

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-13-73	
Company Union Oil Company of Calif.				Connection None		
Pool Undesignated Morrow Gas				Formation Lower Morrow		Unit
Completion Date 10-13-73		Total Depth 13,551'		Plug Back TD 13,470'		Elevation 3776' KOB
Form or Lease Name Pipeline Deep Unit Federal						Well No. 1
Csg. Size 5 1/2"	Wt. 17 & 20#	d 4.76-4.65	Set At 13,542'	Perforations: From 13,456' To 13,460'		
Tbg. Size 2-7/8"	Wt. 6.5#	d 2.441	Set At 13,358'	Perforations: From - To -		Unit Sec. Twp. Rge. J 17 19S 34E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 13,358'		County Lea
Producing Thru Tubing		Reservoir Temp. °F 161 @ 13,550'		Mean Annual Temp. °F		State New Mexico
L 13,458'	H 13,458'	Gg .670	% CO ₂ 0.53	% N ₂ 0.68	% H ₂ S 0	Prover Meter Run 3.826
						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	3.826 x 1.750						3700	72	0	S.I. 82	13 1/2 hrs.
1.	3.826 x 1.750			830	60"	90	2740	82	0	82	45 min.
2.											
3.											
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	15.01	224.93	843.2	0.9723	1.222	1.170	4693
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	4.15	540	1.187	.636	13.97	52.5° @ 60°F	.670	XXXXXX	671	380
2.										
3.										
4.										
5.										

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	5682*	4619*	21335	10,950	2.948	2.948
2.						
3.						
4.						
5.						

$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 13837$			
Absolute Open Flow _____ Mcfd @ 15.025 Angle of Slope θ _____ Slope, n _____			

Remarks: *SIBHP and FBHP calculated from surface data utilizing computed adapted Cullender Smith method.

Approved By Commission 	Conducted By: L. L. Harmon	Calculated By: J. D. Roe	Checked By: H. R. Willis
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