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NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

JAN 8 1979

Form C-122
Revised 9-1-65

O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 12-28-78	
Company: GULF OIL EXPLORATION CO.		Connection: LLANO		
Pool: UNDESIGNATED		Formation:		Unit:
Completion Date: 3-2-78	Total Depth: 10,365	Plug Back TD: 10323	Elevation: 3415 G L	Farm or Lease Name: NOPAL DRAW FEDERAL
Csg. Size: 5 ½	Wt.: 17.	d:	Set At: 10365	Perforations: From 10098 To 10152	Well No.: # 1
Tbg. Size: 2 3/8	Wt.: 4.7	d:	Set At: 10023	Perforations: From To	Unit: C Sec.: 8 Twp.: 21 S Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 10022	County: EDDY
Producing Thru: TBG.	Reservoir Temp. °F: 175 @ 10098	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10023	10023	.609	.722	.769			3	FLG.

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI						3200				48 HRS.
1.	3 X 1.250		500	5	68	2880				1 HR.
2.	3 X 1.250		525	9.5	72	2540				1 HR.
3.	3 X 1.250		525	17	75	2105				1 HR.
4.	3 X 1.250		530	36	70	1425				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 Q, Mcfd
1	7.577	50.66	513.2	.9924	1.281	1.043	509
2.	7.577	71.50	538.2	.9887	1.281	1.044	716
3.	7.577	95.65	538.2	.9859	1.281	1.044	956
4.	7.577	139.84	543.2	.9905	1.281	1.045	1405
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.76	528	1.47	.919
2.	.80	532	1.49	.918
3.	.80	535	1.49	.918
4.	.81	530	1.48	.915
5				

Gas Liquid Hydrocarbon Ratio DRY Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons Deg.
Specific Gravity Separator Gas .609 X X X X X X X X X
Specific Gravity Flowing Fluid X X X X X
Critical Pressure 671 P.S.I.A. P.S.I.A.
Critical Temperature 358 R R

P_c 3213.2 P_c^2 10324.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2894.3	8377.0	1947.7
2		2555.8	6532.1	3792.6
3		2124.1	4511.8	5812.9
4		1457.7	2124.9	8199.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.259

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.216

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.708

Absolute Open Flow 1,708 Mcfd @ 15.025 Angle of Slope Θ 49.75 Slope, n .847

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	LARRY DAVIS	LARRY DAVIS	