NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial **Four Point** [ ] Annual [ ] Special			Test Date: 3-7-75 to 3-14-75	
Company: Union Oil Company of California	Connection: Continental Oil Company			
Pool: La Rica Morrow Gas	Formation: Morrow			Unit
Completion Date: Mar. 11, 1974	Total Depth: 13,716'	Plug Back TD: 13,601'	Elevation: 3959.5' GR	Farm or Lease Name: Pipeline State
Csg. Size: 5-1/2" / Wt.: 20# & 17# / d: 4.892" & 4.778" / Set At: 13,667'		Perforations: From 13,217.5' To 13,423.5'		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: 2.441 / Set At: 13,042'		Perforations: From To		Unit: K / Sec.: 33 / Twp.: 18-S / Rge.: 34-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12,995'		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 169 @ 13,540	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
13042	13042	.850	0.6	0.6	Sweet		4"	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
SI									
1.	4.026 x .875	5.4	3.3	49	2731	56	Pkr		9 Hrs.
2.	4.026 x .875	5.8	5.05	54	2706	54	Pkr		10 "
3.	4.026 x .875	6.5	7.05	44	2581	46	Pkr		14-1/2 "
4.	4.026 x 1.250	7.3	4.4	83	1376	70	Pkr		28 "
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	3.630		28	1.011	1.085	1.000	71
2.	3.630		33	1.006	1.085	1.000	116
3.	3.630		41	1.016	1.085	1.000	183
4.	7.469		52	.9786	1.085	1.000	255
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	.0420	509	1.1590	.9999
2.	.0495	514	1.1700	.9999
3.	.0616	504	1.1480	.9990
4.	.078	543	1.2369	.9990
5.				

Gas Liquid Hydrocarbon Ratio 23 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 52.0 Deg.
Specific Gravity Separator Gas .85 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .974
Critical Pressure 666 P.S.I.A. ____ P.S.I.A.
Critical Temperature 439 R ____ R

P_c 4879 P_c^2 23,804

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	7531	4727	22344	1460
2	7394	4689	21987	1817
3	6730	4249	18054	5750
4	1930	3183	10131	13673
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.139$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.67$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 489$

Absolute Open Flow 423 Mcfd @ 15.025 Angle of Slope θ ____ Slope, n .686

Remarks: * L-10 Chart, Meter Factor = 1.000

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	L. L. Artherholt	John G. Hawkins	H. R. Willis