

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

☐ Initial		☐ Annual		☒ Special		Test Date 8-22-74		AUG 28 1974	
Company O.C.C.				Connection none				O.C.C.	
Secondary Wellbore				Formation Morrow				Unit K	
Test Date 8-22-74		Total Depth 9581		Plug Back TD 9549		Elevation 3513 Gr		Farm or Lease Name Dagger Draw	
Casing Size 17 1/2"		Casing Depth 4.892		Set At 9581		Perforations: From 9494 To 9506		Well No. 2	
Casing Weight 8.5#		Casing Depth 2.441		Set At 9520		Perforations: From To		Unit Sec. Twp. R. K 8 215 9.7	
Type of Well - Single - Graduated - G.G. or G.O. Multiple Single						Packer Set At 9250		County Eddy	
Reservoir Temp. °F 130 @ 9581		Mean Annual Temp. °F 60°		Baro. Press. - P _c 13.2		State New Mexico			
Casing Pressure 9510		Casing Depth 9500		Casing Weight .586		% CO ₂		% N ₂	
						% H ₂ S		Prover	
								Meter Run X	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
Flow Rate (GPM)	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.0		2.25	165	14"	81°	2971	70°			1 hr.
2.0		2.25	150	26.5"	72°	1775	68°			1 hr.
3.0		2.25	165	29"	82°	1542	71°			1 hr.
4.0		2.25	188	32.5"	84°	1249	72°			1 hr.

RATE OF FLOW CALCULATIONS							
NO.	Correction Factor	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Comp. Factor, F _{spv}	Rate of Flow Q, Mscf
1	25.64	49.943	178.2	.9804	1.3063	1.012	1880
2	25.64	65.763	163.2	.9887	1.3063	1.012	2208
3	25.64	71.887	178.2	.9795	1.3063	1.012	2368
4	25.64	80.664	201.2	.9777	1.3063	1.014	2835

NO.	P _c	Temp. °R	T _c	Z	Gas Liquid Hydrocarbon Ratio none produced			Viscosity
1	.26	541	1.55	.976	A.P.I. Gravity of Liquid Hydrocarbons			1.0
2	.26	532	1.52	.976	Specific Gravity Separator Gas .586			XXXXXX
3	.27	542	1.55	.975	Specific Gravity Flowing Fluid XXXXX			
4	.30	574	1.55	.972	Critical Pressure 672 P.S.I.A.			672 P.S.I.A.
					Critical Temperature 350 °R			350 °R

2897.2	8923				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{8923}{7268}$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.208$	
2136.6	4852	4371			AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3245$			
1797.0	3229	539						
1571.9	2471	6452						
1236.8	1655	7268						

3245	Mscf @ 15.025	Angle of Slope 47°10'	Slope
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