NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Seven Rivers- Queen County Lea

Initial ____ Annual X Special ____ Date of Test 3-24/4-1-60

Company Cities Service Oil Co. Lease Dabbs Well No. 1

Unit B Sec. 23 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 7 Wt. 24.0 I.D. 6.336 Set at 2449 Perf. - To -

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

Gas Pay: From 3090 To 3361 L 2449 xG .691 -GL 1692 Bar.Press. 13.2

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

Date of Completion: 11-21-36 Packer None Reservoir Temp. 102 Est.

OBSERVED DATA

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

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								189		72
1.	4	.750	119	4.00	73			184		24
2.	4	.750	136	17.64	69			174		24
3.	4	750	128	23.04	76			156		24
4.	4	.750	158	2.25	66			159		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.	3.435	2300	132.2	.9877	.9318	1.012	73.59
2.	3.435	51.30	149.2	.9915	.9318	1.016	165.4
3.	3.435	57.04	141.2	.9890	.9318	1.014	182.3
4.	3.435	19.62	171.2	.9943	.9318	1.018	63.55
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl. Specific Gravity Separator Gas .691

Gravity of Liquid Hydrocarbons ____ deg. Specific Gravity Flowing Fluid ____

F_c .4915 $(1-e^{-s})$ 0.110 P_c 202.2 P_c^2 40.9

No.	~~Pw~~ Pt (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.	~~197.2~~	38.9				38.9	2.0	197.2	.975
2.	~~177.2~~	35.0		Negligible		35.0	5.9	~~177.2~~ 187.2	.926
3.	169.2	28.6				28.6	12.3	169.2	.837
4.	172.2	29.6				29.6	11.3	172.2	.852
5.									

Absolute Potential: 368 MCFPD; n .597

COMPANY El Paso Natural Gas Co.
ADDRESS Box 1384, Jal, New Mexico
AGENT and TITLE J. E. Murray Gas Tester
WITNESSED Richard O. Berg Production Engineer
COMPANY Cities Service Oil Co.

Richard O. Berg

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.