

N° MEXICO OIL CONSERVATION COMM ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

File
SF Form C-122
C122
Revised 9-1-65
(yates)

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-26-79				
Company Yates Petroleum Corp. ✓				Connection Transwestern Pipeline Company					
Pool West Atoka Morrow Gas				Formation Morrow				Unit	
Completion Date 4-23-79		Total Depth 8880' KB		Plug Back TD 8630' KB		Elevation 3801' KB		Farm or Lease Name Upham "KN"	
Csg. Size 5 1/2"	Wt. 17#	d 4.892	Set At 8880 KB	Perforations: From 8614' To 8622'		Well No. 1			
Thq. Size 2-7/8"	Wt. 6.5#	d 2.441	Set At 8586 KB	Perforations: From To		Unit Sec. Twp. Rge. K 14-T18S-R25E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8586'		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 143@8618		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 8611	H 8611	G _g .686	% CO ₂ 0.42	% N ₂ 0.58	% H ₂ S Nil	Prover	Meter Run 2"	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							2521	59			Days
1.	2.067 x 1.250			240	10	75	2394	63			1 hr
2.				240	19	75	2336	66			1 hr
3.				240	39	75	2229	68			1 hr
4.				240	71	75	2104	70			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	8.120	50.32	253.2	.9859	1.244	1.0238	513
2.	"	69.36	253.2	.9859	"	"	707
3.	"	99.37	253.2	.9859	"	"	1013
4.	"	134.08	253.7	.9859	"	"	1367
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.377	535	1.438	.954	115.5 Mcf/bbl.	55.5 Deg.	0.646	XXXXXX	671 P.S.I.A.	372 R
2.	.377	535	1.438	.954				XXXXX	670 P.S.I.A.	384.5 R
3.	.377	535	1.438	.954						
4.	.377	535	1.438	.954						
5.										

P_c 3283.7 P_c² 10783

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1			9741	1042
2			9284	1499
3			8468	2315
4			7563	3220
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.349$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.8407$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3883$

Absolute Open Flow 3883 Mcfd @ 15.025		Angle of Slope θ 49.18 deg		Slope, n 0.8638	
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Remarks: Pressures by dead weight tester. Calculations worksheet C-122D attached.

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