

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation ABO County Roosevelt

Initial _____ Annual _____ Special X Date of Test 10-28/29/31-60

Company Brown & George Lease Fed. Bluit Well No. 5

Unit SW/4 Sec. 27 Twp. 7 Rge. 37 Purchaser None

Casing 5 1/2 Wt. 17.0 I.D. _____ Set at 9179 Perf. 8015 To 8054

Tubing 2 Wt. 4.7 I.D. _____ Set at 8025 Perf. _____ To _____

Gas Pay: From 8015 To 8054 L _____ x G mix.766 = GL 6147 Bar. Press. 13.2

Producing thru: Casing _____ Tubing X Type Well Single
Single - Bradenhead - G. G. or G. O. Dual

Date of Completion: _____ Packer: 7891

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	Prover Line Size	x Choke Orifice Size	Press. psig	Diff. hw	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1515				
1.	4	x .750	420	14"	70	490	78			3
2.	4	x .750	170	60"	78	255	84			3
3.	4	x .750	190	62"	78	222	78			18 1/2
4.	4	x .750	255	70"	78	295	78			17
5.										

No.	Coefficient (24-Hour)	$\sqrt{h_w P_w}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{cp}	Rate of flow G-MCF/D @ 15.025 psia
1.	3.435	77.88	433.2	.9905	.9339	1.046	258.8
2.	3.435	104.85	183.2	.9831	.9339	1.018	336.5
3.	3.435	112.24	203.2	.9831	.9339	1.020	361.0
4.	3.435	137.02	268.2	.9831	.9339	1.030	445.1
5.							

Gas Liquid Hydrocarbon Ratio 16 Mcf/bbl.

Gravity of Liquid Hydrocarbons 43.0 deg.

F_c 9.936 (1-e^{-s}) .345

Specific Gravity Separator Gas 688

Specific Gravity Flowing Fluid .8109

P_{sc} 1528.2 P₂ 2335.4

No.	P _w P _t (psia)	P ₂ P ₁	F ₂ ² -P ₁ ²	F ₂ G	(F ₂ G) ²	(F ₂ G) ² (1-e ^{-s})	P _w ²	F ₂ ² -P _w ²
1.	503.2	253.2	2082.2	2.57	6.60	2.28	255.3	2080.1
2.	268.2	71.9	2263.5	3.34	11.15	3.85	75.7	2260.3
3.	235.2	55.3	2280.1	3.59	12.89	4.45	59.7	2275.1
4.	308.2	95.0	2240.4	4.42	19.54	6.74	101.7	2233.7
5.								

Wellhead Potential: 470 MCFPD; @ 45 ; n: 1.000

Potential: _____ MCFPD; @ _____ ; n: _____

Conducted by: Jack O. Whitling

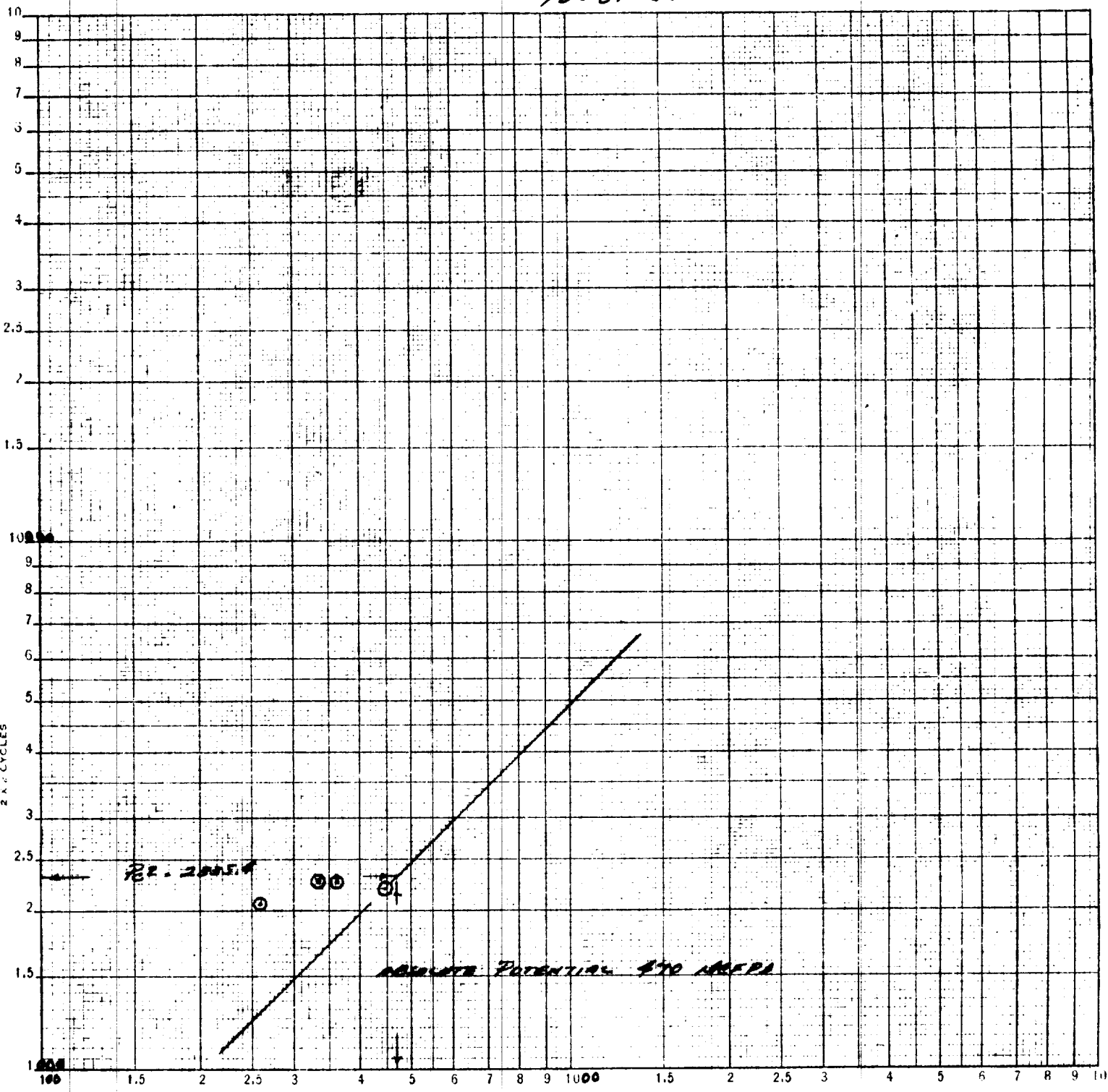
Witnessed by: John Oliver

Calculated by: Jack O. Whitling

BROWN & GEORGE
 FEDERAL BLUIT No. 5
 SW/4 SEC 27 T. 7 R. 37
 ROOSEVELT Co., NEW MEXICO
 10-31-60

$P_c - P_w = 1000$

K&E LOGARITHMIC 359-110
 KEUFFEL & NAUGHTON CO. NEW YORK
 2 1/2 CYCLES



$Q = MCFPD$
 $\theta = 45$
 SLOPE $\pi = 1.000$
 15.025 π