

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool JALMAT Formation YATES County LEAInitial X Annual _____ Special _____ Date of Test 1/2/58Company SUNRAY MID-CONTINENT OIL Co. lease H. D. GREER Well No. 2Unit 0 Sec. 21 Twp. 22 S Rge. 36 E Purchaser EL PASO NATURAL GAS Co.Casing 5½ Wt. 13 I.D. 5.00 Set at 3680 Perf. 3065 To 3470Tubing 2-3/8 Wt. 4.7 I.D. 2.00 Set at 3552 Perf. NONE To _____Gas Pay: From 3065 To 3470 L 3552 xG .765 -GL 2717 Bar.Press. 13.2Producing Thru: Casing _____ Tubing X Type Well SINGLEDate of Completion: 12/27/57 Packer NONE Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (~~XXXXXX~~) 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						656		667		72 HR8.
1.	.500	19/64	150		47	605	62	615	53	2 3/4
2.	.500	22/64	230		50	565	64	585	55	2
3.	.500	26/64	310		60	485	64	544	62	1
4.	.500	33/64	370		60	423	64	508	62	1
5.	.500	33/64	370		68	420	63	502	70	24

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.	5.5233		163.2	1.0127	.88565	1.023	827
2.	"		243.2	1.0098	"	1.040	1,249
3.	"		323.2	1.0000	"	1.049	1,658
4.	"		383.2	1.0000	"	1.059	1,986
5.	"		383.2	0.9924	"	1.057	1,967

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio DRY GAS cf/bbl. Specific Gravity ~~XXXXXX~~ Gas .765
Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____
P_c P_w (1-e^{-s}) P_c 680.2 P_c 462.7

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.	628.2					394.6	68.1		
2.	598.2					357.8	104.9		
3.	557.2					310.5	152.2		
4.	521.2					271.6	191.1		
5.	515.2					265.4	197.3		

Absolute Potential: 3800 MCFPD; n .77COMPANY SUNRAY MID-CONTINENT OIL COMPANYADDRESS Box 1168, SNYDER, TEXASAGENT and TITLE D. G. BOWER, GAS TESTER

WITNESSED _____

COMPANY _____

REMARKS _____

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia

P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .