

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

122 file
Form C-122
Revised 8-1-65

MAY 20 1977

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date May 10, 1977		O. C. C. ARTESIA, OFFICE	
Company Petroleum Reserves Corporation						Connection			
Pool Burton Flats						Formation Morrow		Unit	
Completion Date May 1, 1977		Total Depth 11417'		Plug Back ID 11311		Elevation 3264KB-18		Farm or Lease Name State 21	
Case Size 4"	Wt. 11.60	d 4.000	Set At 11417'	Perforations: From 11064 To 11164		Well No. 1			
Tubg. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 11047'	Perforations: From Open To Ended		Unit Sec. Twp. Rge. B 21 20S 28E			
Type Well - Single - Broadhead - G.C. or G.O. Multiple Single						Packer Set At 11034'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 195 @ 11016		Mean Annual Temp. °F 60		Poro. Press. - P _a 13.2		State New Mexico	
L 11114'*	H	Gg 0.5962	% CO ₂ 1.523	% N ₂ 0.441	% H ₂ S 0.000	Prover	Meter Run X	Taps F	

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. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
51							3147		Packer		48.0 Hrs.
1.	3 6/64	1.375	510	5	40	2982					2.5
2.	3 8/64	1.375	510	14	28	2794					1.0
3.	3 10/64	1.375	510	30	20	2505					1.0
4.	3 12/64	1.375	510	46	28	2155					1.0
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 _{sp}	Rate of Flow Q, Mcfd
1	9.249	51.15	523.2	1.020	1.295	1.047	654.27
2	9.249	85.59	523.2	1.032	1.295	1.052	1112.97
3	9.249	125.28	523.2	1.041	1.295	1.055	1647.97
4	9.249	155.13	523.2	1.032	1.295	1.052	2017.23
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	0.76	500	1.44	0.913	A.P.I. Gravity of Liquid Hydrocarbons	-	Deg.
2	0.76	488	1.40	0.904	Specific Gravity Separator Gas	0.5962	X X X X X X X X
3	0.76	480	1.38	0.898	Specific Gravity Flowing Fluid	X X X X X	
4	0.76	488	1.40	0.904	Critical Pressure	689	P.S.I.A.
5					Critical Temperature	348	R

NO.	P _r	P _w *	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 10.276$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.960$
1	4089.2	16721.6	3885.2	15094.4	1627.2	
2			3621.2	13113.1	3608.5	
3			3227.2	10414.8	6306.8	
4			2881.2	8301.3	8420.3	
5						

AGF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3245$

Absolute Open Flow	3245	Mcf @ 15.055	Angle of Slope °	55°28	Slope, n	0.688
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Remarks: * BHP @ (-7850) 11114' used for pressure calculations

Approved By Commission:	Conducted By: Jarrel Services, Inc	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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