STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

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

Form C-122
Revised 10-1-78

RECEIVED
OCT 14 1981
O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial FOUR POINT [ ] Annual [ ] Special				Test Date: 9-29-81	660 FEL
Company: FRED POOL, ~~OPR.~~ operating Co.		Connection: AIR NEW WELL			1980 FNL
Pool: ~~WILDCAT~~ Und Penn		Formation: PENNSYLVANIA			Unit: H
Completion Date: 9-30-81	Total Depth: 6204	Plug Back TD: ~~6190~~ 6144		Elevation: 3825 KB	Farm or Lease Name: EASTLAND STATE
Csg. Size: 5.5 / Wt.: 17.0 / d: 4.892 / Set At: 6190		Perforations: From 6072 To 6082			Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 6017		Perforations: From OPEN To ENDED			Unit: H / Sec.: 13 / Twp.: 9S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 6017			County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 118 @ 6077	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
6077	6077	0.6322	0.532	1.572			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	B.H.P. P.S.I.G.	Temp. °F	Duration of Flow
SI							1977	87	2364		72 HRS.
1.	4"	X	1"	500	3.0	99	1714	80	2053		
2.	4"	X	1"	500	5.0	96	1606	75	1916		1
3.	4"	X	1"	500	7.0	98	1377	70	1693		1
4.	4"	X	1"	500	11.0	90	1151	71	1416		1
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	4.8740	39.24	513.2	.9645	1.2579	1.0358	240.
2	4.8740	50.66	513.2	.9671	1.2579	1.0370	311.
3	4.8740	59.94	513.2	.9653	1.2579	1.0370	368.
4	4.8740	75.13	513.2	.9723	1.2579	1.0386	465.
5							

NO.	P_t	Temp. °R	T_r	Z
1	.77	559	1.55	.932
2	.77	556	1.54	.930
3	.77	558	1.54	.930
4	.77	550	1.52	.927
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .6320 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .6320
Critical Pressure 671 P.S.I.A. _____ P.S.I.A.
Critical Temperature 361 R _____ R

P_c 2377.2 P_c^2 5651.1

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2066.2	4269.2	1382
2		1929.2	3721.8	1929
3		1706.2	2911.1	2740
4		1429.2	2042.6	3608
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5663$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3587$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 631.8$

Absolute Open Flow _____ Mcfd @ 15.025 Angle of Slope θ 55.7 Slope, n .6832

Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMEMTS.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	DON BENNETT	WOHLFORD & JENKINS	