

3 NMOCG---
2 Compass
1 Rutledge
1 So. Union
1 File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Dakota County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 7-6-60
Company Compass Exploration Lease Federal Well No. 1-7
Unit D Sec. 7 Twp. 24N Rge. 7W Purchaser _____
Casing 4 1/8" Wt. 9.5 I.D. _____ Set at 7330 Perf. 7266 To 7186
Tubing 2 3/8 Wt. 4.6 I.D. _____ Set at 7249 Perf. Open Ended To _____
Gas Pay: From 7186 To 7266 L _____ xG 0.600 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 6-29-60 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (None) 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.	Press. psig	Temp. °F.	
SI						2120		2115		
1.										
2.										
3.		3/4"	169		70°			742		3 Hrs.
4.										
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.							
2.							
3.	12.365		181	0.9905	1.0000	1.014	2248
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 2132 P_c² 4545

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.									
2.									
3.	754					569	3976		1.143
4.									
5.									

Absolute Potential: 2485 MCFPD; n .75 1.1054

COMPANY Compass Exploration
ADDRESS 1645 Court Place; Denver, Colorado
AGENT and TITLE Thomas Dugan Consulting Engineer
WITNESSED _____
COMPANY _____

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} = 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 .

STATE OF NEW MEXICO		
OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
NUMBER OF COPIES RECEIVED		3
DATE RECEIVED		
SAN APO		
FILE		
SECS.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
PRODUCTION OFFICE		
OPERATOR		