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C-122

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NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [x] Initial [ ] Annual [ ] Special			Test Date: 3/4/74	
Company: Cities Service Company		Connection: None		
Pool: ~~Mescalero~~ Undesignated ~~Wolfcamp~~		Formation: Wolfcamp		Unit
Completion Date: 12/16/73	Total Depth: 11,500'	Plug Back TD: 11,379'	Elevation: 3265 (KB)	Farm or Lease Name: Government T Com
Csg. Size: 5½ / Wt.: 20 / d: 4.778 / Set At: 11,439'		Perforations: From 9206 To 9,231		Well No.: 1
Tbg. Size: 2 7/8 / Wt.: 6.4 / d: 2,441 / Set At: 11,001		Perforations: From To		Unit: K / Sec.: 14 / Twp.: 20S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Dual		Packer Set At: 9126		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 166 @ 9206	Mean Annual Temp. °F:	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9206		.649	52%	Nil	.13 Gr.		6"	Flg.

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI						2731				24 hr.
1.	6	x 1½	580	8	82	2785	74			1 hr.
2.	6	x 1½	590	15	89	2564	72			1.5 hr.
3.	6	x 1½	590	26	87	2295	70			1 hr.
4.	6	x 1½	590	47	84	2070	70			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	10.70	68.89	593.2	.9795	1.241	1.053	944
2.	10.70	95.12	603.2	.9732	1.241	1.051	1292
3.	10.70	125.23	603.2	.9750	1.241	1.052	1706
4.	10.70	168.38	603.2	.9777	1.241	1.054	2304
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.89	542	1.46	.902
2.	.90	549	1.48	.906
3.	.90	547	1.47	.903
4.	.90	544	1.46	.901
5.				

Gas Liquid Hydrocarbon Ratio 9.902 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 51.6 @ 60° Deg.
Specific Gravity Separator Gas .649 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX G Mix .937
Critical Pressure 670 P.S.I.A. 661 P.S.I.A.
Critical Temperature 372 R 471 R

P_c 2744.2 P_c^2 7530.6

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2799.7	7838.3	
2		2580.7	6660.0	870.6
3		2316.1	5364.3	2166.3
4		2097.2	4398.2	3132.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.650$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.941$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.800$

Absolute Open Flow 3,800 Mcfd @ 15.025 Angle of Slope θ 63.5 Slope, n .500

Remarks: 29 Bbl. distillate made during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	John West	Rick Pagan	