NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
AUG 26 1971
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8-14-71	
Company: El Paso Natural Gas Co.		Connection:			
Pool: Wildcat		Formation: Atoka		Unit:	
Completion Date: 8-8-71	Total Depth: 15000	Plug Back TD: 14,045	Elevation: 3358 GL	Farm or Lease Name: Arco State	
Csg. Size: 7 5/8 / Wt.: 39.0 / d: 6.500 / Set At: 14,153		Perforations: From 13,880 To 13,890		Well No.: 1	
Tbg. Size: 3 1/2 / Wt.: 9.3 / d: 2.992 / Set At: 12,400		Perforations: From Open To End		Unit: K / Sec.: 16 / Twp.: 23S / Rge.: 31E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12,400		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: @196	Mean Annual Temp. °F: 74	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 13,880 / H: 13,880 / Gg: .572	% CO_2:	% N_2:	% H_2S:	Prover:	Meter Run: 4" / Taps: Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							7257	74			72
1.	4	x	2.000	495	2.00	95	6818	80			1 Hr.
2.	4	x	2.000	500	5.00	95	6285	75			1 Hr.
3.	4	x	2.000	505	10.00	87	5687	75			1 Hr.
4.	4	x	2.000	500	14.00	88	5067	75			1 Hr.
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	19.81	31.88	508.2	.9680	1.332	1.031	840
2.	19.81	50.65	513.2	.9680	1.332	1.031	1,334
3.	19.81	71.99	518.2	.9750	1.332	1.033	1,913
4.	19.81	84.76	513.2	.9741	1.332	1.032	2,248
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.76	555	1.60	.941
2.	.76	555	1.60	.941
3.	.77	547	1.58	.937
4.	.76	548	1.58	.939
5.				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .572 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 346 R ____ R

P_c 7270.2 P_c^2 52855.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		6877.1	47294.5	5561.3
2		6353.4	40365.7	12490.1
3		5779.0	33396.8	19459.0
4		5204.5	27086.8	25769.0
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.051$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.702$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.826$

Absolute Open Flow: 3,826 Mcfd @ 15.025 Angle of Slope θ: 53.5 Slope, n: .740

Remarks: Test calculated by known BHPs and calculated back to P_w or wellhead pressures.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. B. Murray	J. B. Murray	