

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

Form C-122
Revised 9-1-65

RECEIVED

P.S.D.S. 5-28-75

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-31-74		NOV 6 1974	
Company GENERAL AMERICAN OIL COMPANY			Connection TO AIR		
Pool OF TEXAS GRAYBERG <i>Grayburg Atoka Gas</i>			Formation ATOKA		
Completion Date 10-12-74		Total Depth 10927'		Plug Back TO 10460'	
Csg. Size 5 1/2"		Wt. 17 #		Elevation 3582 GR.	
Perforations: From 10350 To 10389		Set At 10,500'		Well No. 3	
Perforations: From OPEN To ENDED		Set At 10,141'		Unit Sec. Twp. Rge. I 29 17S 29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10,111'	
Producing Thru TUBING				County EDDY	
Reservoir Temp. °F 154 @ 10409		Mean Annual Temp. °F 60		State NEW MEXICO	
L 10141		H 10141		Gg 0.7512	
% CO ₂ 1.76		% N ₂ 1.48		% H ₂ S -0-	
Prover ---		Meter Run 4"		Taps FLANGE	

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.	
SI							2897.0			
1.	4"	X	1.25"	670.0	37.0	84	1081.0	68		
2.	4"	X	1.25"	670.0	27.0	84	1258.0	70		
3.	4"	X	1.25"	660.0	21.5	84	1540.0	71		
4.	4"	X	1.25"	660.0	11.0	78	1902.0	71		
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient 24 Hour	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcf/d
1	7.469	158.99	683.2	.9777	1.154	1.083	1451
2	7.469	135.82	683.2	.9777	1.154	1.083	1240
3	7.469	120.31	673.2	.9777	1.154	1.081	1096
4	7.469	86.05	673.2	.9831	1.154	1.085	791
5							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
					25,000	
					A.P.I. Gravity of Liquid Hydrocarbons	54.7
1.	1.02	544	1.35	.853	Specific Gravity Separator Gas	0.7512
2.	1.02	544	1.35	.853	Specific Gravity Flowing Fluid	X X X X X
3.	1.00	544	1.35	.856	Critical Pressure	670 P.S.I.A.
4.	1.00	538	1.33	.849	Critical Temperature	404 R
5.						

NO.	P ₁ ²	P ₂ ²	P ₃ ²	P ₄ ²	P ₅ ²
1	1797	1897.2	3599	15543	
2	1616	2205.2	4863	14279	
3	2412	2623.2	6881	12261	
4	3368	3157.2	9968	9174	
5					

$$(1) \frac{P_F^2}{P_1^2 - P_5^2} = 1.2316$$

$$ACF = Q \left[\frac{P_F^2}{P_1^2 - P_5^2} \right]^n = 1737$$

$$(2) \left[\frac{P_F^2}{P_1^2 - P_5^2} \right]^n = 1.2316$$

Absolute Open Flow	1787	Mcf @ 15.025	Angle of Slope	45°	Slope, n	1.000*
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Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA GAUGE @ 10409 FEET
* GOOD POINT ALIGNMENT BUT SLIGHTLY IN EXCESS OF 1.00 SLOPE

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
		R. WEST	