

NEW MEXICO OIL COMMISSION

Form C-122
Revised 9-1-65

ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-30-74		MAY 7 1974	
Company Amoco Production Company			Connection None		
Pool Dos Hermanos			Formation Morrow Sand		
Completion Date 4-7-74		Total Depth 12,611		Plug Back TD 12,530	
Elevation 3337' RDB		Farm or Lease Name Federal "E" Gas COM			
Casing Size 5 1/2"		WT. 17# & 20#		Set At 12,611	
Perforations: From 11,922 To 12,324		Well No. 1			
Perforations: From 11,882 To 11,884		Unit 21		Sec. Twp. Rye. 20 S 30 E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 11,882		County Eddy County
Producing Thru Tubing		Reservoir Temp. °F 180° @		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 11,884		H 11,884		Gg 0.61	
% CO ₂ 0.9		% N ₂ 1.0		% H ₂ S -	
Prover -		Meter Run 4"		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
Prover Size	X	Orifice 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	of Flow
3"	2.00					3679	74	0	740	
4"	2.00	740	12.0	76	3028	80	50	80	60 Min	
4"	2.00	740	24.0	64	2670	80	60	80	60 Min	
4"	2.00	740	38.0	59	2322	76	50	76	60 Min	
4"	2.00	740	52.0	55	2015	74	40	74	60 Min	

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 hour)	$\sqrt{n_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	95.07	753.2	9850	1.28	1.059	2514
2	19.81	134.4	753.2	9962	1.28	1.066	3620
3	19.81	171.4	753.2	1.001	1.28	1.068	4646
4	19.81	197.8	753.2	1.005	1.28	1.070	5393

NO.	P _a	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.12	536	1.50	891	82.91 Mcf/bbl.	55.2 Deg.	0.61	XXXXXX	674 P.S.I.A.	670 P.S.I.A.
2	1.12	524	1.46	880			XXXXX	7579		
3	1.12	519	1.45	877						
4	1.12	515	1.44	874						

NO.	P _a	P _w	P _w ²	P _a ² - P _w ²	(1) $\frac{P_a^2}{P_a^2 - P_w^2} =$	(2) $\left[\frac{P_a^2}{P_a^2 - P_w^2} \right]^n =$
1	4204.2	17675	6612		24,287	1.7264
2	3851.2	14831	9456		13,983	
3	3499.2	12244	12043			
4	3210.2	10304	13983			

Absolute Open Flow			Angle of Slope	
9310 Mcfd @ 15.025			Slope, n 0.989	

Remarks: *Pressures obtained with Bottom Hole Pressure Recorder.			
Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	John West Engineering	S. D. Blosson	E. J. Saxon