C/8 H

Form C-122

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

RECEIVED
MAR 08 1983
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12/24/82
Company: Yates Petroleum Corporation		Connection: Transwestern Pipeline Company		Unit
Pool: ~~Undesignated~~ Wildcat Box Canyon (Morrow)		Formation: ~~Box Canyon~~ Morrow		
Completion Date: 2/3/82	Total Depth: 8500.0'	Plug Back TD: 8446.0'	Elevation: 4420.0'	Farm or Lease Name: Mescal "SE" Federal
Csg Size: 5.500" / Wt.: 17.000# / d: 4.892" / Set At: 8500.0'		Perforations: From 8129.0' To 8134.0'		Well No.: 1
Tbg Size: 2.875" / Wt.: 6.500# / d: 2.441" / Set At: 8128.0'		Perforations: From 0.0' To 0.0'		Unit: C / Sec: 18 / Twp: 21S / Rge: 22E
Type Well: Single		Packer Set At: 8092.0'		County: Eddy
Producing Thru: Tubing	Resv. Temp. °F: 177 @ 8092'	Mean Temp. °F: 62.0	Baro. Press. - Pa: 13.2 psia.	State: New Mexico

L	H	Gg	%CO2	%N2	%H2S	Prover	Meter Run	Taps
8128.0'	8128.0'	.599	.29	.23	0.00	0.000"	2.000"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO	Prover Size	Orifice X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	Duration of Flow
SI	0.000	X 0.000	0	0.0	65	2228	0	0	0	0 hrs.
1.	4.026	X 1.500	960	3.7	70	2114	62	0	0	24 hrs.
2.	4.026	X 1.500	810	5.8	69	2093	62	0	0	24 hrs.
3.	4.026	X 1.500	656	8.6	65	2056	62	0	0	24 hrs.
4.	4.026	X 1.500	504	16.8	70	2030	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)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	10.841	60.01	973.20	.991	1.292	1.077	897
2.	10.841	69.10	823.20	.991	1.292	1.065	1022
3.	10.841	75.86	669.20	.995	1.292	1.054	1115
4.	10.841	93.21	517.20	.991	1.292	1.040	1345
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	1.45	530	1.49	.862
2.	1.22	529	1.49	.881
3.	.99	525	1.48	.899
4.	.77	530	1.49	.925
5.	0.00	0	0.00	0.000

Gas Liquid Hydrocarbon Ratio 405.000 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.600 Deg.
Specific Gravity Separator Gas .599 xxxxxxxxxxxx
Specific Gravity Flowing Fluid xxxxx .606
Critical Pressure 672.9 PSIA 672.7 PSIA
Critical Temperature 354.5°R 356.9°R

Pc 2241.2 Pc^2 5023.0

NO	Pt^2	Pw	Pw^2	Pc^2-Pw^2
1.	4525.0	2128.7	4531.5	491.4
2.	4436.1	2108.2	4444.6	578.4
3.	4281.6	2071.7	4291.7	731.2
4.	4174.7	2046.8	4189.4	833.5
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2-Pw^2}$ = 6.0356 (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n$ = 3.9528

$AOF = Q\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n$ = 5317 Mcfd

Absolute Open Flow 5317 Mcfd @ 15.025 | Angle of Slope, θ 37 | Slope, n .765

Remarks:

Approved By:	Conducted By: Ed Perry	Calculated By: Andie Alderson	Checked By: