

3 NMOCC
2 Sunset
1 File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 1-19-59
Company Sunset International Pet. Corp. Lease Kutz Federal Well No. 1 - E
Unit G Sec. 17 Twp. 28N Rge. 10W Purchaser Southern Union Gas Co.
Casing 5-1/2" 15.50# I.D. 6590 Set at 4480 Perf. 6309 To 6560
Tubing 2" 4.7# I.D. _____ Set at 6549 Perf. _____ To _____
Gas Pay: From 6309 To 6560 L 6549 xG .650 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 12-20-58 Packer _____ Reservoir Temp. Single - Gas

OBSERVED DATA

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

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2033		2043		S.I.
1.										
2.		3/4"	632				60			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.	12.365		655	1.00	.9608	1.069	8179
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2055 P_c² 4223.025

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.									
2.									
3.	1355					1836.025	2387		1.7692
4.									
5.									

Absolute Potential: 13283 MCFPD; n .85 (1.7692) .85 = 1.6241

COMPANY Sunset International Petroleum Corp.

ADDRESS Box 1527, Denver, Colorado

AGENT and TITLE signed by Thomas A. Dugan

WITNESSED Thomas A. Dugan

COMPANY Val R. Reese & Associates, Inc.

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} = Supercompressibility 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 .

OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received <u>2</u>		
DISTRIBUTION		
	NO.	DATE
General		
Secretary	/	
Field Office		
State Land Office		
U. S. G. S.	/	
Transporter		
File	/	✓