

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Pictured Cliffs County Rio Arriba
Initial Y Annual _____ Special _____ Date of Test 11-14-60
Company Tidal Oil Company Lease Herntz-Tidal Well No. 2-4
Unit 0 Sec. 21 Twp. 24N Rge. 1W Purchaser El Paso Natural Gas Company
Casing 4 1/2 Wt. 9.5 I.D. 4.090 Set at 3146 Perf. 3027 To 3045
Tubing _____ Wt. _____ I.D. _____ Set at _____ Perf. _____ To _____
Gas Pay: From 3027 To 3045 L 3027 xG 0.65 -GL 1968 Bar.Press. 12.0
Producing Thru: Casing y Tubing _____ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 11-1-60 Packer _____ Reservoir Temp. 1030

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) 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								893		SI
1.										
2.										
3.		3/4	202		96			202		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		214	1.0039	0.9608	1.022	2608
4.							
5.							

PRESSURE CALCULATIONS

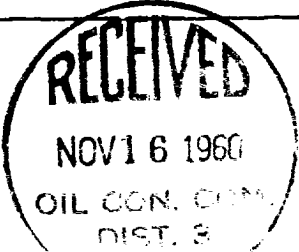
Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 2.205 (1-e^{-s}) 0.133
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2.205 P_c 219.025

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.	202	40.804	5.751	23.074	3068	43.872	775.152		1.57
4.									
5.									

Absolute Potential: 2729 MCFPD; n 0.85/1.0465
COMPANY Tidal Oil Company
ADDRESS 435 Petroleum Club Building, Denver, Colorado
AGENT and TITLE M. B. JONES Morris B. Jones, Consulting Pet. Engineer
WITNESSED _____
COMPANY _____

REMARKS

No tubing in this well at present time.



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 .

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OIL CONSERVATION COMMISSION	
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