

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-12

Revised 12-1-51

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea
Initial X Annual _____ Special _____ Date of Test 2-10-65
Company Sinclair Oil & Gas Company Lease Wm. H. Harrison "D" WN Well No. 4
Unit L Sec. 29 Twp. 24 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 7" Wt. 24 I.D. 6.366 Set at 3610 Perf. 2927 To 2994
Tubing 2 1/2" Wt. 6.5 I.D. 2.441 Set at 3340 Perf. Open Ended To _____
Gas Pay: From 2927 To 2994 L 2927 xG .668 -GL 1955 Bar. Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well G. G. Dual
Date of Completion: 2-7-65 Packer 3340 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr. ⁶⁴ s
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						0		512		76
1.	2"	1.500	200	7	60	0		415		1 hr. 14
2.	2"	1.500	200	12	61	0		366		1 hr. 18
3.	2"	1.500	200	18.5	62	0		317		1 hr. 22
4.	2"	1.500	210	26.5	62	0		252		1 hr. 28
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.	16.47 ✓	38.63 ✓	213.2	1.00 ✓	.9177 ✓	1.022	616 ✓
2.	16.47	50.58	213.2	0.9990 ✓	.9477	1.022	806 ✓
3.	16.47	62.80	213.2	0.9981 ✓	.9477	1.022	1000 ✓
4.	16.47	76.91	223.2	0.9981 ✓	.9477	1.023 ✓	1226 ✓
5.							

PRESSURE CALCULATIONS ^{15.6}

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c .875 ^{15.6} (1-e^{-S}) 0.126 ✓

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 525.2 P_c 275.8 ✓

No.	$\frac{P_w}{P_c}$	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	$\frac{P_w}{P_c}$
1.	$\frac{183.4}{428.2}$	183.4 ✓	183.4 ²	.539	.291	0.04	183.4	92.4 ✓	428.2	.815
2.	$\frac{143.8}{379.2}$	143.8 ✓	143.8 ²	.705	.497	0.06	143.9	131.9 ✓	379.3	.722
3.	$\frac{109.0}{330.2}$	109.0 ✓	109.0 ²	.875	.766	0.10	109.1	166.7 ✓	330.3	.629
4.	$\frac{70.3}{265.2}$	70.3 ✓	70.3 ²	1.07	1.145	0.14	70.4	202.4 ✓	265.3	.505
5.								203.4 ✓		

Absolute Potential: 1,650 MCFPD; n 0.95COMPANY Sinclair Oil & Gas CompanyADDRESS P.O. Box 1920, Hobbs, New MexicoAGENT and TITLE W.F. Burns, SuperintendentWITNESSED Bob Murray & D.E. FitzgeraldCOMPANY El Paso Natural Gas Co. & Sinclair Oil & Gas Company

REMARKS

Orig.&2cc: OCC-Santa Fe
cc: RFS, Gac, File
cc: El Paso Natural Gas Company