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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Wildcat Formation Dakota County Rio Arriba
Initial X Annual _____ Special _____ Date of Test 12-9-59
Company Val R. Reese & Assoc., Inc. Lease Lybrook Well No. 1-19
Unit C Sec. 19 Twp. 24N Rge. 6W Purchaser 6.276
Casing 7" O.D. Wt. 26# & 23# I.D. 6.366 Set at 6635 Perf. 6422 To 6460
Tubing 2-3/8" O.D. Wt. 4.70# I.D. 1.995 Set at 6424 Perf. 6408 To 6404
Gas Pay: From 6422 To 6460 L 6404 xG .630 -GL 4034 Bar.Press. _____
Producing Thru: Casing _____ Tubing X Type Well G. G. Dual
Date of Completion: 11-23-59 Packer 6340 Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

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						2198				
1.										
2.										
3.		3/4	97		58°					3 hours
4.										
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.							
2.							
3.	12.365		109	1.0019	.9759	1.010	1331
4.							
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
 P_c 9.402 $(1-e^{-S})$.254
Specific Gravity Separator Gas .63
Specific Gravity Flowing Fluid _____
 P_c 2210 P_c^2 4884

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.	109	11.8	12.5	156	39.6	51.4	4884		1.0110
4.									
5.									

Absolute Potential: 1342 MCFPD; n .75 11.00821

COMPANY Val R. Reese & Associates, Inc.

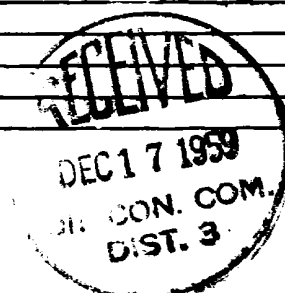
ADDRESS Lobby of Simms Bldg., Albuquerque, New Mexico

AGENT and TITLE John L. Jacob

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 .

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VAL R. REESE & ASSOCIATES, INC.

Company Val R. Reese & Assoc., Inc.

Lease Lybrook Well No. 1-19

SI Dakota 2198

Date of Test 12-9-59

Shut in Pressure (PSIG): Tubing Gal 1637 Casing Gal 1654 S.I. Period 7 Days

Size Blow Nipple 3/4" choke

Flow Through Tubing Working Pressures From None

Time		choke	Gal. Tbg.	Gal. Csg.	Temp
Hours	Minutes	Pressure	Pressure (PSIG)	Wellhead Working Pressure (PSIG)	
0	15	201	1642	1659	50°
0	30	165	1643	1661	52°
0	45	145	1643	1660	53°
1	0	131	1643	1660	55°
2	0	110	1643	1660	56°
3	0	97	1643	1660	58°

Start At 11:50 AM 12-9-59 End Test At 2:50 PM 12-9-59

Remarks: Light spray of water & distillate throughout test.

Tested by: Jim Jacobs

Witness: