

OIL CONSERVATION DIVISION

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 04-19-91	
Company Chevron U.S.A.				Connection	
Pool Eumont				Formation Queens	
Completion Date 04-09-91		Total Depth 3700		Plug Back TD 3655	
Elevation					
Farm or Lease Name Graham Orcutt Gas Comm					
Csg. Size 5 1/2		Wt. 17#		Well No. 1	
Tbg. Size 2 3/8		Wt. 4.7		Unit K	
Set At 3700		Set At 3024		Perforations: From 3052 To 3515	
Perforations: From OPEN To END		Sec. 6		Twp. 21	
Type Well - Single - Drivenhead - G.C. or G.O. Multiple Single		Packer Set At 3024		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 104 @ 3024		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 3024		H 3024		C _g .775	
% CO ₂ 10.45		% N ₂ 1.88		% H ₂ S ---	
Prover		Meter Run 2.067		Taps Flange	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							145		PKR		6 days
1.	2	X	1.250	35	5.00	68	137		PKR		45 mins
2.	2	X	1.250	35	10.50	67	130		PKR		45 mins
3.	2	X	1.250	35	15.50	67	122		PKR		45 mins
4.	2	X	1.250	35	21.00	67	109		PKR		60 mins
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.	8.120	15.52	48.2	.9924	1.136	1.007	143
2.	8.120	22.50	48.2	.9933	1.136	1.007	208
3.	8.120	27.33	48.2	.9933	1.136	1.007	252
4.	8.120	31.82	48.2	.9933	1.136	1.007	294
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Super. Factor, F _{pv}	Rate of Flow
1.	.06	528	1.33	.986	DRY GAS	1.007	143
2.	.06	527	1.33	.986	DRY	1.007	208
3.	.06	527	1.33	.986	DRY	1.007	252
4.	.06	527	1.33	.986	DRY	1.007	294
5.							

NO.	P _t	P _w	P _e	P _e ² - P _w ²	(1) $\frac{P_e^2}{P_e^2 - P_w^2}$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n$
1.	158.2	25.0	22.8	2.2	4.237	2.341
2.	145.3	21.1	3.9			
3.	138.5	19.2	5.9			
4.	127.1	16.1	8.9			
5.						

Absolute Open Flow		590		Mscf @ 15.025		Angle of Slope θ		59.5		Slope, n		.589	
Remarks: *=corrected to 10.45% CO ₂ & 1.88 % N ₂													
NO FLUID PRODUCED DURING TEST													

Approved By Division	Conducted By: Don Hall, Testers	Calculated By: RM	Checked By: RM
----------------------	------------------------------------	----------------------	-------------------