

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 9-23-76		SEP 28 1976	
Company Yates Petroleum Corp.				Connection <i>None</i>					
Pool <i>High Hope abo.</i> Undesignated				Formation Basal Abo		Unit O. C. C. ARTESIA, OFFICE			
Completion Date 8-24-76		Total Depth 7085'		Plug Back TD 4711'		Elevation 3921' GR		Farm or Lease Name Federal "GI" Com	
Csg. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 7080	Perforations: From 4424 To 4472		Well No. 1			
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 4383	Perforations: From To		Unit B		Sec. 23	Twp. 17S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 4383		County Eddy			
Producing Thru 2-3/8" tbg.		Reservoir Temp. °F 107		Mean Annual Temp. °F 62		Baro. Press. - P _g 13.2		State New Mexico	
L 4435	H 4435	G _g 0.635	% CO ₂ 0.07	% N ₂ 0.69	% H ₂ S Nil	Prover X	Meter Run	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.	
SI							1432	78		
1.	Adj. Ch. 8/64						1006	68		2 hrs.
2.	12/64						555	66		1 hr.
3.	17/64						332	64		1 hr.
4.	24/64						173	64		1 hr.
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	.2416		1019.2	.9924	1.255	1.095	336
2	.5725		568.2	.9943	1.255	1.054	428
3	1.187		345.2	.9962	1.255	1.036	531
4	2.388		186.2	.9962	1.255	1.017	565
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.522	528	1.439	.834	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	.849	526	1.433	.901	Specific Gravity Separator Gas	.635
3	.516	524	1.428	.931	Specific Gravity Flowing Fluid	X X X X X
4	.278	524	1.428	.966	Critical Pressure	669 P.S.I.A.
5					Critical Temperature	367 R

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1		1150	1322	1322
2		637	406	2238
3		391	153	2491
4		221	49	2595
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.019$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 576 \text{ MCF}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.019$

POSTED 10-8-10

Absolute Open Flow	576	Mcf/d @ 15.025	Angle of Slope °	45	Slope, n	1.000
Remarks:						

Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie Mahfood	Checked By:
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