

NEW MEXICO OIL CONSERVATION COMMISSION

10385 OFFICE O. C. C.

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST OF GAS WELL '63

Pool Undesignated Formation San Andres County Roosevelt

Initial X Annual _____ Special _____ Date of Test 11-18-63

Company Jack L. Mc Clellan Lease Texaco Federal Well No. 1

Unit _____ Sec. 27 Twp. 7 Rge. 35 Purchaser Hearburg & Ingram

Casing 4 1/2" Wt. 11.60 I.D. 4.000 Set at 4315' Perf. 4200' To 4213'

Tubing 2" Wt. 4.7 I.D. 1.995 Set at 4175' Perf. - To -

Gas Pay: From 4200' To 4213' L 4200' xG 0.8050 -GL 3361 Bar.Press. 13.2

Producing Thru: Casing _____ Tubing X Type Well Single

Date of Completion: 11-20-63 Packer 4175' Single-Bradenhead-G. G. or G.O. Dual 102' Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) L-10 Type Taps Flange

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. DWI psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1243				SI 72
1.	4 x 3.00	32/64"	8.7	4.0	52°	268	52°	-	-	21
2.	4 x 3.00	20/64"	8.5	3.7	50°	544	50°	-	-	10
3.	4 x 3.00	14/64"	8.4	3.0	62°	841	62°	-	-	10
4.	4 x 3.00	10/64"	8.2	1.8	62°	1063	62°	-	-	10
5.										

FLOW CALCULATIONS

No.	Coefficient K = .7071 (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.	65.67	34.80	-	1.0078	0.8535	-	1,427.7
2.	65.67	31.45	-	1.0088	0.8535	-	1,292.8
3.	65.67	25.20	-	0.9881	0.8535	-	1,023.9
4.	65.67	14.76	-	0.9881	0.8535	-	599.7
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl. Specific Gravity Separator Gas 0.8050
 Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
 P_c 9.935 (1-e^{-S}) 0.208 M: P_c 1459.2 P_c² 2129.3

Bottom Hole Pressure = 4206' (+ 5)' Used for Pressure Calculations

No.	P _w (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-S})	$\frac{MHP}{P_w^2}$	$\frac{MHP}{P_c^2 - P_w^2}$	Cal. P _w	P _w / P _c
1.	455.2	-	-	-	-	216.4	1912.9	-	-
2.	683.2	-	-	-	-	466.8	1652.5	-	-
3.	923.2	-	-	-	-	852.3	1277.0	-	-
4.	1251.2	-	-	-	-	1555.5	563.8	-	-
5.									

Absolute Potential: 1,550 MCFPD; n .72

COMPANY Jack L. Mc Clellan
 ADDRESS retroleum bldg. Maxwell, New Mexico
 AGENT and TITLE Coleman Petroleum Engineering Company
 WITNESSED _____
 COMPANY _____

REMARKS

* Mid point Of Casing Perforations

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.

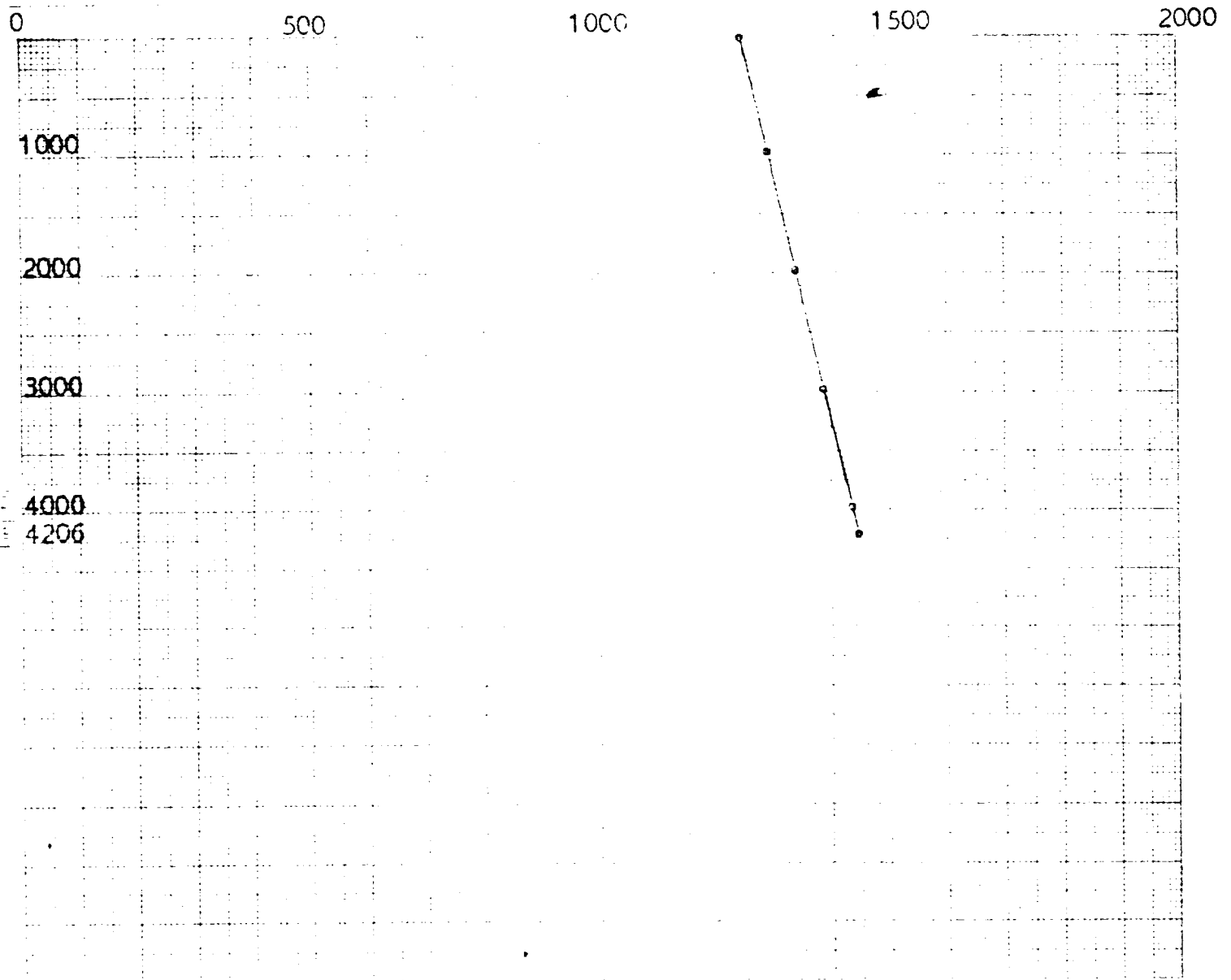
Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

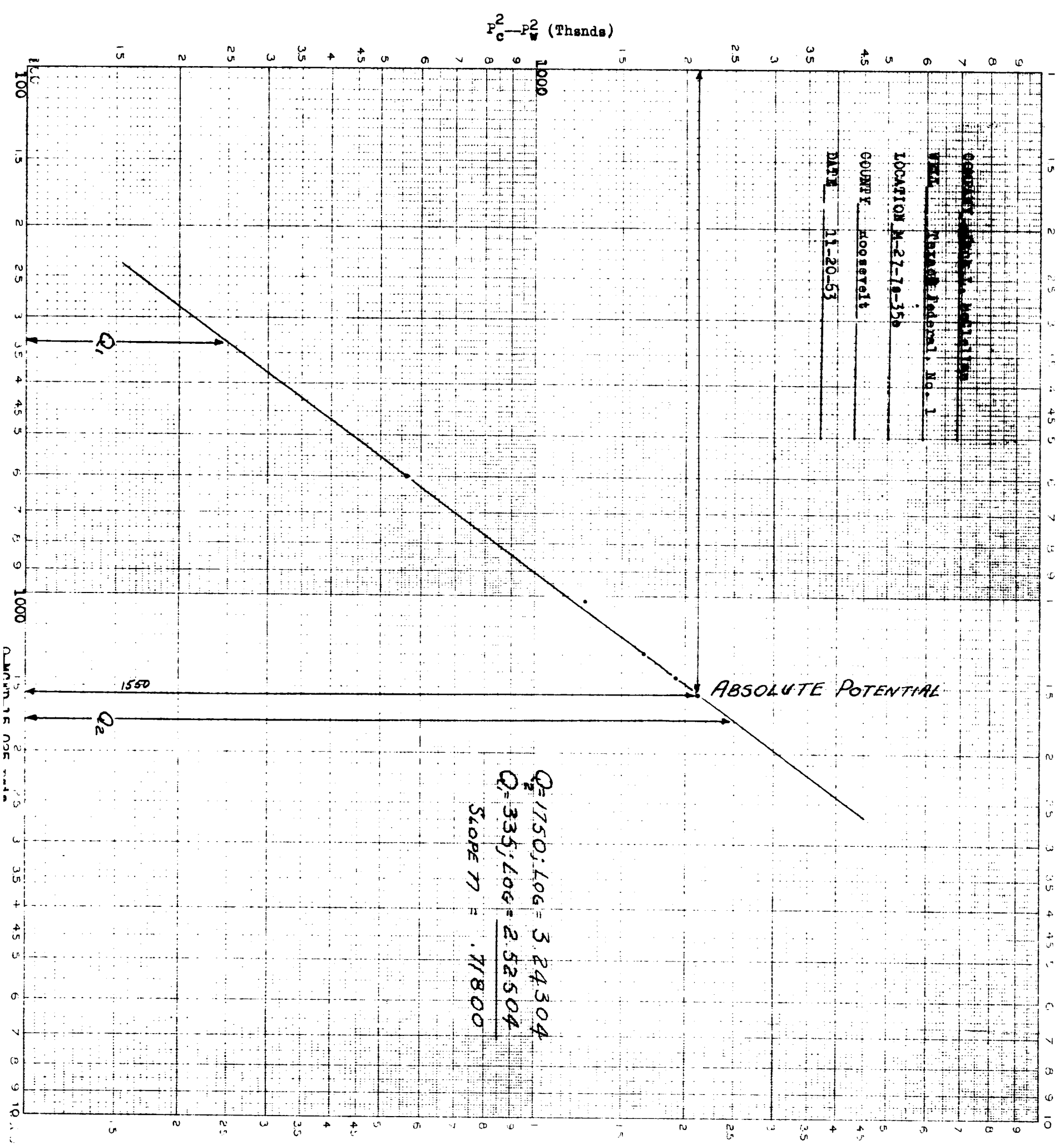


OPERATOR JACK L. MC CLELLAN
 FIELD UNDESIGNATED SAN ANDRES
 NAME TEXACO FEDERAL No. 1
 COUNTY ROOSEVELT NEW MEXICO
 DATE 11-18-63 9:30 AM
 STATUS SHUT IN 4206'
 TIME 72.0 HRS INITIAL
 DEPTH 1243 DWT - 4206 (+5)
 PACK -
 DEPTH 4211' DF NCNE
 (+5') ** NONE
 TEMPERATURE 102°F CATES
 CODE A2410N 1

0	1243	
1000	1291	.048
2000	1339	.048
3000	1387	.048
4000	1436	.049
4206 (+5)	1446	.049

** MID POINT OF CASING PERFORATIONS





GENERAL INVESTIGATION
 WATER RESOURCES FEDERAL, No. 1
 LOCATION M-27-79-35b
 GUNNEY Hooserelt
 DATE 11-20-53

COASTAL & GREAT LAKES SECTION
 U.S. GEOLOGICAL SURVEY
 THE FEDERAL BUREAU OF INVESTIGATION
 WASHINGTON, D.C.