

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122 *File*
Revised 4-1-91

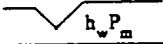
OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator COLLINS AND WARE						Lease or Unit Name BOEING FED. COM. <i>Fed 2 Com</i>					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8/10/92		Well No. 1			
Completion Date		Total Depth 11940'		Plug Back TD 11902'		Elevation		Unit Lr. - Sec. - TWP - Rge. E 2 23 26			
Csg. Size 5 1/2"	Wt. 17	d	Set At 11940'	Perforations: From: 11733' To: 11846'				County EDDY			
Tbg. Size 2 7/8"	Wt. 6.5	d	Set At 11700'	Perforations: From: To:				Pool			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 11696'		Formation MORROW <i>S. Carlsbad</i>			
Producing Thru TBG		Reservoir Temp. °F 191 @ 11700'		Mean Annual Temp. °F 60°		Baro. Press - P 13.2		Connection EPNG			
L 11700'	H 11700'	Gg .584	% CO ₂ 1.33	% N ₂ .31	% H ₂ S	Prover		Meter Run 4.026	Taps FLG		

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.		Temp. °F
SI							2980		PKR		24 HRS.
1.	4	X	1.000	359	14.44	92	542		"		1 HR.
2.	4	X	1.000	347	20.25	90	417		"		1 HR.
3.	4	X	1.500	347	4.00	89	380		"		1 HR.
4.	4	X	1.500	347	6.25	88	358		"		24 HRS.
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F pv.	Rate of Flow Q, Mcfd
1.	4.753	73.31	372.2	.9706	1.309	1.023	453
2.	4.753	85.41	360.2	.9723	1.309	1.022	528
3.	10.84	37.96	360.2	.9732	1.309	1.022	536
4.	10.84	47.45	360.2	.9741	1.309	1.022	670
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcfd/bbl
1.	.55	552	1.58	.956	A.P. I Gravity of Liquid Hydrocarbons	DRY	Deg.
2.	.53	550	1.57	.958	Specific Gravity Separator Gas	.584	XXXXXXXXXX
3.	.53	549	1.57	.958	Specific Gravity Flowing Fluid	XXXXXX	
4.	.53	548	1.57	.958	Critical Pressure	* 676	PSIA. PSIA.
5.					Critical Temperature	* 349	R R

P_c 2993.2 P_c² 8959.2

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		557.6	310.9	8648.4
2.		434.4	188.7	8770.5
3.		398.0	158.4	8800.9
4.		379.1	143.7	8815.5
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.016$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.016$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .681$

Absolute Open Flow	681	Mcfd @ 15.025	Angle of Slope Θ	45°	Slope, n	1.000
--------------------	-----	---------------	------------------	-----	----------	-------

Remarks: WELL MADE TRACE OF FLUID DURING TEST.
* CORRECTED TO 1.33% CO₂ AND .31 N₂.

Approved By Division	Conducted By: JOHN WEST ENGINEERING	Calculated By: BM	Checked By: BM
----------------------	--	----------------------	-------------------