

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

Copy 651
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8-13-74		AUG 19 1974	
Company Monsanto Company				Connection None		O. C. C. ARTESIA, OFFICE	
Well: <u>Avila Monte Sec 2-4861</u> <u>Undesignated</u> 10-9-74				Formation Morrow		Unit V	
Completion Date 8-13-74		Total Depth 10,950		Plug Back TD 10,880		Elevation 3213 Gr	
Frac Size 5 1/2		Wt. 17-20-23		Set At 10,950		Perforations: From 10,734 To 10,750	
Frac Size 2 7/8		Wt. 6.5		Set At 10,490		Perforations: From To	
Type Well - Single - Dradhead - G.G. or G.O. Multiple Single				Packer Set At 10,490		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 156 @ 10,950		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
10,742		H 10,742		G _g .619*		Prover	
				% CO ₂		% N ₂	
				% H ₂ S		Meter Run X	
						Taps	

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.	
1	4.0		2.50	680	5.5	83	3567	82		
2	4.0		2.50	715	8.0	80	3425	81		
3	4.0		2.50	720	16.0	70	3215	84		
4	4.0		2.50	750	34.0	60	2888	84		
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, Mscf
1	33.29	61,746	693.2	.9786	1.2710	1.056	2700
2	33.29	76.326	728.2	.9813	1.2710	1.061	3362
3	33.29	108.311	733.2	.9905	1.2710	1.066	4839
4	33.29	161.086	763.2	1.000	1.2710	1.075	7327
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Mcf/bbl.
1	1.03	543	1.49	.897	A.P.I. Gravity of Liquid Hydrocarbons		Sec.
2	1.09	540	1.48	.888	Specific Gravity Separator Gas	.619	XXXXXXXXXX
3	1.09	530	1.45	.880	Specific Gravity Flowing Fluid	XXXXXX	
4	1.13	520	1.42	.865	Critical Pressure	671	P.S.I.A. 671
5					Critical Temperature	365	R 365

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{12818}{3813}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.3337$
1		3455.2	11938	880		
2		3405.0	11594	1224		
3		3269.8	10692	2126		
4		3000.9	9005	3813		
5						

Absolute Open Flow				17099	Mscf @ 15.025	Angle of Slope @ 55° 3'	Slope, n .699
Remarks: Well was Shut-In 72 Hours prior to the start of this test.							
* .619 Specific Gravity used in calculations, corrected to .582 by Laboratory after calculations were made.							
Approved by Comptroller:		Conducted By: J N Casparis		Calculated By: H L Hagler		Checked By:	
		WEST TEXAS CONSULTING SERVICE, INC.					