NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
NOV 18 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 9-29-81	
Company: AMOCO PRODUCTION COMPANY		Connection: EL PASO NATURAL GAS		Unit
Pool: HAPPY VALLEY MORROW		Formation: MORROW		
Completion Date: 9-29-81	Total Depth: 11500.	Plug Back TD: 11426.	Elevation: 3379.	Farm or Lease Name: LANCASTER SPRING
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 11426.		Perforations: From 10942. To 11178.		Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 10837.		Perforations: From 0. To 0.		Unit: K / Sec.: 9 / Twp.: 22 / Rge.: 26
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 10725.		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 260. @ 11060.	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11060.	11060.	0.617	2.13	0.18	0.	0.	4.0	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					3797.	74.			720.0
1.	4.00 X 1.750	720.	2.6	100.	3544.	78.	0.	0.	1.0
2.	4.00 X 1.750	720.	3.5	100.	3152.	79.	0.	0.	1.0
3.	4.00 X 1.750	720.	4.1	99.	2948.	82.	0.	0.	1.0
4.	4.00 X 1.750	735.	5.1	95.	2575.	85.	0.	0.	1.0
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	14.94	43.24	733.2	0.9636	1.2726	1.0492	831
2.	14.94	50.66	733.2	0.9636	1.2726	1.0492	973.
3.	14.94	54.83	733.2	0.9645	1.2726	1.0496	1055.
4.	14.94	61.47	748.2	0.9680	1.2726	1.0521	1190.
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.08	560.	1.56	0.908
2.	1.08	560.	1.56	0.908
3.	1.08	559.	1.55	0.908
4.	1.10	555.	1.54	0.903
5.				

Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0. Deg.
Specific Gravity Separator Gas 0.617 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.617
Critical Pressure 681. P.S.I.A. 681. P.S.I.A.
Critical Temperature 360. R 360. R

P_c 3808.8 P_c^2 14514.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	12654.	3541.	12540.	1974.
2	10018.	3150.	9924.	4590.
3	8769.	2945.	8671.	5843.
4	6699.	2573.	6620.	7894.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.8503$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3624$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1621$

Absolute Open Flow 1621. Mcfd @ 15.025 Angle of Slope θ 63.3 Slope, n 0.503

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bennett-Cathey	B. A. Hemmeline	L. W. Sheppard