3 Elliott
1 USGS
1 Humble
1 Pan American
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 4-17-59

Company Elliott Prod. Company Lease Haygood Well No. 1

Unit A Sec. 24 Twp. 30N Rge. 14W Purchaser ____

Casing 5-1/2 Wt. 14 I.D. ____ Set at 6388 Perf. 6228 To 6340

Tubing 2-3/8" Wt. 4.7 I.D. ____ Set at 6204 Perf. Open Ended To ____

Gas Pay: From 6228 To 6340 L ____ xG ____ -GL ____ Bar.Press. ____

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

Date of Completion: 4-9-59 Packer None 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						1970		1982		
1.										
2.										
3.						229		612	48	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.	FOR CALCULATIONS SEE ATTACHED TEST DATA SHEET						2801
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl. Specific Gravity Separator Gas ____
Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____
P_c ____ $(1-e^{-s})$ ____ P_c 1994 P_c^2 3976

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.	624					389	3587		1.109
4.									
5.									

Absolute Potential: 3,085 MCFPD; n .75 1.080

COMPANY Elliott Production Company
ADDRESS P.O. Box 5669, Roswell, New Mexico
AGENT and TITLE T. A. Dugan, Consulting Engineer T. A. Dugan
WITNESSED ____
COMPANY ____

REMARKS

Well flowed through tubing, 3/4" adjustable choke, low pressure separator, 2" flow nipple and gas flow was measured with a pitot tube.

For calculations see attached sheet.
Well produced 4.2 bbls. oil during three hour test.

RECEIVED
MAY 1 1959
OIL CON. COM.
DIST. 3

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.