

OIL CONSERVATION DIVISION

Form O-100 ✓
Revised 10-1-72STATE OF NEW MEXICO
ENERGY AND MINERAL DEPARTMENTP.O. BOX 7167
SANTA FE, NEW MEXICO 87501

MULTI-POINT AND ONE-POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3-30-80	
Company Ladd Petroleum Corp.		Connection	
Field Basin Dakota		Formation Dakota	
Completion Date 3-21-80		Total Depth 6452'	Plug Back TD 6393'
		Elevation 5902 RKB	
Well No. 1E		Name of Lessee Humble N. Kirtland	
Casing Size 4-1/2"	Wt. 10.5#	C 4.052	Set At 6446'
Perforations: From 6270 To 6377			
Casing Size 1-1/2"	Wt. 2.9#	C 6338'	Set At 6338'
Perforations: From Open End To			
Type Well - Single - Indented - G.C. or G.C. Multiple Single - Gas		Packer Set At	
Producing thru tbg		State New Mexico	
Reservoir Temp. °F F		Depth Annual Temp. °F	
L		H	
CO ₂		N ₂	
H ₂ S		Proven	
Water Run		Taps	
C		.65	
FLOW DATA			
NO.	Flow Line Size	X	Orifice Size
1			
2			
3	3/2" Pos Choke		166
4			
5			
TUBING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Duration of Flow
1	1759		9 days
2			
3	705	680	3 hrs
4			
5			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 hour)	$\sqrt{h_w P_m}$	Pressure P _m
1			
2			
3	8.5417		178
4			
5			
NO.	Flow Temp. Factor F _L	Gravity Factor F _G	Super Compress. Factor, F _{sp}
1			
2			
3	.9924	.9608	1.017
4			
5			
NO.	Gas-Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbon	Specific Gravity Separator Gas
1			
2			
3			
4			
5			
NO.	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1			
2			
3			
4			
5			
NO.	P ₁	P ₂	P ₃
1	717	514,039	2,643,640
2			
3			
4			
5			
$(1) \frac{P_2^2}{P_1^2 - P_2^2} \times 1.1945$ $(2) \frac{P_3^2}{P_2^2 - P_3^2} \times 1.1926$ $AOF = 0 \left[\frac{P_2^2}{P_1^2 - P_2^2} \right]^n = 1684$			
Absolute Open Flow = 1684 Field # 15,025 Angle of Slope = 75			