

OCC - 3
WJ - 1
HPCG - 1
FW - 1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Graneros-Dakota County Rio Arriba
Initial X Annual _____ Special _____ Date of Test March 20, 1959
Company Johnston-Shear Lease Jicarilla Well No. 1-1
Unit M Sec. 1 Twp. 24N Rge. 4W Purchaser Not connected
Casing 5-1/2 Wt. 14415.5 I.D. _____ Set at 7610 Perf. 7312 To 7512
Tubing 2-3/8 Wt. 4.7 I.D. 1.995 Set at 7504 Perf. 7500 To 7504
Gas Pay: From 7312 To 7512 L 7500 xG .880 est -GL 5100 Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well Single Gas
Date of Completion: March 12, 1959 Packer No Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Remove) (Choke) (Remove) 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						1850		2154		SI
1.										
2.										
3.		1/4				1216	64	1507		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.	1.4383		1228	.9962	0.9393	1.152	1.914
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 3,569 cf/bbl.
Gravity of Liquid Hydrocarbons 51.8 @ 60° deg.
F_c 9.402 (1-e^{-s}) 0.310
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2166 P_c² 4691.56

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.	1519					2307.36	2324.20		1.9678
4.									
5.									

Absolute Potential: 3,180 MCFPD; n .75/1.6614
COMPANY JOHNSTON-SHEAR
ADDRESS 3010 Monte Vista NE, Albuquerque, New Mexico
AGENT and TITLE C. E. Werner, Well Tester, Northwest Production Corp.
WITNESSED J. H. Newman
COMPANY Northwest Production Corp.

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 .

GCC - 3
WRJ - 1
EPNG - 1
PNW - 1
File - 1

DRILLING DEPARTMENT

COMPANY JOHNSTON-SHEAR

LEASE Jicarilla WELL NO. 1-1

DATE OF TEST March 20, 1959

SHUT IN PRESSURE (PSIG): TUBING 1850 CASING 2154 S. I. PERIOD 4 DAYS

SIZE BLOW NIPPLE 1/4" BM Choke

FLOW THROUGH Tubing WORKING PRESSURES FROM Casing

TIME		TUBING PRESSURE	Q (MCFD) 15.025 PSIA & 60°F	WELLHEAD WORKING PRESSURE (PSIG)	TEMP
HOURS	MINUTES				
	<u>15</u>	<u>1614</u>		<u>1992</u>	<u>68</u>
	<u>30</u>	<u>1812</u>		<u>1915</u>	<u>66</u>
	<u>45</u>	<u>1734</u>		<u>1862</u>	<u>65</u>
<u>1</u>	<u>00</u>	<u>1663</u>		<u>1777</u>	<u>64</u>
<u>2</u>	<u>00</u>	<u>1375</u>		<u>1610</u>	<u>64</u>
<u>3</u>	<u>00</u>	<u>1216</u>	<u>1,914</u>	<u>1507</u>	<u>64</u>

START AT: 11:30 AM END TEST AT 2:30 PM

REMARKS:

Well produced 27.92 bbls dist 51.8° gravity @ 60°.

TESTED BY: C. E. Werner

WITNESS: J. M. Newman

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