

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBES OFFICE 000

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Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1958 APR 25 PM 3:47

Pool Jalisco Formation Yates County Lea
Initial XX Annual _____ Special _____ Date of Test 9-12-56
Company SKELLY OIL COMPANY Lease E. T. Johns Well No. 1
Unit L Sec. 21 Twp. 24 S Rge. 37 E Purchaser El Paso Natural Gas Company
Casing 7 Wt. _____ I.D. _____ Set at 3575 Perf. 3004 To 3050
Tubing 2 Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3004 To 3050 L _____ xG 0.650 -GL _____ Bar.Press. 13.2
Producing Thru: Casing XX Tubing _____ Type Well G. O. Dual
Date of Completion: 6-26-56 Packer 3532 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (~~XXXX~~) (~~XXXX~~)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (XXXX) Size	(XXXX) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	2	0.250	160		99			938		72
2.	2	0.375	69		100			160		2:30
3.	2	0.500	33		98			70		2:00
4.								34		1:00
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.	1.4030		173.2	0.9645	0.9608	1.010	227
2.	3.0691		82.2	0.9636	0.9608		233
3.	5.523		46.2	0.9653	0.9608		236
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 951.2 P_c² 904.8

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.						30.0	874.8		
3.						6.9	897.9		
4.						2.2	902.6		
5.									

Absolute Potential: 240 MCFPD; n 1.000

COMPANY SKELLY OIL COMPANYADDRESS Box 38, Hobbs, New Mexico

AGENT and TITLE _____ Dist. Supt.

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 .