

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 6-26-87	
Company: Amoco Production Company		Connection:	
Pool: Bravo Dome		Formation: Tubb	
Completion Date: 9-18-79		Total Depth: 2488	Plug Back TD: 2485
		Elevation: 4749	Unit: BDCDGU
Csg. Size: 4.50	Wt.: 9.5	d: 4.1	Set At: 2488
Perforations: From 2261 To 2444		Well No.: 1934-231K	
Tbg. Size: 2.375	Wt.: 4.6	d: 1.995	Set At: 2261
Perforations: From To		Unit: K Sec. 23 Twp. 19 Rge. 34	
Type Well - Single - Packerhead - G.G. or G.O. Multiple			
Single		Packer Set At: 2261	County: Union
Producing Thru: Tubing	Reservoir Temp. °F: 90	Mean Annual Temp. °F: 50	Baro. Press. - P _g : 12.25
State: New Mexico			
L:	H:	Cg:	% CO ₂ : 100 % N ₂ : 0 % H ₂ S.: 0
Prover:		Meter Run: 4.0	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.	
1.	4.026 x	2.750	187	20	56	185	56	0		24 hrs
2.	4.026 x	2.750	196	14	58	195	58	0		24 hrs
3.	4.026 x	2.750	206	12	58	204	58	0		24 hrs
4.	4.026 x	2.750	219	9	58	219	58	0		24 hrs
5.								0		24 hrs

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcd
1.							2221
2.							1969
3.							1844
4.							1683
5.							

NO.	P _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.					0					
2.							1.529		1072	496
3.										
4.										
5.										

NO.	P _g	P _w	P _w ²	P _g ² - P _w ²
1.	321.25	197.25	38,907	64,294
2.		207.25	42,952	60,249
3.		216.25	46,764	56,437
4.		231.25	53,476	49,725
5.				

(1) $\frac{P_g^2}{P_g^2 - P_w^2} = 1.6051$

AOF = Q $\left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 3435$

(2) $\left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 1.5467$

Absolute Open Flow: 3435	Mcd @ 15.025	Angle of Slope °: 42.67	Slope, n: .9218
--------------------------	--------------	-------------------------	-----------------

Remarks: Test was run from a low flowing tubing pressure to a high flowing tubing pressure to minimize liquid loading effects.

Approved by Commission:	Conducted by: RANDY MAHANNAH	Calculated by: RICHARD ROETH	Checked by:
-------------------------	------------------------------	------------------------------	-------------