

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Jalmat Formation Seven Rivers County Lea
Initial Annual Special X Date of Test 10-24/28-60
Company Cities Service Oil Company Lease Closson "C" Well No. 1
Unit A Sec. 18 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Company
Casing 7" Wt. 24 I.D. Set at 3717 Perf. 3200 To 3350
Tubing 2 1/2" Wt. 6.5 I.D. Set at 3245 Perf. 2190 To 2190
Gas Pay: From 3200 To 3350 L 3245 $\pm$ 245 XG .675 -GL 2190 Bar.Press. 13.2
Producing Thru: Casing Tubing X Type Well Single
Date of Completion: 6-7-60 Packer 3184 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. -

OBSERVED DATA

Tested Through (XXXXXX) (XXXXXX) (Meter) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						326		72
1.	4"	1.750	138	3.06	63	299	Packer	24
2.	4"	1.750	91	11.73	62	290	"	24
3.	4"	1.750	126	34.81	63	269	"	24
4.	4"	1.750	139	75.25	66	186	"	24
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.	19.27	21.51	312.2	.9971	.9427	1.014	395.0
2.	19.27	34.96	303.2	.9981	.9427	-	633.8
3.	19.27	69.61	282.2	.9971	.9427	1.013	1277
4.	19.27	107.02	199.2	.9943	.9427	1.014	1960
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio - cf/bbl.
Gravity of Liquid Hydrocarbons - deg.
F_c 5.866 (1-e^{-S}) .140
Specific Gravity Separator Gas -
Specific Gravity Flowing Fluid -
P_c 339.2 P_c² 115.0

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.	312.2	97.5	2.3	5.3	.74	98.2	16.8	113.4	112.4
2.	303.2	91.9	3.7	13.7	1.9	93.8	21.2	113.4	112.4
3.	282.2	79.6	7.5	56.2	7.9	87.5	27.5	113.4	112.4
4.	199.2	39.7	11.5	132.2	18.5	58.2	56.8	113.4	112.4
5.									

Absolute Potential: 4,000 MCFPD; n 1.000COMPANY El Paso Natural Gas Co.ADDRESS Jal. New MexicoAGENT and TITLE L. D. Southern - Gas TesterWITNESSED Richard O. BergCOMPANY Cities Service Oil Co.

REMARKS

Slope greater than 1,000. Slope of 1,000 drawn thru point corresponding w/highest rate of flow.

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 .

Cities Service Oil Co.
 Closson "C" No. 1
 Sec. 18 - Twp. 22 - Rge. 36
 Lea County, New Mexico
 October 28, 1960

