NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Lea Pennsylvanian Formation Bend County Lea

Initial X Annual Special Date of Test 11-18,19-63

Company Marathon Oil Company Lease Lea Unit Well No. 11

Unit N Sec. 13 Twp. 20S Rge. 34E Purchaser Llano, Inc.

Casing 7" Wt. 29 I.D. 6.184 Set at 14,371 Perf. 12,987 To 12,996

Tubing 2 3/8" Wt. 4.7 I.D. 1.995 Set at 12,961 Perf. Open Ended To

Gas Pay: From 12,987 To 12,996 L 12,961 xG - -GL - Bar.Press. 13.2

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

Date of Completion: 11-13-63 Packer 12,944 Reservoir Temp. 185°F.

OBSERVED DATA

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

No.	Flow Data (~~Prover~~) (Line) Size	Flow Data (~~Choke~~) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						4472		Pkr.	-	93
1.	3	1.00	780	23	85	4375	-	Pkr.	-	3
2.	3	1.75	800	10.5	88	4147	-	Pkr.	-	3
3.	3	1.75	800	35	82	3713	-	Pkr.	-	2
4.	3	1.75	800	~~79~~	76	3235	-	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.	6.182	135.1	793.2	0.9768	0.9258	1.088	822
2.	20.15	92.85	813.2	0.9741	0.9258	1.088	1836
3.	20.15	168.7	813.2	0.9795	0.9258	1.091	3363
4.	20.15	248.6	813.2	0.9850	0.9258	1.093	4993
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 9308 cf/bbl.
Gravity of Liquid Hydrocarbons 50.6° deg.
P_c $(1-e^{-s})$

Specific Gravity Separator Gas 0.700
Specific Gravity Flowing Fluid
P_c P_c^2

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.									
2.									
3.									
4.									
5.									

Absolute Potential: 17.281* MCFPD; n 1.00

COMPANY Marathon Oil Company

ADDRESS P.O. Box 220

AGENT and TITLE [signature] Pet. Engr.

WITNESSED

COMPANY

Rate	P_f & P_s	P_f^2 & P_s^2	$P_f^2 - P_s^2$	REMARKS
SI	6635.2	44026	-	
1	6535.2	42709	1317	
2	6294.2	39617	4409	
3	5922.2	35072	8954	
4	5595.2	31306	12720	

*Point alignment not obtained. Absolute potential based on slope of 1.00. Well will be retested upon securing a pipeline connection. Back pressure curve based on measured bottom hole pressures