NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special		8/8/81	
Company: Getty Oil Company	Connection: flare (unconnected)		
Pool: Wildcat	Formation: Morrow		Unit
Completion Date: 7/27/81	Total Depth: 14523	Plug Back TD: 14440	Elev.: 3636.5
Csg. Size: 4 1/2	Wt.: 13.5	d:	Set At: 14523
Tbg. Size: 2 3/8	Wt.: 4.7#	d: 1.995	Set At:
Perforations: From 14048 To 14072			
Perforations: From To			
Name of Lease: North Bilbrey "18" Fed			
Well No.: 1			
Unit: G Sec.: 18 Twp.: 21S Rge.: 32E			
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			
Packer Set At: 13690' (wireline depth)			
County: Lea			
Producing Thru: Tubing	Reservoir Temp. °F: 198° @ 14523	Mean Annual Temp. °F: 60° F	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13690	13690	0.6200	1.076	.344	0		3"	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						4725	65	Packer		SI
1.	3"	X 1.5	300	4	76	4525	65			1 hour
2.		1.5	300	7	73	4410	65			1 hour
3.		1.5	300	21	62	4075	65			1 hour
4.		1.5	300	77	50	3020	65			1 hour
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.	11.13	35.39	313.2	.9850	1.2700	1.026	505
3.	11.13	46.82	313.2	.9877	1.2700	1.027	671
4.	11.13	81.00	313.2	.9981	1.2700	1.028	1176
5.	11.13	155.29	313.2	1.010	1.2700	1.032	2288

NO.	P_t	Temp. °R	T_t	Z
1.	.464	536	1.48	.950
2.	.464	533	1.47	.948
3.	.464	522	1.44	.947
4.	.464	510	1.30	.942
5.				

Gas Liquid Hydrocarbon Ratio 16.1 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 46.7 Deg.
Specific Gravity Separator Gas XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 675 P.S.I.A. P.S.I.A.
Critical Temperature 363 R R

P_c 6376 P_c^2 40653

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		6108	37308	3345
2		5974	35689	4965
3		5571	31036	9617
4		4346	18888	24766
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.641$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.453$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3324$

Absolute Open Flow 3,324 Mcfd @ 15.025 Angle of Slope θ Slope, n .7537

Remarks: Bottom hole pressures measured at midpoint of perfs

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Murray & McCurry	Murray	Botes