

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-23-74	
Company Union Oil Co. of California				Connection			
Pool Undesignated Morrow Gas				Formation Morrow		Unit	
Completion Date Mar. 11, 1974		Total Depth 13,716'		Plug Back TD 13,601'		Elevation 3959.5' GR.	
Farm or Lease Name Pipeline State Com		Well No. 1					
Csg. Size 5-1/2"	Wt. 20# & 17#	Set At 13,667'	Perforations: From 13,217.5' To 13,423.5'				
Tbg. Size 2-7/8"	Wt. 6.5#	Set At 13,042'	Perforations: From To				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12,995'		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 169 @ 13,540		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico		Meter Run 3" Taps Flange					
L 13042	H 13042	G _g .708	% CO ₂ .6	% N ₂ .6	% H ₂ S Sweet	Prover	

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											120 Hrs
1.	3"	x	1"	150#	25	90°	165	92°	Pkr	Pkr	24 Hrs
2.											
3.											
4.											
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 _{pv}	Rate of Flow Q, Mcfd
1	4.828	63.874	163.2	.9723	1.188	1.015	362
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	25.82	Mcf/bbl.
1.	.2436	550°	1.4073	.970	A.P.I. Gravity of Liquid Hydrocarbons	52.0	Deg.
2.					Specific Gravity Separator Gas	.708	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X	1.073
4.					Critical Pressure	670	P.S.I.A.
5.					Critical Temperature	391	R

P _c 3853.2	P _c ² 14,847	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.006$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.006$
NO.	P _t ²	P _w	P _w ²
1		303	92
2			
3			
4			
5			

Absolute Open Flow		364	Mcf/d @ 15.025	Angle of Slope	45°	Slope, n	1
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Remarks: P_w Calculated from surface pressure utilizing a computer adapted Cullender-Smith method. Output and data are attached.

Approved By Commission	Conducted By: L. L. Artherholt	Calculated By: John G. Hawkins	Checked By: H. R. Willis
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