER OF THE COMMISSION**

**BY THE COMMISSION:** This cause came on for hearing at 9 o'clock a.m. on June 9, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

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## (NONOMBRE-UPPER PENNSYLVANIAN AND NONOMBRE-LOWER PENNSYLVANIAN POOLS - Cont'd.)

NOW, on this 15th day of June, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Midwest Oil Corporation, seeks the creation of two new oil pools for Pennsylvanian production for its dually completed State "C" Well No. 1 located in Unit K of Section 32, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico, and the promulgation of special rules and regulations for said pools, including provision for 160-acre spacing units and fixed well locations.

(3) That said State "C" Well No. 1 has discovered a separate common source of supply which should be designated the Nonombre-Upper Pennsylvanian Pool; that the vertical limits of said pool should be the zone encountered in said well between 10,344 and 10,360 feet; and that the horizontal limits of said pool should be the SW/4 of Section 32, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico.

(4) That said State "C" Well No. 1 encountered a separate common source of supply which should be designated the Nonombre-Lower Pennsylvanian Pool; that the vertical limits of said pool should be the zone encountered in said well between 10,694 and 10,719 feet; and that the horizontal limits of said pool should be the SW/4 of Section 32, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico.

(5) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 160-acre spacing units should be promulgated for the Nonombre-Upper Pennsylvanian Pool and the Nonombre-Lower Pennsylvanian Pool.

(6) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pools and protect correlative rights.

(7) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pools to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(8) That this case should be reopened at an examiner hearing in July, 1966, at which time the operators in the subject pools should be prepared to appear and show cause why the Nonombre-Upper Pennsylvanian Pool and the Nonombre-Lower Pennsylvanian Pool should not be developed on 40-acre spacing units.

## IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Upper Pennsylvanian production, is hereby created and designated the Nonombre-Upper Pennsylvanian Pool with vertical limits comprising the zone encountered

in the Midwest Oil Corporation State "C" Well No. 1 located in Unit K of Section 32, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico, between the interval from 10,344 to 10,360 feet, and horizontal limits comprising the SW/4 of Section 32, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico.

(2) That a new pool in Lea County, New Mexico, classified as an oil pool for Lower Pennsylvanian production, is hereby created and designated the Nonombre-Lower Pennsylvanian Pool with vertical limits comprising the zone encountered in said State "C" Well No. 1 between 10,694 feet and 10,719 feet, and horizontal limits comprising the SW/4 of Section 32, Township 13 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That temporary Special Rules and Regulations for the Nonombre-Upper Pennsylvanian Pool and for the Nonombre-Lower Pennsylvanian Pool are hereby promulgated as follows:

## SPECIAL RULES AND REGULATIONS

FOR THE  
NONOMBRE-UPPER PENNSYLVANIAN POOL  
AND THE  
NONOMBRE-LOWER PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the Nonombre-Upper Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Upper Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

Each well completed or recompleted in the Nonombre-Lower Pennsylvanian Pool or in the Lower Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Lower Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, comprising a governmental quarter section.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of either the northeast quarter or the southwest quarter of a governmental quarter section.

RULE 5. The Secretary-Director may grant an exception to the footage requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon, provided the well will be located no nearer than 330 feet to the outer boundary of the

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(NONOMBRE-UPPER PENNSYLVANIAN AND NONOMBRE-  
LOWER PENNSYLVANIAN POOLS - Cont'd.)

unit. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

**RULE 6.** A standard proration unit (158 through 162 acres) shall be assigned a 160-acre proportional factor of 7.67 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

**IT IS FURTHER ORDERED:**

(1) That any well presently drilling to or completed in the Nonombre-Upper Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof and any well presently drilling to or completed in the Nonombre-Lower Pennsylvanian Pool or in the Lower Pennsylvanian formation within one mile thereof that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before July 1, 1965.

(2) That each well presently drilling to or completed in the Nonombre-Upper Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof and any well presently drilling to or completed in the Nonombre-Lower Pennsylvanian Pool or in the Lower Pennsylvanian formation within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 160 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in July, 1966, at which time the operators in the subject pools may appear and show cause why the Nonombre-Upper Pennsylvanian Pool and the Nonombre-Lower Pennsylvanian Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

**DONE** at Santa Fe, New Mexico, on the day and year hereinabove designated.

**TOBAC-PENNSYLVANIAN POOL**  
Chaves County, New Mexico

Order No. R-2685, Creating and Adopting Temporary Operating Rules for the Tobac-Pennsylvanian Pool, Chaves County, New Mexico, April 1, 1964.

Order No. R-2685-A, May 6, 1965, makes permanent the temporary rules adopted in Order No. R-2685.

Application of Cabot Corporation for the Creation of a New Oil Pool and for Special Pool Rules, Chaves County, New Mexico.

CASE NO. 3003  
Order No. R-2685

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on March 11, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 31st day of March, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Cabot Corporation, seeks the creation of a new oil pool for Pennsylvanian production and the promulgation of temporary special rules and regulations governing said pool, including a provision for 80-acre proration units.

(3) That the Signal State Well No. 1, located in Unit A of Section 29, Township 8 South, Range 33 East, NMPM, Chaves County, New Mexico, has discovered a separate common source of supply which should be designated the Tobac-Pennsylvanian Pool; that the vertical limits of said pool should be the Pennsylvanian formation and the horizontal limits of said pool should be the SE/4 of Section 20, the SW/4 of Section 21, the NW/4 of Section 28, and the NE/4 of Section 29, Township 8 South, Range 33 East, NMPM, Chaves County, New Mexico.

(4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Tobac-Pennsylvanian Pool.

(5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(6) That the top of the perforations in the Pennsylvanian formation in the Signal State Well No. 1 is at 9058 feet; that the special rules and regulations should therefore provide for an 80-acre proportional factor of 4.77 for allowable purposes.

State "F0" No. 3  
NW/4 Sec. 32, T-13-S, R-34-E  
Lea County, New Mexico



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OFFSET OPERATORS ADDRESSEE LIST

Yates Petroleum Corporation  
207 South Fourth St.  
Artesia, NM 88210

NLG/tjt  
APRD01-LLL

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MODEL 1-1-1

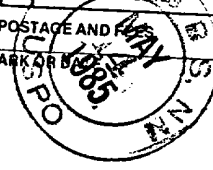
P 267 162 739

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

SENT TO		YATES PETROLEUM CORP.	
STREET AND NO.		207 SOUTH 4TH ST.	
P.O., STATE AND ZIP CODE		ARTESIA, NM 88210	
POSTAGE		\$2.22	
CERTIFIED FEE		75	
SPECIAL DELIVERY		c	
RESTRICTED DELIVERY		c	
SHOW TO WHOM AND DATE DELIVERED		c	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		c	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		c	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		70	
TOTAL POSTAGE AND FEES		\$1.67	
POSTMARK OR RECEIPT			

PS Form 3800, Apr. 1976



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O.C.M.  
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<div>3 E T 1 3 S</div>	<div>24</div> <div>Skelly</div>	<div>19</div> <div>Shell</div> <div>Shell Bell Pet</div> <div>Shell J. Rice</div>	<div>22</div> <div>Sk</div> <div>R 3 4 E</div>
<div>25</div> <div>J. M. Huber</div> <div>Ohio</div> <div>Ohio</div> <div>State</div>	<div>29</div> <div>U.S.</div> <div>U.S. Smelt</div> <div>U.S. Smelt</div> <div>State</div> <div>Smelt - State</div> <div>Corpus Christi</div>	<div>30</div> <div>Amerada</div> <div>C.W. Trainer</div> <div>Fort</div> <div>Shell</div> <div>Shell Bell Pet</div> <div>Shell J. Rice</div>	<div>27</div> <div>J. Bojia Jr.</div> <div>Phillips</div> <div>Denny</div> <div>Phillips</div> <div>Phillips Dye</div> <div>11000</div> <div>Dye</div>
<div>26</div> <div>Texaco</div> <div>State</div>	<div>31</div> <div>Sun</div> <div>State</div> <div>Midwest</div> <div>20 Po#2</div> <div>L. Penn.</div> <div>Harris St.</div> <div>Midwest</div> <div>20 Po#3</div> <div>30 Po#1</div> <div>U. Penn.</div> <div>C#1</div> <div>U. L. Penn.</div>	<div>32</div> <div>Midwest</div> <div>20 Po#2</div> <div>L. Penn.</div> <div>Harris St.</div> <div>Midwest</div> <div>20 Po#3</div> <div>30 Po#1</div> <div>U. Penn.</div> <div>C#1</div> <div>U. L. Penn.</div>	<div>34</div> <div>Sun</div> <div>State</div> <div>NONOMBRE</div>
<div>27</div> <div>State</div>	<div>36</div> <div>Sun</div> <div>State</div>	<div>37</div> <div>Sun</div> <div>State</div> <div>R. Lowe</div> <div>So. Min. - Lowe</div> <div>Midwest</div> <div>State</div>	<div>3</div> <div>Kern CSL</div> <div>Superior</div> <div>State</div> <div>Sinclair</div>
<div>12</div>	<div>7</div>	<div>8</div>	<div>9</div> <div>10</div>

**MEXICO OIL CONSERVATION COMMISSION**  
**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122  
 Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 4-9-81	
Company AMOCO PRODUCTION COMPANY				Connection WARREN PETROLEUM COMPANY		
Pool WILDCAT				Formation MORROW		Unit
Completion Date 10/2/80		Total Depth 14438.		Plug Back TD 12750.		Elevation 4193.
Form or Lease Name STATE FO						Well No. 3
Csg. Size 5.500	Wt. 17.0	d 4.892	Set At 13015.	Perforations: From 12230. To 12565.		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 12141.	Perforations: From 0. To 0.		Unit    Sec.    Twp.    Rge. F 32 13S 34E
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At 12103.		County LEA
Producing Thru TUBING		Reservoir Temp. °F 206. @ 12398.		Mean Annual Temp. °F 60.0		Baro. Press. - P <sub>a</sub> 13.2
State NEW MEXICO						
L 12398.	H 12398.	G <sub>g</sub> 0.792	% CO <sub>2</sub> 0.59	% N <sub>2</sub> 2.49	% H <sub>2</sub> S 0.	Prover 0.
Meter Run 4.0		Taps FLANGE				

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							2085.	86.			46.5
1.	4.00 X 2.500			28.	6.2	78.	1972.	79.	0.	0.	1.0
2.	4.00 X 2.500			35.	17.6	82.	1930.	80.	0.	0.	0.7
3.	4.00 X 2.500			38.	30.5	79.	1845.	84.	0.	0.	1.0
4.	4.00 X 2.500			39.	38.4	75.	1779.	85.	0.	0.	0.7
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd
1	32.71	16.10	41.5	0.9831	1.1240	1.0051	585.
2	32.71	29.16	48.2	0.9795	1.1240	1.0058	1056.
3	32.71	39.32	50.7	0.9822	1.1240	1.0062	1429.
4	32.71	44.66	52.0	0.9859	1.1240	1.0065	1630.
5							

NO.	P <sub>t</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.					0.	0.	0.792	XXXXXXX	661.	411.
2.	0.06	538.	1.31	0.990				XXXXX	661.	411.
3.	0.07	542.	1.32	0.989					P.S.I.A.	P.S.I.A.
4.	0.08	539.	1.31	0.988						
5.	0.08	535.	1.30	0.987						

P <sub>c</sub> 2049.5    P <sub>c</sub> <sup>2</sup> 4200.			
NO.	P <sub>t</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>
1	3941.	1953.	3815.
2	3776.	1917.	3674.
3	3453.	1834.	3362.
4	3212.	1772.	3140.
5			

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 3.9632$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6458.$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.9632$

Absolute Open Flow	6458.	Mcf/d @ 15.025	Angle of Slope @	45.0	Slope, n	1.000
Remarks:						

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	John West Eng.	Debbie Etheridge	L. W. Sheppard

# SUGGESTED FIELD DATA SHEET (Not Required To File)

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 11-7-81		Lease No. or Serial No.	
Company Amoco Production Co. - Western Petroleum Co.		Connection		Allottee	
Field Wild Cat		Reservoir Morrow		Location	
Completion Date		Total Depth 14438		Plug Block ID 12750	
Casing Size 5 1/2		Casing Weight 20 #		Casing Set At 13015'	
Perforations: From 13230		Perforations: To 13565		Elevation 4152.6'	
Well No. 3		Farm or Lease Name State "FO"		Sec. 32	
Twp.-Bk. 13S		Rge. 34E		County or Parish Lea County	
Type Completion (Describe) Single		Packer Set At 12,103		State New Mexico	
Producing Tests Tubing		Reservoir Temp. F 206° @ 13,598'		Mean Annual Temp. F 60°	
Baro. Press. - P <sub>a</sub> 13.2		% CO <sub>2</sub> .589		% H <sub>2</sub> S 2.487	
Prover 4" Flange		Meter run			

DATE	ELAP. TIME	Wellhead Working Pressure			METER OR PROVER				REMARKS
		Tbg. Psig.	Csg. Psig.	Temp. F	Pressure Psig.	Diff.	Temp. F	Orifice	
9:40		2085		86°			84°		Build up PSI
									2.50 Orifice
10:20		2032		75°			80°		Begin Test
10:35		2007		76°			76°		551 McF/Day
10:50		1986		77°			78°		
11:05		1980		79°			78°		
11:20		1972		79°			78°		End Rate I
11:35		1929		80°			80°		
11:50		1924		80°			81°		1048 McF/Day
12:05		1930		80°			80°		End Rate II
12:20		1904		81°	31.50		80°		
12:35		1874		82°	31.50		80°		
12:50		1854		83°	31.50		80°		1417 McF/Day
1:05		1845		84°	31.50		79°		End Rate III
1:20		1797		84°	32.75		77°		
1:35		1772		84°	32.75		75°		1615 McF/Day
1:50		1779		85°	32.75		75°		End Rate IV
									Fluid Test



# NEW-TEX LAB

P. O. BOX 1161  
HOBBS, N.M. 88240

No. 4766  
Run No. \_\_\_\_\_  
Date of Run 4-10-81  
Date Secured 4-9-81

## CERTIFICATE OF ANALYSIS

Sample of Amoco Production State "FO"  
Secured from West Engineering  
412 N. Dal Paso  
Hobbs, NM 88240  
Secured by \_\_\_\_\_  
Time \_\_\_\_\_ Date \_\_\_\_\_  
Sampling conditions \_\_\_\_\_ Press \_\_\_\_\_  
Temp. \_\_\_\_\_

## FRACTIONAL ANALYSIS

### Percentage Composition

	MOL %	LIQ. %	G.P.M.
Carbon Dioxide	.589		
Nitrogen	2.487		
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane	75.395		
Propane	10.138	2.704	
Isobutane	4.533	1.244	
Normal Butane	.802	.262	
Isobutane	2.621	.824	
Pentanes			
n-Pentane	.668	.244	
Isopentane	.656	.237	
Hexanes	.574	.235	
Heptanes	Plus 1.537	.707	
Octanes			
TOTAL	100.000	6.452	

Calc. Sp. Gr. 0.7916  
Calc. A.P.I. \_\_\_\_\_  
Calc. Vapor Press. \_\_\_\_\_ PSIA  
Sp. Gr. \_\_\_\_\_  
Mol. Wt. 23.08

### LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M. 1.244  
Butanes Calc. G.P.M. 1.086  
Pentanes Plus. G.P.M. 1.423  
Ethane Calc. G.P.M. 2.704  
RVP Gasoline G.P.M. \_\_\_\_\_

B.T.U. Cu. Ft. @ 14.696 P.S.I.A.  
Dry Basis 1332  
Wet Basis 1309

Sulfur Analysis by Titration  
Gr./100 Cu. Ft.  
Hydrogen Sulfide  
Mercaptans  
Sulfides  
Residual Sulfur  
Total Sulfur

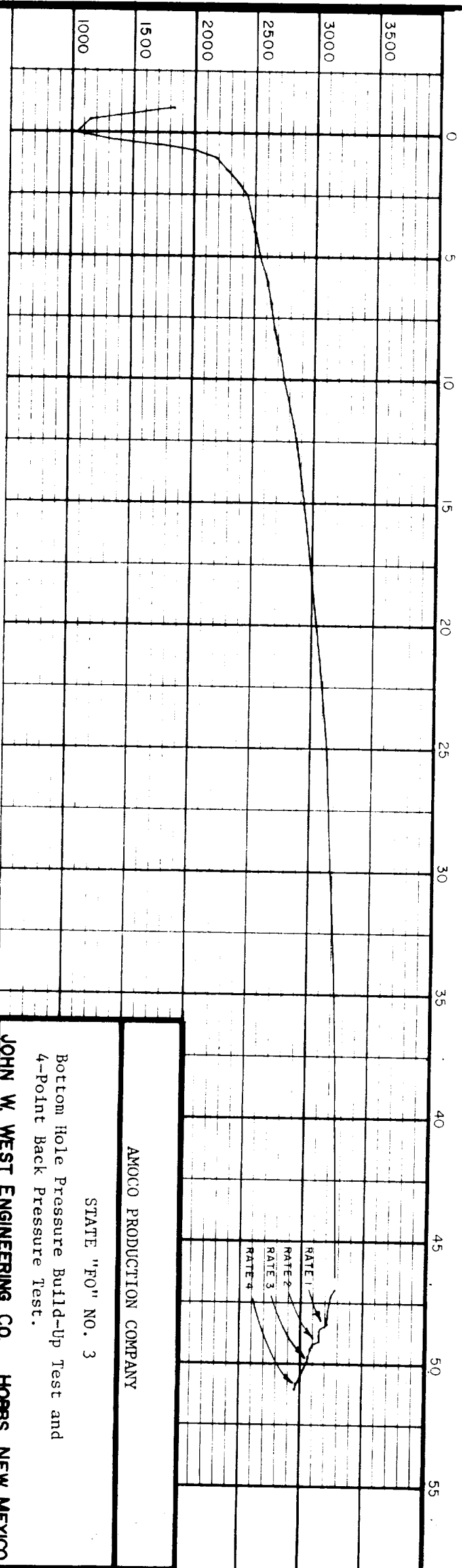
Anal. by Deane Simpson Checked by \_\_\_\_\_ Approved by Deane Simpson

### Additional Data and Remarks

TEST DATE: APRIL 7 to 9, 1981  
TEST DEPTH: 12398 FEET

ELEMENT NO: 34911  
RANGE: 0-6050 psi  
CLOCK NO: E2145  
RANGE: 0-72 Hours

Note: See attached sheet for tabulations of Pressures and Times.



AMOCO PRODUCTION COMPANY

STATE "FO" NO. 3

Bottom Hole Pressure Build-Up Test and  
4-Point Back Pressure Test.

JOHN W. WEST ENGINEERING CO. HOBBBS, NEW MEXICO

Date: 4-13-81

Drawn by: MCT

Scale: As Shown

JOHN W. WEST ENGINEERING COMPANY  
412 NORTH DAL PASO, HOBBS, NEW MEXICO

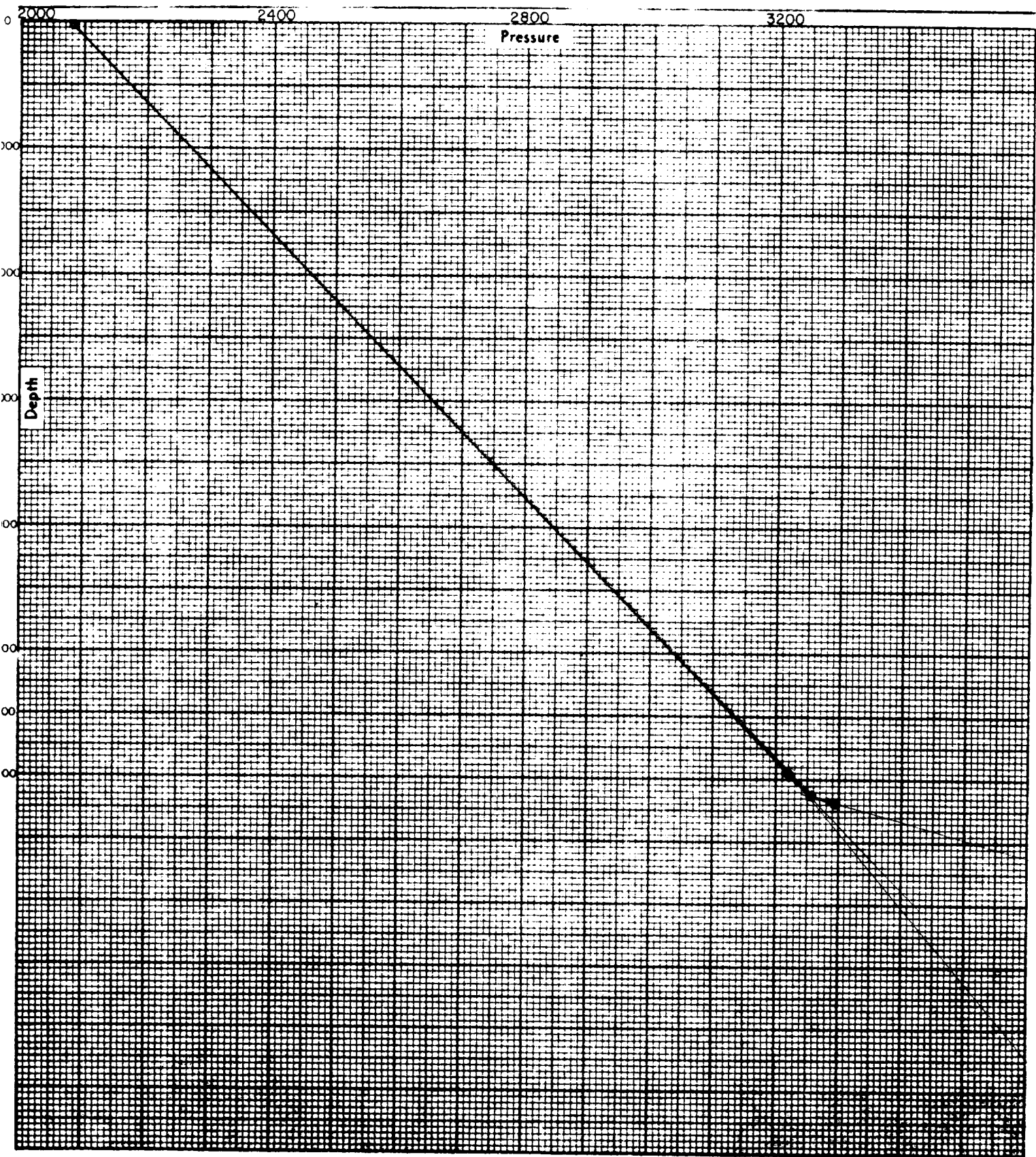
TELEPHONES 393-3942  
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR AMOCO PRODUCTION COMPANY  
LEASE STATE "FO"  
WELL NO. 3  
FIELD \_\_\_\_\_  
DATE 4-7-81 TIME 11:00 A.M.

DEPTH	PRESSURE	GRADIENT
000	2085	
11898	3220	.095
12298	3257	.093
12398	3294	.370

STATUS Shut-In TEST DEPTH 12398'  
TIME SI \_\_\_\_\_ LAST TEST DATE \_\_\_\_\_  
CAS PRES. \_\_\_\_\_ BHP LAST TEST \_\_\_\_\_  
TUB PRES. 2085 BHP CHANGE \_\_\_\_\_  
ELEV. \_\_\_\_\_ FLUID TOP \_\_\_\_\_  
DATUM \_\_\_\_\_ WATER TOP \_\_\_\_\_  
TEMP \_\_\_\_\_ RUN BY M.R.  
CLOCK NO E2145 GAUGE NO. 12434  
ELEMENT NO. 34911 (0-6050 psi)



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TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104  
Supersedes Old C-104 and C-11  
Effective 1-1-65

I. Operator  
Amoco Production Company  
Address  
P. O. Box 68 Hobbs, NM 88240  
Reason(s) for filing (Check proper box)  
New Well ☐ Change in Transporter of:  
Recompletion ☐ Oil ☐ Dry Gas ☐  
Change in Ownership ☐ Casinghead Gas ☐ Condensate ☐  
Other (Please explain) Request temporary permission to commingle liquid production with liquid production from the State FO #2 Nonombre Penn.

If change of ownership give name and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name State FO	Well No. 3	Pool Name, Including Formation Nonombre Atoka-Morrow Gas	Kind of Lease State, Federal or Fee State	Lease No. OG-5343
Location Unit Letter F ; 2080 Feet From The North Line and 1980 Feet From The West Line of Section 32 Township 13-S Range 34-E , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> Amoco Pipeline Company	Address (Give address to which approved copy of this form is to be sent) P. O. Box 6110-A, Chicago, IL 60680			
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Warren Petroleum	Address (Give address to which approved copy of this form is to be sent) P. O. Box 1689, Lovington, NM 88260			
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 32	Twp. 13	Rge. 34
Is gas actually connected?		When Yes 2-19-81		

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X						
Date Spudded 11-17-66	Date Compl. Ready to Prod. 10-2-80		Total Depth 14438'		P.B.T.D. 12750			
Elevations (DF, RKB, RT, GR, etc.) 4157.6'	Name of Producing Formation Atoka		Top Oil/Gas Pay 12230'		Tubing Depth 12141'			
Perforations 12230'-12565' w/2 JSPF					Depth Casing Shoe			
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
17-1/2"	13-3/8"		322'		300			
11"	8-5/8"		4275'		450			
7-7/8"	5-1/2"		13010'		818			

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbl's.	Water - Bbl's.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D 2019	Length of Test 24 hr.	Bbls. Condensate/MMCF 35/1	Gravity of Condensate
Testing Method (pitot, back pr.) Flowing	Tubing Pressure (Shut-in) 225	Casing Pressure (Shut-in)	Choke Size 27/64"

VI. CERTIFICATE OF COMPLIANCE 0+4-NMOCD, H  
1-Hou 1-Susp 1-LBG

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

  
(Signature)

Assist. Admin. Analyst

(Title)

3-30-81

(Date)

OIL CONSERVATION COMMISSION

APPROVED \_\_\_\_\_, 19\_\_\_\_  
BY \_\_\_\_\_  
TITLE \_\_\_\_\_  
Orig. Signed By  
Jerry Sexton  
Dist. L. Supv.

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

## OIL CONSERVATION DIVISION

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. OF COPIES RECEIVED	
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LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
OG-5343	

10. TYPE OF WELL		OIL WELL <input type="checkbox"/>		GAS WELL <input type="checkbox"/>		DRY <input type="checkbox"/>		OTHER <input type="checkbox"/>	
b. TYPE OF COMPLETION		NEW WELL <input type="checkbox"/>		WORK OVER <input type="checkbox"/>		DEEPEN <input type="checkbox"/>		PLUG BACK <input type="checkbox"/>	
								DIFF. RESVR. <input type="checkbox"/>	
								OTHER <input type="checkbox"/>	
2. Name of Operator									
Amoco Production Company									
3. Address of Operator									
P. O. Box 68 Hobbs, NM 88240									
4. Location of Well									
UNIT LETTER <u>F</u> LOCATED <u>2080</u> FEET FROM THE <u>North</u> LINE AND <u>1980</u> FEET FROM <u>West</u> LINE OF SEC. <u>32</u> TWP. <u>13-S</u> RGE. <u>34-E</u> NMPM <u>Lea</u>									
15. Date Spudded		16. Date T.D. Reached		17. Date Compl. (Ready to Prod.)		18. Elevations (DF, RKB, RT, GR, etc.)		19. Elev. Casinghead	
11-17-66		1-31-67		10-2-80		4157.6 GL			
20. Total Depth		21. Plug Back T.D.		22. If Multiple Compl., How Many		23. Intervals Drilled By		Rotary Tools	
14338'		12750'				0-TD		Cable Tools	
24. Producing Interval(s), of this completion - Top Bottom, Name								25. Was Directional Survey Made	
12230'-12565' Morrow								No	
26. Type Electric and Other Logs Run								27. Was Well Cored	
Comp neutron form density; Dual laterolog micro SFL								No	

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
Existing Casing Not Altered					

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
31. Perforation Record (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
12230'-12565' w/2 JSPF				DEPTH INTERVAL			
				AMOUNT AND KIND MATERIAL USED			
				12230'-12565'			
				5200 gal. 7-1/2% MS acid			

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
10-2-80		Flowing				Shut-in	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
10-2-80	24	27/64"		0	2019	45	
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
500#			0	2019	45		

34. Disposition of Gas (Sold, used for fuel, vented, etc.)		Test Witnessed By	
To be sold			

35. List of Attachments	

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Benton Green TITLE Assist. Admin. Analyst DATE 10-28-80

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

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OIL CONSERVATION DIV

OIL CONSERVATION COMMISSION

BOX 1980

HOBBS, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE March 25, 1981

This is to notify the Oil Conservation Commission that connection for the

purchase of gas from the Amoco Production Company  
Operator

State F 0 3 F, Lea 32-13-34  
Lease, Well No. and Unit County S-T-R

Morrow, Warren Petroleum Company  
Pool Name of Purchaser

was made on February 19, 1981.  
Date

Warren Petroleum  
Purchaser

K.W. Mapp  
Representative

Field Supervisor  
Title

cc: To Operator  
Oil Conservation Commission - Santa Fe