451 File

NEW MEXICO OIL CONSERVATION COMMSSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED BY
DEC 20 1983
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 11-8-83	
Company: Amoco Production Company ✓		Connection: Conoco		
Pool: Shugart ~~Und~~ Morrow		Formation: Morrow		Unit
Completion Date: ~~6-2-79~~ 11-9-83	Total Depth: 11800	Plug Back TD: ~~10965~~ 11,755	Elevation: 3632.9 ~~3638~~ GL	Farm or Lease Name: Lt. Fed ~~A Fed Com~~ Greenwood PG
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 11800		Perforations: From 11492 To 11732		Well No.: 1
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: 11396		Perforations: From 0 To 0		Unit: F / Sec.: 35 / Twp.: 18 / Rge.: 31
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 11300		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 154 @ 11800	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11612	11800	0.749	0.42	0.46	0.0	0.0	4.0	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	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							970	72	48.0
1.	4.03 x 2.250	29	3.2	70	0	0	924	73	0.8
2.	4.03 x 2.250	31	10.2	70	0	0	840	73	0.8
3.	4.03 x 2.250	38	21.2	70	0	0	688	74	0.8
4.	4.03 x 2.250	45	35.4	70	0	0	504	74	0.8
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	25.64	11.71	42.3	0.9905	1.1555	1.0051	345
2.	25.64	21.27	44.2	0.9905	1.1555	1.0053	628
3.	25.64	32.88	51.1	0.9905	1.1555	1.0062	971
4.	25.64	45.23	57.8	0.9905	1.1555	1.0070	1337
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.06	530	1.31	0.990
2.	0.07	530	1.31	0.989
3.	0.08	530	1.31	0.988
4.	0.09	530	1.31	0.986
5.				

Gas Liquid Hydrocarbon Ratio 0.0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0.0 Deg.

Specific Gravity Separator Gas	0.749	xxxxxxxxx
Specific Gravity Flowing Fluid	xxxxx	0.749
Critical Pressure	666 P.S.I.A.	666 P.S.I.A.
Critical Temperature	403 R	403 R

P_c 973.9 P_c^2 948

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	878	928	861	87
2	728	845	715	234
3	492	695	483	465
4	267	513	264	685
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3850$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2390$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1656$

Absolute Open Flow 1656 Mcfd @ 15.025 | Angle of Slope θ 56.7 | Slope, n 0.658

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
		Barbara Wagner	Richard Booth