

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

15-129-21116-0000
 Form C-5 Revised

Conservation Division
 TYPE TEST: Initial / Annual Workover Reclassification TEST DATE:
 Company: Anadarko Petroleum Corp. Lease: U.S. Government Well No.: C-2
 County: Morton Location: 733 FULT 17 1/2 FUL Section: 23 Township: 33 Range: 40 Acres:
 Field: Stirrup Reservoir: Morrow Pipeline Connection:
 Completion Date: 4-28-92 Type Completion(Describe): Single oil Plug Back T.D.: 5377 Packer Set At:
 Production Method: Flowing Pumping Gas Lift Type Fluid Production: oil API Gravity of Liquid/Oil:
 Casing Size: 5.50 Weight: 15.5 I.D.: 4.950 Set At: 5421 Perforations: 5248 To: 5280
 Tubing Size: 2.375 Weight: 4.70 I.D.: 1.995 Set At: 5246 Perforations: To:
 Pretest: Starting Date: 6-30-92 Time: 9:30 AM Ending Date: 7-1-92 Time: 9:30 AM Duration Hrs.: 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure	Separator Pressure	Choke Size		
Casing: <u>375</u> Tubing: <u>45</u>	<u>12</u>	<u>64/64</u>		
Bbls./In.	Tank	Starting Gauge	Ending Gauge	Net Prod. Bbls.
	Size Number	Feet Inches Barrels	Feet Inches Barrels	Water Oil
Pretest:				
Test:				
Test:	<u>300</u> <u>.1</u>	<u>3'</u> <u>3"</u> <u>64.03</u>	<u>12'</u> <u>29.5"</u> <u>260.14</u>	<u>0</u> <u>196.11</u>

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. Psig or (Pd)	Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
Orifice Meter						
Critical Flow Prover	<u>2"</u>	<u>1.25</u>		<u>4</u>		
Orifice Well Tester						

GAS FLOW RATE CALCULATIONS (R)

Coeff. (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)
<u>480</u>			<u>.9258</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>

Gas Prod. MCFD Flow Rate (R): 444 Oil Prod. Bbls./Day: 196 Gas/Oil Ratio (GOR) = 2.267 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 1st day of July 1992

For Offset Operator

James R. Ray
 For State

Joe Dougherty
 For Company
 STATE CORPORATION COMMISSION
 Wichita, Kansas
 Form C-5 (5/88)

07-24-92

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division

TYPE TEST: Initial Annual Workover Reclassification TEST DATE: _____
 Company Anadarko Petroleum Corp. Lease U.S. Government Well No. C-2
 County Morton Location 723 FULT 1716 FULT Section 0302 Township 33 Range 40 Acres _____
 Field _____ Reservoir MORROW Pipeline Connection _____
 Completion Date 4-28-92 Type Completion (Describe) Single oil Plug Back T.D. 5377 Packer Set At _____
 Production Method: Flowing Pumping Gas Lift Oil Type Fluid Production _____ API Gravity of Liquid/Oil _____
 Casing Size 5.50 Weight 15.5 I.D. 4.950 Set At 5421 Perforations 5248 To 5280
 Tubing Size 2.375 Weight 4.70 I.D. 1.995 Set At 5246 Perforations _____ To _____

Pretest: _____ Duration Hrs. _____
 Starting Date _____ Time _____ Ending Date _____ Time _____
 Test: _____ Duration Hrs. _____
 Starting Date 6-30-92 Time 9:30 AM Ending Date 7-1-92 Time 9:30 AM Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure			Separator Pressure			Choke Size				
Casing:	<u>375</u>	Tubing:	<u>45</u>		<u>12</u>	<u>64/64</u>				
Bbls./In.	Tank		Starting Gauge			Ending Gauge			Net Prod. Bbls.	
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:										
Test:										
Test:	<u>300</u>	<u>.1</u>	<u>3'</u>	<u>3"</u>	<u>64.03</u>	<u>12'</u>	<u>39.5"</u>	<u>260.14</u>	<u>0</u>	<u>196.11</u>

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-Tester Pressure	In. Water	In. Merc.	Psig or (Pd)	Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
Orifice Meter									
Critical Flow Prover	<u>2"</u>	<u>1.25</u>				<u>4</u>			
Orifice Well Tester									

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psia)	Extension $\sqrt{hw \times Pm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)
<u>480</u>			<u>.9258</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
Gas Prod. MCFD	Oil Prod. Bbls./Day:	Gas/Oil Ratio (GOR)	Cubic Ft. per Bbl.			
Flow Rate (R): <u>444</u>	<u>196</u>	<u>2.267</u>				

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 1st day of July 1992

For Offset Operator: _____ For State: James R. Kay For Company: Joe Dougherty

RECEIVED STATE CORPORATION COMMISSION JUL 14 1992

Conservation Division Wichita, Kansas Form C-5 (5/88)

STATE CORPORATION COMMISSION OF KANSAS, CONSERVATION DIVISION

PRODUCTIVITY TEST
BARREL TEST

OPERATOR _____ LOCATION OF WELL _____

LEASE _____ OF SEC. _____ T. _____ R. _____

WELL NO. _____ COUNTY _____

FIELD _____ PRODUCING FORMATION _____

Date Taken _____ Date Effective _____

Well Depth _____ Top Prod. Form _____ Perfs _____

Casing: Size _____ Wt. _____ Depth _____ Acid _____

Tubing: Size _____ Depth of Perfs _____ Gravity _____

Pump: Type _____ Bore _____ Purchaser _____

Well Status _____
Pumping, flowing, etc.

TEST DATA

Permanent _____ Field _____ Special _____

Flowing _____ Swabbing _____ Pumping _____

STATUS BEFORE TEST:

PRODUCED _____ HOURS

SHUT IN _____ HOURS

DURATION OF TEST _____ HOURS _____ MINUTES _____ SECONDS

GAUGES: WATER _____ INCHES _____ PERCENTAGE

OIL _____ INCHES _____ PERCENTAGE

GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) _____

WATER PRODUCTION RATE (BARRELS PER DAY) _____

OIL PRODUCTION RATE (BARRELS PER DAY) _____ PRODUCTIVITY

STROKES PER MINUTE _____

LENGTH OF STROKE _____ INCHES

REGULAR PRODUCING SCHEDULE _____ HOURS PER DAY.

COMMENTS _____

WITNESSES:

FOR STATE

FOR OPERATOR

FOR OFFSET

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division

TYPE TEST: Initial Annual Workover Reclassification TEST DATE: 8-25-93

Company Anadarko Petroleum Corp. Lease U.S. Government Well No. C-2

County Morton Location 733 F-NL+1716 PwL Section 32 Township 33 Range 40 Acres

Field Stirr-up Reservoir Morrow D Pipeline Connection Centana Energy

Completion Date 4-28-92 Type Completion (Describe) Single oil Plug Back T.D. 5377 Packer Set At -

Production Method: Flowing Pumping Gas Lift Oil Type Fluid Production Oil API Gravity of Liquid/Oil 40.2 @ 60°

Casing Size	Weight	I.D.	Set At	Perforations	To
5.50	15.5	4.950	5421	5248	5280
Tubing Size	Weight	I.D.	Set At	Perforations	To
2.375	4.70	1.995	5246	-	-

Pretest: Starting Date 8-24-93 Time 10:15 Ending Date 8-25-93 Time 10:15 Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure	Separator Pressure	Choke Size		
Casing: <u>540</u>	Tubing: <u>220</u>	<u>44/64</u>		
Bbls./In.	Tank	Starting Gauge	Ending Gauge	Net Prod. Bbls.
	Size Number	Feet Inches Barrels	Feet Inches Barrels	Water Oil
Pretest:				
Test:	<u>300</u>	<u>2 0</u>	<u>44.06 5 11</u>	<u>122.55</u>
Test:				<u>78.49</u>

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections	Orifice Meter Range					
Pipe Taps: <u>Flange Taps</u>	Differential: <u>100</u> Static Pressure: <u>250</u>					
Measuring Device	Run-Prover-Tester Size	Orifice Size	Meter-Prover-Tester Pressure	Diff. Press.	Gravity	Flowing Temp.
Orifice Meter	<u>3</u>	<u>1.50</u>	In.Water In.Merc. Psig or (Pd)	(hw) or (hd)	Gas (Gg)	(t)
Critical Flow Prover			<u>124.8</u>	<u>23</u>	<u>.700</u>	<u>60°</u>
Orifice Well Tester						

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psia)	Extension $\sqrt{hw \times Fm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chamber Factor (Fcd)
<u>11.41</u>	<u>139.2</u>	<u>56.583</u>	<u>1.195</u>	<u>1.000</u>	<u>1.000</u>	<u>-</u>
Gas Prod. MCFD	Oil Prod. Bbls./Day	Gas/Oil Ratio (GOR)	Cubic Ft. per Bbl.			
Flow Rate (R): <u>771</u>	<u>78</u>	<u>9891</u>				

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 25 day of Aug. 1993

For Offset Operator

James R Kaye
For State

Joe Dougherty
For Company

PRODUCTIVITY TEST
BARREL TEST

OPERATOR _____ LOCATION OF WELL _____
 LEASE _____ OF SEC. T R _____
 WELL NO. _____ COUNTY _____
 FIELD _____ PRODUCING FORMATION _____
 Date Taken _____ Date Effective _____
 Well Depth _____ Top Prod. Form _____ Perfs _____
 Casing: Size _____ Wt. _____ Depth _____ Acid _____
 Tubing: Size _____ Depth of Perfs _____ Gravity _____
 Pump: Type _____ Bore _____ Purchaser _____
 Well Status _____
 Pumping, flowing, etc.

TEST DATA

Permanent _____ Field _____ Special _____
 Flowing _____ Swabbing _____ Pumping _____

STATUS BEFORE TEST:

PRODUCED _____ HOURS

SHUT IN _____ HOURS

DURATION OF TEST _____ HOURS _____ MINUTES _____ SECONDS

GAUGES: WATER _____ INCHES _____ PERCENTAGE

OIL _____ INCHES _____ PERCENTAGE

GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) _____

WATER PRODUCTION RATE (BARRELS PER DAY) _____

OIL PRODUCTION RATE (BARRELS PER DAY) _____ PRODUCTIVITY

STROKES PER MINUTE _____

LENGTH OF STROKE _____ INCHES

REGULAR PRODUCING SCHEDULE _____ HOURS PER DAY.

COMMENTS _____

WITNESSES:

FOR STATE

FOR OPERATOR

FOR OFFSET

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division

TYPE TEST: Initial (Annual) Workover Reclassification TEST DATE: 10-5-94

Company Anadarko Petroleum Corp Lease U.S. Government Well No. C-2

County Morton Location 733' FNL + 1716' FWL Section 9302 Township 33 Range 40 Acres

Field Stirrup Reservoir Upper Morrow Pipeline Connection Anadarko Gathering Co.

Completion Date 4-28-92 Type Completion(Describe) Single Oil Plug Back T.D. 5377 Packer Set At

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

Flowing Pumping Gas Lift Casing Size 5.50 Weight 15.5 I.D. 4.950 Set At 5421 Perforations 5248 To 5280

Tubing Size 2.375 Weight 4.70 I.D. 1.995 Set At 5246 Perforations To

Pretest: Starting Date Time Ending Date Time Duration Hrs.

Test: Starting Date 10/4/94 Time 10:00 A Ending Date 10/5/94 Time 10:00 A Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure	Separator Pressure	Choke Size
Casing: 300 Tubing: 150	36#	

Bbls./In.	Tank		Starting Gauge			Ending Gauge			Net Prod. Bbls.	
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:										
Test:	300	8	8"	172.27	7	4"	145.62	—	26.65	
Test:										

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections			Orifice Meter Range					
Pipe Taps:	Flange Taps:	✓	Differential:	100	Static Pressure:	250		
Measuring Device	Run-Prover-Tester Size	Orifice Size	Meter-Prover-Tester Pressure In. Water	In. Merc.	Psig or (Pd)	Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
Orifice Meter	3	1.25			4 1/6 #	8.4"	.700	60
Critical Flow Prover								
Orifice Well Tester								

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)	MCFD (Fp)	Meter-Prover Press. (Psia)	Orifice (Pm)	Extension √hw x Pm	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)
7.771	56.0	21.688	1.195	1.000	1.000	—		

Gas Prod. MCFD Flow Rate (R): 201 Oil Prod. Bbls./Day: 26.65 Gas/Oil Ratio (GOR) = 7.542 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 5 day of Oct, 1994

Albert T. Kendro
 For State

Wayne J. Kashi
 For Company

For Offset Operator

PRODUCTIVITY TEST
BARREL TEST

OPERATOR _____ LOCATION OF WELL _____
 LEASE _____ OF SEC. T _____ R _____
 WELL NO. _____ COUNTY _____
 FIELD _____ PRODUCING FORMATION _____
 Date Taken _____ Date Effective _____
 Well Depth _____ Top Prod. Form _____ Perfs _____
 Casing: Size _____ Wt. _____ Depth _____ Acid _____
 Tubing: Size _____ Depth of Perfs _____ Gravity _____
 Pump: Type _____ Bore _____ Purchaser _____
 Well Status _____
 Pumping, flowing, etc.

TEST DATA

Permanent _____ Field _____ Special _____
 Flowing _____ Swabbing _____ Pumping _____

STATUS BEFORE TEST:

PRODUCED _____ HOURS

SHUT IN _____ HOURS

DURATION OF TEST _____ HOURS _____ MINUTES _____ SECONDS

GAUGES: WATER _____ INCHES _____ PERCENTAGE

OIL _____ INCHES _____ PERCENTAGE

GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) _____

WATER PRODUCTION RATE (BARRELS PER DAY) _____

OIL PRODUCTION RATE (BARRELS PER DAY) _____ PRODUCTIVITY

STROKES PER MINUTE _____

LENGTH OF STROKE _____ INCHES

REGULAR PRODUCING SCHEDULE _____ HOURS PER DAY.

COMMENTS _____

WITNESSES:

FOR STATE

FOR OPERATOR

FOR OFFSET

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division

TYPE TEST: Initial Annual Workover Reclassification TEST DATE: 8-25-93

Company Lease Well No.
 Anadarko Petroleum Corp. U.S. Government C-2

County Location Section Township Range Acres
 Norton 733 F.N.H. + 1716 Part B02 33 40

Field Reservoir Pipeline Connection
 6 Stick-up Morrow D Centana Energy

Completion Date Type Completion (Describe) Plug Back T.D. Packer Set At
 4-28-92 Single oil 5377 -

Production Method: Type Fluid Production API Gravity of Liquid/Oil
 Flowing Pumping Gas Lift Oil 40.2 @ 60°

Casing Size Weight I.D. Set At Perforations To
 5.50 15.5 4.950 5421 5248 5280

Tubing Size Weight I.D. Set At Perforations To
 2.375 4.70 1.995 5246 - -

Pretest: Starting Date Time Ending Date Time Duration Hrs.

Test: Starting Date 8-24-93 Time 10:15 Ending Date 8-25-93 Time 10:15 Duration Hrs. 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure Separator Pressure Choke Size

Casing: 540 Tubing: 220 44/64

Bbls./In.	Tank		Starting Gauge			Ending Gauge			Net Prod. Bbls.	
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:										
Test:	300		2	0	44.06	5	11	122.55		78.49
Test:										

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections Orifice Meter Range

Pipe Taps: Flange Taps: Differential: 100 Static Pressure: 250

Measuring Device	Run-Prover-Tester Size	Orifice Size	Meter-Prover-Tester Pressure			Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
			In. Water	In. Merc.	Psig or (Pd)			
Orifice Meter	3	1.50			124.8	23	200	60°
Critical Flow Prover							RECEIVED STATE CORPORATION COMMISSION	
Orifice Well Tester							SEP 17 1993	

GAS FLOW RATE CALCULATIONS (R)

CONSERVATION DIVISION

Coeff. (Fb)	MCFD (Fp)	Meter-Prover Press. (Psia)	Extension (Pm)	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)
11.41	139.2		56.583	1.195	1.000	1.000	-

Gas Prod. MCFD Oil Prod. Bbls./Day: 78 Gas/Oil Ratio (GOR) = 9891 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 25 day of Aug. 1993

For Offset Operator *James R. Kaye* For State
 For Company *Joe Daugherty*