NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Angel Peak Formation Dakota County San Jaun

Initial XX Annual _____ Special _____ Date of Test 1-7-60

Company Sunset Int'l Petr. Lease Martin Federal Well No. 1-C

Unit B Sec. 3 Twp. 27N Rge. 10W Purchaser Southern Union Ga s

Casing 5½ Wt. 15.5 I.D. _____ Set at 6572 Perf. 6546 To 6354

Tubing 2" EUE Wt. 4.7 I.D. 2" Set at 6524 Perf. Pin [illegible] Collar on bottom

Gas Pay: From 6354 To 6546 L _____ xG .670 -GL _____ Bar.Press. _____

Producing Thru: Casing _____ Tubing XX Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 12-24-59 Packer None Reservoir Temp. 176

OBSERVED DATA

Tested Through ~~(Prover)~~ (Choke) ~~(Meter)~~ Type Taps _____

No.	Flow Data (Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1475		1969		
1.										
2.										
3.		3/4	596		80			1090		3 hours
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.	12.3650		608	0.9813	0.9463	1.064	7426
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ $(1-e^{-s})$ _____

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1981 P_c^2 3934

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.	1102					1214	2720		
4.									
5.									

Absolute Potential: 9,750 MCFPD MCFPD; n 0.75
COMPANY [illegible]
ADDRESS Sunset Int'l Petr. Beverly Hills, Calif Box 568 Bloomfield
AGENT and TITLE Thomas E Popp T.Popp Engineer
WITNESSED _____
COMPANY _____

REMARKS

RECEIVED
JAN 14 196[illegible]
OIL CON[illegible]
DIST.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w). MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia

P_w = Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t.