NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 9-1-65

MULTIPOINT AN ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAY 21 1976
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 5-14-1976
Company: Gulf Oil Corporation	Connection: Air		Unit
Pool: Undesignated Morrow	Formation: Morrow		
Completion Date: 5-12-76	Total Depth: 11450	Plug Back TD: 11410	Elevation: 3352 Gr.
Farm or Lease Name: Eddy F.V. State Com.			
Csg. Size: 5.50" / Wt.: 17.00# / d: 4.892" / Set At: 11450	Perforations: From 11112 To 11134		Well No.: 1
Tbg. Size: 2.375EUE / Wt.: 4.70# / d: 1.995" / Set At: 11032	Perforations: From To		Unit: H / Sec.: 25 / Twp.: 20 / Rge.: 27
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Completion	Packer Set At: 11032		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 170 @ 11123	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
11123	11123	0.616	0.69	0.29	0.00		X	

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						3539	60			
1.	4.00	2.00	690	5.50"	60	3457	60			1.00 Hr.
2.	4.00	2.00	690	19.00"	92	3385	60			1.00 Hr.
3.	4.00	2.00	690	36.00"	81	3290	60			1.00 Hr.
4.	4.00	2.00	710	85.00"	60	2975	60			1.00 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.	19.81	62.190	723.2	1.0000	1.2741	1.0660	1673
2.	19.81	115.589	703.20	0.9706	1.2741	1.0550	2987
3.	19.81	159.108	703.20	0.9804	1.2741	1.0590	4169
4.	19.81	247.935	723.20	1.0000	1.2741	1.0690	6690 ✓
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	1.05	520	1.42	0.870
2.	1.05	552	1.51	0.897
3.	1.05	541	1.48	0.885
4.	1.08	520	1.42	0.865
5.				

Gas Liquid Hydrocarbon Ratio 131237 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 56.00 Deg.
Specific Gravity Seperator Gas 0.616 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.639
Critical Pressure 671 P.S.I.A. 670 P.S.I.A.
Critical Temperature 365 R 372 R

P_c 3552.2 P_c^2 12618

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3485.8	12150	468
2		3444.5	11865	753
3		3394.1	11519	1099
4		3229.4	10429	2189
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 11.4813$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 11.4813$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 47866$

Absolute Open Flow 47866 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.00

Remarks:

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	Larry Davis	Larry Davis	