NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT BACK PRESSURE TEST FOR GAS WELL AND ONE-POINT BACK PRESSURE TEST FOR GAS WELL

Form C-12
Revised 9

RECEIVED
JUL 14 1987
O. C. D.
ARTESIA, OFFICE

c/s F. file

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 5-4-85	
Company: FRED POOL DRILLING INC.	Connection: TO AIR			
Pool: ~~FWOR~~ RANCH Pre Permian	Formation: Permo PENN		Unit: J	
Completion Date: 3-15-85	Total Depth: 6080.	Plug Back T.D.: 6020	Elevation: 0	Farm or Lease Name: EASTLAND STATE
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 6080.		Perforations: From 5854 To 6014		Well No.: 3
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 5754		Perforations: From 0 To 0		Unit: J / Sec.: 13 / Twp.: 12S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 5754.		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 127 @ 5934	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: NEW MEXICO
L: 5934 / H: 5934	Gg: 0.635	% CO_2: 2.44	% N_2: 3.62	% H_2S: 0 / Prover: 2.0 / Meter Run: 0 / Taps:

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F
SI						
1.	2.00	X	0.063	1775	0	68
2.	2.00	X	0.125	1545	0	70
3.	2.00	X	0.188	1015	0	69
4.	2.00	X	0.219	676	0	74
5.						

TUBING DATA / B.H.P. DATA

NO.	Tubing Press. p.s.i.g.	Tubing Temp. °F	B.H.P. Press. p.s.i.g.	CHOKE	Duration of Flow
SI	1837.2	2175	127		72.0
1.	1775.2	2107	127	24/64	1.0
2.	1545.2	1835	127	24/64	1.0
3.	1015.2	1357	127	24/64	1.0
4.	676.2	1046	127	24/64	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	Supercompress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.06	0	1788.2	0.9924	1.2549	1.1326	161
2	0.26	0	1558.2	0.9905	1.2549	1.1182	572
3	0.61	0	1028.2	0.9915	1.2549	1.0828	841
4	0.84	0	689.2	0.9868	1.2549	1.0537	753
5							

NO.	P_t	Temp. °R	T_r	Z
1	2.65	528	1.49	0.780
2	2.31	530	1.49	0.800
3	1.52	529	1.49	0.853
4	1.02	534	1.50	0.901
5				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: 0.635 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 0.635
Critical Pressure: 675 P.S.I.A. 675 P.S.I.A.
Critical Temperature: 355 °R 355 °R

P_c 1866.5 P_c^2 3484

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	4495	1809	3274	210
2	3416	1581	2500	984
3	1877	1179	1391	2093
4	1122	916	839	2645
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6643$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4429$

AOF = $Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1213$

Absolute Open Flow: 1213 Mcfd @ 15.025 | Angle of Slope θ: 54.3 | Slope, n: 0.719

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	BENNETT & CATHEY	RICHARD TOWNLEY	