NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 31 1975
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 1-23-75	
Company: Champlin Petroleum Company	Connection: El Paso Natural Gas Co.			
Pool: East Carlsbad Wolfcamp (C. 5015 5-28-75)	Formation: Wolfcamp			Unit
Completion Date: 1-24-75	Total Depth: 12100	Plug Back TD: 10440	Elevation: 3109 DF	Farm or Lease Name: Pecos-Federal
Csg. Size: 7" / Wt.: 29.0 / d: 6.184 / Set At: 11397		Perforations: From 9401 To 9806		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5 / d: 2.441 / Set At: 9340		Perforations: From To		Unit: C / Sec.: 1 / Twp.: 22S / Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 9340		County: Eddy
Producing Thru: TBG	Reservoir Temp. °F: 171 @ 9603	Mean Annual Temp. °F: 60 (E)	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9603	9603	.684	0	0	0		4"	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					3376	60			65
1.	4" x 1.000"	778.9	4.40	70	2722	75			2
2.	4" x 1.000"	778.9	12.30	70	2615	75			2
3.	4" x 1.000"	770.0	24.00	71	2397	75			2
4.	4" x 1.000"	764.7	41.00	73	2170	75			2
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	4.752	59.04	792.1	.9905	1.209	1.091	367
2.	4.752	98.71	792.1	.9905	1.209	1.091	613
3.	4.752	137.10	783.2	.9896	1.209	1.090	849
4.	4.752	178.59	777.9	.9877	1.209	1.087	1102
5.							

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

Gas Liquid Hydrocarbon Ratio 2.467 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 52.1 Deg.
Specific Gravity Separator Gas .684 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 1.632
Critical Pressure 669 P.S.I.A. 619 P.S.I.A.
Critical Temperature 386 R 668 R

P_c 3389.2 P_c^2 11486.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2735.4	7482.4	4004.3
2		2630.0	6916.9	4569.8
3		2412.4	5819.7	5667.0
4		2188.0	4787.3	6699.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.715$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.715$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1890$

Absolute Open Flow 1890 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.000 (2)

Remarks: (1) PW calculated by time sharing program using stepwise procedure
Z factors based on TR = 1.00 (Reservoir TR = .94)
(2) Slope of back pressure curve greater than 1.000 (slope of 1.000 drawn through highest rate).

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Joe Ragan	J. K. Adair, Jr.	