

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-01-92	
Company BTA Oil Producers				Connection GPM Gas Corporation			
Pool Vacuum, North <i>Atoka/Marathon</i>				Formation Atoka		Unit	
Completion Date 10-01-92		Total Depth 12,900		Plug Back TD 12,827		Elevation 4042' RKB	
Farm or Lease Name Vacuum, 9205 JV-P Com							
Csg. Size 5-1/2	Wt. 17 & 20	d 4.778	Set At 12,900	Perforations: From 12,415 To 12,425		Well No. 1	
Tbg. Size 2-7/8	Wt. 6.5	d 2.441	Set At 12,328	Perforations: From To		Unit L	Sec. Twp. Rge. 31 16S 35E
Type Well—Single—Bradenhead—G.G. or G.O. Multiple Single				Packer Set At 12,358		County Lea	
Producing Thru tubing		Reservoir Temp. °F 179 @ 12,420'		Mean Annual Temp. °F 80		Baro. Press. — P _a 13.2	
State New Mexico							
L 12,358	H 12,358	G _g .648	% CO ₂ 0.39	% N ₂ 1.19	% H ₂ S 0	Prover	Meter Run 4.026"
Taps flange							

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
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	
SI	4.026	x	1.750				1378	60	pkc	65	
1.	4.026	x	1.750	17	4	80	1212	66	pkc		1 hr
2.	4.026	x	1.750	24	8	84	1100	72	pkc		1 hr
3.	4.026	x	1.750	35	14	75	922	74	pkc		1 hr
4.	4.026	x	1.750	50	22	75	624	75	pkc		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	14.93	10.99	30.2	0.9813	1.242	.978	196
2.		17.25	37.2	0.9777	1.242	.978	306
3.		25.98	48.2	0.9859	1.242	.978	465
4.		37.29	63.2	0.9859	1.242	.978	667
5.							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio — no liquid recovery — Mcf/bbl.
1.	.045	540	1.45	.978	A.P.I. Gravity of Liquid Hydrocarbons — — — — — Deg.
2.	.056	544	1.46	.978	Specific Gravity Separator Gas .648 — — — — — XXXXXXXXXX
3.	.072	535	1.44	.978	Specific Gravity Flowing Fluid — — — — — XXXXX
4.	.094	535	1.44	.978	Critical Pressure 670 — — — — — P.S.I.A. — — — — — P.S.I.A.
5.					Critical Temperature 372 — — — — — R — — — — — R

P _c 2269.2 P _w ² 5149.3				
NO.	P _f ²	P _w	P _w ²	P _f ² - P _w ²
1		1992.2	3968.9	1180.4
2		1811.2	3280.4	1868.8
3		1509.2	2277.7	2871.6
4		1022.2	1044.9	4104.4
5				

$$(1) \frac{P_f^2}{P_f^2 - P_w^2} = 1.25$$

$$(2) \left[\frac{P_f^2}{P_f^2 - P_w^2} \right]^n = 1.247$$

$$AOF = Q \left[\frac{P_f^2}{P_f^2 - P_w^2} \right]^n = 832$$

Absolute Open Flow	832		Mcf/d @ 15.025	Angle of Slope @	45.3		Slope, n	.9894	
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Remarks: Bottom Hole Pressure measured by Jarrel Services Inc.

Approved By Commission:	Conducted By: BTA Oil Producers	Calculated By: T. J. Williams	Checked By:
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