NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Queen County Lea

Initial X Annual ____ Special ____ Date of Test August 12-13, 1963

Company Sunray DX Oil Company Lease New Mexico State "AL" Well No. 1

Unit I Sec. 14 Twp. 17S Rge. 36E Purchaser None

Casing 2 7/8" Wt. 6.50# I.D. 2.441" Set at 4374 Perf. 4300 To 4311

Tubing ____ Wt. ____ I.D. ____ Set at ____ Perf. ____ To ____

Gas Pay: From 4300 To 4311 L 4300 xG .684 -GL 2941 Bar.Press. 13.2 psia

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

Date of Completion: August 9, 1963 Packer ____ Reservoir Temp. 100 Deg. F

OBSERVED DATA

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

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										
1.		12/64 3/16	1185		70	N		1872	77	
2.		16/64 4/16	764		69	O		1185	70	1½
3.		20/64 5/16	525		70	W		764	69	3
4.		24/64 6/16	372		68			525	70	4½
5.								372	68	4

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.	0.7425		1198.2	0.9905	0.9366	1.143	943
2.	1.3309		777.2	0.9915	0.9366	1.089 1.092	1049
3.	2.0930		538.2	0.9905	0.9366	1.061	1109
4.	3.0300		385.2	0.9924	0.9366	1.043 1.044	1130
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c 5.866 $(1-e^{-s})$ 0.256

Specific Gravity Separator Gas 0.684
Specific Gravity Flowing Fluid ____
P_c 1885.2 P_c^2 3554

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$(F_cQ)^2$ $(1-e^{-s})$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	1198.2	1436	5.532	30.60	7.83	1443.8	2110.2	1198.3	63.6
2.	777.2	604	6.136	37.65	9.64	613.6	2940.4	783.3	41.5
3.	538.2	290	6.52	42.38	10.85	300.9	3253.1	548.5	29.1
4.	385.2	148.4	6.64	44.09	11.29	159.3	3394.7	399.1	21.2
5.									

Absolute Potential: 1185 MCFPD; n .72 .690

COMPANY Sunray DX Oil Company

ADDRESS P.O. Box 128, Hobbs, New Mexico

AGENT and TITLE V. R. Mayabb, District Engineer V. R. Mayabb

WITNESSED H. A. Riggs

COMPANY Sunray DX Oil Company

REMARKS

1 560 1443.8 2110.2 1198.3 63.6
2 643 613.6 2940.4 783.3 41.5
3 796 300.9 3253.1 548.5 29.1
4 901 159.3 3394.7 399.1 21.2