

3-NMOC
2-Compass (Denver)
1-Compass (Farmington)
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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Formation Dakota County San Juan
Initial X Annual _____ Special _____ Date of Test 9-16-61
Company COMPASS Exploration, Inc. Lease Federal Well No. 1-30 A
Unit A Sec. 30 Twp. 30N Rge. 13W Purchaser _____
Casing 5-1/2 Wt. 15.5# I.D. _____ Set at 6247 Perf. 6015 To 6076
Tubing 2-3/8 Wt. 4.7# I.D. _____ Set at 6105 Perf. 6101 To 6097
Gas Pay: From 6015 To 6076 L _____ xG .68 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-5-61 Packer _____ Reservoir Temp. _____

OBSERVED DATA

Tested Through ~~2004~~ (Choke) ~~2004~~ 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						1997		2004		
1.										
2.		3/4"	233					707		3 hrs.
3.										
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	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		245	.9795	.9393	1.083	2851
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 2016 P_c 4064.256

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.	719					516.961	3547.294		1.1457
4.									
5.									

Absolute Potential: 2901 MCFPD; n .75 1.1076

COMPANY Compass Exploration, Inc.
ADDRESS 101 University Blvd., Denver, Colorado
AGENT and TITLE Original signed by T. A. Dugan 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 .