

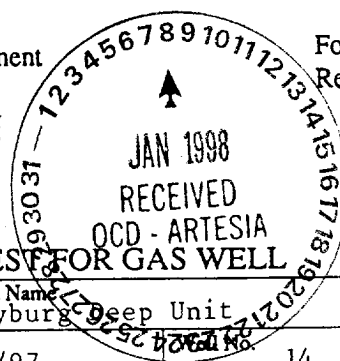
Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-122
Revised 4-1-91



MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Phillips Petroleum Company				Lease or Unit Name Grayburg Deep Unit			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12/11/97			
Completion Date 12/4/97		Total Depth 11,400		Plug Back TD 11,300		Elevation 3594' GL	
Csg. Size 5 1/2		Wt. d 17# 4.892		Set At 11,400		Perforations: From: 10,938 To: 10,982	
Tbg. Size 2 3/8		Wt. d 4.7# 1.995		Set At 10,903		Perforations: From: OPEN To: ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,864		Unit Ltr. - Sec. - TWP - Rgc. D 25 - 17s - 29e	
Producing Thru Tbg		Reservoir Temp. °F 164 @ 10966		Mean Annual Temp. °F 60		Baro, Press - P _a 13.2	
L * 10966		H 10966		Gg 0.699		% CO ₂ 2.63	
				% N ₂ 0.70		% H ₂ S	
				Prover		Meter Run 4.026	
						Taps FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice X Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI						2720		PACKER		22.75 Hr.
1.	4.026	x 2.000	49.2	5.70	42	2635				2 Hr.
2.	4.026	x 2.000	50.2	13.40	46	2590				2 Hr.
3.	4.026	x 2.000	50.2	17.30	45	2520				2 Hr.
4.	4.026	x 2.000	51.2	31.40	45	2290				2 Hr.
5.										

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	19.81	16.75	49.2	1.018	1.196	1.013	409
2.	19.81	25.94	50.2	1.014	1.196	1.013	631
3.	19.81	29.47	50.2	1.014	1.196	1.013	717
4.	19.81	40.10	51.2	1.015	1.196	1.013	977
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.07	502	1.20	.974	20.7	
2.	.07	506	1.21	.974	A.P.I. Gravity of Liquid Hydrocarbons 50.7 @ 60	Deg.
3.	.07	506	1.21	.974	Specific Gravity Separator Gas 0.699	XXXXXXXXXX
4.	.07	505	1.20	.974	Specific Gravity Flowing Fluid	XXXXXX
5.					Critical Pressure ** 674	P.S.I.A. 674 P.S.I.A.
					Critical Temperature ** 418	R 418 R

P _c 3020.3		P _c ² 9122.2		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.999$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.892$
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	
1.		2902.7	8425.7	696.5	
2.		2804.5	7865.2	1257.0	
3.		2716.6	7379.9	1742.3	
4.		2466.0	6081.1	3041.1	
5.					

AOF = Q	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,848$
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Absolute Open Flow 1,848	Mcf/d @ 15.025	Angle of Slope θ 59.87	Slope, n 0.5804
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Remarks: Well made 11.0 Bbls 50.7 API Condensate during test

* BHP Instrument set @ this depth ** Corrected to 2.63% CO₂

Approved By Division	Conducted By: Jarrel Services, Inc.	Calculated By: Bob Murray	Checked By: Bob Murray
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