

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Basin- Dakota Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 8-24-61
Company The Atlantic Refining Company Lease State B Well No. 1
Unit B Sec. 16 Twp. 29N Rge. 10W Purchaser Southern Union Gas Company
Casing 1 1/2 Wt. 9.5# I.D. 4.090 Set at 6543 Perf. 6485 To 6502
O.D. 11.6# I.D. 4.000 Set at 6543 Perf. 6474 To 6479
Tubing 2-3/8" Wt. 4.7# I.D. 1.995 Set at 6356.62 Perf. 6459 To 6463
O.D. 2.375 I.D. 1.995 Set at 6356.62 Perf. 6420 To 6433
Gas Pay: From 6360 To 6510 L 6346 B .68 G 5618 To 6384 Bar.Press. 12.0
Producing Thru: Casing _____ Tubing X Type Well Single - Gas
Date of Completion: 8-6-61 Packer None Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps _____

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI								
1.		<u>3/4"</u>	<u>205</u>		<u>77</u>	<u>2065</u>	<u>800</u>	<u>3</u>
2.								
3.								
4.								
5.								

FLOW CALCULATION

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.	<u>12.3650</u>		<u>217</u>	<u>.9840</u>	<u>.9393</u>	<u>1.038</u>	<u>2574</u>
2.							
3.							
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

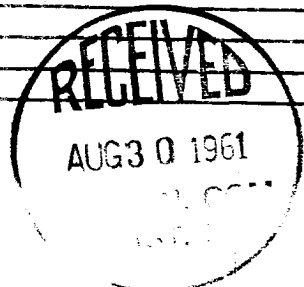
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2077 P_c 4313.9

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ³ (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w / P _c
1.						<u>659.3</u>	<u>3654.6</u>		<u>.391</u>
2.									
3.									
4.									
5.									

Absolute Potential: 2914 MCFPD; α .75
COMPANY THE ATLANTIC REFINING COMPANY
ADDRESS 760 - Petroleum Club Building, Denver 2, Colorado
AGENT and TITLE Charles Koritnik - Engineer
WITNESSED B.J. Sartain
COMPANY THE ATLANTIC REFINING COMPANY

REMARKS

Well unloading fracture treatment water plus condensate.



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 .