## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

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Patri S	၉	d	12	-1	<b>-</b> 55

Pressure   Flow Calculations   Flow Temp.   Gravity   Compress.   Rate of Flow   Flow Temp.   Factor	Pool	Besin			Fc	ormation_	Dak	ota		County_	Rio	Artib	<u> </u>
Data   Tubing   Apr   Tubing	Initi	al_I		Annu	al		Spe	cial		Date of	Test	7-4-6	4
Casing Ag	Compa	ny Ske	11y 01	1 Compa	my	L	ease_	icarilla	r uG#	We	Ll No	26	
Casing Ag	Unit	I	_Sec	<b>21</b> Tw	p. 251	Rge	. 5w	Pur	chaser		· · · · · · · · · · · · · · · · · · ·		
Property   Clocke   Content   Press   Diff.   Temp.   Press.   Temp.   Press.   Temp.   Press.   Temp.   Press.   Pres	Casin	ıg <b>43</b> 5	Wt. 11	.6# I	.D. 4.0	<b>00</b> Set	at_ 7	<b>728</b> P	erf	741	_To	72401	
Case   Page   From   717h   To   7260   L   7005   xg   G.70   GL   A904   Bar, Press.   12.0													
Tubing   X   Type Well   3ingle - gas													
Packer   P								-					
Control   Cont	Dat.e	of Compl	et.ion•	7-4-61		Packer	7001	Si	ngle-Brad Reserv	enhead-G.	G. or	G.O.	Dual
Prover   Choke   Meter   Type Taps	Dave	Or Compr	C010II		*	r donor				ozi renip			
Flow Data					· · ·	(25.1.)	OBSER	VED DATA		m m-			
No.   (Prover) (Choke) (Orifice)   Press.   Diff.   Temp.   Press.   Temp.   Press.   Temp.   Orifice)   Size   Size   psig   h_w   OF.   psig   OF.   psig   F.   Hr.	Teste	ed Throug				(Meter)							
Size   Size   psig   hw   oF,   psig   oF,   psig   oF,   hr.		(Prover	)   (Ch	Flow D	ata TPress.	Diff.	Temp.	Tubin Press	g Data . Temp.	Casing   Press.	Data Temp.	<del>.  </del>	Duration
1	No.	(Line)											OI FIOW
1.   3/4   60   77   60   1   1   1   1   1   1   1   1   1	ST	2126		TZE	bsrg	W11	F •	_		Pore	- · · ·	<del> </del>	
PLOW CALCULATIONS	1.		3	/4"			60					13	hra.
PLOW CALCULATIONS   Rate of Flow   Pressure   Flow Temp.   Gravity   Factor   Fact	$\frac{2}{3}$	· · · · · · · · · · · · · · · · · · ·	<del></del> -		<del> </del>	<del>  </del>		<del> </del>			<del> </del>	+	· · · · · · · · · · · · · · · · · · ·
Pressure   Flow Temp.   Gravity   Compress.   Rate of Flow   Factor   Fac			<del>-i</del>					<del> </del>		<del> </del>			
Coefficient	5.								1	1			
Coefficient						म	LOW CA	LCULATIO	ns				
(24-Hour)   V   hwpf   psia   Ft   Fg   Fpv   @ 15.025 psia	T	Coeffi	cient	1	Pr	ressure	Flow	Temp.	Gravity	Compr	ess.	Rate	of Flow
1.   12.1650   89   1.0000   9.256   1.0000   1016	No.	(2). 11	(mn)	- / h		neia	Fa	Factor F		Factor Factor		or Q-MCMPD @ 15.025 nsi:	
PRESSURE CALCULATIONS  as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid Pc 1740 Pc 1,027,600  No. Pw Pt FcQ (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pw Pc Pc Pc Pc Pw Pc Pc Pc Pc Pw Pc				VIIW	Pf								
PRESSURE CALCULATIONS  as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid Pc 1740 Pc 1,027,600  No. Pw Pt FcQ (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pc Pw Pc Pw Pc Pc Pc Pc Pw Pc Pc Pc Pc Pw Pc	$\frac{1}{2}$ .	12, 3070		+		- <del> </del>	1.00		7,429		<u> </u>		
PRESSURE CALCULATIONS  as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas ravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid c	3。												
PRESSURE CALCULATIONS  as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas ravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid c	4.			<del></del>		<del></del>	<del></del>					<del> </del>	<del></del>
as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid Pc 1740	2.1												
Travity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid Pc 1740 Pc 3,027,600  No. Pw Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc 1. 89 Pc 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.						PRE	SSURE	CALCUTAT	'IONS				
Travity of Liquid Hydrocarbons deg. Specific Gravity Flowing Fluid Pc 1740 Pc 3,027,600  No. Pw Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc 1. 89 Pc 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ac I i	ianid Hyd	roce rhe	on Rati	0		cf/bbl	_	Spec	eific Grav	itv Ser	parato	or Gas
No.   Pw   Pt   FcQ   (FcQ) <sup>2</sup>   (FcQ) <sup>2</sup>   Pw <sup>2</sup>   Pc-Pw   Cal.   Pw   Pc    1.   89   7921   9.571   91.604   27.573   35.494   2,992.106   148   0.106    3.   4.   5.	ravit	cy of Liq	uid Hyd	irocarb	ons		deg	. •	Spec	ific Grav	ity Flo	owing	Fluid
No. Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 Pw Pc-Pw Cal. Pw Pc  1. 89 721 9.571 91.604 27.573 35.444 2.992.106 188 0.108  2. 3. 4. 5. 4. 5. 5.	c	9,402		(	1-e <sup>-s</sup>	0.300		_	Pc-	1740	Pc	3,027.	600
No. Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 Pw Pc-Pw Cal. Pw Pc  1. 89 721 9.571 91.604 27.573 35.444 2.992.106 188 0.108  2. 3. 4. 5. 4. 5. 5.													
Pt (psia)	$\Box$	$P_{\mathbf{w}}$		2 T				2	_	_2 _2			
1. 89 7921 9.571 91.604 27.573 35.494 2.992.106 188 0.100 2. 3. 4. 5. Absolute Potential: 1.026 MCFPD; n 0.75  COMPANY Skelly Oil Company  ADDRESS Dresser 110 - Farmington, New Maxico  AGENT and TITLE Orige signed by D. H. Oheim - Sr. Production Engineer  WITNESSED COMPANY	No.			Pt   F	CQ	$(F_cQ)^2$		F <sub>c</sub> Q)~	$P_w^2$	Pc-Pw	-   (	jal.	Pw Po
2. 3. 4. 5.  Absolute Potential: 1,026 MCFPD; n 0.75  COMPANY Skelly Oil Company  ADDRESS Drawer 510 - Farmington, New Mexico  AGENT and TITLE Originated by D. H. Oheir - Sr. Production Engineer  WITNESSED COMPANY				6	.571	91.604			35.194	2.992.	106	188	
Absolute Potential: 1,026 MCFPD; n 0.75  COMPANY Skelly Oil Company  ADDRESS Drawer 510 - Farmington, New Mexico  AGENT and TITLE Originated by D. H. Oheir - Sr. Production Engineer  WITNESSED COMPANY	2.	<del></del>					1-"						
Absolute Potential: 1,026 MCFPD; n 0.75  COMPANY Skelly Oil Company  ADDRESS Drawer 510 - Farmington, New Maxico  AGENT and TITLE Crig signed by D. H. Oheir - Sr. Production Engineer  WITNESSED COMPANY	3.	<del> </del>							<del> </del>	<del></del>		<del> </del>	
Absolute Potential: 1,026 MCFPD; n 0.75  COMPANY Skelly Oil Company  ADDRESS Drawer 510 - Farmington, New Maxico  AGENT and TITLE Crise signed by D. H. Obein - Sr. Production Engineer  WITNESSED COMPANY	5.												
COMPANY Skelly Oil Company ADDRESS Drawer 510 - Farmington, New Maxico AGENT and TITLE Originated by D. H. Oheir - Sr. Production Engineer WITNESSED COMPANY		luta Para	ntial.	1.02	6		MCRDI	). n 0	.75				
ADDRESS Drever 510 - Farmington, New Mexico  AGENT and TITLE Cris signed by D. H. Obein - Sr. Production Engineer  WITNESSED  COMPANY	COMPA	ANY Ske	lly Oil	Compa	ny			, n					
WITNESSEDCOMPANY	ADDRE	ESS D	raver 5	10 - P	armingt	on, New	ierico						
COMPANY				derm	gred by	D. H. O	nein		Sr. Prod	uction En	ineer		
REMARKS													
							RE	CMARKS		1	THN.	IFA	

## 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 (Pw). MCF/da. @ 15.025 psia and 600 F.
- $P_c$ = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia
- PwT 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.
- $h_{\mathbf{w}}$  Differential meter pressure, inches water.
- Fg Gravity correction factor.
- $F_{t}$  Flowing temperature correction factor.
- $F_{nv}$  Supercompressability factor.
- n I Slope of back pressure curve.

Note: If  $P_{\mathbf{W}}$  cannot be taken because of manner of completion or condition of well, then  $P_{\mathbf{W}}$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_{\mathbf{t}}$ .