

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 08/01/91	
Company BTA Oil Producers				Connection NGPL/Phillips 66 Natural Gas Co.		
Pool Aline, Morrow				Formation Morrow		Unit
Completion Date 05/02/91		Total Depth 13,760		Plug Back TD 13,675		Elevation 3763' RKB
Farm or Lease Name Aline, 9012 JV-P						
Csq. Size 5-1/2	Wt. 23	d 4.670	Set At 13,760	Perforations: From 13,671 To 13,675		Well No. 1
Tbg. Size 2-7/8	Wt. 6.5	d 2.441	Set At 13,352	Perforations: From To		Unit G
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 13,320		County Lea
Producing Thru Tubing		Reservoir Temp. °F 191@ 13,673		Mean Annual Temp. °F 80		Baro. Press. - P _a 13.2
State New Mexico						
L 13,352	H 13,352	G _g .701	% CO ₂ 0.48	% N ₂ 0.75	% 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	1.250					80	Pkr	75	
1.	4.026	x	1.250	820	3.5	100	5903	80	Pkr		1 hr
2.	4.026	x	1.250	825	13	100	5730	80	Pkr		1 hr
3.	4.026	x	1.250	835	25	90	5503	80	Pkr		1 hr
4.	4.026	x	1.250	840	88	75	4858	80	Pkr		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	7.469	54.00	833.2	0.9636	1.194	1.081	502
2	7.469	104.39	838.2	0.9636	1.194	1.081	970
3	7.469	145.62	848.2	0.9723	1.194	1.089	1375
4	7.469	274.01	853.2	0.9859	1.194	1.102	2655
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NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	16432	Mcf/bbl.
1.	1.25	560	1.43	.856	A.P.I. Gravity of Liquid Hydrocarbons	56 @ 60	Deg.
2.	1.25	560	1.43	.856	Specific Gravity Separator Gas	.701	XXXXXXX
3.	1.27	550	1.40	.843	Specific Gravity Flowing Fluid	XXXXX	
4.	1.28	535	1.36	.823	Critical Pressure	668	P.S.I.A.
5.					Critical Temperature	392	R

P _c 8414.2 P _r ² 70799					
NO.	P _t ²	P _w	P _r ²	P _t ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.52$ (2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.813$ AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 7469$
1		8244.2	67967	2832	
2		8045.2	64725	6074	
3		7805.2	60921	9878	
4		7119.2	50683	20116	
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Absolute Open Flow	7469	Mcf/d @ 15.025	Angle of Slope @	0.8219	Slope, n	50.58
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Remarks: Bottom Hole Pressure measured by Jarrel Services Inc.

Approved By Commission:	Conducted By: BTA Oil Producers	Calculated By: Tom Williams	Checked By:
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