

NEW MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS RECEIVED

Form C-122
Revised 9-1-65

MAR 4 1971

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 2-24-71			
Company Midwest Oil Corp.				Connection None				O. C. C. ARTESIA, OFFICE	
Pool Buffalo Valley (Penn.)				Formation Atoka-Penn.				Unit	
Completion Date 2-24-71		Total Depth 8703		Plug Back TD 8668		Elevation 3548		Farm or Lease Name State - "V"	
Csg. Size 4 1/2	Wt. 11.6#	d 4.0"	Set At 8703	Perforations: From 8459 To 8475		Well No. 1			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995"	Set At 8458	Perforations: From 8412 To 8422		Unit 0	Sec. 6	Twp. 155	Rge. 38E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single gas - dist.						Packer Set At 8375		County Chavez	
Producing Thru 2 3/8 tbg.		Reservoir Temp. °F 148 @ 8400		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 8458	H 8458	Gg .6872	% CO ₂ 0.34	% N ₂ 1.15	% H ₂ S less .05	Prover - -	Meter Run 4" flange	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.		Temp. °F
SI	4"		2"	540	2	81	2417	62	Packer		1 hr.
1.	"		"	548	6	73	2341	63			"
2.	"		"	550	12	73	2260	66			"
3.	"		"	550	26	71	2117	67			"
4.											
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, Mcfd
1	20.48	33.3	553.2	.9804	1.206	1.055	851
2	20.48	58.0	561.2	.9877	1.206	1.061	1501
3	20.48	82.2	563.2	.9877	1.206	1.064	2134
4	20.48	121.0	563.2	.9896	1.206	1.064	3147
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 61.5 @ 64° Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons .6872 Deg.
2.					Specific Gravity Separator Gas XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXX 13.2
4.					Critical Pressure 388 P.S.I.A. P.S.I.A.
5.					Critical Temperature R R

* P _c 3500.2 P _c ² 12,251				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	3424.2	11,725	526	
2	3323.2	11,044	1207	
3	3257.2	10,609	1642	
4	3074.2	9,451	2800	
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$

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

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

Absolute Open Flow 10,048 Mcfd @ 15.025		Angle of Slope 52	Slope, n 0.784
* Pressures recorded, taken with bottom hole pressure instrument. Pressure @			
Remarks: Mid-Perforations			

Approved By Commission:	Conducted By: <i>Chas. A. Lutz</i>	Calculated By: <i>Chas. A. Lutz</i>	Checked By: <i>078</i>
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