

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-9-80		DEC 18 1980	
Company DINERO OPERATING COMPANY				Connection EL PASO NATURAL GAS COMPANY				
Pool Dulm... ..				Formation Atoka			Unit J O. C. D. ARTESIA, OFFICE	
Completion Date 11-7-80		Total Depth 12,700		Plug Rock TD 12,400		Elevation		Form or Lease Name Big Chief
Cas. Size 5 1/2	Wt. 17	d	Set At 12,700	Perforations: From 11,362 To 11,370			Well No. 3	
Tub. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11,385	Perforations: From Open To Ended			Unit Soc. Twp. Rge. J 21 22 28	
Type Well - Single - Blindhead - G.C. or G.O. Multiple Single				Packer Set At 11,385			County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 188 11385		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico
L 11,385	H 11,385	Cg .576	% CO ₂ .44	% H ₂ .26	% H ₂ S	Prover	Meter Run 4	Taps Flg.

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.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							5253				48 hrs.
1.	4 X 1.500			343	4.0	66	3992				1 hr.
2.	4 X 1.500			355	6.76	77	3247				1 hr.
3.	4 X 1.500			360	10.24	74	2452				1 hr.
4.	4 X 1.500			372	20.25	72	1760				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, Mhd
1	10.84	37.75	356.2	.9943	1.318	1.027	551
2	10.84	49.89	368.2	.9840	1.318	1.026	720
3	10.84	61.82	373.2	.9868	1.318	1.027	895
4	10.84	88.32	385.2	.9887	1.318	1.028	1283
5							

NO.	R _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/tbl.			
1	.53	526	1.52	.948	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.			
2	.55	537	1.55	.950	Specific Gravity Separator Gas .576 X X X X X X X X			
3	.56	534	1.54	.948	Specific Gravity Flowing Fluid X X X X X			
4	.57	532	1.54	.947	Critical Pressure 672 P.S.I.A. P.S.I.A.			
5					Critical Temperature 346 R R			

NO.	P _i	P _w	P _w ²	P _i ² - P _w ²	(1) $\frac{P_i^2}{P_i^2 - P_w^2} = 1.135$	(2) $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 1.135$
1	5265.2	4007.2	16057.7	11675.2		
2		3263.6	10651.1	17081.8		
3		2471.0	6105.8	21627.1		
4		1816.4	3299.3	24433.6		
5						

Absolute Open Flow 1,456 Mhd @ 15.025				Angle of Slope 45		Slope, n 1.00	
Remarks: 4.7 bbls of water during test, condensate TSM.							

Approved By Division	Conducted By: Townley, Rea & Reston	Calculated By: Reston, McMurrain & Rea	Checked By:
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