

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-6-75		AUG 14 1975	
Company Mountain States Petroleum Corp.						Connection Phillips Petroleum Corp. (Lusk plant)			
Pool Buffalo Vally Penn						Formation Atoka			
Completion Date 4-11-75		Total Depth 8500'		Plug Back TD 8449'		Elevation 3524 gr.		Farm or Lease Name State Comm.	
Csg. Size 4 1/2"	Wt. 15.1#	d p-110	Set At 8449'	Perforations: From 8230' To 8306'		Well No. 1			
Tbg. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 8192"	Perforations: From van tool @ 8212' To		Unit M	Sec. 36	Twp. 14S	Rge. 27E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 8192'		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 140° @ 8120'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 8268'	H 8268'	G _g 0.653	% CO ₂ 0.50	% N ₂ 0.65	% 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. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI				L-10 readings			967.0		packer	choke	
1.	4" x 1.00"			6.94	1.50	114	892.0	80		6/64	60 min.
2.	4" x 1.00"			6.99	2.50	116	838.0	81		8/64	60 min.
3.	4" x 1.00"			6.99	4.10	124	737.0	82		10/64	60 min.
4.	4" x 1.00"			6.94	5.50	124	625.0	82		12/64	60 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$ meter factor	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.753	2.236	241.0	.9518	1.237	1.018	132.6
2	4.753	2.236	244.4	.9501	1.237	1.017	222.0
3	4.753	2.236	244.4	.9436	1.237	1.016	361.2
4	4.753	2.236	241.0	.9436	1.237	1.016	481.1
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NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio TSTM Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons Deg.	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P.S.I.A.	Critical Temperature °R
1.	0.36	574	1.53	.965			0.653	XXXXXX	670	375
2.	0.36	576	1.54	.966						
3.	0.36	584	1.56	.968						
4.	0.36	584	1.56	.968						
5.										

P _c 980.2 P _c ² 960.8		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4355$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.401$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	
1	819.4		819.9	140.9	
2	724.5		725.8	235.0	
3	562.8		566.3	394.5	
4	407.3		413.7	547.1	
5					

Absolute Open Flow 867 Mcfd @ 15.925		Angle of Slope θ 45.5°		Slope, n 0.984	
Remarks: 100" - 500# - 150° L-10 readings good point alignment					
Approved By Commission:		Conducted By: D. Tyson		Calculated By: R. West	
				Checked By: J.W.W.	