Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MANZANO OIL CORPORATION				Lease or Unit Name: NEUHAUS "14" FED.	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-27-93	Well No.: 2
Completion Date: 7-14-93	Total Depth: 11606	Plug Back TD: 11566		Elevation: 3662KB	Unit Ltr. - Sec. - TWP - Rge.: B - 14 - 20 - 35
Csg. Size: 5½ / Wt.: 17# / d: 4.892 / Set At: 11606		Perforations: From: 11362 To: 11440			County: LEA
Tbg. Size: 2-7/8 / Wt.: 6.5 / d: 2.441 / Set At: 11243		Perforations: From: To:			Pool: Wildcat
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE		Packer Set At: 11243			Formation: WOLFCAMP
Producing Thru: TBG	Reservoir Temp. °F	Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2		Connection: PHILLIPS

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11500	11500	.710	2.18	1.26			4.026	FLG

	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					1319		PKR		16 HR
1.					982		"		1½ HR
2.					848		"		1 HR
3.					713		"		1 HR
4.					642		"		2 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.							2,431
2.	VOL MEASURED ELECTRONIC FLOW METER #95899 (PHILLIPS)						3,898
3.							4,695
4.							5,009
5.							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio: 614 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 53.6 @ 60 Deg.
Specific Gravity Separator Gas: .710 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX GMIX=1.126
Critical Pressure: P.S.I.A. *658 P.S.I.A.
Critical Temperature: R *524 R

P_c 1332.2 P_c^2 1774.8

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		1013.1	1026.5	748.3
2.		910.4	828.8	946.0
3.		815.0	664.2	1110.6
4.		774.3	599.5	1175.3
5.				

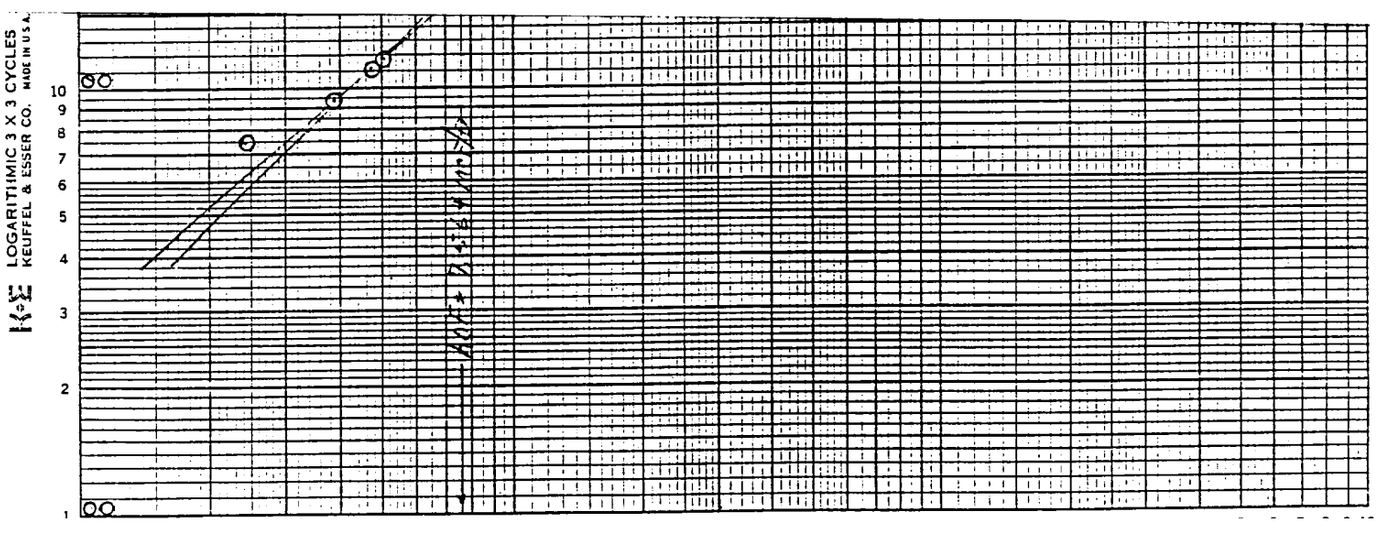
1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.510$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.510$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 7.564$

Absolute Open Flow 7,564 Mcfd @ 15.025 | Angle of Slope θ 45 | Slope, n 1.000

Remarks: WELL MADE 135.3 BBLS 53.6 API CONDENSATE
* CORRECTED TO 2.18% CO2 & 1.26% N2

Approved By Division	Conducted By:	Calculated By:	Checked By:
	JOHN WEST ENGINEERING	B.M.	B.M.



COMPANY : MANZANO OIL   LEASE : NEW 14 FED.   WELL NO. : 2
UNIT :   SECTION :   TOWNSHIP :
L : 11243   H : 11243   L/H : 1   G/GMIX : 1.126
%CO2 : 2.18   %N2 : 1.26   H2S :   DATE :
d : 2.441   Fr : 0.010763   GH : 12659.6   RANGE :

VOL 1 : 2431   PSIA 1 : 995.2   RESV.TEMP 186.4
VOL 2 : 3898   PSIA 2 : 861.2
VOL 3 : 4695   PSIA 3 : 726.2   SHUT-IN PR= 1332.2
VOL 4 : 5009   PSIA 4 : 655.2

PCR : 658
TCR : 524

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 GM	2.431	2.431	3.898	3.898	4.695	4.695	5.009	5.009
2 TW	534	534	534	534	534	534	534	534
3 Ts	646.4	646.4	646.4	646.4	646.4	646.4	646.4	646.4
4 T	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2
PR (est)	1.51		1.31		1.10		1.00	
5 Z(est)	0.500	0.421	0.377	0.406	0.655	0.426	0.693	0.449
6 TZ	295.0	248.6	340.7	229.6	386.6	251.2	409.2	265.1
7 GH/TZ	42.879	50.929	37.161	52.847	32.747	50.390	30.935	47.750
8 eS	4.993	6.752	4.029	7.256	3.414	6.617	3.190	5.993
9 1-e-S	0.800	0.852	0.752	0.862	0.707	0.849	0.687	0.833
10 Pt	995.2	995.2	861.2	861.2	726.2	726.2	655.2	655.2
11 Pt2 /1000	990.4	990.4	741.7	741.7	527.4	527.4	429.3	429.3
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.0107631
13 Fs=FrTZ	3.178	2.675	3.667	2.578	4.161	2.704	4.405	2.854
14 FsQm	7.72	6.50	14.29	10.05	19.54	12.70	22.06	14.29
15 L/H(FsQm)	59.7	42.3	204.3	101.0	381.6	161.2	486.5	204.3
16 Fw	47.72204	36.03604	153.5766	67.08739	269.2367	136.8177	334.1745	170.21196
17 Pw2	1035.1	1026.5	895.2	828.8	797.2	664.2	730.5	599.5
18 Ps2	5153.1	6930.3	3607.0	6013.0	2722.1	4394.8	2435.6	3592.9
19 Ps	2276.6	2632.6	1899.2	2452.1	1649.9	2096.4	1560.6	1895.5
20 P	1635.9	1313.9	1390.2	1656.7	1188.0	1411.3	1107.9	1275.4
21 Pr	2.49	2.76	2.10	2.52	1.81	2.14	1.68	1.94
22 Tr	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
23 Z	0.431	0.442	0.406	0.423	0.426	0.406	0.449	0.411

Pc = 1332.2   Pc2 = 1774.8

Pt2 =	Pw =
990.4	1013.1
741.7	910.4
527.4	815.0
429.3	774.3

Pc2-Pw2=	Pw2 =
748.3	1026.5
946.0	828.8
1110.6	664.2
1175.3	599.5

n = 1.000

Pc2/(Pc2-Pw2) = 2.372, 1.876, 1.598, 1.510

[Pc2/Pc2-Pw2]n = 2.372, 1.876, 1.598, 1.510

AOF= Q 5.766, 7.313, 7.503, 7.564

FORM C122-C