

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

Well File # C.1227-2
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-9-78		JAN 17 1978	
Company Texas Pacific Oil Co., Inc. Transwestern Pipeline					Connection Morrow		O.C.C. AMERADA OFFICE	
Pool Kennedy Farms <i>Morrow</i>					Formation Morrow		Unit	
Completion Date 8-11-77			Total Depth 8881'		Plug Back TD 8762'		Elevation 3309 GL	
Csg. Size 5 1/2"			Wt. 15.5#		Set At 8881'		Perforations: From 8586' To 8704'	
Tbg. Size 2 3/8"			Wt. 4-6#		Set At 8480'		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8480'		County Eddy	
Producing Thru 2 3/8" OD			Reservoir Temp. °F 137° 8881'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2 psia	
L 8645'			H 8645'		Gg .627		% CO ₂ .15	
					% N ₂ .36		% H ₂ S Nil	
					Prover		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							2364		Pkr.		72 hrs
1.	4" X 1.75"			530	12	60	2255				1 hr.
2.	4" X 1.75"			530	26.5	75	2207				1 hr.
3.	4" X 1.75"			560	54	70	2089				1 hr.
4.	4" X 1.75"			550	82	60	1960				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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	14.93	80.74	543.2	1.00	1.263	1.054	1605
2	14.93	119.98	543.2	.9859	1.263	1.047	2335
3	14.93	175.93	573.2	.9905	1.263	1.053	3460
4	14.93	214.90	563.2	1.00	1.263	1.055	4275
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>70</u> Mcf/bbl.		
1	.811	520	1.42	.901	A.P.I. Gravity of Liquid Hydrocarbons <u>56.4</u> Deg.		
2	.811	535	1.46	.912	Specific Gravity Separator Gas <u>.627</u> XXXXXXXXX		
3	.856	530	1.44	.902	Specific Gravity Flowing Fluid <u>XXXXX</u> .669		
4	.841	520	1.42	.899	Critical Pressure <u>670</u> P.S.I.A. 669 P.S.I.A.		
5					Critical Temperature <u>367</u> R 381 R		

P _c <u>3073</u>	P _c ² <u>9443.3</u>		
NO	P _t ²	P _w	P _w ²
1		2986	8916.2
2		2928	8573.2
3		2822	7963.7
4		2713	7360.4
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 17.916$$

$$ACF = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 12,850$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.009$$

Absolute Open Flow <u>12,850</u> Mcfd @ 15.025		Angle of Slope θ _____		Slope, n <u>.721</u>	
Remarks: P _f & P _s substituted for P _c & P _w - Measured with Amerada Inst. No. 5317N, 5000# Element @ 8645'					
Approved By Commission:		Conducted By: Joe Dodd		Checked By:	
				Calculated By: Mel Schroeder	