NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

C-Files Form C-122 Revised 9-1-65

C-122

RECEIVED

AUG 22 1978

O. C. C.

ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 7-11-78			
Company: COMMANCHE OIL & GAS CO.				Connection: Air					
Pool: Sams Ranch				Formation: Grayburg				Unit: 1980'S - 1980'W	
Completion Date: 7-11-78		Total Depth: 1853		Plug Back TD:		Elevation: 3600.3 gr.		Farm or Lease Name: Federal "14"	
Csg. Size: 5 1/2	Wt.: 15.5	d:	Set At: 1818	Perforations: From open		To hole		Well No.: 1	
Tbg. Size: 2 3/8	Wt.: 4.6	d:	Set At: 1850	Perforations: From		To		Unit: K	Sec.: 14	Twp.: 14	Rge.: 28
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At:				County: Chaves	
Producing Thru: Tbg.	Reservoir Temp. °F:		Mean Annual Temp. °F:		Baro. Press. – P_a:			State: New Mexico	
L	H	Gg: .734 (Assumed)	% CO_2	% N_2	% H_2S	Prover	Meter Run: 6" choke	Taps: nipple	

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							1017		1017		72 hrs.
1.	6	x	8/64	918		75	918		918		1 hr.
2.	6	x	9/64	875		74	875		878		1 hr.
3.	6	x	10/64	806		74	806		808		1 hr.
4.	6	x	11/64	776		74	776		778		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	.2618		931.2	.9859	1.167	1.124	315
2	.3346		888.2	.9868	1.167	1.117	382
3	.4173		819.2	.9868	1.167	1.108	436
4	.5090		789.2	.9868	1.167	1.103	510
5							

NO.	P_t	Temp. °R	T_t	Z
1	1.39	535	1.33	.792
2	1.33	534	1.33	.801
3	1.23	534	1.33	.815
4	1.18	534	1.33	.822
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas .734 XXXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure 668 P.S.I.A. _____ P.S.I.A.

Critical Temperature 401 R _____ R

P_c 1030.2 P_c^2 1061.3

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		931.2	867.1	194.2
2		891.2	794.2	267.1
3		821.2	674.4	386.9
4		791.2	626.0	435.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.438$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.702$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .868$

Absolute Open Flow 868 Mcfd @ 15.025 Angle of Slope θ 59.25° Slope, n .597

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Marshall Morris	Rick Pagan	