NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122 Revised 1-1-65

RECEIVED
MAY 5 1971
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 4-20-71	
Company: Morris R. Antweil	Connection: None			Unit:
Pool: South Carlsbad	Formation: Morrow			
Completion Date: 4-1-71	Total Depth: 11,818	Plug Back TD: 11,759	Elevation: 3206 K.B.	Farm or Lease Name: Little Jewell
Csg. Size: 7" 4-1/2" / Wt.: 23 11.60 / d: 6.366 4.000 / Set At: *10,703		Perforations: From 11,441 To 11,468		Well No.: 1 - L.T.
Tbg. Size: 2-3/8 / Wt.: 4.70 / d: 1.995 / Set At: 11390		Perforations: From Open End To		Unit: F / Sec.: 31 / Twp.: 22-S / Rge.: 27-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G.G.		Packer Set At: 11,390		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 174 @ 11455	Mean Annual Temp. °F:	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11390	11390	.581	1.02	.28	Nil		3.068"	Flange

	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					3778	70		S.I.	96 Hrs.
1.	3.068 X 1.500	701	18	76	3750	72			.75
2.	3.068 X 1.500	780	48	54	3651	72			.50
3.	3.068 X 1.500	880	92	40	3468	72			.50
4.	3.068 X 2.000	885	38	42	3167	72			1.00
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	11.13	113.38	714.2	.9850	1.312	1.098	1791
2.	11.13	195.12	793.2	1.006	1.312	1.125	3225
3.	11.13	286.66	893.2	1.020	1.312	1.166	4978
4.	21.32	184.75	898.2	1.018	1.312	1.167	6139
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.90	536	1.52	.830
2.	2.11	514	1.46	.790
3.	2.37	500	1.42	.735
4.	2.39	502	1.43	.734
5.				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .581 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 676.8 P.S.I.A. 676.8 P.S.I.A.
Critical Temperature: 351.8 R 351.8 R

P_c 3791.2 P_c^2 14373.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3777.7	14271.0	102.3
2		3713.6	13790.8	582.5
3		3601.7	12972.2	1401.1
4		3371.3	11365.7	3007.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.779$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.186$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 13420$

Absolute Open Flow: 13420 Mcfd @ 15.025 Angle of Slope θ: 63.5 Slope, n: .500

Remarks: *Casing Size Set At 10,541 to 11,818

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bill Kirby	Bill Kirby	Bill Kirby