NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
DEC 21 1981
O. C. D.
ARTESIA, OFFICE

C/SF C-122

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 12-14-81	
Company: Gulf Oil ~~Exp. & Prod.~~ Corp.	Connection: EPNG			
Pool	Formation: Morrow		Unit: P	
Completion Date: 11-23-81	Total Depth: 10957	Plug Back TD: 10530	Elevation: GL 3521	Farm or Lease Name: Gaucho State Com.
Csg. Size: 5 ½ / Wt.: 17 / d: / Set At: 10957		Perforations: From 10322 To 10464		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: / d: / Set At: 10265		Perforations: From To		Unit: P / Sec.: 12 / Twp.: 19s / Rge.: 27e
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 10265		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 176 @ 10265	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10265	10265	.7413	.605	3.035			4"	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					3350				72 hrs.
1.	4 X 1.000	625	2.0	70	2850				1 hr.
2.	4 X 1.000	620	7.8	98	2795				1 hr.
3.	4 X 1.000	620	13.0	94	2550				1 hr.
4.	4 X 1.000	610	26.0	86	2150				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	4.753	35.73	638.2	.9905	1.162	1.080	211
2.	4.753	70.28	633.2	.9653	1.162	1.064	399
3.	4.753	90.73	633.2	.9688	1.162	1.066	517
4.	4.753	127.29	623.2	.9759	1.162	1.069	733
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.96	530	1.34	.858
2.	.96	558	1.41	.883
3.	.96	554	1.40	.880
4.	.94	546	1.38	.875
5.				

Gas Liquid Hydrocarbon Ratio 14.352 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 53 @ 60 Deg.
Specific Gravity Separator Gas .7413 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .938
Critical Pressure 662 P.S.I.A. 661 P.S.I.A.
Critical Temperature 396 R 471 R

P_c 3363.2 P_c^2 11,311.1

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2863.5	8199.5	3111.6
2		2809.2	7891.7	3419.4
3		2565.0	6579.1	4732.0
4		2167.0	4695.7	6615.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.710$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.688$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.237$

Absolute Open Flow 1,237 Mcfd @ 15.025 Angle of Slope θ 45.75° Slope, n .976

Remarks: Produced 5.4 bbls. of distillate during the test

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Davis Services, Inc.	Rick Pagan	