

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalnet Formation 7 R County Lee
 Initial X Annual _____ Special _____ Date of Test 9-11-61
 Company C. E. Long Lease Pach State Well No. 2
 Unit K Sec. 32 Twp. 21 Rge. 36 Purchaser Phillips Petroleum Corporation
 Casing 5 1/2" Wt. 14.0 I.D. _____ Set at 3910 Perf. 3754 To 3800
Garrett sleeve
 Tubing 2 3/8 Wt. 4.7 I.D. _____ Set at 3888 Perf. 3820 To _____
(Assumed)
 Gas Pay: From 3754 To 3800 L 3820 x G .650 = GL _____ Bar. Press. 13.2
 Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G. O. Dual
 Date of Completion: 12-12-56 Packer: None

Flow Data						Tubing Data		Casing Data		Duration
No.	XXXXX Line Size	XXXXX x Orifice Size	Press. psig	Diff. hw	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	of Flow Hr.
SI						603		617		72
1.	4" X 2.750		15	4.50	80	569		590		3
2.	4" X 2.750		17	7.50	90	547		587		3
3.	4" X 2.750		19	10.00	84	519		554		3
4.	4" X 2.750		20	12.00	74	480		535		3
5.	4" X 2.750		19	8.00	86	470		526		20

No.	Coefficient (24-Hour)	$\sqrt{h_w p_w}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	53.05	11.23		.9813	.9608	NEG.	561.7
2.	53.05	15.05		.9723	.9608	NEG.	745.9
3.	53.05	17.94		.9777	.9608	NEG.	894.0
4.	53.05	19.96		.9868	.9608	NEG.	1,004
5.	53.05	16.05		.9759	.9608	NEG.	818.0

Gas Liquid Hydrocarbon Ratio 146.2 Mcf/bbl.
 Gravity of Liquid Hydrocarbons 29.5 @ 60 deg.
 F_c Measured (1-e^{-s}) --
 Specific Gravity Separator Gas .9608
 Specific Gravity Flowing Fluid .8789
 P_c 630.2 P₂ 397.1

No.	P _w P _t (psia)	P _t ²	P _c ² - 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
1.	582.2	339.0	58.1				363.8	33.3
2.	560.2	313.8	83.3				360.2	36.9
3.	532.2	283.2	113.9	- Measured -			321.7	75.4
4.	493.2	243.2	153.9				300.5	96.6
5.	483.2	233.5	163.6				290.7	106.4

Wellhead Potential: 1,230 MCFPD; θ_t 63.5; n_t .499
 ABS. Potential: 1,690 MCFPD; θ 61.0; n .554
 Conducted by: J. B. Murray
 Witnessed by: C. E. Long
 Calculated by: J. B. Murray