Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: UMC OCEAN ENERGY				Lease or Unit Name: SUGGART 28			
Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 6-19-98		Well No.: 1	
Completion Date: 6-14-98	Total Depth:		Plug Back TD: 11943	Elevation:		Unit Ltr. - Sec. - TWP - Rge.:	
Csg. Size: 5 1/2	Wt.: 17#	d:	Set At:	Perforations: From: 11676 To: 11904		County: EDDY	
Tbg. Size: 2 7/8	Wt.: 6.5	d: 2.441	Set At:	Perforations: From: To:		Pool: Shugart Morrow	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE				Packer Set At:		Formation: MORROW	
Producing Thru: TBG	Reservoir Temp. °F: 178.1	Mean Annual Temp. °F: 60		Baro. Press - P_a: 13.2		Connection: VONTCD	
L: 11676	H: 11676	Gg: .667	% CO_2: .518	% N_2: .572	% H_2S:	Prover:	Meter Run: 4.026 Taps: FLG

FLOW DATA

NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI						2277		PKR		48 HRS
1.	4	X 2.000	155	5.29	78	2100		"		1 HR
2.	4	X 2.000	163	13.69	76	1970		"		"
3.	4	X 2.000	163	33.64	76	1810		"		"
4.	4	X 2.000	163	54.29	74	1648		"		"
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.	19.81	29.83	168.2	.9831	1.224	1.016	722
2.	19.81	49.11	176.2	.9850	1.224	1.017	1193
3.	19.81	76.99	176.2	.9850	1.224	1.017	1870
4.	19.81	102.21	176.2	.9848	1.224	1.017	2487
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.25	538	1.42	.968
2.	.26	536	1.41	.967
3.	.26	536	1.41	.967
4.	.26	534	1.41	.967
5.				

Gas Liquid Hydrocarbon Ratio 32.667 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 57.0 @ 60 Deg.
Specific Gravity Separator Gas .667 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX GMIX. = .754
Critical Pressure 670 P.S.I.A. 667 P.S.I.A.
Critical Temperature 378 R 408 R

P_c 2890.2 P_c^2 5245.10

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		2114.6	4471.5	773.5
2.		1987.2	3948.9	1296.1
3.		1833.8	3362.8	1882.2
4.		1681.8	2828.4	2416.7
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.170$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.170$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5,398$

Absolute Open Flow 5,398 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.000

Remarks: Well Produced 8.00 BBL of 57.0 API Gr. Condensate

Approved By Division	Conducted By:	Calculated By:	Checked By:
	~~Gradient~~ Pluteau Testing	BM	BM