Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS O3

Pool __Jalmat__ Formation __Yates__ County __Lea__

Initial _____ Annual _____ Special __x__ Date of Test __12-3 to 12-7-56__

Company __Cities Service Oil Company__ Lease __Closson B__ Well No. __9__

Unit __J__ Sec. __19__ Twp. __22S__ Rge. __36E__ Purchaser __United Carbon__

Casing __5½__ Wt. __14__ I.D. __5.012__ Set at __3439__ Perf. _____ To _____

Tubing __2__ Wt. __4.7__ I.D. __1.995__ Set at __3528__ Perf. _____ To _____

Gas Pay: From __3528__ To __3555__ L __3528__ xG __.673__ -GL __2374__ Bar.Press. __13.2__

Producing Thru: Casing _____ Tubing __x__ Type Well __Single__

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: __6-29-56__ Packer __None__ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)   Type Taps __Fl9__

No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Flow Data Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Temp. °F.	Casing Data Press. psig	Temp. °F.	Duration of Flow Hr.
SI						1053				72
1.	3	1.500	117	41.0	60	433				24
2.	3	1.500	109	36.0	60	490				24
3.	3	1.500	126	30.0	60	545				24
4.	3	1.500	98	28.0	60	606				24
5.										

FLOW CALCULATIONS

No.	Coefficient Flg (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.	14.36	73.01	130.2	1.000	.9463	1.012	1004
2.	14.36	66.27	122.2	1.000	.9463	1.011	911
3.	14.36	64.57	139.2	1.000	.9463	1.013	888
4.	14.36	55.76	111.2	1.000	.9463		758
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.

Gravity of Liquid Hydrocarbons _____ deg.

F_c __9.936__ $(1-e^{-s})$ __.151__

Specific Gravity Separator Gas _____

Specific Gravity Flowing Fluid _____

P_c __1066.2__ P_c^2 __1136.8__

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	$\frac{P_w}{P_c}$
1.	446.2	199.1	9.98	99.60	15.0	214.1	922.7	463	.434
2.	503.2	253.2	9.05	81.90	12.4	265.6	871.2	515	.484
3.	558.2	311.6	8.82	77.79	11.7	323.3	813.5	568	.534
4.	619.2	383.4	7.53	56.70	8.7	392.1	744.7	626	.587
5.									

Absolute Potential: __1,250__ MCFPD; n __1.000__

COMPANY __Cities Service Oil Company__

ADDRESS __Box 97, Hobbs, New Mexico__

AGENT and TITLE __E. H. Furrey, Jr., Petroleum Engineer__

WITNESSED __Ed Mabe__

COMPANY __El Paso Natural Gas Co.__

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.