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 Juan

Initial XX Annual ____ Special ____ Date of Test 11-23-- 1960

Company Sunset Inter. Petr. Corp Lease Kutz Federal Well No. 13-33

Unit K Sec. 33 Twp. 28N Rge. 10W Purchaser Southern Union Gas Co.

Casing 4½ " Wt. 11.6 I.D. 4" Set at 6730 Perf. 6550 KB To 6600KB

Tubing 2 7/8 Wt. 6.7 I.D. 2 1/2 Set at 6522 Perf. Open End To ____

Gas Pay: From 6472 To 6672 L ____ xG ____ -GL ____ Bar.Press. 12.0

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

Date of Completion: 11-15-1960 Packer 6452 Reservoir Temp. 160

OBSERVED DATA

Tested Through ~~(Xxxxxx)~~ (Choke) ~~(Meter)~~ Type Taps ____

No.	Flow Data (Prover) (Line) Size	Flow Data (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						1892		*--		
1.		3/4 "	317		70	317	70	--		3 Hours
2.										
3.										
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.	12.3650		329	.9905	.9325	1.037	3896
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c 5.551 $(1-e^{-s})$ 0.280

Specific Gravity Separator Gas ____
Specific Gravity Flowing Fluid .69
P_c 1904 P_c^2 3625216

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.	329	108241	21626.7	487713	92560	95,954	3029.26	772	
2.									
3.									
4.									
5.									

Absolute Potential: 4453 MCFPD; n ==

COMPANY ~~Sunset International P Petroleum Corp.~~

ADDRESS ~~402 S. Beverly Dr. Beverly Hills Calif / 5th Floor 444-17 th Street~~ Denver, 2, Colo.

AGENT and TITLE ~~Thomas F. Popp Dist. Engr.~~

WITNESSED Thomas F. Popp

COMPANY ____

REMARKS

Squeezed Cement Collar @ 2218, held 3000 psi OK, but did not wish to Frac against. Set Retv. Packer and completed and produced under packer

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.