3-[illegible]
1-Sunset
1-Reese
1-Sou. Union
1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool **Wildcat** Formation **Dakota** County **San Juan**

Initial **X** Annual _____ Special _____ Date of Test **9-1-58**

Company **Sunset International Pet Corp** Lease **Kutz-Federal** Well No. **2**

Unit **M** Sec. **27** Twp. **28N** Rge. **10W** Purchaser **Southern Union**

Casing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____

Tubing **2-3/8"** Wt. **4.7** I.D. _____ Set at **6488** Perf. _____ To _____

Gas Pay: From _____ To _____ L **6477** xG **.650** =GL **4210** Bar.Press. _____

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

Date of Completion: _____ Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1902				
1.										
2.		3/4	584		84					3 hrs
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.							
2.	12.3650		596	.9777	.9608	1.055	7304
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl. Specific Gravity Separator Gas _____

Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____

F_c **9.936** $(1-e^{-s})$ **.251** P_c **1914** P_c^2 **3663**

No.	P_w P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.	596	355	72.6	5270	1322	677	1986		1.8444
4.									
5.									

Absolute Potential: **12,289** MCFPD; n **.85** **1.6825**

COMPANY **Sunset Internation Petroleum Corp.**

ADDRESS **5th Floor Midland Savings Bldg., Denver, Colorado**

AGENT and TITLE **T. A. Dugan, Consulting Engineer**

WITNESSED _____

COMPANY _____

REMARKS

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.

3-NMOCC
1-Sunset
1-Reese
1-File

VAL R. REESE & ASSOCIATES, INC.

Company **Sunset International**

Lease **Kutz** Well No. **2**

Date of Test **9-1-58**

Shut in Pressure (PSIG): Tubing **1902** Casing **-** S.I. Period **7** Days

Size Blow Nipple **3/4" TC Choke**

Flow Through **Tbg** Working Pressures From **-**

Time Hours	Time Minutes	Pressure	Q (MCFD) @ 15.025 PSIA & 60° F	Wellhead Working Pressure (PSIG)	Temp
1	-	630			80
2	-	604			80
2	30	593			80
3	-	584			84

Start At **10:00 A.M.** End Test At **1:00 P.M.**

Remarks: **Spray of distillate throughout test.**

Tested By: **T. A. Dugan**

Witness:

OIL CONSERVATION COMMISSION

AZTEC DISTRICT OFFICE

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