

NEW KICO OIL CONSERVATION COMMISSIO
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-22-74	
Company The Superior Oil Company				Connection Southern Union		
Pool Hat Mesa				Formation Morrow		Unit
Completion Date 4-12-74		Total Depth 14,374		Plug Back TD 14,245		Elevation 3800 KB
Farm or Lease Name Government "H" Com						Well No. 1
Csg. Size 10-3/4 x 7-5/8 x 5	Wt. ---	d ---	Set At 14,374	Perforations: From 13,888 To 13,934		Unit Sec. Twp. Rge. G 10 21-S 32-E
Tbg. Size 2-7/8	Wt. 6.50#	d 2.441	Set At 13,777	Perforations: From None To		County Lea
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 13,777		State New Mexico
Producing Thru Tubing		Reservoir Temp. °F 195 @ 14,374		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2
L 13,777	H 13,777	G _g 0.662	% CO ₂ 1%	% N ₂ Neg	% H ₂ S 0	Prover X
				Meter Run X		Taps F

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.	
SI							4718	60	Pkr	--
1.	4.026 x 1.500			424	2	46	4609	60	Pkr	--
2.	4.026 x 1.500			426	12	48	4396	60	Pkr	--
3.	4.026 x 1.500			433	26	48	4172	60	Pkr	--
4.	4.026 x 1.500			436	53	50	3888	60	Pkr	--
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	10.84		437.2	1.014	1.229	1.052	420
2	10.84		439.2	1.012	1.229	1.051	1,029
3	10.84		446.2	1.012	1.229	1.052	1,528
4	10.84		449.2	1.010	1.229	1.053	2,186
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	51.163 Mcf/bbl.
1	0.65	506	1.34	0.903	A.P.I. Gravity of Liquid Hydrocarbons	51.5 Deg.
2	0.65	508	1.35	0.905	Specific Gravity Separator Gas	0.662
3	0.66	508	1.35	0.904	Specific Gravity Flowing Fluid	X X X X X X X X
4	0.67	510	1.35	0.902	Critical Pressure	674 P.S.I.A.
5.					Critical Temperature	377 R

P _c 4731.2 P _c ² 22,384				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{22,384}{7,090}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.6540$
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1	21,364		21,367	1,017	
2	19,441		19,458	2,926	
3	17,516		17,554	4,830	
4	15,219		15,294	7,090	
5					

Absolute Open Flow		5,801 Mcfd @ 15.025	Angle of Slope @	49.7	Slope, n	0.849
Remarks:						
Approved By Commission: Conducted By: Hanson Calculated By: O. V. Sivage Checked By:						

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OIL CONSERVATION COMM.
WILSON, H. M.

LOCATION: Unit 7 Section 10 Township 2N Range 3E

$$\frac{d}{dt} \frac{F}{GH} = \frac{P}{Cr} \frac{T}{Cr} \frac{1}{\text{TABLE IX \& I}}$$
[illegible]

The Superior Oil Co.
GOVERNMENT "H" COM. No. 1
 HAT MESA (MORROW) FIELD
 G - 10 - 21S - 32E
 Lea County, New Mexico
 10-22-74

100,000

10,000

$(P_c^2 - P_w^2)$ 1000

1000

$n = 0.849$
 $\theta = 49.7^\circ$
 AOF = 5,801 MCFPD

1000

10,000

RATE (MCFPD)

10/22/74

10/22/74

9
10
11

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WIL CONSERVATION COMM.
WILSON, H. M.