

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Todd San Andres Formation San Andres County Roosevelt
Initial X Annual _____ Special _____ Date of Test March 24-28, 1964
Company Jack L. McClellan Lease Mark Federal Well No. 1
Unit M Sec. 26 Twp. 7 S Rge. 35 E Purchaser Not Connected
Casing 5 1/2 Wt. 15.5 I.D. 4.950 Set at 4348 Perf. 4211 To 4221
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 4176 Perf. open end To _____
Gas Pay: From 4211 To 4221 L 4176 xG .805 -GL 3362 Bar.Press. 13.2
Producing Thru: Casing Packer Tubing X Type Well Single
Date of Completion: 11/23/63 Packer 4176 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. 100 Assumed

OBSERVED DATA

Tested Through (Prover) (~~30000~~) (~~10000~~)

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Choke) Size	(Choke) (Prover) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1150		Heater	Choke	72
1.	2	.750	35.5		60	1082		9/64		2
2.	2	1.000	32.5		54	1054		12/64		2
3.	2	1.000	52.7		52	984		15/64		2
4.	2	1.250	39.5		47	891		18/64		2
5.	2	1.250	28.0		49	975		15/64		22

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w D_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	12.2023		48.7	1.0000	.8635	1.000	513
2.	22.0662		45.7	1.0058	.8635	1.000	876
3.	22.0662		65.9	1.0078	.8635	1.000	1265
4.	35.6738		52.7	1.0127	.8635	1.000	1644
5.	35.6738		41.2	1.0107	.8635	1.000	1283

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio * _____ cf/bbl.
Gravity of Liquid Hydrocarbons 48.7 deg.
P_c 9.936 (1-e^{-s}) 0.207

Specific Gravity Separator Gas .805
Specific Gravity Flowing Fluid _____
P_c 1163.2 P_c² 1353.0

No.	P _w P _t (psia)	P _c 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.	1095.2	1199	5.097	25.98	5.38	1204.4	148.6	1097.5	.94
2.	1067.2	1140	8.704	75.76	15.68	1155.7	197.3	1075.0	.92
3.	997.2	994	12.659	157.98	32.70	1026.7	326.3	1013.3	.87
4.	904.2	818	16.335	266.83	55.23	873.2	479.8	934.5	.80
5.	988.2	977	12.748	162.51	33.64	1010.6	342.4	1005.3	.86

Absolute Potential: 3.500 MCFPD; n .713COMPANY Jack L. McClellanADDRESS Petroleum Building, Roswell, New MexicoAGENT and TITLE A. L. Smith Independent Gas TesterWITNESSED J. W. BrasfieldCOMPANY Franklin, Aston & Fair

REMARKS

*produced estimated volume of 0.5 barrel condensate and 0.5 barrel water during test.