

## INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

## NOMENCLATURE

$Q$  = Actual rate of flow at end of flow period at W. H. working pressure ( $P_w$ ).  
MCF/da. @ 15.025 psia and 60° F.

$P_c$  = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.  
psia

$P_w$  = Static wellhead working pressure as determined at the end of flow period.  
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

$P_t$  = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

$P_f$  = Meter pressure, psia.

$h_w$  = Differential meter pressure, inches water.

$F_g$  = Gravity correction factor.

$F_t$  = Flowing temperature correction factor.

$F_{pv}$  = Supercompressability factor.

$n$  = Slope of back pressure curve.

Note: If  $P_w$  cannot be taken because of manner of completion or condition of well, then  $P_w$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_t$ .

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County San Juan  
 Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 1-22-65  
 Company PAN AMERICAN PETROLEUM CORP. Lease Richardson Gas Unit Well No. 1  
 Unit A Sec. 11 Twp. 27N Rge. 13W Purchaser \_\_\_\_\_  
 Casing 4-1/2 Wt. 10.5 I.D. 4.052 Set at 6111 Perf. 5916-24 To 6000-12  
5942-50 To 6030-42  
 Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 5920 Perf. 5883 To 5889  
 Gas Pay: From 5916 To 6042 L \_\_\_\_\_ xG .700 -GL \_\_\_\_\_ Bar.Press. 12  
 Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
 Date of Completion: 1-13-65 Packer None Reservoir Temp. \_\_\_\_\_  
 Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps \_\_\_\_\_

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.	
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.		Press. psig
1.	9 Days					1762		1866	
1.	2 inch	.750	477			477	60° est.	564	
2.									
3.									
4.									
5.									

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.3630		489	1.000	.9230	1.062	3944
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
 Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
 F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>)  
 Specific Gravity Separator Gas \_\_\_\_\_  
 Specific Gravity Flowing Fluid \_\_\_\_\_  
 P<sub>c</sub> 1078 P<sub>c</sub><sup>2</sup> 1,161,824

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> /P <sub>c</sub>
1.									
2.						767	1161824 - 767		

**OIL CONSERVATION DIVISION**

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

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

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

**REQUEST FOR ALLOWABLE AND AUTHORIZATION  
 TO TRANSPORT OIL AND NATURAL GAS**

**I.**

Operator <b>AMOCO PRODUCTION COMPANY</b>	Well API No. <b>300450674200</b>
Address <b>P.O. BOX 800, DENVER, COLORADO 80201</b>	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input checked="" type="checkbox"/>

If change of operator give name and address of previous operator \_\_\_\_\_

**II. DESCRIPTION OF WELL AND LEASE**

Lease Name <b>RICHARDSON GAS COM B</b>	Well No. <b>1</b>	Pool Name, Including Formation <b>BASIN DAKOTA (PRORATED GAS)</b>	Kind of Lease State, Federal or Fee	Lease No.
Location				
Unit Letter <b>A</b>	<b>890</b>	Feet From The <b>FNL</b> Line and <b>890</b>	Feet From The <b>FEL</b>	Line
Section <b>11</b>	Township <b>27N</b>	Range <b>13W</b>	<b>NMPM</b>	County <b>SAN JUAN</b>

**III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<b>MERIDIAN OIL INC.</b>	<b>3535 EAST 30TH STREET, FARMINGTON, CO 87401</b>
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<b>EL PASO NATURAL GAS COMPANY</b>	<b>P.O. BOX 1492, EL PASO, TX 79978</b>
If well produces oil or liquids, give location of tanks.	Is gas actually connected? When?

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
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GK, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations				Depth Casing Shoe				
<b>TUBING, CASING AND CEMENTING RECORD</b>								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET			SACKS CEMENT		

**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 Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.

**RECORDED & INDEXED**  
**JUL 2 1990**  
**OIL CON. DIV.**  
**DISTRICT 13**

**GAS WELL**

Actual Prod. Test - MMCF/D	Length of Test	Bbls. Condensate/MMCF	By of Condensate
Testing Method (pact, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

**VI. OPERATOR CERTIFICATE OF COMPLIANCE**

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

Signature *Doug W. Whaley*  
 Printed Name Doug W. Whaley, Staff Admin. Supervisor  
 Title \_\_\_\_\_  
 Date June 25, 1990 Telephone No. 303-830-4280

**OIL CONSERVATION DIVISION**

Date Approved JUL 2 1990

By *Doug Whaley*  
 Title SUPERVISOR DISTRICT 13

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- All sections of this form must be filled out for allowable on new and recompleted wells.
- Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- Separate Form C-104 must be filed for each pool in multiply completed wells.