COPY TO O. C. C.

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT A ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-

Type Test: XX Initial ☐ Annual ☐ Special		Date of Test: 9-17-79	
Company: PETROLEUM DEVELOPMENT CORP.	Connection: None		
Pool: Undesignated	Formation: Morrow		Unit
Completion Date: 9-15-79	Total Depth: 13032	Plug Back T.D.: 12979	Elevation: 3716 KB
Farm or Lease Name: Pedco Gulf Fed COM			
Csg. Size: 4 1/2 / Wt.: 12.7 / d: / Set At: 13032	Perforations: From 12896 To 12902		Well No.: 2
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 12902	Perforations: From Open To end		Unit: A / Sec.: 33 / Twp.: 18S / Rge.: 32E
Type well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 12902		County: Lea
Producing Thru: Tbg.	Reservoir Temp. °F: 203 @ 12899	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
12899	12899	.641	.57	.32	.05		4"	Flg.

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line 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	Duration of Flow
SI						4025				72 hr.
1.	4	x 1.500	380	4.0	83	3228				1 hr.
2.	4	x 1.500	385	8.5	58	2895				1 hr.
3.	4	x 1.500	390	17.0	75	2517				1 hr.
4.	4	x 1.500	395	35.0	75	1976				1 hr.
5.										

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RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	10.84	39.66	393.2	.9786	1.249	1.035	544
2	10.84	58.18	398.2	1.002	1.249	1.041	822
3	10.84	82.79	403.2	.9859	1.249	1.037	1146
4	10.84	119.53	408.2	.9859	1.249	1.038	1656
5							

NO.	P_t	Temp. °R	T_r	Z
1	.59	543	1.46	.933
2	.59	518	1.39	.923
3	.60	535	1.44	.930
4	.61	535	1.44	.929
5				

Gas Liquid Hydrocarbon Ratio 34.73 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 56 @ 60 Deg.
Specific Gravity Separator Gas .641 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX G-mix = .725
Critical Pressure 670 P.S.I.A. P.S.I.A.
Critical Temperature 372 R R

* P_c 4436.9 P_c^2 19686.1

NO	B.H.P.	P_w	P_w^2	$P_c^2 - P_w^2$
1	4663.2	3494.7	12212.9	7473.2
2	4221.2	3133.2	9816.9	9869.2
3	3702.2	2717.8	7386.4	12299.7
4	2993.2	2179.1	4748.5	14937.6
** 5	5779.2			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.318$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.318$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2183$

Absolute Open Flow 2,183 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.000

Remarks: * All pressures obtained from bottom hole bomb set @ 12,600'.
** Bottom hole shut-in pressure.
Well made five (5) barrels oil and no water during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
John W. Runyan	Petr. Dev. Corp.	Bob McMurrain	

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