CISF File

OIL AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 8-19-85	
Company: CITIES SERVICE ✓		Connection: AIR WELL		
Pool: WILDCAT — Wolfcamp		Formation: MORROW		Unit:
Completion Date: 8-19-85	Total Depth: 10,707'	Plug Back T.D.: 10,383'	Elevation: 4416'GR	Farm or Lease Name: FEDERAL "AC"
Csg. Size: 5.5 / Wt.: 17 / d: 4.892 / Set At: ~~10400~~ 10706	Perforations: From 10202 To 10234			Well No.: 1
Tbg. Size: 2.785 / Wt.: 6.5 / d: 2.441 / Set At: 10096	Perforations: From To			Unit: K / Sec.: 35 / Twp.: 23S / Rge.: 23E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 10088		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 240 @ 10216	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10218	10218	.584	1.402	.197	0	0	4.026	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	B.H.P. DATA: Press. p.s.i.g.	CHOKE	Duration of Flow
SI					3146	240	3928		86.0
1.	4.03 X 1.000	520	55.0	87	3040	240	3831	7/64	1.0
2.	4.03 X 2.250	525	12.0	69	2800	240	3548	11.5/64	1.0
3.	4.03 X 2.250	525	21.0	79	2545	240	3275	14.5/64	1.0
4.	4.03 X 2.250	520	31.6	75	2318	240	3045	16 1/64	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	4.75	171.25	533.2	0.9750	1.3086	1.0355	1075
2	25.64	80.36	538.2	0.9915	1.3086	1.0408	2783
3	25.64	106.31	538.2	0.9822	1.3086	1.0381	3637
4	25.64	129.80	533.2	0.9859	1.3086	1.0388	4461
5							

NO.	P_t	Temp. °R	T_t	Z
1	0.79	547	1.56	0.933
2	0.79	529	1.51	0.923
3	0.79	539	1.54	0.928
4	0.79	535	1.53	0.927
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas 0.584 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.584
Critical Pressure 679 P.S.I.A. 679 P.S.I.A.
Critical Temperature 351 °R 351 °R

P_c 3203.3 P_c^2 10261

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3121	9741	520
2		2883	8313	1948
3		2656	7056	3205
4		2467	6086	4175
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 2.4575

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.:8435

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 8224

Post ID-2
6-13-85
Comp + BK

Absolute Open Flow 8224 Mcfd @ 15.025 Angle of Slope θ 55.8 Slope, n 0.680

Remarks: B.H.P. MEASURED WITH AMERADA PRESSURE ELEMENTS

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	BENNETT & CATHEY	DON BENNETT	