C/ST
File

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 9-1-65

RECEIVED BY
OCT 19 1983
O. C. D.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 9-27-83	
Company: Amoco Production Co. (USA)			Connection: Llano		
Pool: ~~Undes.~~ Atoka (Salt Draw)			Formation: Atoka		Unit
Completion Date: 10-5-83	Total Depth: 13623		Plug Back TD: ~~13577~~ 12,900	Elevation: ~~3660~~ 2997.9	Farm or Lease Name: State MA Com
Csg. Size: 4.500 / Wt.: 15.1 / d: 3.830 / Set At: 13622			Perforations: From 12046 To ~~12063~~ 12070		Well No.: 1
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: ~~11462~~ 12,007			Perforations: From 0 To 0		Unit: # 3 / Sec.: 25 / Twp.: 28 / Rge.:
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Natural			Packer Set At: 11462		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 190 @ 13577	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.0		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13577	13577	0.582	0.44	0.77	0.0	0.0	3.1	Flange

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					7368	70			120.0
1.	3.07 x 2.000	515	10.0	62	7270	73	0	0	1.0
2.	3.07 x 2.000	525	20.0	62	7193	79	0	0	1.0
3.	3.07 x 2.000	540	38.0	62	7077	69	0	0	1.0
4.	3.07 x 2.000	570	73.0	62	6837	49	0	0	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	21.79	72.66	528.0	0.9981	1.3104	1.0424	2158
2.	21.79	103.73	538.0	0.9981	1.3104	1.0432	3084
3.	21.79	144.96	553.0	0.9981	1.3104	1.0444	4314
4.	21.79	206.30	583.0	0.9981	1.3104	1.0468	6154
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.78	522	1.49	0.920
2.	0.80	522	1.49	0.919
3.	0.82	522	1.49	0.917
4.	0.87	522	1.49	0.913
5.				

Gas Liquid Hydrocarbon Ratio 2000 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 56 Deg.
Specific Gravity Separator Gas 0.582 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx 0.584
Critical Pressure 674 P.S.I.A. 674 P.S.I.A.
Critical Temperature 350 R 351 R

P_c 7373.7 P_c^2 54371

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	53042	7277	52953	1418
2	51927	7198	51816	2556
3	50268	7105	50481	3891
4	46923	6912	47782	6590
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 8.2508

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 4.2437

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 26116

Post ID-2
10-21-83
Comp. Atr.

Absolute Open Flow 26116 Mcfd @ 15.025 | Angle of Slope θ 55.6 | Slope, n 0.685

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Jarrel Services	Richard Roeth	