

15.093-00040-0000

non-protected  
10-9-85

STATE OF KANSAS - CORPORATION COMMISSION  
PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division

TYRE TEST: Initial Annual Workover Reclassification TEST DATE:

Company: Amoco Prod. Co. Lease: G.O. Patterson Well No.: 1

County: Kearny Location: SE 1/4 Section: 23 Township: 23 22 Range: 38 Acres:

Field: Patterson Reservoir: Morrow Pipeline Connection: NONE

Completion Date: 8-13-81 Type Completion (Describe): Oil Well Plug Back T.D.: 4784 Packer Set At: NONE

Production Method: Pumping Type Fluid Production: Oil/wtr API Gravity of Liquid/Oil: 38.4

Flowing Casing Size	Weight	I.D.	Set At	Perforations	To
<u>7"</u>	<u>24#</u>	<u>6.366</u>	<u>4830</u>	<u>4740</u>	<u>4752 1/2</u>
Tubing Size	Weight	I.D.	Set At	Perforations	To
<u>2 7/8"</u>	<u>6.5#</u>	<u>2.441</u>	<u>4743</u>		

Pretest: Starting Date 8-13-85 Time 8:00 A.M. Ending Date 8-14-85 Time 8:00 AM Duration Hrs. 24

Test: Starting Date 8-14-85 Time 8:00 A.M. Ending Date 8-15-85 Time 8:00 AM Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

Casing:	Tubing:	Producing Wellhead Pressure			Separator Pressure			Choke Size			
		Bbls./In.	Tank	Starting Gauge	Ending Gauge	Net Prod. Bbls.	Water	Oil			
		Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels		
Pretest:		<u>500</u>	<u>143672</u>	<u>3</u>	<u>6</u>	<u>116</u>	<u>6</u>	<u>3</u>	<u>207</u>	<u>103</u>	<u>91</u>
Test:		<u>500</u>	<u>143672</u>	<u>6</u>	<u>3</u>	<u>207</u>	<u>9</u>	<u>0 1/2</u>	<u>301</u>	<u>105</u>	<u>94</u>
Test:											

GAS PRODUCTION OBSERVED DATA

Pipe Taps:	Flange Taps:	Orifice	Differential:			Static Pressure:		
			Meter-Tester	Pressure	Diff. Press.	Gravity	Flowing	
Measuring Device	Run-Prover-Tester	Orifice Size	Meter-Tester	Pressure	Diff. Press.	Gravity	Flowing	
Orifice Meter	Tester Size	Size	In. Water	In. Merc.	Psig or (Pd)	(hw) or (hd)	Gas (Gg)	Temp. (t)
Critical Flow Prover								
Orifice Well Tester								

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psla) (Pm)	Extension $\sqrt{hw \times Pm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)

Gas Prod. MCFD: NONE Oil Prod. Bbls./Day: 94 Gas/Oil Ratio (GOR) = NA Cubic Ft. per Bbl.

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the        day of        1985

For Offset Operator: James Papp For State: Lynn D. Mearns For Company: Amoco Prod. Co.

STATE CORPORATION COMMISSION

SEP 3 1985 9-3-85

15-093-00040-0000

STATE OF KANSAS - CORPORATION COMMISSION  
 PRODUCTION TEST & GOR REPORT

JUL 1 1989 Form C-5 Revised

Conservation Division

TYPE TEST: Initial (Annual) Workover Reclassification TEST DATE: 6-22-89

Company: Amoco Prod. Co. G.O. Patterson Lease Well No. 1

County: Kearny Location: SE 1/4 Section: 23 Township: 23 22 Range: 38 Acres: 1

Field: Patterson Reservoir: Morrow Pipeline Connection: N/A

Completion Date: 8-13-41 Type Completion (Describe): Oil well Plug Back T.D.: 4784 Packer Set At: N/A

Production Method: Pumping Gas Lift Type Fluid Production: Oil/Water API Gravity of Liquid/Oil: 37.5

Casing Size	Weight	I.D.	Set At	Perforations	To
7"	24#	6.366	4830	4740	4752.50
Tubing Size	Weight	I.D.	Set At	Perforations	To
2 7/8"	6.5#	2.441	4743		

Pretest: Starting Date 6-20-89 Time 10:00 A.M. Ending Date 6-21-89 Time 10:00 A.M. Duration Hrs. 24

Test: Starting Date 6-21-89 Time 10:00 A.M. Ending Date 6-22-89 Time 10:00 A.M. Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure			Separator Pressure			Choke Size				
Casing:	Tubing:									
Bbls./In.	Tank	Starting Gauge			Ending Gauge			Net Prod. Bbls.		
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:	500	143672	3	10	127	4	9 1/2	159	207	32
Test:	500	143672	4	9 1/2	159	5	8 3/4	190	212	31
Test:										

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections				Orifice Meter Range				
Pipe Taps:	Flange Taps:		Differential:		Static Pressure:			
Measuring Device	Run-Prover-Tester Size	Orifice Size	Meter-Prover-Tester Pressure			Diff. Press.	Gravity	Flowing
			In. Water	In. Merc.	Psig or (Pd)	(hw) or (hd)	Gas (Gg)	Temp. (t)
Orifice Meter						RECEIVED		
Critical Flow Prover						STATE CORPORATION COMMISSION		
Orifice Well Tester						JUL - 7 1989	7-7-89	
						CONSERVATION DIVISION		
						Wichita, Kansas		

GAS FLOW RATE CALCULATIONS (R)

Coeff. MCFD (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psia)(Pm)	Extension $\sqrt{hw \times Pm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)
Gas Prod. MCFD		Oil Prod. Bbls./Day: 32		Gas/Oil Ratio (GOR) - N/A		Cubic Ft. per Bbl.
Flow Rate (R): N/A						

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 22 day of June 1989

James R. Ray For State  
 Zul. Mangala For Company

For Offset Operator

STATE OF KANSAS - CORPORATION COMMISSION  
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division

TYPE TEST: Initial Annual Workover Reclassification TEST DATE:

Company: Amoco Production Lease: G.O. Patterson Well No.: 1

County: Kearny Location: SE 1/4 Section: 23 Township: 23 22 38 Acres:

Field: Patterson Reservoir: Morrow Pipeline Connection: NONE

Completion Date: 8-13-41 Type Completion(Describe): Oil Well Plug Back T.D.: 4784 Packer Set At: NONE

Production Method: Pumping Type Fluid Production: Oil/Water API Gravity of Liquid/Oil: 36

Flowing Casing Size	Weight	I.D.	Set At	Perforations	To
<u>7"</u>	<u>24#</u>	<u>6.366</u>	<u>4830</u>	<u>4740</u>	<u>4752.5</u>
Tubing Size	Weight	I.D.	Set At	Perforations	To
<u>2 3/8"</u>	<u>6.5#</u>	<u>2.441</u>	<u>4746</u>		

Pretest: Starting Date: 6-2-88 Time: 9:30 A.M. Ending Date: 6-3-88 Time: 9:30 A.M. Duration Hrs.: 24

Test: Starting Date: 6-3-88 Time: 9:30 A.M. Ending Date: 6-4-88 Time: 9:30 A.M. Duration Hrs.: 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure	Separator Pressure	Choke Size
Casing: _____	Tubing: _____	_____

Bbls./In.	Tank		Starting Gauge			Ending Gauge			Net Prod. Bbls.	
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:	<u>500</u>	<u>143672</u>	<u>4</u>	<u>1</u>	<u>135</u>	<u>5</u>	<u>2</u>	<u>171</u>	<u>270</u>	<u>36</u>
Test:	<u>500</u>	<u>143672</u>	<u>5</u>	<u>2</u>	<u>171</u>	<u>6</u>	<u>4</u>	<u>210</u>	<u>285</u>	<u>38</u>
Test:										

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections				Orifice Meter Range					
Pipe Taps:	Flange Taps:	Differential:	Static Pressure:						
Measuring Device	Run-Prover-Tester Size	Orifice Size	Meter-Prover-Tester Pressure	In.Water	In.Merc.	Paig or (Pd)	Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
Orifice Meter									
Critical Flow Prover									
Orifice Well Tester									

RECEIVED  
 STATE CORPORATION COMMISSION  
 JUL 28 1988

7-28-88

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psia)	Extension (Pm)	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Chart Factor (Fpv)	Chart Factor (Fd)

Gas Prod. MCFD: NONE Oil Prod. Bbls./Day: 37 Gas/Oil Ratio (GOR) - N/A Cubic Ft. per Bbl.

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 4 day of June 1988

For Offset Operator: \_\_\_\_\_ For State: \_\_\_\_\_ For Company: Lynn W. [Signature]

NON PRORATED

15-093-00040-0000

# PRODUCTIVITY TEST BARREL TEST

\* RULE 82-3-202 of the General Rules and Regulations of the State of Kansas:

Productivities, when to be taken. (f) Pool tests. Pool tests shall be taken as ordered by the Commission at twelve month intervals thereafter.

COUNTY Kerney

EFFECTIVE DATE \_\_\_\_\_  
(Office use only)

FIELD Patterson

PRODUCING FORMATION Marrow

PURCHASER Matarov

OPERATOR Amaco Production Co

ADDRESS \_\_\_\_\_  
(if new operator)

LEASE L Q Patterson

* WELL NO.	SEC.	TWP.	RGE.	BOPD	WATER %	DATE TAKEN.
1. <u>1</u>	<u>23</u>	<u>23<sup>22</sup></u>	<u>38</u>	<u>91</u>	<u>18</u>	<u>8/15/85</u>
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

FIELDMAN'S REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WITNESSES:

James Rapp  
FOR STATE

Lynn D. Mangel  
FOR OPERATOR

FOR OFFSET

\*NOTE: IF THE WELL IS TEMPORARILY ABANDONED AT TIME OF TEST, BUT AT A LATER DATE IS PUT ON PUMP, PLEASE HAVE IT TESTED AT THAT TIME. THIS PREVENTS OVERPRODUCTION ON THE TABLE "B" REPORT. TO SCHEDULE A TEST CALL: DISTRICT OFFICE #6, 1014 CODY, HAYS, KANSAS 67601 (913) 628-1200.

## STATE CORPORATION COMMISSION OF KANSAS. CONSERVATION DIVISION

RECEIVED  
STATE CORPORATION COMMISSION

AUG 28 1985

CONSERVATION DIVISION  
Wichita, Kansas

R

PRODUCTIVITY TEST  
BARREL TEST

15-093-00040-0000

OPERATOR Amoco Prod Co LOCATION OF WELL SE 1/4  
 LEASE B.O. Patterson OF SEC. 23 T 25 R 38  
 WELL NO. 1 COUNTY Herny  
 FIELD Patterson PRODUCING FORMATION Morrow  
 Date Taken 7-9-92 Date Effective 7-9-92  
 Well Depth 4784 Top Prod. Form 4740 Perfs 4752  
 Casing: Size 7" Wt. 24 Depth 4740 Acid \_\_\_\_\_  
 Tubing: Size 2 7/8" Depth of Perfs 4743 Gravity 39.4  
 Pump: Type Frothing Barrel Bore Purchaser Rock  
 Well Status Pumping  
 Pumping, flowing, etc.

TEST DATA

Permanent \_\_\_\_\_ Field \_\_\_\_\_ Special \_\_\_\_\_  
 Flowing \_\_\_\_\_ Swabbing \_\_\_\_\_ Pumping

STATUS BEFORE TEST:

PRODUCED 24 HOURS  
 SHUT IN \_\_\_\_\_ HOURS  
 DURATION OF TEST 24 HOURS \_\_\_\_\_ MINUTES \_\_\_\_\_ SECONDS  
 GAUGES: WATER 13" INCHES 93 PERCENTAGE  
 OIL 9.4" INCHES 7 PERCENTAGE  
 GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) \_\_\_\_\_  
 WATER PRODUCTION RATE (BARRELS PER DAY) 175  
 OIL PRODUCTION RATE (BARRELS PER DAY) 16 PRODUCTIVITY  
 STROKES PER MINUTE 8.6  
 LENGTH OF STROKE 108 INCHES  
 REGULAR PRODUCING SCHEDULE \_\_\_\_\_ HOURS PER DAY.  
 COMMENTS \_\_\_\_\_

WITNESSES:

FOR STATE James R Kapp FOR OPERATOR Gary B. Williams FOR OFFSET \_\_\_\_\_

15-093-00040-0000 *N Hemmen*

STATE OF KANSAS - CORPORATION COMMISSION  
 PRODUCTION TEST & GOR REPORT

Conservation Division

Form C-5 Revised

TYPE TEST: Initial (Annual) Workover Reclassification TEST DATE: 6-20-90

Company *Amoco Prod Company* Lease *Gate O. Patterson* Well No. *1*

County *KEARNY* Location *SE 1/4* Section *23* Township *23 S* Range *38 W* Acres

Field *Patterson* Reservoir *Marion* Pipeline Connection *NA*

Completion Date *8-13-41* Type Completion (Describe) *oil well* Plug Back T.D. *4784* Packer Set At *4700*

Production Method: Type Fluid Production *oil well* API Gravity of Liquid/Oil *47.84*

Flowing  Pumping  Gas Lift

Casing Size *5 1/2"* Weight *14#* I.D. *5.01* Set At *4784* Perforations *5690* To

Tubing Size *2 7/8"* Weight *6.5#* I.D. *2.44* Set At *4740* Perforations *4740 - 4752 1/2* To

Pretest: Starting Date *6-18-90* Time *11:00 AM* Ending Date *6-19-90* Time *11:00 AM* Duration Hrs. *24*

Test: Starting Date *6-19-90* Time *11:00 AM* Ending Date *6-20-90* Time *11:00 AM* Duration Hrs. *24*

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure			Separator Pressure			Choke Size				
Casing:			Tubing:							
Bbls./In.	Tank	Starting Gauge			Ending Gauge			Net Prod. Bbls.		
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:	<i>300</i>	<i>170929</i>	<i>4</i>	<i>9</i>	<i>95</i>	<i>8</i>	<i>1</i>	<i>112</i>	<i>112</i>	<i>17</i>
Test:	<i>300</i>	<i>170929</i>	<i>8</i>	<i>1</i>	<i>112</i>	<i>9</i>	<i>3</i>	<i>129</i>	<i>112</i>	<i>17</i>
Test:										

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections			Orifice Meter Range					
Pipe Taps:	Flange Taps:		Differential:			Static Pressure:		
Measuring Device	Run-Prover-Tester Size	Orifice Size	Meter-Prover In. Water	Tester In. Merc.	Pressure Psig or (Pd)	Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
Orifice Meter								
Critical Flow Prover								
Orifice Well Tester								

GAS FLOW RATE CALCULATIONS (R)

Coef. (Fb)	MCFD (Fp)	Meter-Prover Press. (Pm)	Extension $\sqrt{hw \times Pm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)

Gas Prod. MCFD *NA* Oil Prod. Bbls./Day: *17* Gas/Oil Ratio (GOR) = *NA* Cubic Ft. per Bbl.

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 20 day of June 19 90

For Offset Operator *James Pratt* For State *SEP 13 1990* For Company *9-13-90*

CONSERVATION DIVISION  
 TOPEKA, KANSAS

STATE OF KANSAS - CORPORATION COMMISSION.  
PRODUCTION TEST & GOR REPORT

Conservation Division AUG 1 1988 Form C-5 Revised

TYPE TEST: Initial Annual Workover Reclassification TEST DATE:

Company Lease Well No.

Apoco Production G.O. Patterson 1

County Location Section Township Range Acres

Kearny SE 1/4 23 23 22 38

Field Reservoir Pipeline Connection

Patterson Morrow None

Completion Date Type Completion(Describe) Plug Back T.D. Packer Set At

8.13.41 Oil Well 4784 None

Production Method: Type Fluid Production API Gravity of Liquid/Oil

Flowing Pumping Gas Lift Oil/Water 36

Casing Size Weight I.D. Set At Perforations To

7" 24# 6.366 4830 4740 4752.5

Tubing Size Weight I.D. Set At Perforations To

2 3/8" 6.5# 2.441 4746

Pretest: Duration Hrs.

Starting Date 6-2-88 Time 9:30 A.M. Ending Date 6-3-88 Time 9:30 A.M. 24

Test: Duration Hrs.

Starting Date 6-3-88 Time 9:30 A.M. Ending Date 6-4-88 Time 9:30 A.M. 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure Separator Pressure Choke Size

Casing: Tubing:

Bbls./In.	Tank		Starting Gauge			Ending Gauge			Net Prod. Bbls.	
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:	500	143672	4	1	135	5	2	171	270	36
Test:	500	143672	5	2	171	6	4	210	285	38
Test:										

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections Orifice Meter Range

Pipe Taps: Flange Taps: Differential: Static Pressure:

Measuring Device	Run-Prover-Tester Size	Orifice Meter	Meter-Prover-Tester Pressure			Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
			In. Water	In. Merc.	Psig or (Pd)			
Orifice Meter		STATE CORPORATION COMMISSION						
Critical Flow Prover		AUG 29 1988			8-29-88			
Orifice Well Tester		CONSERVATION DIVISION						

Wichita, Kan GAS FLOW RATE CALCULATIONS (R)

Coeff. MCFD (Fb)(Fp)(CWTC)	Meter-Prover Press.(Pbia)(Pm)	Extension $\sqrt{hw \times Pm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor(Fd)

Gas Prod. MCFD Flow Rate (R): NONE Oil Prod. Bbls./Day: 37 Gas/Oil Ratio (GOR) - N/A Cubic Ft. per Bbl.

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 4 day of June 1988

For Offset Operator *James R. Kary* For State *Lyman J. W. ...* For Company