

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-3-82		JAN 15 1982	
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Co.		Unit O. C. D.	
Pool Undesignated Abo		Formation Abo		ARTESIA, OFFICE	
Completion Date 11-12-81		Total Depth 5273' KB		Plug Back TD 4220' KB	
Elevation 3697' GR		Farm or Lease Name West Dixon NX State		Well No. 1	
Csg. Size 5-1/2"	Wt. 14#	d 5.012	Set At 4987'	Perforations: From 3195' To 3485'	
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 3150'	Perforations: From - To -	
Type well - Single - Draddenhead - G.C. or G.O. Multiple Single				Packer Set At 3150'	
Producing Thru Tubing		Reservoir Temp. °F 96 @ 3480'		Mean Annual Temp. °F 62°	
Baro. Press. - P _a 13.2		State New Mexico		County Chaves	
L 3340	H 3340	G _g .669	% CO ₂ 0.42	% N ₂ 13.96	% H ₂ S 0
Prover -		Meter Run 2		Taps Flanged	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							850				days
1.	2.067	x	.375	245	18.0	65	265	66			24 hrs
2.	2.067	x	.375	200	13.3	45	452	66			24 hrs
3.	2.067	x	.375	190	8.0	45	583	66			24 hrs
4.	2.067	x	.375	200	5.5	45	650	66			24 hrs
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	.6689	68.2	258.2	.9952	1.223	1.109	57
2	.6689	53.2	213.2	1.015	1.223	1.018	45
3	.6689	40.3	203.2	1.015	1.223	1.017	34
4	.6689	34.3	213.2	1.015	1.223	1.018	29
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1	.40	525	1.55	.964	A.P.I. Gravity of Liquid Hydrocarbons	Dry	Deq.
2	.33	505	1.49	.965	Specific Gravity Separator Gas	.669	XXXXXXX
3	.31	505	1.49	.967	Specific Gravity Flowing Fluid	XXXXX	.669
4	.33	505	1.49	.965	Critical Pressure	646	P.S.I.A. 646
5					Critical Temperature	339	R 339

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	77.4		77.4	667.7
2	216.4		216.4	528.7
3	355.5		355.5	389.6
4	439.8		439.8	305.3
5				

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.1159$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.1073$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 63$$

Absolute Open Flow	63	Mcf/d @ 15.025	Angle of Slope	.929
Remarks:				
Approved By Division				
Conducted By: David Weaver		Calculated By: Al Springer		Checked By: