Copy to NMOCC
Revised 9-1-65
C-122

MULTIPOINT / ONE POINT BACK PRESSURE TEST FOR GAS WELL

N. M. O. C. C. COPY

RECEIVED
MAY 5 1976
O. C. C.
ARTESIA, OFFICE

RECEIVED
MAY - 3 1976
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 3-15-76	
Company: Yates Petroleum Corporation	Connection: None		
Pool: ~~Burton Flat~~ East Burton Flat Morrow (RS 9-1-76)	Formation: Morrow	Unit:	
Completion Date: 2-17-76	Total Depth: 11970	Plug Back TD: 11920	Elevation: 3317' KB
Farm or Lease Name: Williamson "BC"			
Csg. Size: 5½" / Wt.: 20# / d: 4.778 / Set At: 11965	Perforations: From 11823 To 11867	Well No.: 3	
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: 1.995 / Set At: 11809	Perforations: From To	Unit: H / Sec.: 17 / Twp.: 20S / Rge.: 29E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 11767	County: Eddy	
Producing Thru: 2-3/8"	Reservoir Temp. °F: 160 @ 11845	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: New Mexico			
L: 11830 / H: 11830	Gg: 0.661	% CO_2: 0.87	% N_2: 0.45
% H_2S: Nil	Prover: 2"	Meter Run:	Taps:

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					3715	62			1 hr.
1.	2"x3/8"	1325		74	1355	74			1 hr.
2.		1211		74	1225	74			1 hr.
3.		1181		74	1203	74			1 hr.
4.		1181		73	1200	74			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	2.378		1338.2	.9868	1.230	1.115	4306
2.	2.378		1224.2	.9868	1.230	1.106	3807
3.	2.378		1194.2	.9868	1.230	1.104	3805
4.	2.378		1194.2	.9877	1.230	1.104	3809
5.							

NO.	P_t	Temp. °R	T_c	Z
1.	1.986	534	1.459	.805
2.	1.819	534	1.459	.817
3.	1.774	534	1.459	.821
4.	1.774	533	1.456	.820
5.				

Gas Liquid Hydrocarbon Ratio: TSTM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx .661
Critical Pressure: 673 P.S.I.A.
Critical Temperature: 366 R

P_c 4932.0 P_c^2 24325

NO	P_t^2	P_w	R_w^2	$P_c^2 - R_w^2$
1				
2				
3				
4		1860.9	3463	20962
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1604$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1604$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4420$

Absolute Open Flow: 4420 Mcfd @ 15.025
Angle of Slope θ: 45 Slope, n: 1.00

Remarks: Delivrability test - flow stabilized in 3rd hour on positive choke

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Weaver	Eddie Mahfood	