

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 06/01/78		Spud Date Not Avail.	
Company Atlantic Richfield Company ✓				Connection El Paso Natural Gas Company					
Pool Undesignated <i>Wildcat</i>				Formation Atoka				Unit	
Completion Date 12/07/77		Total Depth 11315		Plug Back TD 11225		Elevation 3282 GL		Farm or Lease Name Hondo 22 State	
Csg. Size 5 1/2	Wt. 15.5	d	Set At 11312	Perforations: From 10477 To 10483				Well No. 1	
Tbg. Size 2-3/8	Wt. 6.5	d	Set At 1-374	Perforations: From Open To End				Unit Sec. Twp. Rge. H 22 19 28	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10357		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 178 @ 10480		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 10374	H 10374	G _g .667	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4"	Taps Flg.	

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							1363				48 hrs.
1.	4 x .750			578	4.0	84	1265				1 hr.
2.	4 x .750			578	9.0	87	1135				1 hr.
3.	4 x .750			576	17.6	87	829				1 hr.
4.	4 x .750			576	20.2	87	595				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	2.661	48.63	591.2	.9777	1.224	1.055	164
2	2.661	72.94	591.2	.9750	1.224	1.054	244
3	2.661	101.83	589.2	.9750	1.224	1.054	341
4	2.661	109.09	589.2	.9750	1.224	1.054	365
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.88	544	1.44	.898	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.88	547	1.45	.901	Specific Gravity Separator Gas .667 XXXXXXXXXX
3.	.88	547	1.45	.901	Specific Gravity Flowing Fluid XXXXXX
4.	.88	547	1.45	.901	Critical Pressure 670 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 378 R _____ R

P _c 1376.2 P _c ² 1893.9				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1			1634.1	259.8
2			1319.1	584.8
3			710.7	1183.2
4			371.6	1522.3
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 7.290$$

$$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .443$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.700$$

Absolute Open Flow	443	Mcf/d @ 15.025	Angle of Slope @	63.5	Slope, n	.500
Remarks:						
Approved By Commission:	Conducted By: Bob McMurrain	Calculated By: Bob McMurrain	Checked By: <i>[Signature]</i>			