

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-6-81			
Company SUPERIOR OIL CO.				Connection None					
Pool Wildcat				Formation Wolfcamp				Unit	
Completion Date 12-16-80		Total Length 11641 MD		Plug Back TD 11160		Elevation KB 3459.3		Farm or Lease Name Meander Fed.	
Cog. Size	wt.	d	Set At	Perforations: From 9390 To 9398		Well No. 1			
Trq. Size 2 7/8	4.7	470	1.995	Set At 9200	Perforations: From To		Unit # 14	Soc. 25	Twps. 25
Type Well - Single - Broadhead - G.G. or G.O. Multiple						Packer Set At		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 166 @ 9200		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L *9235	H 9235	G _g .618	% CO ₂ .225	% N ₂ .575	% H ₂ S 0	Prover	Meter Run 4"	Taps Flg.	

*Equiv. Length 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							4970				
1.	4 X 1.750			531	64.00	64	2970				2 hr.
2.	4 X 1.750			531	59.30	66	2992				2 hr.
3.	4 X 1.750			518	46.20	67	3054				2 hr.
4.	4 X 1.750			475	29.20	66	3160				2 hr.
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, Mhd
1	14.93	186.62	544.2	.9962	1.272	1.049	3,704
2	14.93	179.64	544.2	.9943	1.272	1.049	3,558
3	14.93	156.66	531.2	.9933	1.272	1.048	3,097
4	14.93	119.40	488.2	.9943	1.272	1.044	2,354
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 281.0 Mc/Std.	A.P.I. Gravity of Liquid Hydrocarbons 57.7 @ 60°
1	.81	524	1.45	.909	Specific Gravity Separator Gas .618	XXXXXX
2	.81	526	1.45	.909	Specific Gravity Flowing Fluid XXXXX	6-MIX=.628
3	.79	527	1.46	.911	Critical Pressure 671 P.S.I.A.	671 P.S.I.A.
4	.73	526	1.45	.918	Critical Temperature 362 R	365 R
5						

P _r 4983.2 P _w 24832.3				(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.575$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.575$	
NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²		
1		3011.3	9067.9	15764.4			
2		3032.0	9193.0	15639.3			
3		3083.9	9510.4	15321.9			
4		3183.1	10132.1	14700.2			
5							

Absolute Open Flow 5,835 Mhd @ 15.025				Angle of Slope θ 45		Slope, n 1.000	
Remarks: Well made 3.77 BBLS 57.7 API condensate during test.							
Approved By Division		Conducted By: C. Meyer		Calculated By: Joe B. Murray		Checked By: <i>[Signature]</i>	