

V 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 9-18-78		OCT 12 1978	
Company Yates Petroleum Corp. ✓				Connection El Paso Natural Gas Company		O. C. C.	
Pool West Burton Flat Atoka				Formation Atoka		ARTESIA, OFFICE	
Completion Date 9-2-78		Total Depth 11540 KB		Plug Back TD 10700 KB		Elevation 3255' KB	
Farm or Lease Name Federal "DC" com							
Csg. Size 5½"	Wt. 20#	d 4.778	Set At 11495'	Perforations: From 10624-10634' KB		Well No. 1	
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 10507	Perforations: From To		Unit Sec. Twp. Rye. L 29 20S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10517		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 162 @ 10629		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
State New Mexico							
L 10619	H 10619	Gg 0.692	% CO ₂ 0.77	% N ₂ 0.34	% H ₂ S Nil	Prover	Meter Run 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							4886	57			Days
1.	4.026x1.250			580	9	65	4445	58			1 hr
2.				581	21	63	4052	60			1 hr
3.				582	38	61	3503	62			1 hr
4.				583	63	60	2815	65			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	7.469	73.07	593.2	.9952	1.252	1.058	719
2.	7.469	111.71	594.2	.9971	1.252	1.059	1103
3.	7.469	150.39	595.2	.9990	1.252	1.060	1489
4.	7.469	193.81	596.2	1.0000	1.252	1.060	1921
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	56300	Mcf/bbl.
1	.881	525	1.419	.8935	A.P.I. Gravity of Liquid Hydrocarbons	520	Deg.
2.	.883	523	1.414	.8921	Specific Gravity Separator Gas	0.638	XXXXXXX
3.	.884	521	1.408	.8906	Specific Gravity Flowing Fluid	XXXXX	692
4.	.886	520	1.405	.8896	Critical Pressure	673	P.S.I.A.
5.					Critical Temperature	370	R

P _c 6228.2	P _c ² 38790		
NO.	P _t ²	P _w	P _w ²
1		32893	5897
2		28082	10708
3		21796	16994
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6174$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4207$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2729$

Absolute Open Flow 2729 Mcfd @ 15.025

Angle of Slope Θ 53 deg 52' Slope, n 0.7303

Remarks: Static BH Pressures by Bennett Wirline flowing pressures by dead wt. tester, calculations - worksheet attached.

Approved By Commission:	Conducted By: Bill Trembley, Jr.	Calculated By: Eddie Mahfood	Checked By:
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