

MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED
Form C-122
Rev. 9-1-65

OCT 27 1971

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 10-21-71			
Company David Fasken				Connection Transwestern		ARTESIA, OFFICE	
Pool Boyd (Morrow)				Formation Morrow		Unit	
Completion Date Mar. 24, 1971		Total Depth 9292		Plug Back TD 9238		Elevation 3501.2 KB	
Farm or Lease Name Arco "10" Federal				Well No. 1			
Csg. Size 4 1/2		Wt. 10.5		ID 4.052		Set At 9292	
Perforations: From 9024 To 9151							
Tbg. Size 2 3/8		Wt. 4.60		ID 1.995		Set At 8928	
Perforations: From To							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas				Packer Set At		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 162 @ 8888		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
State New Mexico							
L 9088		H 9088		G _g 0.613		% CO ₂	
						% N ₂	
						% H ₂ S	
Prover		Meter Run 1000#x100"		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.	
SI							1559			
1.	4"	1.250	820	4	72	1467	70			60 Min.
2.	4"	1.250	760	6	79	1417	70			60 Min.
3.	4"	1.250	760	12	81	1355	70			60 Min.
4.	4"	1.250	770	20	82	1267	70			60 Min.
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	7.469	57.7	833.2	0.9887	1.277	1.077	586
2	7.469	68.1	773.2	0.9822	1.277	1.069	682
3	7.469	96.3	773.2	0.9804	1.277	1.065	959
4	7.469	125.1	783.2	0.9795	1.277	1.065	1245
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	1.24	532	1.47	0.871	A.P.I. Gravity of Liquid Hydrocarbons	None	Deq.
2	1.15	539	1.49	0.886	Specific Gravity Separator Gas	613	XXXXXXX
3	1.15	541	1.49	0.886	Specific Gravity Flowing Fluid	XXXXXX	
4	1.17	542	1.50	0.887	Critical Pressure	671 P.S.I.A.	P.S.I.A.
5					Critical Temperature	362 R	R

P _f 1931.2 P _f ² 3730			
NO.	P _t ²	P _s ²	P _f ² - P _s ²
1	1814.2	3291	439
2	1756.2	3084	646
3	1683.2	2833	897
4	1586.2	2516	1214
5			

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

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ _____

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

Absolute Open Flow	3730	Mcf/d @ 15.025	Angle of Slope @ 45° 53'	Slope, n 0.96933
--------------------	------	----------------	--------------------------	------------------

Remarks: BHP measured with Amerada RPG-3 gauge.

Approved By Commission:	Conducted By: Teffteller, Inc	Calculated By: Farrest Teffteller	Checked By:
-------------------------	----------------------------------	--------------------------------------	-------------