Copy to OCC 122-76

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
OCT 19 1976
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-14-76	
Company: Morris R Antweil	Connection: None				
Pool: Wildcat	Formation: Morrow			Unit: P	
Completion Date: 9-14-76	Total Depth: 11550	Plug Back TD: 11410	Elevation: 3152 gr.	Farm or Lease Name: Mesa Grande	
Csg. Size: 5 1/2 / Wt.: 17# / d: / Set At: 11410		Perforations: From 11107 To 11246		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 11025		Perforations: From To		Unit: F / Sec.: 11 / Twp.: 22 / Rge.: 26	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 11025		County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 183 @ 11107	Mean Annual Temp. °F:	Baro. Press. – P_a:	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11025	11025	.603				2"		

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover ~~Line~~ Line	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						2336	Shut-in			72 hr.
1.	2	x 1	58		0	2020				1 hr.
2.	2	x 1	65		0	1760				1 hr.
3.	2	x 1	90		26	1290				1 hr.
4.	2	x 1	100		32	987				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	17.09		71.2	1.063	1.288	Nil	1,666
2.	17.09		78.2	1.063	1.288	Nil	1,830
3.	17.09		103.2	1.034	1.228	Nil	2,349
4.	17.09		113.2	1.029	1.288	Nil	2,564
5.							

NO.	P_t	Temp. °R	T_r	Z
1.				
2.				
3.		NEG.		
4.				
5.				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/Bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .603 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. P.S.I.A.
Critical Temperature: 358 R R

P_c 2349.2 P_c^2 5518.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			4225.5	1293.2
2			3455.6	2263.1
3			1887.0	3631.7
4			1230.8	4287.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.267$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.066$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.441$

Absolute Open Flow: 3,441 Mcfd @ 15.025 | Angle of Slope θ: 63.5 | Slope, n: .500

Remarks: Slope was too steep a 63.5 was drawn thru low rate of flow to correspond to commission rules.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	Joe B. Murray	