

MULTI-POINT FLOW PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queen County Lea

Initial Annual X Special Date of Test 6-22-56

Company Continental Oil Co. Lease Meyer A-26 Well No. 1

Unit G Sec. 26 Twp. 20 Rge. 37 Purchaser E. P. N. G.

Casing 5 1/2" Wt. 14 I.D. 5.012 Set at 3749 Perf. 3576 To 3670

Tubing None Wt. I.D. Set at Perf. To

Gas Pay: From 3576 To 3670 L. 3576 XG .675 TGL 2413.8 Bar.Press. 13.2

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

Date of Completion: 7-27-55 Packer None Reservoir Temp. 90 °

OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. r_w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	<u>4</u>	<u>1.500</u>	<u>602</u>	<u>10.89</u>	<u>67</u>			<u>813</u>		<u>72</u>
2.	<u>"</u>	<u>"</u>	<u>611</u>	<u>19.36</u>	<u>65</u>			<u>786</u>		<u>24</u>
3.	<u>"</u>	<u>"</u>	<u>616</u>	<u>30.25</u>	<u>70</u>			<u>728</u>		<u>24</u>
4.	<u>"</u>	<u>"</u>	<u>620</u>	<u>50.41</u>	<u>70</u>			<u>699</u>		<u>24</u>
5.								<u>655</u>		<u>24</u>

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{r_w P_t}$	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>13.99</u>	<u>81.85</u>	<u>615.2</u>	<u>.9933</u>	<u>.9427</u>	<u>1152</u>
2.	<u>"</u>	<u>109.93</u>	<u>624.2</u>	<u>.9952</u>	<u>"</u>	<u>1550</u>
3.	<u>"</u>	<u>137.96</u>	<u>629.2</u>	<u>.9905</u>	<u>"</u>	<u>1939</u>
4.	<u>"</u>	<u>178.66</u>	<u>633.2</u>	<u>.9905</u>	<u>"</u>	<u>2512</u>
5.						

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio No Liquid cc/bbl.

Gravity of Liquid Hydrocarbons None deg.

P_c .9002 $(1-e^{-8})$.153

Specific Gravity Separator Gas

Specific Gravity Flowing Fluid

P_c 826.2 P_c^2 683 (Thousands.)

No.	P_w P_t (psia)	P_t^2	$F_c Q$	$(F_c Q)^2$	$(P_c Q)^2$ $(1-e^{-8})$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	P_w / P_c
1.	<u>799.2</u>	<u>639</u>	<u>1.037</u>	<u>1.075</u>	<u>.164</u>	<u>639.164</u>	<u>43.836</u>	<u>799</u>	<u>.967</u>
2.	<u>741.2</u>	<u>549</u>	<u>1.395</u>	<u>1.946</u>	<u>.298</u>	<u>549.298</u>	<u>133.702</u>	<u>741</u>	<u>.897</u>
3.	<u>712.2</u>	<u>507</u>	<u>1.745</u>	<u>3.045</u>	<u>.466</u>	<u>507.466</u>	<u>175.534</u>	<u>712</u>	<u>.862</u>
4.	<u>668.2</u>	<u>446</u>	<u>2.261</u>	<u>5.112</u>	<u>.782</u>	<u>446.782</u>	<u>236.218</u>	<u>668</u>	<u>.808</u>
5.									

Absolute Potential 6,600 MCFPD; n .89

COMPANY Continental Oil Co.

ADDRESS Box 127, Hobbs, N. Mexico

AGENT and TITLE W. D. Howard, Gas Tester

WITNESSED

COMPANY

REMARKS

According to information received from E. P. N. G. testers, well was not drawn down 30 % of well's shut-in pressure on highest rate of flow due to necessity of changing orifice plates during test to obtain a greater drawdown. On previous testing, E. P. N. G. did not have equipment for rapid plate changing. Please advise if well must be retested.

pies to:

OCC-Santa Fe-3 EWW HLJ RLA LVB File

6P

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 .