NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 3 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial [/] Annual [ ] Special			Test Date: 12/22/71
Company: Amoco Production Company	Connection: None		Unit
Pool: Wildcat	Formation: Morrow Penn		API No. 30-015-20510
Completion Date: 12/18/71	Total Depth: 10,168	Plug Back TD: 10,000	Elevation: 3587 KDB
Farm or Lease Name: Malco "S" Federal			
Csg. Size: Liner 5-1/2" / Wt.: 17# / d: 4.892 / Set At: 6277' - 10,138	Perforations: From 9621 To 9929		Well No.: X #3
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: 1.995 / Set At: 9504	Perforations: From Open End To		Unit: F / Sec.: 11 / Twp.: 18S / Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 9491'		County: Eddy
Producing Thru: 2-3/8" Tbg	Reservoir Temp. °F: 145 @ 9775	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	Tap
9504	9504	0.630	0.38	0.31	0	-	6"	Flange

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					2862		Pkr	-	40 hrs
1.	6.065 x 2.500	565	5.3	110	2689	60	Pkr	-	1 hr
2.	6.065 x 2.500	560	16.0	97	2453	60	Pkr	-	1 hr
3.	6.065 x 2.500	590	27.5	87	2220	60	Pkr	-	1 hr
4.	6.065 x 2.500	600	36.0	81	2035	60	Pkr	-	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	30.31	55.34	578.2	0.9551	1.260	1.038	2,096
2	30.31	95.76	573.2	0.9662	1.260	1.041	3,678
3	30.31	128.79	603.2	0.9750	1.260	1.048	5,026
4	30.31	148.56	613.2	0.9804	1.260	1.049	5,836
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.86	570	1.57	0.928
2.	0.85	557	1.53	0.922
3.	0.90	547	1.50	0.911
4.	0.91	541	1.49	0.908
5				

Gas Liquid Hydrocarbon Ratio 74,136 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
Specific Gravity Separator Gas 0.630 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.670
Critical Pressure 673 P.S.I.A. 670 P.S.I.A.
Critical Temperature 364 R 381 R

* P_c 3773.2 P_c^2 14,237

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3632.8	13,197	1,040
2		3330.2	11,090	3,147
3		3173.2	10,069	4,168
4		2981.1	8,887	5,350
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.661$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.848$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 10,785$

Absolute Open Flow 10,785 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n 0.626

Remarks: * Pc measured with bottom hole pressure recorder

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Al Klaar	Ed Snook	Ed Snook