

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-20-72		NOV 28 1972	
Company David Fasken				Connection Transwestern		O. C. C.	
Pool Boyd				Formation Morrow		Unit ARTESIA, OFFICE	
Completion Date 7-20-72		Total Depth 9320		Plug Back TD 9252		Elevation 3551 KB	
Farm or Lease Name Johnston "9" Federal				Well No. 1			
Cag. Size 4 1/2	Wt. 10.50	d 4.052	Set At 9319	Perforations: From 9072 To 9092			
Thg. Size 2 3/8	Wt. 4.70	d 1.995	Set At 8668	Perforations: From To			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas				Packer Set At 8668		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 172 ° 8600		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
L 9060		H 9060		Gg 0.594	% CO ₂	% N ₂	% H ₂ S
Prover				Meter Run X		Taps	

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							2267		Pkr.		
1.	4"	X	1.875	490	2.5	58	2092	74			45 min.
2.	4"	X	1.875	490	5.5	60	1964	74			45 min.
3.	4"	X	1.875	490	12.0	64	1775	74			45 min.
4.	4"	X	1.875	490	22.0	66	1509	74			45 min.
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, Mcfd
1	17.26	35.5	503.2	1.0020	1.298	1.044	832.0
2	17.26	52.6	503.2	1.0000	1.298	1.043	1229.1
3	17.26	77.7	503.2	0.9962	1.298	1.043	1808.7
4	17.26	105.2	503.2	0.9943	1.298	1.040	2437.1
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1		Simplified			A.P.I. Gravity of Liquid Hydrocarbons	None	Deg.
2		Supercompressibility			Specific Gravity Separator Gas		XXXXXXXXXX
3		Tables Uses			Specific Gravity Flowing Fluid	XXXXXX	
4					Critical Pressure	672	P.S.I.A.
5					Critical Temperature	354	R

P _f 2862.2	P _{f2} 8192		
NO.	P _s	P _{s2}	P _{f2} -P _{s2}
1	2648.2	7013	1179
2	2496.2	6231	1961
3	2279.2	5195	2997
4	1972.2	3890	4302
5			

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

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

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

Absolute Open Flow	4300	Mcf/d @ 15.025	Angle of Slope @	49° 4'	Slope, α	0.86738
Remarks: BHP measured with Amerada RPG-3 gauge.						
Approved By Commission:		Conducted By: Tefteller, Inc.		Calculated By: F. Tefteller		Checked By: