

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5/28/79	
Company GULF OIL EXPLORATION & PRODUCTION				Connection AIR		
Well N. LUSK MORROW				Formation MORROW		Unit I
Completion Date 5/5/79		Total Length 13000		Plug Test To 12968		Elevation GL 3666
Cg. Size 5 1/2	Wt. 17	d 13000	Set At 13000	Perforations: From 12560 To 12726		Well No. # 1
Trq. Size 2 3/8	Wt. N/ 80	d 12500	Set At 12500	Perforations: From To		Unit Sec. Twp. Rge. T 4 19 32
Type Well - Single - Broadhead - G.G. or G.O. Multiple SINGLE					Packer Set At 12500	
Producing Thru TBG.		Reservoir Temp. °F 180 ° PERFS		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2
L 12500		H 12500	G _g .634	% CO ₂ .820	% N ₂ .560	Prover Meter Run Taps 4" FIG.

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
51							3420				72 HRS.
1.	4	X	2.000	570	5.0	85	3245				1 HR.
2.	4	X	2.000	555	9.0	82	3100				1 HR.
3.	4	X	2.000	570	18.0	76	3000				1 HR.
4.	4	X	2.000	600	30.5	76	2900				1 HR.
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 O, Mcd
1	19.81	54.00	583.2	.9768	1.256	1.048	1375
2	19.81	71.51	568.2	.9795	1.256	1.049	1828
3	19.81	102.46	583.2	.9850	1.256	1.051	2639
4	19.81	136.76	613.2	.9850	1.256	1.055	3536
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 19.538 Mcf/bbl.	
1.	.87	545	1.48	.910	A.P.I. Gravity of Liquid Hydrocarbons 51 @ 60°	
2.	.85	542	1.47	.909	Specific Gravity Separator Gas .634	
3.	.87	536	1.46	.905	Specific Gravity Flowing Fluid .787	
4.	.92	536	1.46	.899	Critical Pressure 670 P.S.I.A.	
5.					Critical Temperature 368 °R	

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 4.232$ (2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 4.232$ AGF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 14.965$
1		3281.4	10767.6	1019.3	
2		3137.2	9842.0	1944.9	
3		3061.0	9369.7	2417.1	
4		3000.3	9001.8	2785.1	
5					

Absolute Open Flow 14.965	Mcd @ 15.025	Angle of Slope θ 45°	Slope, n 1.000
Remarks: MADE 20 BARRELS OF FLUID			
Approved by: JOHN DAVIS		Conducted by: LARRY C. DAVIS	
Calculated by:		Checked By:	

RECEIVED

JUN 1 1979

OIL CONSERVATION COMM.
HOBBES, N. M.