CONFIDENTIAL

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED
AUG -9 '90
O. C. D.
ARTESIA, OFFICE

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 5/25/89		
Company: BHP Petroleum Company, Inc. ✓		Connection: W/O Pipeline			
Pool: Comanche Spring Pre-Permian		Formation: Montoya		Unit: "A"	
Completion Date: 5-19-89	Total Depth: 6624'	Plug Back TD: 6575'	Elevation: 3697'KB	Farm or Lease Name: Conoco "8" Federal	
Csg. Size: 5½ / Wt.: 15.5# / d: / Set At: 6624'		Perforations: From 6116' To 6150'		Well No.: 1	
Tbg. Size: 2-7/8 / Wt.: 6.5# / d: / Set At: 6575'		Perforations: From To		Unit: A / Sec.: 8 / Twp.: 11S / Rge.: 27E	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple: G		Packer Set At: 6008'		County: Chaves	
Producing Thru: Tubing	Reservoir Temp. °F: 127	Mean Annual Temp. °F: 60	Baro. Press. - P_a: 13.20	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
6137	6137	.646	.00	.00	.00	.0	4.0	Flange

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					1942	90			139.0
1.	4.03 x .875	312	5.5	68.	1630	90	0.	0.	1.0
2.	4.03 x .875	400	8.8	80.	1342	90	0.	0.	1.0
3.	4.03 x .875	163	27.2	84.	1022	90	0.	0.	.8
4.	4.93 x .765	130	35.5	90	1090	90	0.	0.	17.5
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	3.63	42.29	325.2	.9924	1.2442	1.0313	195.
2.	3.63	60.30	413.2	.9813	1.2442	1.0369	277.
3	3.63	69.23	176.2	.9777	1.2442	1.0150	310.
4.	3.63	71.30	143.2	.9723	1.2442	1.0117	317.
5.							

NO.	P_r	Temp. °R	T_r	Z
1	.49	528.	1.42	.940
2.	.62	540.	1.45	.930
3.	.26	544.	1.46	.971
4.	.21	550.	1.48	.977
5				

Gas Liquid Hydrocarbon Ratio 12.000 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons .0 Deg.
Specific Gravity Separator Gas .646 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .967
Critical Pressure 670. P.S.I.A. 654. P.S.I.A.
Critical Temperature 373. R 473. R

P_c _____ P_c^2 _____

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	1584	2510	1122
2	1288	1658	1974
3	988	976	2656
4	1049	1099	2532
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1905.8$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3632$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 392$

Port ID-2
9-7-90
comp & BK

Absolute Open Flow 392 Mcfd @ 15.025 Angle of Slope θ 49.4 Slope, n .592

Remarks: BHP measures with electronic gauges.

Approved By Division	Conducted By:	Calculated By:	Checked By: