

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool _____ Formation Dakota County San Juan

Initial X Annual _____ Special _____ Date of Test 2-1-59

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

Unit H Sec. 4 Twp. 27N Rge. 10W Purchaser _____

Casing 5-1/2" Wt. 15.5 I.D. _____ Set at 6773 Perf. 6510 To 6712

Tubing 2-3/8 Wt. 4.7 I.D. _____ Set at 6712 Perf. Open End To _____

Gas Pay: From 6510 To 6712 L _____ xG 0.670 -GL _____ Bar.Press. _____

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

Date of Completion: 1-22-59 Packer _____ Reservoir Temp. _____

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1640		1907		
1.										
2.										
3.		3/4"	412		62			928		3 hrs.
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.	12.3640		424	.9981	0.9463	1.046	5180
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 1919 P_c^2 3683

No.	$\frac{P_w}{P_t}$ (psia)	P_t^2	F _c Q	(F _c Q) ²	$\frac{(F_c Q)^2}{(1-e^{-s})}$	P_w^2	$P_c^2 - P_w^2$	Cal. $\frac{P_w}{P_c}$	$\frac{P_w}{P_c}$
1.									
2.									
3.	940					884	2799		1.3158
4.									
5.									

Absolute Potential: 6541 MCFPD; n 0.85 1.2627

COMPANY Sunset International Petroleum Corp.

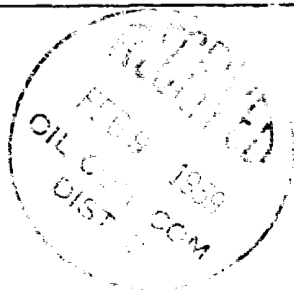
ADDRESS Box 1527 Denver Colo Box 568 Bloomfield

AGENT and TITLE Tom Pepp, Engineer

WITNESSED T. A. Dugan

COMPANY Consultant

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 .

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