NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT ND ONE POINT BACK PRESSURE TI FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
OCT 16 1978
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-5-78	
Company: Yates Petroleum Corp.			Connection: El Paso Natural Gas Company		
Pool: Eagle Creek Permo-Penn			Formation: Cisco		Unit: Lse # NM-487738
Completion Date: 9-2-78	Total Depth: 8555'		Plug Back TD:	Elevation: 6655'	Farm or Lease Name: Federal "AB" Com.
Csg. Size: 5½"	Wt.: 15.5-17#	d: 4.950	Set At: 8500'	Perforations: From 6447 To 6632' KB	Well No.: 2
Tbg. Size: 2-3/8"	Wt.: 4.7#	d: 1.995	Set At: 6406'KB	Perforations: From To	Unit: O Sec.: 5 Twp.: 18S Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 6406' KB		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 123 @ 6580		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
6571	6571	.752	Nil	1.12	Nil		4"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					1852	61			72 hrs
1.	4.026 x 2.000	640	7.3	75	1619	62			1 hr
2.		641	17.5	76	1430	63			1 hr
3.		642	36	77	1152	64			1 hr
4.		643	59	78	810	65			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	19.81	69.05	653.2	.9859	1.233	1.0600	1763
2	19.81	107.00	654.2	.9850	1.233	1.0596	2728
3	19.81	153.58	655.2	.9840	1.233	1.0593	3910
4	19.81	196.76	656.2	.9831	1.233	1.0589	5003
5							

NO.	P_t	Temp. °R	T_r	Z
1	.976	535	1.442	.8900
2	.978	536	1.445	.8907
3	.979	537	1.447	.8912
4	.981	538	1.450	.8919
5				

Gas Liquid Hydrocarbon Ratio 84.370 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 52.0 Deg.

Specific Gravity Separator Gas	0.658	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	0.694
Critical Pressure	669 P.S.I.A.	668 P.S.I.A.
Critical Temperature	371 R	386 R

P_c 2313 P_c^2 5351

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			4131	1210
2			3304	2047
3			2342	3009
4			1536	3815
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.4026 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.3927

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 6968

Absolute Open Flow 6968 Mcfd @ 15.025 Angle of Slope θ 45.6 deg Slope, n .9790

Remarks: Static BH Pressures by Bennett Wireline, flowing pressures by DWT, calculations worksheet C-122D attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bill Trembley, Jr.	Eddie Mahfood	