NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT / ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 4-10-67	
Company: Union Oil Company of Calif.	Connection: El Paso Natural Gas Company			
Pool: Red Hills	Formation: Wolfcamp			Unit
Completion Date: 3-3-67	Total Depth: 15,005	Plug Back TD: 14,217	Elevation: 3377 G.L.	Farm or Lease Name: Red Hills Unit
Csg. Size: 5" / Wt. / d: 4.276 / Set At: 15,002		Perforations: From 13,424 To 13,652		Well No.: 2
Tbg. Size: 2 7/8" / Wt.: 7.9,9.5 / d: 2.195, 2.323 / Set At: 12,896		Perforations: From To		Unit: B / Sec.: 5 / Twp.: 26S / Rge.: 33E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12,776		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 13424 186	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
13,424	13,424	0.625	0.18	0.41	0		4.026	Flg.

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					7,382		Pkr.		
1.	4.026 2.000	8.80	2.4	75	7,212	85			2.75 hrs
2.	4.026 2.000	8.80	5.7	44	6,528	87			16.50 hrs
3.	4.026 2.500	8.75	5.0	32	6,222	87			21.75 hrs
4.	4.026 2.500	8.80	6.4	26	5,012	87			5.00 hrs
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	62.64	2.4	8.80	.9859	1.265	1.066	1,760
2.	62.64	5.7	8.80	1.0157	1.265	1.086	4,380
3.	103.21	5.0	8.75	1.0281	1.265	1.092	6,390
4.	103.21	6.4	8.80	1.0344	1.265	1.100	8,360
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	1.15	535	1.47	.880
2.	1.15	504	1.38	.848
3.	1.13	492	1.35	.838
4.	1.15	486	1.33	.826
5.				

Gas Liquid Hydrocarbon Ratio 30,900 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.5 Deg.
Specific Gravity Separator Gas 0.625 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx 0.724
Critical Pressure 671 P.S.I.A. 668 P.S.I.A.
Critical Temperature 365 R 398 R

P_c 7395.2 P_c^2 54,682.0

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	52202.1	7231.3	52291.7	2397.3
2	42707.3	6578.3	43274.0	11415.0
3	38877.7	6320.3	39946.2	14742.8
4	25252.6	5179.1	26823.1	27865.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.5574$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.7733$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 13.665$

Absolute Open Flow 13,600 Mcfd @ 15.025 Angle of Slope θ Slope, n .663

Remarks: * 100" x 1000 psig meter with L-10 chart

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	R. T. Thomas	T. L. Burger	