NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED
MAR 08 1983
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special	Test Date: 3-2-83		
Company: Gulf Oil, ~~Explor. & Prod.~~ Corp.	Connection: Air		
Pool: ~~North~~ Und. Loving Atoka	Formation: Atoka	Unit: F	
Completion Date: 3-2-83	Total Depth: 12721	Plug Back T.D.: 12641	Elevation: 3030' Gr.
Farm or Lease Name: Loving Federal Com			
Csg. Size: 5" / Wt. / d / Set At: 12721	Perforations: From 11458 To 11540	Well No.: 1	
Tbg. Size: 2-3/8" / Wt. / d / Set At: 11386	Perforations: From To	Unit: F / Sec.: 4 / Twp.: 23s / Rge.: 28e	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 11386	County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 188 @ 11386	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: N.M.			
L: 11386	H: 11386	Gg: .5775	% CO_2: .575
% N_2: .785	% H_2S:	Prover:	Meter Run: 4"
Taps: Flg.			

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					4475				30hrs
1.	4 x 3.000	725	4.0	92	4250				1hr
2.	4 x 3.000	730	7.0	83	4100				1hr
3.	4 x 3.000	720	14.5	64	3800				1hr
4.	4 x 3.000	720	25.0	80	3250				1hr
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	51.64	54.34	738.2	.9706	1.315	1.048	3753
2	51.64	72.13	743.2	.9786	1.315	1.052	5042
3	51.64	103.11	733.2	.9962	1.315	1.058	7380
4	51.64	135.39	733.2	.9813	1.315	1.052	9491
5							

NO.	P_t	Temp. °R	T_t	Z
1	1.10	552	1.58	.911
2	1.11	543	1.55	.904
3	1.09	524	1.50	.894
4	1.09	540	1,54	.904
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/Bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .5775 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. P.S.I.A.
Critical Temperature: 350 R R

P_c 4488.2 P_c^2 20143.9

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		4338.4	18821.7	1322.2
2		4231.3	17903.9	2240.0
3		4073.9	16596.7	3547.2
4		3725.5	13879.4	6264.5
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.216$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.049$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 19.443$

Post FD-2
4-1-83
Comp. + BH

Absolute Open Flow: 19,443 Mcfd @ 15.025 Angle of Slope θ: 58.5 Slope, n: .614

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Davis Services, Inc.	Rick Pagan	