

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-11-79				
Company ARCO Oil & Gas Co. Div of Atlantic Richfield				Connection El Paso Natural Gas					
Pool Jalmat Yates				Formation Jalmat				Unit N	
Completion Date 12-30-78		Total Depth 3761'		Plug Back TD 2947'		Elevation 3482 GR		Farm or Lease Name State 157 D	
Cst. Size 5-1/2"	Wt. 17.0	d 4.892	Set At 3560	Perforations: From 2717 To 2928			Well No. 7		
Thq. Size 2-3/8"	Wt. 4.7	d 1.995	Set At 2650	Perforations: From Open To End			Unit Sec. Twp. Rge. N 12 22S 36E		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 2650			County Lea		
Producing Thru Tubing		Reservoir Temp. °F 101 @ 2650		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 2650	H 2650	Gg .672	% CO ₂ 0.52	% N ₂ 5.35	% H ₂ S 0	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							610		Pkr.		48 Hrs
1.	4	x	1.750	60	3.24	36	594	74			1 Hr
2.	4	x	1.750	62	15.21	37	543	74			1 1/2 Hr
3.	4	x	1.750	62	35.40	37	442	74			1 Hr
4.	4	x	1.750	67	62.41	45	279	74			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, Mcf/d
1	14.93	15.40	73.2	1.024	1.220	NIL	287
2	14.93	33.82	75.2	1.023	1.220	NIL	630
3	14.93	51.60	75.2	1.023	1.220	NIL	961
4	14.93	70.75	80.2	1.015	1.220	NIL	1308
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.11	496	1.30	NIL	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
2	.11	497	1.30	NIL	Specific Gravity Separator Gas .672 XXXXXXXXXX
3	.11	497	1.30	NIL	Specific Gravity Flowing Fluid XXXXX
4	.12	505	1.32	NIL	Critical Pressure 669 P.S.I.A. P.S.I.A.
5					Critical Temperature 382 R R

P _r 623.2 P _c ² 388.4		$(1) \frac{P_r^2}{P_c^2 - P_w^2} = 1.365$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.190$	
NO	P _r ²	P _w	P _r ²	P _c ² - P _w ²	
1		607.9	369.6	18.8	
2		559.8	313.4	75.0	
3		465.6	216.8	171.6	
4		322.2	103.8	284.6	
5					

$AQF = Q \left[\frac{P_r^2}{P_c^2 - P_w^2} \right]^n = 1,557$		Absolute Open Flow 1557 Mcf/d @ 15.025		Angle of Slope @ 60.75		Slope, n .560	
--	--	--	--	------------------------	--	---------------	--

Remarks: Calculated by El Paso computer.			

Approved By Commission: <i>John W. Ramsey</i>	Conducted By: R. Dailey	Calculated By: Bob McMurray	Checked By: <i>Ed Bradley</i>
--	----------------------------	--------------------------------	----------------------------------