NEW MEXICO OIL CONSERVATION COMMISSION — Form C-122

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED BY
JAN 19 1984
O. C. D.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special			Test Date: 11/25/83	
Company: Yates Petroleum Corporation	Connection: Transwestern Pipeline Company			Unit
Pool: Pecos Slope Abo	Formation: Abo			
Completion Date: 11/16/82	Total Depth: 4200.0'	Plug Back TD: 4194.0'	Elevation: 3936.7'	Farm or Lease Name: LILLIE "RB" FEDERAL
Csg Size: 4.500" / Wt.: 9.500# / d: 4.090" / Set At: 4194.0'	Perforations: From 3687.0' To 3857.0'			Well No.: 2
Tbg Size: 2.375" / Wt.: 4.700# / d: 1.995" / Set At: 3620.0'	Perforations: From 0.0' To 0.0'			Unit Sec F 14 Twp 5 Rge 24
Type Well: Single		Packer Set At: 3620.0'		County: Chaves
Producing Thru: Tubing	Resv. Temp. °F: 96 @ 3620'	Mean Temp. °F: 62.0	Baro. Press. - Pa: 13.2 psia.	State: New Mexico

L	H	Gg	%CO2	%N2	%H2S	Prover	Meter Run	Taps
3620.0'	3620.0'	.654	.02	6.45	0.00	0.000"	2.000"	Flange

NO	FLOW DATA: Prover Size	Orifice Size	Press. psig	Diff. hw	Temp. °F	TUBING DATA: Press. psig	Temp. °F	CASING DATA: Press. psig	Temp. °F	Duration of Flow
SI	0.000	x 0.000	0	0.0	68	910	0	0	0	0 hrs.
1.	2.067	x 1.250	300	13.8	68	769	62	0	0	24 hrs.
2.	2.067	x 1.250	330	16.1	68	703	62	0	0	24 hrs.
3.	2.067	x 1.250	360	28.1	68	651	62	0	0	24 hrs.
4.	2.067	x 1.250	380	36.0	68	540	62	0	0	24 hrs.
5.	0.000	x 0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	$\sqrt{h_w P_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	8.134	65.74	313.20	.992	1.237	1.025	672
2.	8.134	78.82	343.20	.992	1.237	1.027	808
3.	8.134	102.41	373.20	.992	1.237	1.030	1053
4.	8.134	122.24	393.20	.992	1.237	1.031	1258
5.	0.300	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.47	528	1.48	.953
2.	.52	528	1.48	.948
3.	.57	528	1.48	.943
4.	.60	528	1.48	.940
5.	0.00	0	0.00	0.000

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0.000 Deg.
Specific Gravity Separator Gas: .654 xxxxxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx .654
Critical Pressure: 659.4 PSIA 659.4 PSIA
Critical Temperature: 355.7°R 355.7°R

Pc 923.2 P_c^2 852.3

NO	P_t^2	Pw	P_w^2	$P_c^2 - P_w^2$
1.	611.8	785.7	617.4	234.9
2.	512.9	721.8	521.0	331.3
3.	441.2	674.5	455.0	397.3
4.	306.0	571.1	326.1	526.2
5.	0.0	0.0	0.0	0.0

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6546$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4863$

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1870$ Mcfd

Absolute Open Flow: 1870 Mcfd @ 15.025 | Angle of Slope, θ: 38 | Slope, n: .787

Remarks:

Approved By:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Andie Carpenter	