STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

C _ CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-12[illegible]
Revised [illegible]-78

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

FEB 17 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-11-81	
Company: Yates Petroleum Corporation			Connection: Transwestern Pipeline Co.		Unit
Pool: Pecos Slope-Abo Gas			Formation: Abo		
Completion Date: 9-11-81	Total Depth: 3999'		Plug Back TD: 3998'	Elevation: 3928.5' GR	Farm or Lease Name: Lillie RB Federal
Csg. Size: 4-1/2" / Wt.: 9.5# / d: 4.090 / Set At: 3998'			Perforations: From 3534' To 3763'		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: 2.441 / Set At: 3504			Perforations: From - To -		Unit: M / Sec.: 10 / Twp.: 5S / Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 3704'		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 104 3649'	Mean Annual Temp. °F: 62°	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3650	3650	.659	1.52	6.53	-	-	2"	Flanged

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					1000				days
1.	2.067 x .875	450	15.0	58	500.0	61			24 hrs
2.	2.067 x .875	455	9.2	58	709.0	61			24 hrs
3.	2.067 x .875	435	5.8	52	797.0	61			24 hrs
4.	2.067 x .875	430	3.2	51	882.0	61			24 hrs
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	3.729	83.4	463.2	1.002	1.232	1.040	399
2.	3.729	65.6	468.2	1.002	1.232	1.040	314
3	3.729	51.1	448.2	1.008	1.232	1.040	246
4	3.729	37.5	443.2	1.009	1.232	1.040	181
5							

NO.	P_t	Temp. °R	T_r	Z
1	.70	518	1.47	.925
2.	.70	518	1.47	.925
3.	.67	512	1.45	.924
4.	.67	511	1.45	.924
5				

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

Specific Gravity Separator Gas	.659	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	.659
Critical Pressure	666 P.S.I.A.	666 P.S.I.A.
Critical Temperature	352 R	352 R

P_c 1013.2 P_c^2 1026.6

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	263.4		264.1	762.5
2	521.6		522.0	504.6
3	656.4		656.7	369.9
4	801.4		801.5	225.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.346$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.209$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 482$

Absolute Open Flow: 482 Mcfd @ 15.025 | Angle of Slope θ: | Slope, n: .638

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	David Weaver	Al Springer	