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COPY TO O. C. C.

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

NM 6869

Form C-122
Revised 6-1-65

MAR 27 1979

U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

☒ Flow Test		☐ Annual		☐ Special		Test Date: 3/17/79	
Company: General Exploration Company				Connection: El Paso Natural Gas			
Pool: Undesignated				Formation: Morrow			
Completion Date: 3/17/79		Total Depth: 13450'		Plug Back TD: 13400'		Elevation: 3801' KB-29	
Casing Size: 5 1/2"		Wt.: 17.0		Set At: 13450'		Perforations: From 13065 To 13245	
Casing Size: 2 3/8"		Wt.: 4.7		Set At: 13158'		Perforations: Open Ended	
Type Well - Single - Underhead - G.G. or G.O. Multiple				Packer Set At: 13158' AND 13192'		Form or Lease Name: Pipeline Deep Unit	
Producing thru Tubing: 168 # 12992		Reservoir Temp. °F: 129.92		Mean Annual Temp. °F: 60°		Well No.: 4	
L: 13155'		H: -		Gg: 0.6882		Unit: N 6 19s 34e	
				% CO ₂ : 0.636		County: Lea	
				% N ₂ : 0.736		State: New Mexico	
				Surf: 13.2		Prover: Meter Run	
						4" F	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							4175	75	PACKER		20.5 hrs
1.	4	9/64	2.500	520	1.00	71	3260				1.50
2.	4	11/64	2.500	534	2.25	73	2874				1.00
3.	4	13/64	2.500	534	3.24	75	2454				1.25
4.	4	15/64	2.500	534	4.41	75	2122				1.75
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, F _{sp}	Rate of Flow Q, Mcfd
1	32.64	23.09	533.2	0.9896	1.206	1.056	949.83
2	32.64	35.09	547.2	0.9877	1.206	1.055	1439.32
3	32.64	42.10	547.2	0.9859	1.206	1.055	1723.71
4	32.64	49.12	547.2	0.9859	1.206	1.055	2011.13
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 Flowline Fluid	Critical Pressure	Critical Temperature
1	0.79	531	1.39	0.897	9.437	52.2	0.6882	XXXXXX	672	381
2	0.81	533	1.40	0.898						
3	0.81	535	1.40	0.898						
4	0.81	535	1.40	0.898						
5										

P _r 6468.2		P _w 41837.6	
NO.	P _r	P _w	P _r ² - P _w ²
1	5431.2	29497.9	12339.7
2	4910.2	24110.1	17727.5
3	4357.2	18985.2	22852.4
4	3888.2	15118.1	26719.5
5			

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.566$

ADP = $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2918$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.451$

Actual Flow: 2918	Mold @ 15.0%: 50° 19'	Slope, n: 0.830
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Remarks: * BOTTOM HOLE PRESSURE @ (-9354) 13155' USED FOR PRESSURE CALCULATIONS
WELL PRODUCED 37.18 BD in 5.5 Hrs. or 162:24 BD/D

Approved by Commission: <i>John W. Ramsey</i>	Conducted by: JARREL SERVICES, INC.	Calculated by: Joe A. Coleman	Checked by: Joe A. Coleman
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APR 31979
OIL CONSERVATION COMM.
ROBBS. H. M.