## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

	^		_	_		_
Revri s	0	d	12	<b>-</b> 1	-5	5

Annual   Special   Date of Test   10-19-64	ool Besin De	kota	For	mation_	Dekot	<u> </u>		_County	Sen Jus	m.
Aste   Call   A Gas   Company   Lease   RICHARDSON   Well   No.   11-5	nitialX	Annu	al		Speci	ial	<del></del>	_Date of '	rest_10-	19-64
B   Sec.   22   Tup.   311   Rge.   125   Purchaser   Southern Union										
sing \$-1/2 Wt 9.5810.51.D. \$.009 Set at 7810 Perf. 7157 To 7352  bing 2-3/8 Wt. \$4.7 J.D. 1.995 Set at 7150 Perf. Finned Caller To  s Pay: Prom 7157 To 7332 J. 7150 xG.700(est) GL 5005 Bar. Press.  oducing Thru: Casing Tubing X Type Well Single set  te of Completion: 10-12-64 Packer Reservoir Temp.  OBSERVED DATA  sted Through (Prost) (Choke) (Chok	it <b>D</b> s	Sec. 22 Tw	p., 31.W	Rge	. 124	Purc	haser	Southern U	nd.on	
Pressure			,							352
Second   Press   Property   Press										
Tubing Thru: Casing Tubing Tubing Single-Bradenhead-G. G. or G.O. Dual te of Completion: 10-12-64 Packer Single-Bradenhead-G. G. or G.O. Dual te of Completion: 10-12-64 Packer Single-Bradenhead-G. G. or G.O. Dual te of Completion: 10-12-64 Packer Single-Bradenhead-G. G. or G.O. Dual te of Completion: 10-12-64 Packer Single-Bradenhead-G. G. or G.O. Dual te of Completion: 10-12-64 Packer Temp.    OBSERVED DATA		-								
The of Completion:    10-12-64   Packer   Single-bradenhead-u, G. or G.U. Dual Reservoir Temp.										
Sted Through (TTONS) (Choke) (RECOT)  Type Taps  Flow Data  Flow Data  (Line) (Orifice) (Choke) (Press. Diff. Temp. Press. Temp. Press. Temp. Obratio of Flow Size Size psig hw of Flow Temp. Press. Temp. Press. Temp. Obratio of Flow Temp. Press. Temp. Press. Temp. Obratio of Flow Size Size psig hw of Flow Temp. Press. Temp. Obratio of Flow Temp. Press. Temp. Obratio of Flow Temp. Pressure Calculations  PRESSURE CALCULATIONS  Liquid Hydrocarbon Ratio of Flow Temp. Pressure Calculations  Liquid Hydrocarbon Ratio of Flow Temp. Pressure Calculations  Pressure Calculations  Liquid Hydrocarbon Ratio of Flow Temp. Pressure Calculations  Pressure Calculations  Pressure Calculations  Liquid Hydrocarbon Ratio of Flow Temp. Pressure Calculations  Pressure	te of Complet	ion. 10-12	-64	Packer	Hone	Sin	gle-Brade	nhead-G. (	3. or G	.O. Dual
Type Taps	oc or compres		<del> </del>	_r aonor				<del></del> -		***************************************
Flow Data					OBSERVE	SD DATA				
(Line) (Choke) (Orifice) Press. Diff. Temp. Press. Temp. Op. (Orifice) Size Size psig h. Op. psig Op.	sted Through	( <del>TIGGET</del> ) (	Choke) (1	decer)						
(Line) (Orifice) psig hw OF. psig OP. psig OF. Hr.  7 days   1876   1877   1876   1877   1878   1877   1878   1877   1878   1877   1878   1877   1878	( <del>*******</del> )			Diff.	Temp.					Duratio
FLOW CALCULATIONS  Coefficient  Coefficient  Pressure  Flow Temp.  Factor  Fac	(Line)	(Orifice)	1	1	_		i			of Flo
FLOW CALCULATIONS    Coefficient			Pole	W		1396		1897		
FLOW CALCULATIONS  Coefficient  Pressure  Pressure  Flow Temp.  Factor	Z CAYS	3/4				397	90-(98t)	903	90-(98	6) 3 mgs
PLOW CALCULATIONS    Coefficient										
Coefficient  (24Hour)  (24Hour)  (24Hour)  (24Hour)  (24Hour)  (24Hour)  (24Hour)  (25Hour)  (24Hour)  (25Hour)  (25Hour)  (26Hour)  (26Hour)  (26Hour)  (27Hour)  (27Hour)  (28Hour)  (28Hour)  (28Hour)  (29Hour)  (29Hour)  (21Hour)  (21Hour)  (24Hour)  (25Hour)  (24Hour)  (25Hour)  (26Hour)  (26										
PRESSURE CALCULATIONS  Liquid Hydrocarbon Ratio										
PRESSURE CALCULATIONS  Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity of Liquid Hydrocarbons deg. Specific Gravity Floring Fluid Pc 1909 Pc	.				Fact	or	Factor	Facto	r	Q-MCFPD
Liquid Hydrocarbon Ratio cf/bbl.  rity of Liquid Hydrocarbons deg.  Pw Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 Pw Pc-Pw Cal. Pw Fc  915  915  MPANY Actee dll 5 20 Coppny  DRESS Drest 570, Fordington, New Monice  ENT and TITLE Original Signe From MCFPD; n Tressed Carl E. James on MCFPD  MPANY	12.365			109	1.000		.9270°	1,05		4925
Liquid Hydrocarbon Ratiocf/bbl.  wity of Liquid Hydrocarbonsdeg. Specific Gravity Separator Gas										
Liquid Hydrocarbon Ratiocf/bbl.  wity of Liquid Hydrocarbonsdeg. Specific Gravity Separator Gas										
Liquid Hydrocarbon Ratiocf/bbl.  vity of Liquid Hydrocarbonsdeg. Specific Gravity Separator Gas				PRE	SSURE CA	TTATION	ONS			
Pw Pt FcQ (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc Pc  Specific Gravity Floring Fluid Pc 1909 Pc  Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc  915 Solute Potential: 5990 MCFPD; n •75  MPANY Acted Call 5 Company  DRESS Drawer 570, Paridiation, New Modes  ENT and TITLE Original Signer Sy Carl 5. James on MPANY  MPANY  MPANY	Tionid Undua	oombon Dati	•			120011112		fic Gravit	tv Sena	rator Gas
Pw Pt FcQ (FcQ) <sup>2</sup> (FcQ) <sup>2</sup> Pw2 Pc-Pw Cal. Pw Pc Pc Psia)  915  solute Potential: 5990 MCFPD; n .75  MPANY Actes CHI & Casery  DRESS Dreser 570, Period Can, New Mexico  ENT and TITLE Original Signer From Carl E. James on MANY  MPANY	vity of Liqui	d Hydrocarb	ons				Speci	fic Gravi		
Pt (psia)		(	1-e-0/				Pc		_Fc	· · · · · · · · · · · · · · · · · · ·
Pt (psia)	$P_{\mathbf{W}}$	7		, ,,		2		-2 2		
solute Potential: 5990 MCFPD; n .75  MPANY Actor Cli 5 Company  DRESS Brawer 570, Farmington, New Musico  ENT and TITLE Original Signer 27  TNESSED Carl E. Jameson  MPANY		$ ho_{ extsf{t}}$   F	cQ	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>0</sub>	2Q)~ -e−s)	•	"	P	
MPANY Acted CIL & Company DRESS Drewer 570, Ferrington, New Maxico ENT and TITLE Original Signes 27 FNESSED Carl E. Jameson MPANY							<del>03(22)</del>	2,607,09	5	
MPANY Actoc dil & Carpeny DRESS Drewer 570, Ferrington, New Maxico ENT and TITLE Original Signes 27 FNESSED Carl E. Jameson MPANY			<del></del>							
MCFPD; n .75  MPANY Actor GIL & GAS Company  DRESS Dresser 570, Fermington, New Maxico  ENT and TITLE Original Signer 27  TNESSED Carl E. Jumeson  MPANY										
MPANY Actoc dll & Carpany DRESS Drewer 570, Farrington, New Marico ENT and TITLE Original Signes 27 TNESSED Carl E. Jameson MPANY	L						TE	<u></u>		
DRESS Brewer 570, Parsington, New Marico ENT and TITLE Original Signes 27 Carl E. Jameson, Rightset Engineer TNESSED Carl E. Jameson MPANY		ial: 5	Common	<b>V</b>	_MCFPD;	n	7			
INESSED Carl E. Jumeson MPANY	DRESS DR	mer 570, Fe	gul ne ton	, Nev X	ect.co					
MPANY	Ditt Gird 1111	Origino	ii Sign <del>ë</del> ≎ ≠3			Cur	1 1. Jane	em, Hetr	ict Ing	ineer
		Çarı E								The state of the s
	MIMNI		<del>, , , , , , , , , , , , , , , , , , , </del>		REM	ARKS	<del></del>		175	T CAVIS
# W 1 120									138	(01.98)

## 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  $\equiv$  Actual rate of flow at end of flow period at W. H. working pressure (P<sub>W</sub>). MCF/da. @ 15.025 psia and 60° F.
- P<sub>c</sub>= 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
- Pt Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia
- Pf Meter pressure, psia.
- hw Differential meter pressure, inches water.
- FgI Gravity correction factor.
- Ft Flowing temperature correction factor.
- F<sub>nv</sub> Supercompressability factor.
- n I 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  $P_{t}$ .