

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

DEC 13 1982

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11/8/82	
Company Exxon Company USA		Connection None	
Pool Turkey Track		Formation Morrow	
Completion Date 11/2/82		Total Depth 11800'	
Plug Back TD 11800'		Elevation 3364' GL	
Farm or Lease Name New Mexico CZ State			
Csg. Size 7"		Well No. 1	
Wt. 26.0		Set At 11800'	
Perforations From 11448' To 11579'		Unit I	
Perforations Open Ended		Sec. 2	
Tubing Size 2 7/8"		Twp. 19s	
Wt. 6.4		Rye. 29e	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual		Packer Set At 10662'	
Producing Thru Tubing		County Eddy	
Reservoir Temp. °F -		State New Mexico	
Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 11514'		H -	
G _g 0.6930		% CO ₂ 1.280	
% N ₂ 0.431		% H ₂ S -	
Prover -		Meter Run 2.900	
Taps F			

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							3134	60	PACKER		96.0 hrs
1.	2.90	4/64	1.000	490	4	102	2737	60			1.0 hr
2.	2.90	4.5/64	1.000	480	8	95	2565	60			1.0 hr
3.	2.90	5/64	1.000	500	15	98	2404	60			1.0 hr
4.	2.90	7/64	1.000	500	19	104	2082	60			1.0 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, Mscf/d
1	4.801	44.86	503.2	0.9619	1.201	1.043	259.51
2	4.801	62.81	493.2	0.9680	1.201	1.044	366.00
3	4.801	87.74	513.2	0.9653	1.201	1.044	509.84
4	4.801	122.00	513.2	0.9602	1.201	1.043	704.50
5							

NO.	R	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	0.75	562	1.47	0.920	A.P.I. Gravity of Liquid Hydrocarbons	-	Deg.
2	0.73	555	1.45	0.918	Specific Gravity Separator Gas	0.6930	XXXXXX
3	0.76	558	1.46	0.917	Specific Gravity Flowing Fluid	XXXXX	
4	0.76	564	1.48	0.920	Critical Pressure	672	P.S.I.A.
5					Critical Temperature	382	R

NO.	P _i ²	P _w *	P _w ²	P _e ² - P _w ²
1	4468.2	19964.8	1141.9	
2	4447.2	19777.6	1329.1	
3	4363.2	19037.5	2069.2	
4	4215.2	17767.9	3338.8	
5				

(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 15.88$ (2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 7.083$

AOF = 0 $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2592.4$

Post ID-2
12-17-82
Comp & BK

Absolute Open Flow	2592	Mcf/d @ 15.025	Angle of Slope	54° 42'	Slope, n	0.708
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Remarks: * BOTTOM HOLE PRESSURE @ (-8150) 11514' USED FOR PRESSURE CALCULATIONS

Approved By Division	Conducted By:	Calculated By:	Checked By:
	JARREL WELL TESTING, INC	Joe A. Coleman	PE #2208 Joe A. Coleman