

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

Form C-122
Revised 9-1-65

RECEIVED 0.56

JUN 23 1980

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-22-80		JUN 23 1980	
Company Yates Petroleum Corp. ✓				Connection El Paso Natural Gas Company			O. C. D. ARTESIA, OFFICE	
Pool No. Turkey Track Morrow				Formation Morrow			Unit	
Completion Date 4-18-80		Total Depth 11500'		Plug Back TD 11372' KB		Elevation 3440' KB		Form or Lease Name No. Turkey Track "MU"
Csg. Size 5-1/2"	Wt. 20#	d 4.778	Set At 11412' KB	Perforations: From 11205 To 11230' KB		Well No.		
Tbg. Size 2-7/8"	Wt. 6.5#	d 2.441	Set At 11169' KB	Perforations: From 11175 To 11178' KB		Unit C	Sec. 33	Twp. 18S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11169' KB		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 167 @ 11218		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico
L 11213	H 11213	G _g 0.640	% CO ₂ 0.58	% N ₂ 0.34	% H ₂ S Nil	Provor	Meter Run 4"	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							3366	68			Days
1.	4.026 x 1.750			532	7	64	2960	73			1 hour
2.				533	13	64	2757	77			1 hour
3.				535	24	64	2437	80			1 hour
4.				536	46	64	1843	82			1 hour
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	14.93	61.78	545.2	.9962	1.268	1.050	1223
2.	14.93	84.26	546.2	.9962	1.268	1.050	1669
3.	14.93	114.70	548.2	.9962	1.268	1.050	2271
4.	14.93	158.94	549.2	.9962	1.268	1.050	3147
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.	0.810	524	1.440	.9079	170.31 Mcf/bbl.	52.2 Deg.	0.622	X X X X X X X X	673 P.S.I.A.	364 R
2.	0.812	524	1.440	.9077				X X X X X	728 P.S.I.A.	388 R
3.	0.814	524	1.440	.9075						
4.	0.816	524	1.440	.9073						
5.										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1			15835	4255
2			13845	6245
3			10965	9125
4			6385	13705
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.4659$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.3581$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4274$

4482.2 P_r² 20090

Absolute Open Flow	4274 Mcfd @ 15.025	Angle of Slope	51.33 deg	Slope, n	0.8002
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Remarks: Static pressures by Bennett Wireline; Flowing pressures by DWT.
Calculations worksheet C-122D attached. Well produced 3 bbls load water during test.

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