

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

Form O-122
Revised 6-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-30-78		DEC - 8 1978	
Company Amoco Production Company				Connection El Paso Natural Gas Comp				O. C. G.
Pool <i>Willcox Strawn</i> Barton Flat				Formation Strawn				Unit ARTESIA, OFFICE
Completion Date 8-7-78		Total Depth 11,460		Plug Back TD 11,412		Elevation 3,250		Form or Lease Name State EP Com
Csg. Size 5.500	Wt. 15.5	d 4.950	Set At 11,458	Perforations: From 10,258 To 10,266		Well No. 1		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 10,141	Perforations: From 0 To 0		Unit Sec. Twp. Rge. J 21 20S 28E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,141		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 178 @ 10263		Mean Annual Temp. °F 60		Boro. Press. - P _g 13.2		State New Mexico
L 10263	H 10263	Gg 0.668	% CO ₂ 0.40	% N ₂ 0.98	% H ₂ S 0	Provor 0	Meter Run 4.0	Tags Flange

FLOW DATA						TUBING DATA		CASING DATA		Direction 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							2020	52			43.0
1.	4.03 X 1.250			505	74.0	68	1755	64	0	0	1.2
2.	4.03 X 1.250			505	38.0	75	1724	64	0	0	1.0
3.	4.03 X 1.250			505	23.0	75	1714	65	0	0	1.0
4.	4.03 X 1.250			505	10.2	74	1729	64	0	0	1.0
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 _{sp}	Rate of Flow Q, Mscf
1	7.47	195.82	518.2	0.9924	1.2235	1.0523	1869
2	7.47	140.33	518.2	0.9859	1.2235	1.0502	1328
3	7.47	109.17	518.2	0.9859	1.2235	1.0502	1033
4	7.47	72.88	518.2	0.9868	1.2235	1.0505	690
5							

NO.	P _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	Ref. (bbl.)
1	0.77	528	1.40	0.903	8.4	
2	0.77	535	1.42	0.907	65.0	
3	0.77	535	1.42	0.907		
4	0.77	534	1.42	0.906		
5						

$P_c = 2057$ $P_c^2 = 4231$					Gas Liquid Hydrocarbon Ratio <u>8.4</u> Ref. (bbl.) A.P.I. Gravity of Liquid Hydrocarbons <u>65.0</u> Deg. Specific Gravity Separator Gas <u>0.668</u> XXXXX Specific Gravity Flowing Fluid <u>XXX XX</u> 0.937 Critical Pressure <u>669</u> P.S.I.A. 656 P.S.I.A. Critical Temperature <u>376</u> R 460 R
NO.	P ₁ ²	P _w ²	P ₂ ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.0270$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0138$ AOR = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3763$
1	3127	1783	3181	1051	
2	3018	1740	3029	1202	
3	2983	1723	2968	1264	
4	3035	1737	3016	1215	
5					

Absolute Open Flow	3763	Mold @ 15.025	Angle of Slope @	63.3	Slope, n	0.503
Remarks:						

Approved By Consultant:	Conducted By: John West Engineering	Calculated By: CCW	Checked By: RMB
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