

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Lea Pennsylvanian Formation Pennsylvanian County Lea
 Initial X Annual _____ Special _____ Date of Test 6-10 & 6-11, 1963
 Company Marathon Oil Company Lease _____ Lea Unit _____ Well No. 10
 Unit F Sec. 13 Twp. 20S Rge. 34E Purchaser Llano, Inc.
 Casing 7" Wt. 29# I.D. 6.184 Set at 14,308 Perf. * To _____
 Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 12,852 Perf. Open Ended To _____
 Gas Pay: From 12,890 To 13,114 L 12,852 xG 0.6925 -GL 8900 Bar.Press. 13.2
 Producing Thru: Casing _____ Tubing X Type Well Gas-Oil Dual
 Single-Bradenhead-G. G. or G.O. Dual
 Date of Completion: 6-11-1963 Packer 12,833 Reservoir Temp. 190° F

OBSERVED DATA

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

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. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						4518		Pkr.		58.5
1.	4"	1,000	910	13	82	4498	-	Pkr.	-	3
2.	4"	1,500	905	6.5	95	4360	-	Pkr.	-	3
3.	4"	1,500	910	31	87	3862	-	Pkr.	-	2
4.	4"	1,500	910	49	90	3658	-	Pkr.	-	2
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.	6.135	109.56	923.2	.9795	.9308	1.101	675
2.	13.99	77.27	918.2	.9680	.9308	1.085	1057
3.	13.99	169.18	923.2	.9750	.9308	1.098	2358
4.	13.99	212.69	923.2	.9723	.9308	1.092	2941
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 11,671 cf/bbl. Specific Gravity Separator Gas .6925
 Gravity of Liquid Hydrocarbons 50.4 deg. Specific Gravity Flowing Fluid _____
 P_c _____ (1-e^{-s}) P_c _____ P_c _____

No.	P _w 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	P _w /P _c
1.									
2.									
3.									
4.									
5.									

Absolute Potential: 9,664 ** MCFPD; n 0.87724

COMPANY Marathon Oil Company

ADDRESS P.O. Box 2107, Hobbs, New Mexico

AGENT and TITLE Robert L. McLean Petroleum Engineer

WITNESSED _____

COMPANY _____

Pf & Ps	Pf ² & Ps ²	Pf ² - Ps ²	REMARKS
6632.2 (SI)	43,986		* Csg. Perfs. 12890-897, 12908-913 & 13100-114
6469.2	41,851	2135	** Back Pressure Curve based on measured BHP's.
6370.2	40,579	3407	
5927.2	35,132	8854	
5714.2	32,652	11,334	

1963 JUN 21 PM 2:02

HOBBS OFFICE 600