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NEW MEXICO OIL CONSERVATION COMMISSION — Form C-122 Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JAN 31 1978
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special							Test Date: 1-24-78		
Company: Champlin Petroleum Company				Connection: None					
Pool: East Carlsbad - Morrow - Gas				Formation: Morrow				Unit:	
Completion Date: 1-24-78		Total Depth: 11,681		Plug Back TD: 11,622			Elevation: 3134 Gr	Farm or Lease Name: Reeves Federal	
Csg. Size: 5½	Wt.: 17	d: 4.892	Set At: 11,677	Perforations: From 11,510		To 11,538		Well No.: 2	
Tbg. Size: 2-7/8	Wt.: 6.5	d: 2.441	Set At: 11,380	Perforations: From		To		Unit: C	Sec.: 35	Twp.: 21-S	Rge.: 27-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 11,350				County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 186 @ 11,519		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2				State: New Mexico	
L: 11,524	H: 11,524	Gg: 0.609	% CO_2: 4.57	% N_2: 0.39	% H_2S: 0	Prover: 2"	Meter Run: -	Taps: -	

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							3745	60	Pkr.	Pkr.	67
1.	2.00	x	0.750	92		24	3110	60			1
2.	2.00	x	0.750	162		33	2551	60			1
3.	2.00	x	1.250	78		36	2100	60			1
4.	2.00	x	1.250	82		41	1675	60			1
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	9.67		105.2	1.037	1.281	1.011	1366
2.	9.67		175.2	1.027	1.281	1.017	2268
3.	28.28		91.2	1.024	1.281	1.009	3413
4.	28.28		95.2	1.019	1.281	1.009	3545
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.15	484	1.37	0.979
2.	0.25	493	1.40	0.967
3.	0.13	496	1.41	0.983
4.	0.14	501	1.42	0.983
5.				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: 0.609 (xxxxxxxxx)
Specific Gravity Flowing Fluid: xxxxx (0.609)
Critical Pressure: 691 P.S.I.A. (691 P.S.I.A.)
Critical Temperature: 353 R (353 R)

P_c 3758.2 P_c^2 14124

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3129	9789	4335
2		2577	6642	7482
3		2143	4592	9533
4		1728	2985	11139
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2679$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2679$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4495$

Absolute Open Flow: 4,495 Mcfd @ 15.025 | Angle of Slope θ: 45.0 | Slope, n: 1.0

Remarks: Calculated using Time - Share Computer Program using Stepwise Procedure

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	G. W. Sparkman	(See Remarks)	K. W. Lewis