

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 8750

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-4-81		JUL 30 1981			
Company ANADARKO Production Co.		Connection AIR - NEW WELL		Unit O. C. D.			
Pool BOTO W. 1st Sec. 12 Twp. 19S R. 25E		Formation ATOKA		ARTESIA, OFFICE			
Completion Date APRIL 4, 1981		Total Length 9,274 9394		Plug Back TD 9,015 9020			
Elevation 3,413 KB		GLASS		Well No. 1			
Casing Size 4.5		WT. 11.6		d 4.00			
Perforations From 8806 To 8812		Perforations From OPEN To ENDED		Unit Sec. Twp. R. F 12 19S 25E			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE		Packer Set At 8754		County EDDY			
Producing Thru TUBING		Reservoir Temp. °F 172° 8809°		Mean Annual Temp. °F 60			
Baro. Press. - P _a 13.2		State NEW MEXICO		Meter Run 4"			
L 8809		H 8809		G _g .625			
% CO ₂ .96		% N ₂ .93		% H ₂ S -0-			
Prover FLANGE		Taps FLANGE		Duration of Flow 70			
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w		
1	4"	X	.500	335.0	3.8		
2	4"	X	.500	335.0	5.3		
3	4"	X	.500	490.0	26.0		
4	4"	X	.500	580.0	48.0		
TUBING DATA							
				Press. p.s.i.g.	Temp. °F		
				2043.0	68		
				1902.0	75		
				1796.0	78		
				1633.0	83		
				1301.0	82		
CASING DATA							
				Press. p.s.i.g.	Temp. °F		
				260	68		
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, Mhd
1	1.2120	36.38	348.2	.9850	1.2649	1.0281	56.
2	1.2120	42.96	348.2	.9822	1.2649	1.0276	66.
3	1.2120	114.38	503.2	.9741	1.2649	1.0375	177.
4	1.2120	168.74	593.2	1.0632	1.2649	1.0859	299.
5							
NO.	P _g	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcl/bbl.		
1	.52	536	1.49	.946	A.P.I. Gravity of Liquid Hydrocarbons 52.9 _____ Deg.		
2	.52	539	1.50	.947	Specific Gravity Separator Gas .625 _____ X X X X X X X X		
3	.75	548	1.52	.929	Specific Gravity Flowing Fluid X X X X X		
4	.88	460	1.28	.848	Critical Pressure 674 _____ P.S.I.A.		
5					Critical Temperature 360 _____ R		
P _c 2571.3 P _w 5611.6					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7308$		
NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5978$		
1	2463.1	5066.9	545		A.G.I. = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 477.7$		
2	2322.7	5394.9	1217				
3	2103.9	4426.4	2185				
4	1670.7	2791.2	3820				
5							
Absolute Open Flow 477.9 _____ Mhd @ 15.025					Angle of Slope @ 49.5		Slope, n .8542
Remarks: GAS ANALYSIS BY NORTHERN NATURAL GAS COMPANY PER MIKE BRASWELL'S INSTRUCTIONS							
Approved by Division		Conducted By: DON BENNETT		Calculated By: WOHLFORD & JENKINS		Checked By:	