NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 8-18-79	
Company: Union Oil Co. of California	Connection			
Pool: Wildcat	Formation: Morrow			Unit
Completion Date: 7-10-79	Total Depth: 15,531'	Plug Back TD: 15,090'	Elevation: 3535' GR.	Farm or Lease Name: Paduca Federal
Csg. Size: 5-1/2" OD / Wt.: 20# / d: 4.778" / Set At: 15,531'		Perforations: From 14,817' To 15,007'		Well No.: 1
Tbg. Size: 2-7/8" OD / Wt.: 6.5# / d: 2.441" / Set At: 14,600'		Perforations: From To		Unit: G / Sec.: 30 / Twp.: 24-S / Rge.: 32-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 14,600'		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 222 @ 15,090'	Mean Annual Temp. °F: 70	Baro. Press. – P_a: 13.2 psia	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
14,600'	14,600'	.582	.45	.77	-0-	-0-	4.0	Flange

	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 Hrs.
SI						7000	95			42.0
1.	4.00	x 0.500	820	10	65	820	65	0	0	24.0
2.										
3.										
4.										
5.										

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	1.182	91.28	833.2	.9952	1.291	1.070	148.3
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.22	540	1.54	.894
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio – Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons – Deg.

Specific Gravity Separator Gas	.582	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	.582
Critical Pressure	674 P.S.I.A.	674 P.S.I.A.
Critical Temperature	350 R	350 R

P_c 6969.2 P_c^2 48569

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		817	668	47901
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0139$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0139$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 150$

Absolute Open Flow 150 Mcfd @ 15.025 Angle of Slope θ 45.0 Slope, n 1

Remarks: Calculations completed using Garrett Computing System's AOF program.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D. I. Spradlin	D. Harris	L. H. Pardue

RECEIVED
OCT - 5 [illegible]
O.C.D. HOBBS, OFFICE