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 [ ] Annual [ ] Special				Test Date	
Company: Brunson & McKnight		Connection: None			
Pool: Wildcat		Formation: Morrow		Unit: OJO Chisos Unit	
Completion Date: 2-12-74	Total Depth: 14,739'	Plug Back TD: 13,230'	Elevation: 3500' KB	Farm or Lease Name: OJO Chisos Unit	
Csg. Liner: 7 5/8"	Wt.: See Attachment	d	Set At	Perforations: From 13,187' To 13197'	Well No.: 1
Tbg. Size: 2 7/8"	Wt.: 7.9 6.5	d	Set At: 13,047'	Perforations: From To	Unit: Sec. 23 Twp. 225 Rge. 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 13,037'		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 234@ 13,192'	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
13,047	13,047	.594	.0046	.0035	None		4.026	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.	4.0	2.750	540	8	84	5336	68			60 Min
2.	4.0	2.750	552	16	90	5046	72			60 Min
3.	4.0	2.750	555	41	64	3863	72			60 Min
4.	4.0	2.750	560	56.5	62	3201	72			60 Min
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	41.10	66.53	553.2	.9777	1.299	1.044	3,626
2	41.10	95.10	565.2	.9723	1.299	1.044	5,154
3	41.10	152.63	568.2	.9962	1.299	1.044	8,475
4	41.10	179.96	573.2	.9971	1.299	1.044	10,002
5							

NO.	P_r	Temp. °R	T_r	Z
1	.823	544	1.53	.918
2	.841	550	1.55	.917
3	.840	524	1.48	.917
4	.840	522	1.47	.917
5				

Gas Liquid Hydrocarbon Ratio: No fluid Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: No Deg.
Specific Gravity Separator Gas: .594 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 670 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 368 R ____ R

P_c 7587.2 P_c^2 57565

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		6811.2	46394	11171
2		6521.2	42526	15039
3		5285.2	27933	29632
4		4585.2	21024	36541
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5753$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4741$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 14,744$

Absolute Open Flow: 14,744 Mcfd @ 15.025 | Angle of Slope θ: 49.5 | Slope, n: .855

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By: