

3-NMOCC
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1-Compass (Farmington)
1-El Paso Prod.
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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 Wildcat Formation Gallup County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 9-12-61
Company Compass Exploration, Inc. Lease Federal Well No. 1-3
Unit K Sec. 3 Twp. 26N Rge. 7W Purchaser _____
Casing 5-1/2 Wt. 15.5# I.D. _____ Set at 7415 Perf. 6592 To 6598
Tubing 2-1/6 Wt. 3.25 I.D. _____ Set at 6620 Perf. Open End To _____
Gas Pay: From 6592 To 6598 L _____ xG .70 -GL _____ Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well G.G. Dual
Date of Completion: 8-30-61 Packer _____ Reservoir Temp. _____
Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Choke) 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.	
1.						1073		1625		
2.		3/4"	219		63			638		3 hrs.
3.										
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.	12.365		231	.9971	.9258	1.028	2689
3.							
4.							
5.							

PRESSURE CALCULATIONS

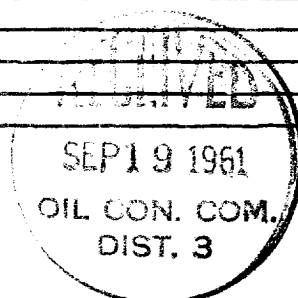
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1637 P_c² 2679.769

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.	650					422,500	2257,269		1.1872
4.									
5.									

Absolute Potential: 3058 MCFPD; n .75 1.1372

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} = 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 .