

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST, OR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-4-79			
Company ARCO Oil & Gas Company				Connection El Paso Natural Gas					
Pool Eumont				Formation Yates 7 Rivers Queen				Unit C	
Completion Date 1-19-79		Total Depth 4000		Plug Back TD 3784		Elevation 3605		Farm or Lease Name J. R. Phillips "B"	
Prod. Size 5-1/2"	Wt. 15.5	d 4.95	Set At 3999	Perforations: From 3364 To 3600				Well No. 6	
Thg. Size 2-7/8"	Wt. 6.5	d 2.441	Set At 3290	Perforations: From Open To Ended				Unit Sec. Twp. Rge. C 31 19S 37E	
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single - Recompletion						Packer Set At 3290		County Lea	
Producing Thru Thg		Reservoir Temp. °F 95.0 @ 3482		Mean Annual Temp. °F 60.0		Baro. Press. - P _b 13.2		State New Mexico	
L 3290	H 3290	G _g .676	% CO ₂ 3.44	% N ₂ 2.04	% H ₂ S 0.8	Prover ----	Meter Run 4"	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							344		Pkr		SI 49.5Hrs
1.	4	x	2.250	71	2.25	54	337	52			.75 Hrs
2.	4	x	2.250	74	6.25	56	331	56			.75 Hrs
3.	4	x	2.250	81	15.21	58	315	58			.75 Hrs
4.	4	x	2.250	87	28.62	60	288	61			.75 Hrs
5.	4	x	2.250	85	45.56	62	251	63			.75 Hrs

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 _{pr}	Rate of Flow Q, Mc/d
1	25.64	13.76	84.2	1.006	1.216	NIL	432
2	25.64	23.25	87.2	1.004	1.216	NIL	731
3	25.64	37.85	94.2	1.002	1.216	NIL	1182
4	25.64	53.55	100.2	1.000	1.216	NIL	1670
5	25.64	66.89	98.2	.9981	1.216	NIL	2082

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	wt./bbl.
1	0.12	514	1.40	NIL	A.P.I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2	0.13	516	1.41	NIL	Specific Gravity Separator Gas	.676	XXXXXXXXXX
3	0.14	518	1.42	NIL	Specific Gravity Flowing Fluid	XXXXXX	Dry Gas
4	0.15	520	1.42	NIL	Critical Pressure	681	P.S.I.A.
5	0.14	522	1.43	NIL	Critical Temperature	366	R

P _r 388.2	P _w 150.7		
NO.	P _r ²	P _w ²	P _r ² - P _w ²
1		380.2	144.6
2		376.2	141.5
3		365.2	133.4
4		347.2	120.5
5		326.2	106.4

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 3.4018$$

$$ACF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4345$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.0872$$

Absolute Open Flow	4345	Mcf/d @ 15.025	Angle of Slope @	53° 4'	Slope, n	0.601
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Remarks: BHP measured at mid point of perforations @ 3482'.

Approved By Commission:	Conducted By: El Paso Natural Gas Co.	Calculated By: James Cogburn	Checked By: L. C. Hudry
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RECEIVED

APR 9 1979

OIL CONSERVATION COMM.
ROBBS, N. M.