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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: 4-POINT~~XX~~ ☐ Initial ☐ Annual ☐ Special			Test Date: 4-16-87	
Company: SUN EXPLORATION & PROD.	Connection: TO AIR NEW WELL			
Pool	Formation		Unit	
Completion Date: 4-14-87	Total Depth	Plug Back TD: 12963 FT	Elevation	Farm or Lease Name: NEW MEXICO FED COM
Csg. Size: 5.5 / Wt.: 20.0 / d: 4.778 / Set At: 12963 FT		Perforations: From 12955 FT To 12970 FT		Well No.: ~~3~~ #1
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.661 / Set At: 12899 FT		Perforations: From To		Unit: H / Sec.: 24 / Twp.: 18 / Rge.: 33
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 12899 FT		County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 202 @	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NE MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
12952	12952	.7198	.477	1.504	0	0	4.026	FLG

	FLOW DATA				TUBING DATA		BHP 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					4830	60			24
1.	4.026 X 2.250	595	15.3	67	4670	65			60MIN
2.	4.026 X 2.250	600	29.0	57	4607	65			60MIN
3.	4.026 X 2.250	615	54.0	48	4476	64			60MIN
4.	4.026 X 2.250	645	104.0	45	4294	62			60MIN
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	25.64	96.46	608.2	0.9933	1.1787	1.0737	3110
2.	25.64	133.35	613.2	1.0029	1.1787	1.0799	4365
3.	25.64	184.18	628.2	1.0117	1.1787	1.0874	6125
4.	25.64	261.63	658.2	1.0147	1.1787	1.0946	8784
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.91	527	1.35	0.867
2.	0.92	517	1.32	0.857
3.	0.94	508	1.30	0.846
4.	0.99	505	1.29	0.835
5				

Gas Liquid Hydrocarbon Ratio: 9719 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 52.1 Deg.
Specific Gravity Separator Gas: .7198 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .7198
Critical Pressure: 666 P.S.I.A. 650 P.S.I.A.
Critical Temperature: 391 R 492 R

P_c 4843.2 P_c^2 23457

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		4701	22095	1362
2		4655	21668	1788
3		4560	20795	2662
4		4456	19855	3601
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.5132$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6.5132$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 57209$

Absolute Open Flow: 57209 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.000

Remarks:

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