MULTIPO AND ONE POINT BACK PRESSURE ST FOR GAS WELL 122 file Revised 9-1-65

RECEIVED

FEB 8 1977

O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 1-28-77	
Company: Amoco Prod. Co.	Connection: To Air			
Pool: South Empire Morrow ~~Undesignated~~	Formation: Morrow			Unit:
Completion Date: 1-28-77	Total Depth: 11,165	Plug Back TD: 11130	Elevation: 3567 Gr.	Farm or Lease Name: Empire South Deep Unit

Csg. Size	Wt.	d	Set At	Perforations:		Well No.
5 1/2"	17#	4.892"	11165	From 10642	To 10900	12

Tbg. Size	Wt.	d	Set At	Perforations:		Unit	Sec.	Twp.	Rge.
2 3/8"	4.7#	1.995	10500	From Open	To Ended	K	5	18 S	29 E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
Single	10500	Eddy

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tubing	190 @ 10771	60	13.2	New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10771	10771	0.6483	0.41	0.54	–	--	4"	Flange

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
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	
SI						3175.0		Packer	Choke	45 hrs
1.	4"	x 2.00"	465.0	22.0	82	3039.0	64		13/64	60 Min
2.	4"	x 2.00"	660.0	43.0	82	2890.0	65		16/64	60 "
3.	4"	x 2.00"	800.0	55.0	85	2763.0	67		18/64	60 "
4.	4"	x 2.00"	990.0	66.0	87	2618.0	68		20/64	60 "
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	102.6	478.2	.9795	1.2420	1.043	2579
2.	19.81	170.1	673.2	.9795	1.2420	1.060	4345
3.	19.81	211.5	813.2	.9768	1.2420	1.073	5454
4.	19.81	257.3	1003.2	.9750	1.2420	1.087	6709
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.77	542	1.45	.920
2.	1.00	542	1.45	.890
3.	1.27	545	1.45	.868
4.	1.49	547	1.46	.846
5				

Gas Liquid Hydrocarbon Ratio – Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons – Deg.
Specific Gravity Separator Gas 0.6483 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 673 P.S.I.A. P.S.I.A.
Critical Temperature 375 R R

P_f 2788.2 P_f^2 10165

NO	P_f^2	P_s	P_s^2	$P_f^2 - P_s^2$
1	9316	3093.0	9567	598.0
2	8429	3012.4	9075	1090.0
3	7707	2949.6	8700	1465.0
4	6923	2897.0	8393	1772.0
5				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 5.736$

(2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 4.643$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 31,150$

POSTED ID-2 TEST 2-11-77

Absolute Open Flow 31,150 Mcfd @ 15.025 | Angle of Slope θ 48.7° | Slope, n 0.879

Remarks: Good Test – Good Point Alignment

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	C.J.P.	K.J.W.	J.W.W.