Revised 12-1-55

MULTI-POINT BA	CK PRESSUR	e test fo	OR GAS	WELLS
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Pool	Blinebry	<u> </u>		Formation	B1	inebry		County Lea				
Init	ial		Annual		Spec	ial		_Date of	Test	9-23-55		
Comp	party Pan Ame	erican P	etroleum	Corp.	Lease_So	uthland	Royalty "	A ^M Wel	1 No	6		
Unit	H S	Sec. 9	Two 21	-S Re	re. 37-	E Purc	haser F	ermian Ba	sin Pip	e line		
	ng 5½ W											
	ng 2-3/8											
	Pay: From											
	_								·	•		
	ucing Thru: cf Complet											
Dave	CI COMPICE	,1011,				ED DATA						
m+		/ D	\ (Q\-1-a	\		DD DAIA		Тто Тор				
rest	ed Through			-) (Meter)	<u>.</u>	r		Type Tap				
	(Provon)	F10	ow Data Pres	s. Diff.	Temp.		Data Temp.	Casing D		Duration		
No.	(Line)	(Orifi	ce)		o _F .		°F.	psig		of Flow Hr.		
SI	Size	Size	e psi	g h _w	-r.	psig	F.	1851.9	├	72-1/4 SIP		
1.	4	2,25	420,	0 1.0	88			1643.0		23-1/4		
2.	4	2,25	421.	2 8,5	50			1436.7		23		
<u>3. [</u>		2,25		4 13.2	78		ļ	1328.0	 	23-1/2		
4. 5.		2.25	429.	0 19.8	46		 	1104.0	╂╼╼╼═╂	23-3/4		
No.		fficient		Pressure	FLOW CALCULATION Factor Ft			Factor		Rate of Flow Q-MCFPD @ 15.025 psia		
1.	40,53		20,81	0.9			0.9527	1.03		812		
2.	40.53		60.76		1,009		0.9527	1.05	2	2492		
<u>3</u> .	40.53		76.61		0.98		0.9527	1.04		3033		
1. 2. 3. 4.	40,53		93.57		1.01	37	0.9527	1.05	2	3852		
as I Tavi	iquid Hydro ty of Liqui 1.758	d Hydro	Ratio 4 carbons (1-e ^{-s}	2252 x 10	deg.		Speci Speci	fic Gravi fic Gravi 1 865.1	ty Flow	rator Gas <u>0.66</u> ing Fluid 3478.6		
No.	F _t (psia)	Pt ²	F _c Q	(F _c Q) ²	(1	'cQ) ² e ^{-s})	P _w 2	P _c -P _w ²	Ca:	w Pc		
1. 2.	1656.2	2743.0	1.127	2,036	0.5		2743.5 2107.1	735.1	1656 1451			
3.	1341.2	2102.2 1798.8	5.332	19.19 28.43	7.2		1806.1	1672.5	1343			
4.	1117.2	1248.1	6.772	45.86	11.		1259.8	2218.8	1122			
5.								[
Abso	Absolute Potential: 5800 MCFPD; n .895											
COMP	ANY Pan Am	erican F										
	ESS P. O.			New Me		The						
	T and TITLE ESSED	- N -C	- W = 6.	mail	Fleid	Engineer	<u> </u>					
COME	***************************************				·	····						
J U111					REM	ARKS						

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 I Actual rate of flow at end of flow period at W. H. working pressure ($P_{\rm W}$). MCF/da. @ 15.025 psia and 60° 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.
- $h_{\mbox{\scriptsize W}}\mbox{\footnotesize I}$ Differential meter pressure, inches water.
- Fg Gravity correction factor.
- Ft_{-} Flowing temperature correction factor.
- F_{DV} 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 $P_{\mathbf{t}}$.

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool	Blinebry	, 		Fo	rmation	B1:	inebry		_County	Les		
Initi	ial		Annua	1		Spec	ial X		_Date of	Test)-23-	55
Compa	any Pan Ame	rican	Petrol	oun Co	rp.	Lease So	uthland	oyalty "	A* Wel	l No	6_	
Unit	H s	Sec	Twp	_ 21_ S	Rg	e. 37~	E Purc	haserP	ermian Bar	da Pip	· IAn	•
Casir	ng 5} W	t. 15.	5# I.	D. 4.9	50" Se	t at6	892' Pe:	rf. 5647	'1	To 61	081	
Tubir	Tubing 2-3/6Wt. 4.7# I.D. 1.995" Set at Perf. To											
Gas Pay: From 5647' To 6108' L 5647' xOmix. 0.757-GL 4275' Bar. Press. 13.2												
Produ	Producing Thru: Casing I Tubing Type Well G. O. Dual Single-Bradenhead-G. G. or G.O. Dual											
	of Complet											
						OBSERV	ED DATA					
Teste	ed Through	(Prov	(6	lhoko)	(Meter)	-			Type Tap	s		
	···		Tarr Do	+ -			Tubing	Data	Casing D	2 t 2		
	(Prouer)		low Da		Diff.	Temp.		Temp.				Duration
No.	• • • • • • • • • • • • • • • • • • • •	(Orif	٠. ١	rress.	Dir.)	rress.	1				of Flow
	Size	Si	z e	psig	h _w	°F.	psig	°F.	psig	°F∙		Hr.
SI									1851.9			/L SIP
1.	<u>_</u>	2,2		420,0		88			1643.0		23-1	
2.	_	2,2		421.2		50			1436.7	ļ	23-1	
3.	<u> </u>	2,3		432.4		78			1328.0	 		
4. 5.		2,2	(2	429.0	19.8	46			1104.0		23-3	VA
No.	Coefficient (24-Hour) $\sqrt{h_w p_f}$			essure	-		Gravity Compres		C Q-MCFPD		PPD .	
1.	40,53		20,8			0,974		0.9527				12
2. 3. 4.	40.53		60.				6	0.9527	1.05			92
3.	40.53		76.		0.98				1.043		3033	
4.	40.53		93.	57	1.01.37		7	0.9527	1.05	2	3652	
PRESSURE CALCULATIONS Gas Liquid Hydrocarbon Ratio 42252 x 10 ³ cf/bbl. Specific Gravity Separator Gas 0.66 Gravity of Liquid Hydrocarbons 55 deg. Specific Gravity Flowing Fluid Pc 1865.1 Pc 3478.6												
No.	Pt (psia)	Ρŧ			(F _c Q) ²	(1	cQ) ² -e ^{-s})	P _w 2	P _c -P _w ²	Ca P	w	P _w P _c
Ţ.	1656,2	2/4.5		27	2,036	0,51	92	2743.5	735.1	1020	-2	
	144.9	27.02			19.19	A. 89		2107.1	1377.5	1451		
	1341.2	1798.	- 	332	28.43	7.25		1806.1	1672.5	1343	7-	-72
4. 5.	1117.2	1248.	- 00'	772	15.86	11.6		1259.8	2218.8	1122	•7	60
	lute Potent	ial:	5800			MCFPD;	n .89	5				
COMP	ANY Pan Ame	rican										
	ESS P. O. I				New Mex							
AGEN	T and TITLE		. ک	mcf	hail	Field	lingineer	·				
	ESSED						·					
COMP	ANY											
						REM	IARKS					

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- Pf Meter pressure, psia.
- hw Differential meter pressure, inches water.
- F_g Gravity correction factor.
- F_t Flowing temperature correction factor.
- F_{DV} Supercompressability factor.
- n I Slope of back pressure curve.

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